

## MPEEPPYPP-MOTHERBOARDS

# SOYO B450M ATX Gaming Motherboard User Manual

Model: MPEEPPYPP-MOTHERBOARDS

## INTRODUCTION

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This manual provides detailed instructions for the installation, operation, and maintenance of the SOYO B450M ATX Gaming Motherboard. This motherboard is designed to support AMD Ryzen 1st to 5th generation CPUs, featuring DDR4 memory support and an M.2 NVMe slot for high-speed storage. Please read this manual thoroughly before proceeding with installation to ensure proper setup and optimal performance.

## FEATURES

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- High-performance SOYO B450M motherboard designed for gaming enthusiasts, supporting Ryzen 1st to 5th generation CPUs for optimal performance.
- Equipped with DDR4 memory slots, this ATX motherboard allows for faster data transfer and improved multitasking capabilities.
- M.2 NVMe support enables lightning-fast storage solutions, enhancing your gaming experience with reduced load times and increased responsiveness.
- Multiple connectivity options including USB 3.1, HDMI, and Ethernet ensure seamless integration with your gaming setup and peripherals.
- Compact ATX form factor fits easily into most cases, making it an ideal choice for building a powerful yet space-efficient gaming rig.

## SETUP GUIDE

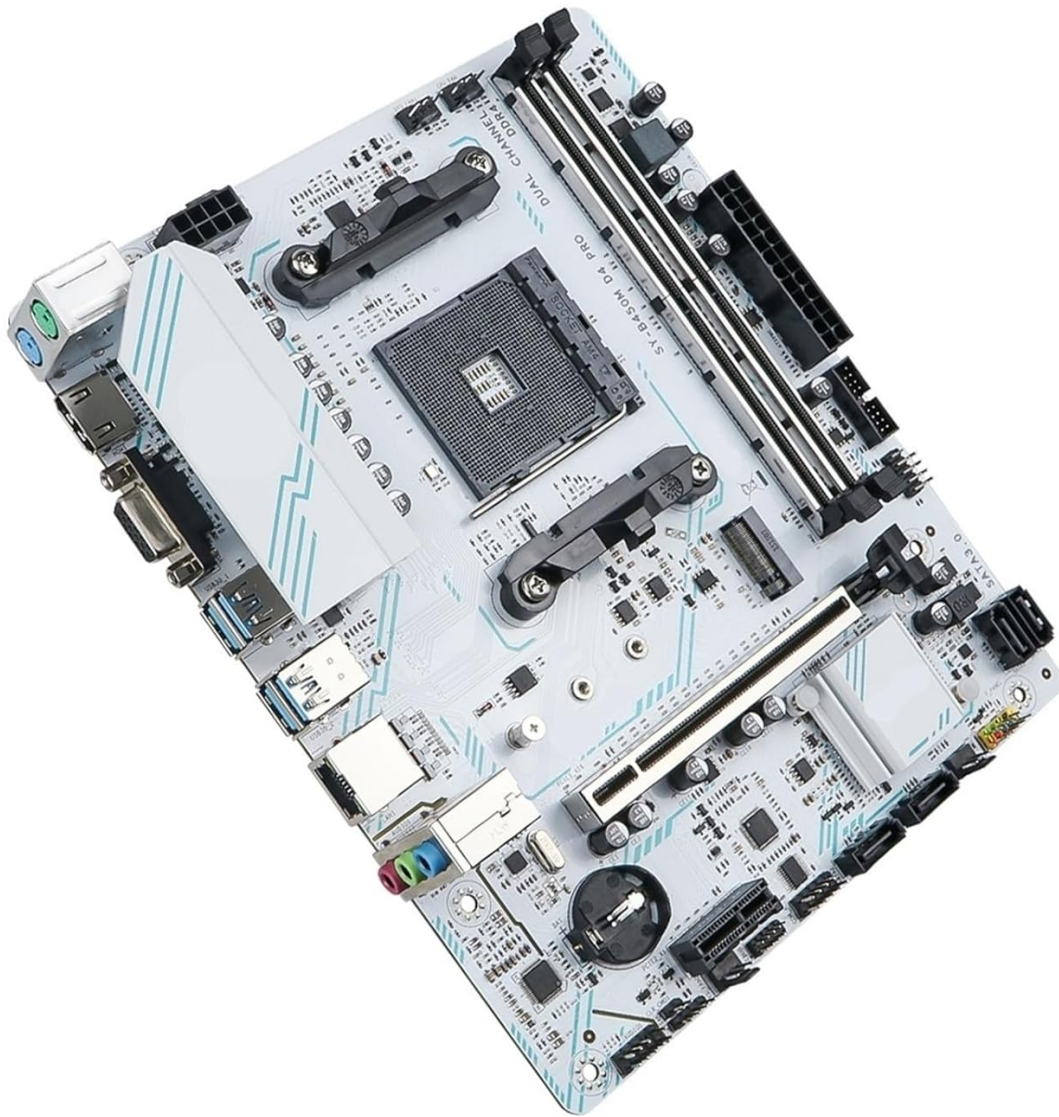
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### 1. Unpacking and Inspection

