GEEKOM A9 Max

GEEKOM A9 Max Mini PC User Manual

Model: A9 Max

1. Introduction

The GEEKOM A9 Max Mini PC is a high-performance, compact computing solution designed for a wide range of applications, from demanding AI tasks and creative workflows to gaming and everyday productivity. Equipped with the latest AMD Ryzen AI 9 HX 370 processor and Radeon 890M graphics, it offers exceptional power and efficiency in a small form factor. This manual provides essential information for setting up, operating, maintaining, and troubleshooting your GEEKOM A9 Max Mini PC.



Image: The GEEKOM A9 Max Mini PC, showcasing its compact design and sleek silver finish.

2. Key Features Overview

The GEEKOM A9 Max Mini PC integrates cutting-edge technology to deliver a powerful and versatile computing experience. Key features include:

- **Flagship AI Performance:** AMD Ryzen AI 9 HX 370 processor with up to 80 TOPS of AI power.
- **Powerful Graphics:** Integrated AMD Radeon 890M for gaming and 4K media.
- **Advanced Cooling:** IceBlast 2.0 system with copper heatsink and dual heat pipes.
- **High-Speed Memory & Storage:** 32GB DDR5-5600MHz RAM and 2TB NVMe SSD, expandable.
- **Extensive Connectivity:** Dual 2.5G LAN, USB4 (40 Gbps), HDMI 2.1 8K, Wi-Fi 7, Bluetooth 5.4.
- **Multi-OS Support:** Pre-installed with Windows 11 Pro, compatible with Linux and Android x86.



Image: An overview of the GEEKOM A9 Max's key features, including its AI capabilities, graphics, cooling system, and connectivity options.

3. Setup Guide

3.1 Package Contents

Before you begin, ensure all components are present in the box:

- GEEKOM A9 Max Mini PC
- HDMI Cable
- Power Adapter
- VESA Mount
- User Guide / Thank You Card



Image: All items included in the GEEKOM A9 Max Mini PC package, such as the PC unit, cables, power adapter, and VESA mount.

3.2 Connecting Your Mini PC

Follow these steps to set up your GEEKOM A9 Max:

1. **Connect Display:** Use an HDMI cable to connect your monitor or TV to one of the HDMI 2.1 ports on the back of the Mini PC. Alternatively, use a USB4 Type-C port for display output.
2. **Connect Peripherals:** Plug in your USB keyboard and mouse into any available USB-A 3.2 Gen2 ports.
3. **Connect to Network:** For wired internet, connect an Ethernet cable to one of the 2.5G LAN ports. For wireless, ensure Wi-Fi 7 is enabled after initial setup.
4. **Connect Power:** Plug the power adapter into the DC input port on the Mini PC, then plug the adapter into a power outlet.
5. **Power On:** Press the power button located on the front of the Mini PC.

