ACEMAGICIAN S3A

ACEMAGICIAN S3A Mini PC Instruction Manual

Model: S3A | Brand: ACEMAGICIAN

INTRODUCTION

This manual provides essential information for setting up, operating, and maintaining your ACEMAGICIAN S3A Mini PC. This compact desktop computer is powered by an AMD Ryzen 7 8745HS processor and features an AMD Radeon 780M GPU, 16GB DDR5 RAM, and a 512GB NVMe SSD, offering robust performance for various tasks from light gaming to office work.

Image: Overview of the ACEMAGICIAN S3A Mini PC's core components and capabilities.

WHAT'S IN THE BOX

Verify that all items are present in the packaging:
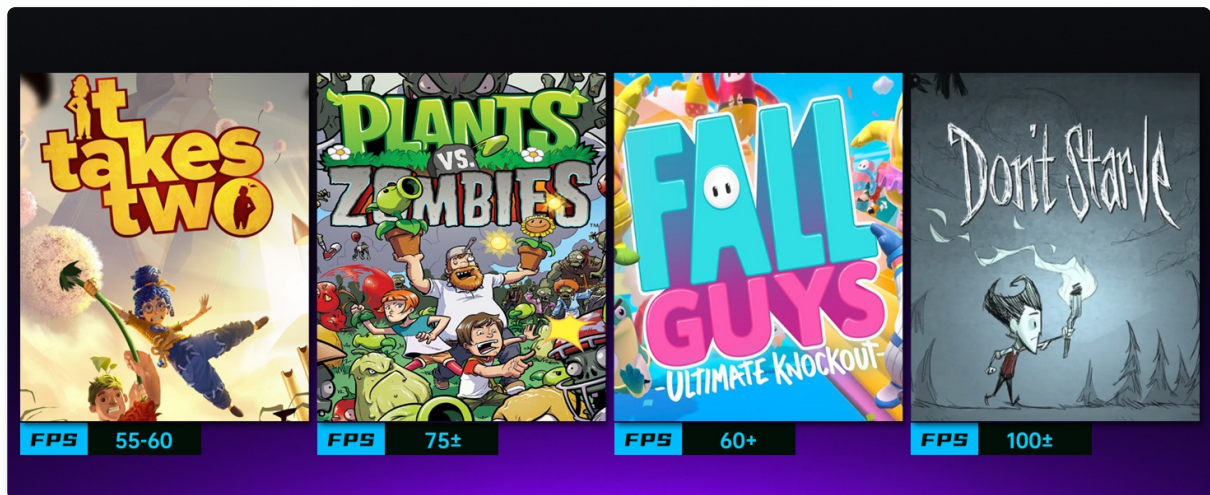
- Mini PC
- Power Adapter
- HDMI Cable

Image: Contents of the ACEMAGICIAN S3A Mini PC retail packaging.

SETUP

1. **Connect Power:** Plug the power adapter into the DC IN port on the Mini PC and then into a power outlet.
2. **Connect Display:** Connect your monitor(s) to the Mini PC using the HDMI, DisplayPort (DP), or full-function Type-C port. The S3A supports up to three 4K displays simultaneously.
3. **Connect Peripherals:** Plug in your USB keyboard, mouse, and any other USB devices into the available USB 3.2 ports.
4. **Network Connection:** For wired internet, connect an Ethernet cable to the 2.5Gbps LAN port. For wireless, the device supports WiFi 6.
5. **Power On:** Press the power button on the front of the Mini PC.
6. **Initial Windows Setup:** Follow the on-screen instructions to complete the Windows 11 Pro setup, including language, region, network, and user account creation.

*1080P medium to low resolution

Image: Rear and side view of the ACEMAGICIAN S3A Mini PC highlighting available ports for connectivity.

OPERATING MODES

The ACEMAGICIAN S3A Mini PC offers multiple operating modes to optimize performance and energy consumption based on your needs:

- **Silent Mode:** Ideal for quiet streaming or light work. Fan sound is as low as 35dB, and power consumption is reduced to 20-35W for smart energy saving.
- **Auto Mode:** Suitable for medium workloads or entertainment projects. The Mini PC power is set to 30-45W to improve work efficiency.