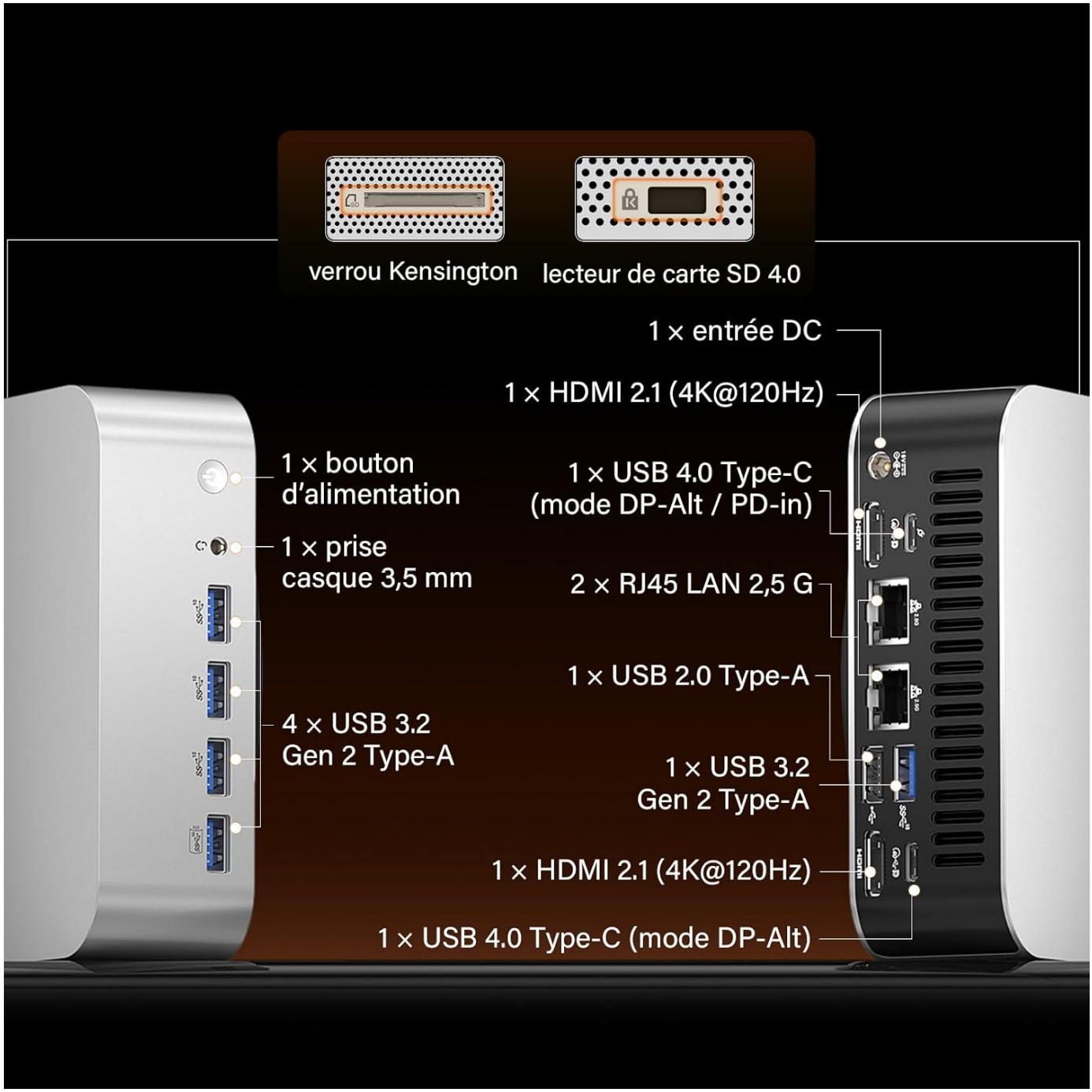


Image: A detailed diagram illustrating all available ports on the GEEKOM A9 Max Mini PC, including USB, HDMI, LAN, and power input.

4. Operating Your Mini PC

4.1 Initial Boot and Operating System

The GEEKOM A9 Max comes pre-installed with Windows 11 Pro. Upon the first boot, you will be guided through the Windows setup process, including language selection, network configuration, and user account creation. Follow the on-screen instructions to complete the setup.

The Mini PC also supports other operating systems such as Linux (Ubuntu, Manjaro) and Android x86, making it a versatile platform for developers and advanced users.



Image: Visual representation of the GEEKOM A9 Max's compatibility with multiple operating systems, including Windows 11 Pro, Linux, and Android x86.

4.2 Performance Capabilities

Processor and AI: The AMD Ryzen AI 9 HX 370 processor, built on the Strix Point architecture, delivers up to 80 TOPS of AI performance (50 TOPS via NPU + 30 TOPS via GPU/CPU). This enables next-generation Copilot+ experiences, local LLM execution, and demanding AI creations like Stable Diffusion.

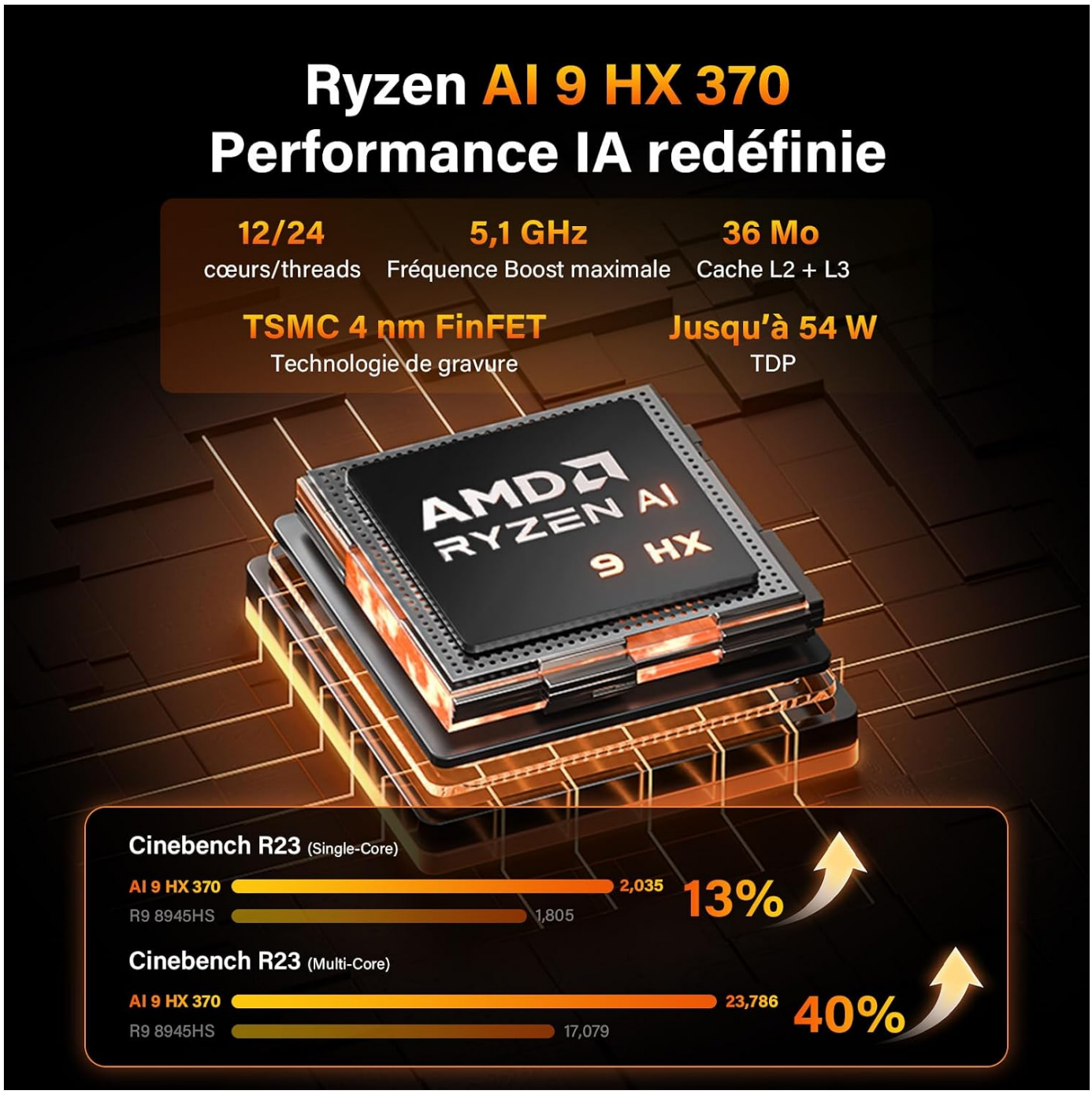


Image: A graphic detailing the performance metrics of the AMD Ryzen AI 9 HX 370 processor, highlighting its core count, boost frequency, and cache size.



Image: An illustration emphasizing the 80 TOPS AI performance of the GEEKOM A9 Max, showcasing the integration of GPU, CPU, and NPU for intelligent processing.

Graphics: The integrated AMD Radeon 890M graphics (16 RDNA3.5 compute units) provides performance comparable to entry-level dedicated GPUs. It handles games like Valorant, Fortnite, LoL, and CS2 at 1080p High settings with high frame rates, supports FidelityFX Super Resolution (FSR), and ensures smooth 4K playback and light 3D rendering.



Image: A visual demonstrating the gaming performance of the GEEKOM A9 Max, showing frame rates for popular titles like Assassin's Creed Mirage, Cyberpunk 2077, and Counter-Strike 2.

Memory and Storage: With 32GB of DDR5-5600MHz RAM (expandable up to 128GB) and a 2TB NVMe SSD (expandable up to 4TB via two PCIe Gen4 x4 slots), the A9 Max supports advanced multitasking, AI applications, and creative workflows. This flexibility allows for combining system and workspace drives.