- **Performance Mode:** For demanding tasks and intense gaming. Power can be cranked up to 40-54W to handle the toughest graphics and upgrade your gaming experience. Adjustable RGB lighting effects provide atmosphere.
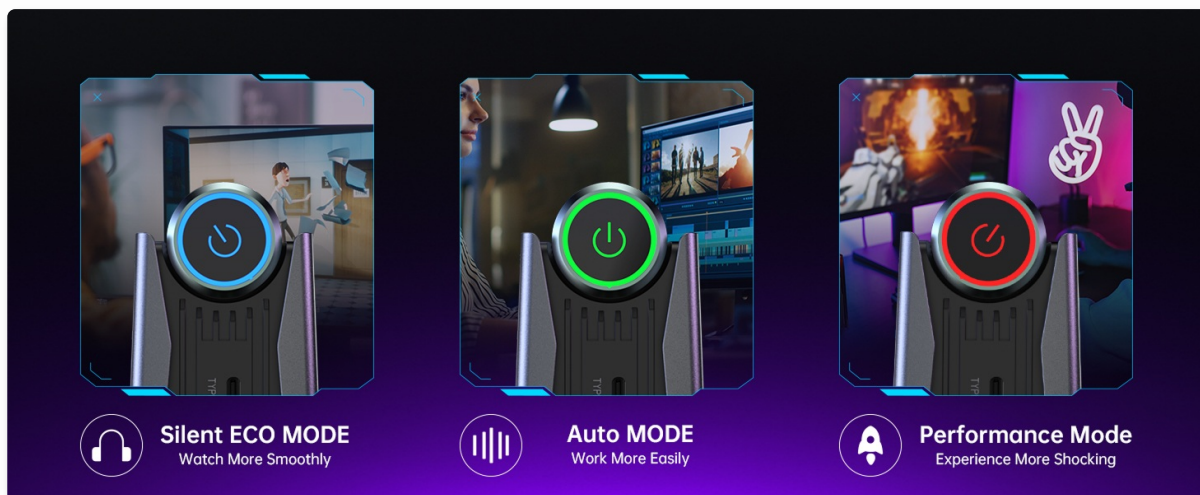

Image: Visual representation of the three distinct operating modes of the S3A Mini PC.

FEATURES & PERFORMANCE

Processor: AMD Ryzen 7 8745HS

The AMD Ryzen 7 8745HS processor (8 Cores/16 Threads, 16MB Cache, up to 4.9 GHz max boost) is built on the Zen4 Architecture and 4nm technology. It offers powerful performance comparable to high-end desktop processors, suitable for gaming and creative tasks.

Image: Detailed specifications and performance benchmarks for the AMD Ryzen 7 8745HS processor.

Graphics: AMD Radeon 780M GPU

Equipped with the AMD Radeon 780M GPU (12 CUs, RDNA 3 Architecture, 2600MHz), this Mini PC supports DirectX 12 Ultimate for smooth gaming and visuals. It delivers significantly higher frame rates compared to previous integrated graphics solutions.

AMD Ryzen 7 8745HS

effortlessly handling high-load multitasking

54W TDP	4.9 GHz	8 Cores	16 MB
TSMC 4nm FinFET	Turbo Boost	16 Threads	L3 Cache

Cinebench R23 (Single-Core)   Cinebench R23 (Multi-Core)

1731	R7 8745HS	15899
1565	R9 6900HX	14136
1546	R7 7735HS	13598

↑12%   17%↑

Image: Detailed specifications and performance benchmarks for the AMD Radeon 780M GPU.

Memory & Storage

The S3A comes with 16GB of 5600MHz DDR5 RAM, pre-installed in dual-channel configuration (2 SO-DIMM DDR5 slots), and is upgradeable to a total of 64GB. It also includes a 512GB M.2 2280 NVMe PCIe4.0 SSD, offering data transmission speeds 10 times faster than ordinary SATA SSDs. Storage is upgradeable to 4TB.

Cooling System

Equipped with a built-in dual-fan, high-efficiency cooling system, the S3A Mini PC ensures optimal thermal management during intense workloads and gaming sessions. This advanced design provides more efficient and faster heat dissipation compared to single-fan systems.