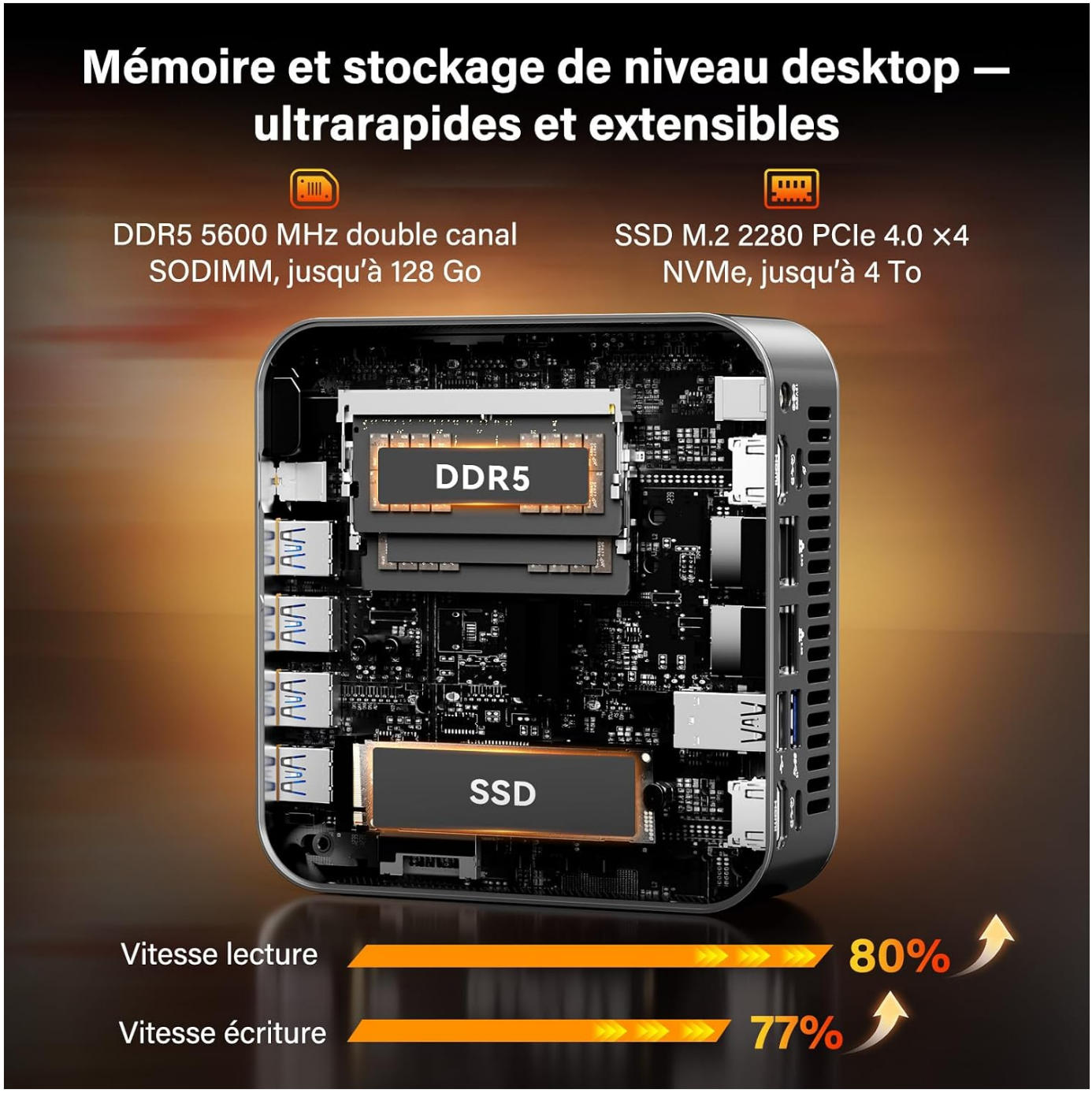


Image: An internal view of the GEEKOM A9 Max, highlighting the DDR5 SODIMM memory and NVMe SSD slots, along with their upgrade capabilities.

4.3 Connectivity

The A9 Max offers premium connectivity for professionals:

- **USB Ports:** 2x USB4 (40 Gbps, PD, DP-Alt Mode) for external eGPUs/SSDs or 8K displays, 5x USB-A 3.2 Gen2, 1x USB 2.0.
- **Network:** 2x 2.5 GbE LAN ports for high-speed wired connections.
- **Display:** 2x HDMI 2.1 FRL for 8K display support.
- **Wireless:** Wi-Fi 7 and Bluetooth 5.4 for cutting-edge wireless connectivity.
- **Other:** SD 4.0 card reader, 3.5mm headphone jack, Kensington lock slot.



Image: A visual representation of the GEEKOM A9 Max's superior network performance, highlighting its 2.5 Gbps LAN, Wi-Fi 7, and Bluetooth 5.4 capabilities.



Image: The GEEKOM A9 Max supporting multiple 8K displays, demonstrating its capability for complex multi-monitor setups ideal for design, gaming, film, and office use.

5. Maintenance

5.1 Cooling System

The GEEKOM A9 Max features the IceBlast 2.0 cooling system, which includes a large copper heatsink, dual heat pipes, and a high-performance fan. This system provides 52% more cooling capacity compared to standard solutions. The optimized airflow design, with side intake and rear exhaust, effectively prevents overheating, ensuring sustained high performance during demanding tasks.