Auto Mode

Power: **35-45W**   Fan Volume: **38db**

Leave the dial in the center and you get Auto Mode. Auto mode is suitable for daily work like office kit. It can offer better peak performance for multitasking, more efficient working.

Image: Internal view and components of the advanced cooling system.

Connectivity & Display Support

The S3A features WiFi 6 (802.11ax) for fast and stable wireless connections (up to 9.6Gbps) and Bluetooth 5.2 for connecting wireless peripherals. It includes a 2.5Gbps LAN port, 1 x HDMI, 1 x DP, and 1 x full-function Type-C port, supporting 4K triple display output for enhanced productivity.

Performance Mode

Power: **45-54W**

Fan Volume: **42db**

Performance mode, which is prepared for heavy productivity and gaming. Slide the dial to the right for Performance Mode, the light turn red; which improves frame rates while gaming and offers a boost for other CPU and graphics-intense tasks.

Image: Triple-display setup demonstrating the S3A Mini PC's multi-monitor capabilities.

SPECIFICATIONS

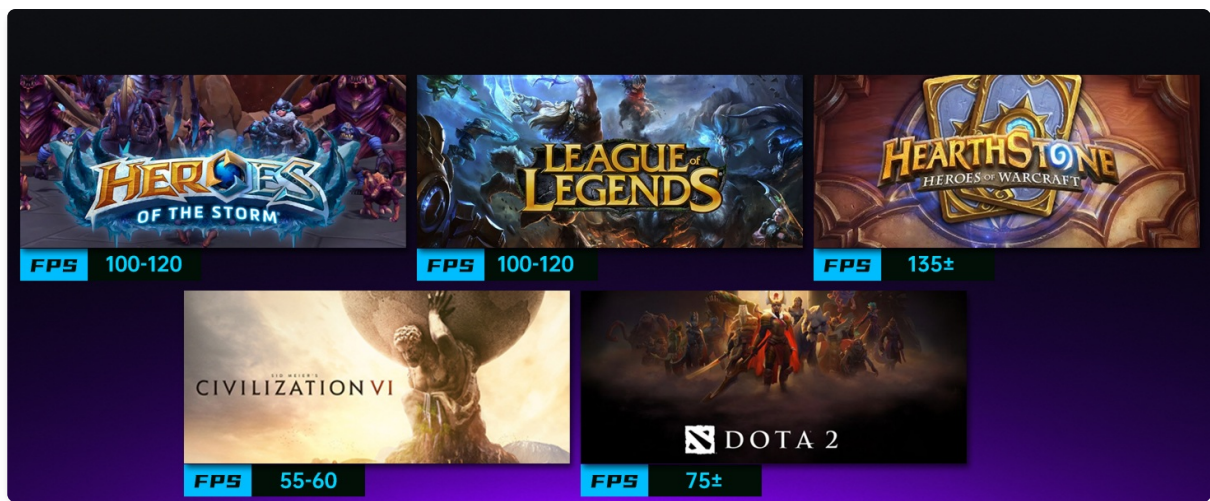| Feature	Specification
Model	S3A
Processor	AMD Ryzen 7 8745HS (8C/16T, up to 4.9 GHz)
Integrated Graphics	AMD Radeon 780M
RAM	16GB DDR5 5600MHz (2 SO-DIMM slots, up to 64GB)
SSD	512GB M.2 2280 NVMe PCIe4.0 (2 slots, up to 4TB)
Network	WiFi 6, Bluetooth 5.2, 2.5Gbps LAN
Display Output	1 x HDMI, 1 x DP, 1 x Type-C (full function) - Supports 4K Triple Display
Operating System	Windows 11 Pro (also supports Linux, Ubuntu)
Dimensions	3.06 x 5.89 x 7.42 inches (approx.)
Item Weight	3.45 pounds

Image: Detailed product parameters and specifications.