Image: An X-ray view of the GEEKOM A9 Max's IceBlast 2.0 cooling system, showing the internal components like the copper heatsink, dual heat pipes, and high-performance fan.

To ensure optimal cooling performance, keep the Mini PC in a well-ventilated area and ensure that the air vents are not obstructed. Regularly clean dust from the vents using compressed air.

6. Troubleshooting

If you encounter issues with your GEEKOM A9 Max Mini PC, consider the following general troubleshooting steps:

- **No Power:** Ensure the power adapter is securely connected to both the Mini PC and a working power outlet. Try a different outlet.
- **No Display:** Verify that the HDMI or USB4 cable is firmly connected to both the Mini PC and the monitor. Check the monitor's input source setting. Try a different cable or display.
- **No Internet Connection:** For wired connections, check the Ethernet cable and router. For Wi-Fi, ensure the Wi-Fi adapter is enabled in Windows settings and that you are connected to the correct network. Restart your router.
- **System Unresponsive:** If the system freezes, press and hold the power button for 10 seconds to force a shutdown,

then restart the PC.

- **Driver Issues:** Ensure all drivers are up to date. You can usually find the latest drivers on the GEEKOM official website.

For persistent issues, refer to the GEEKOM support website or contact customer service.

7. Specifications

Detailed technical specifications for the GEEKOM A9 Max Mini PC:

Feature	Specification
Brand	GEEKOM
Model Number	A9 Max
Processor Brand	AMD
Processor Type	Ryzen AI 9 HX 370
Processor Speed	5.1 GHz
RAM Size	32 GB DDR5-5600MHz
Max Memory	128 GB
Hard Drive Size	2 TB
Hard Drive Technology	SSD NVMe PCIe Gen4 x4
Graphics Chipset Brand	AMD
Graphics Description	Integrated Radeon 890M
Operating System	Windows 11 Pro (pre-installed), Linux, Android x86
Connectivity Type	Bluetooth, Wi-Fi, LAN
Wireless Technology	Wi-Fi 7, Bluetooth 5.4
HDMI Ports	2
USB 2.0 Ports	1
USB 3.0 Ports	5
USB4 Ports	2 (Type-C)
LAN Ports	2 (2.5 GbE RJ45)
Dimensions (L x W x H)	13.5 x 13.2 x 4.6 cm (5.3 x 5.2 x 1.8 inches)
Weight	692 g (1.53 lb)

Spécifications techniques du Mini PC GEEKOM A9 Max

Processeur	Processeur AMD Ryzen AI 9 HX 370
GPU intégré	Graphiques AMD Radeon 890M
Mémoire	DDR5 double canal 262 broches 5600MHz, jusqu'à 128 Go
Stockage	SSD NVMe PCIe 4.0 ×4 M.2 2280 de 2 To, jusqu'à 4 To pris en charge
Connectique	5 × USB 3.2 Gen 2 Type-A, 1 × USB 2.0 Type-A, 1 × USB 4.0 Type-C (mode DP-Alt / PD-in), 1 × USB 4.0 Type-C (mode DP-Alt), 2 × LAN RJ45 2,5G, 2 × HDMI 2.1 (4K@120Hz), 1 × Prise casque 3,5 mm, 1 × Lecteur de carte SD 4.0, 1 × Entrée DC, 1 × Bouton d'alimentation, 1 × Verrou Kensington

TDP	54 W
Connectivité sans fil	Wi-Fi 7, Bluetooth 5.4
Système d'exploitation	Windows / Linux
Dimensions	135 mm × 132 mm × 46,9 mm 5,3 po × 5,2 po × 1,8 po
Poids	692 g (1,53 lb)
Contenu de l'emballage	1 × A9 MaxMini PC, 1 × Câble HDMI, 1 × Support VESA, 1 × Adaptateur secteur, 1 × Guide d'utilisation

Image: A comprehensive table summarizing the technical specifications of the GEEKOM A9 Max Mini PC.

8. Warranty and Support

Every GEEKOM Mini PC is covered by a three-year warranty, ensuring peace of mind. GEEKOM also provides lifetime technical assistance and responsive 24/7 customer support. For any questions or assistance, please refer to your purchase platform's customer service or contact GEEKOM directly.



Image: A graphic illustrating GEEKOM's commitment to quality with a 3-year warranty and dedicated customer support.

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Answered questions about this manual

I bought the GEEKOM A9 Max; how do I plug back in the antenna wires that are soldered to the shielding?

Based on the GEEKOM A9 Max design, the antenna wires are typically connected to the Wi-Fi/Bluetooth module using small MHF4 or IPEX connectors, while the other ends are attached to the internal shielding or...

Read full answer