MAINTENANCE

To ensure the longevity and optimal performance of your ACEMAGICIAN S3A Mini PC, follow these maintenance guidelines:

- **Keep Vents Clear:** Ensure that the ventilation holes are not obstructed to allow for proper airflow and prevent overheating.
- **Regular Cleaning:** Periodically clean the exterior of the Mini PC with a soft, dry cloth. Use compressed air to gently clear dust from the vents.
- **Software Updates:** Regularly check for and install Windows updates, driver updates, and firmware updates to maintain system stability and security.
- **Safe Shutdown:** Always shut down the Mini PC properly through the operating system to prevent data corruption.
- **Magnetic Design for Upgrades:** The magnetic cover design allows for easy access to upgrade RAM (up to 64GB) and SSD (up to 4TB).
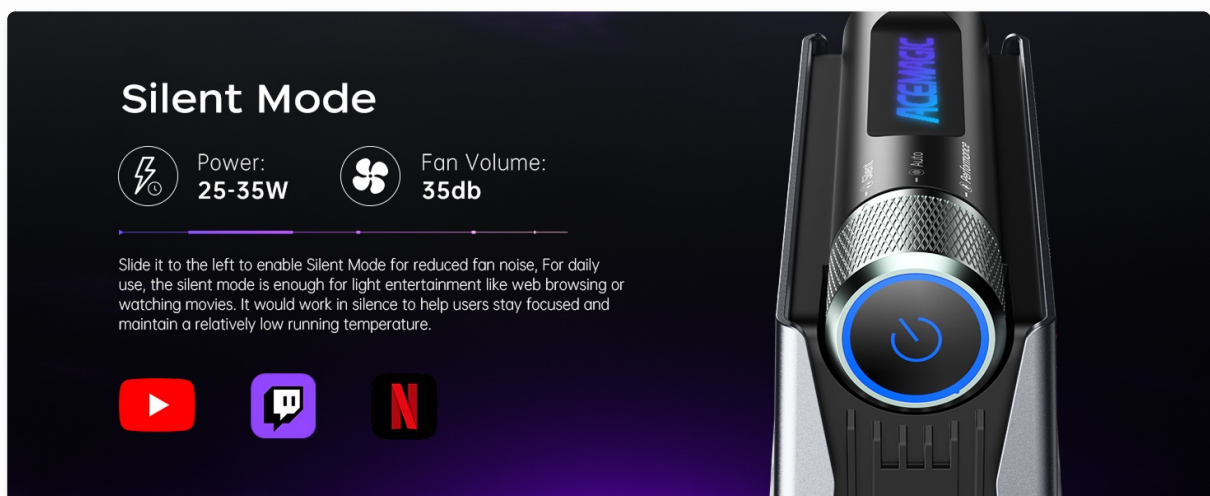

Image: Magnetic design for easy access and upgrades to RAM and SSD.

TROUBLESHOOTING

If you encounter issues with your ACEMAGICIAN S3A Mini PC, try the following basic troubleshooting steps:

- **No Display:** Ensure all display cables (HDMI, DP, Type-C) are securely connected to both the Mini PC and the monitor. Verify the monitor is powered on and set to the correct input source.
- **Power Issues:** Check that the power adapter is correctly plugged into the Mini PC and a working power outlet. Try a different outlet if necessary.
- **Slow Performance:** Close unnecessary applications. Check Task Manager for high CPU, RAM, or disk usage. Ensure Windows and drivers are up to date. Consider clearing temporary files or running a disk cleanup.
- **Network Connectivity:** For wired connections, check the Ethernet cable and router. For Wi-Fi, ensure the Wi-Fi adapter is enabled and you are connected to the correct network. Restarting your router may help.
- **Peripheral Not Responding:** Try connecting the peripheral to a different USB port. Restart the Mini PC. Ensure drivers for the peripheral are installed and up to date.

WARRANTY & SUPPORT

ACEMAGICIAN is committed to providing high-quality products and excellent after-sales service. Your S3A Mini PC comes with a 12-month warranty and lifetime technical support.

For support inquiries, please use the following methods:

- **Amazon Buyer Account:** Log in to your Amazon buyer account, find your order, and click "Get Help."
- **Support Email:** service@acemagicians.com
- **Telephone (US):** +1 800 908 1980

Image: ACEMAGICIAN brand logo, representing quality and support.