Carefully remove the motherboard from its packaging. Inspect for any visible damage. Ensure all accessories, such as SATA cables and the I/O shield, are present.

### 2. CPU Installation

Locate the AM4 CPU socket. Lift the retention arm. Align the triangular marker on your Ryzen CPU with the corresponding marker on the socket. Gently place the CPU into the socket without forcing it. Lower the retention arm to secure the CPU.



**Figure 1:** Top-down view of the SOYO B450M motherboard. This image highlights the central AM4 CPU socket, surrounded by the four DDR4 RAM slots, and various other components including the M.2 slot and PCIe slots. The I/O panel connectors are visible on the left edge.

### 3. RAM (DDR4) Installation

Open the clips on both ends of the DDR4 memory slots. Align the notch on your DDR4 memory module with the key in the DIMM slot. Press down firmly on both ends of the memory module until the clips snap into place. Refer to your motherboard's manual for recommended dual-channel configurations.

### 4. M.2 NVMe SSD Installation

Locate the M.2 slot on the motherboard. Remove the M.2 standoff screw. Insert your M.2 NVMe SSD into the slot at an angle. Gently push down the SSD and secure it with the standoff screw.

### 5. Power Connections

- **24-pin ATX Power:** Connect the main 24-pin power cable from your power supply unit (PSU) to the corresponding connector on the motherboard.
- **8-pin EPS/CPU Power:** Connect the 8-pin (or 4+4 pin) CPU power cable from your PSU to the connector near the

CPU socket.

## 6. Front Panel Connectors

Connect the power switch, reset switch, HDD LED, and power LED cables from your PC case to the front panel header pins on the motherboard. Consult the motherboard's silkscreen labels for correct polarity and placement.

## 7. Peripheral Connections

Connect your USB devices, HDMI display, Ethernet cable, and audio devices to the appropriate ports on the motherboard's I/O panel.



**Figure 2:** Angled view of the SOYO B450M motherboard. This perspective highlights the various I/O ports on the left, including USB, HDMI, and audio jacks, as well as the PCIe slots for graphics cards and other expansion cards.

## 8. Motherboard Mounting

Install the I/O shield into your PC case. Carefully align the motherboard with the standoffs in your case and secure it with screws. Ensure no components are touching the case directly without proper insulation.

## OPERATING INSTRUCTIONS

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### 1. Initial Power On and BIOS/UEFI Access

After connecting all components and power, press the power button on your PC case. During the boot process, repeatedly press the **DEL** or **F2** key (common keys, may vary) to enter the BIOS/UEFI setup utility. Here you can configure boot order, system time, and other advanced settings.

### 2. Driver Installation

Once your operating system is installed, install the necessary drivers for the motherboard chipset, audio, LAN, and any other integrated components. These drivers are typically available on the manufacturer's website or included on a driver CD/USB drive.

### 3. Operating System Installation

Insert your operating system installation media (USB drive or DVD) and follow the on-screen prompts to install your preferred operating system.

## MAINTENANCE

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### 1. Cleaning

Regularly clean dust from your computer case and motherboard components using compressed air. Ensure the system is powered off and unplugged before cleaning. Avoid using liquids directly on components.

### 2. BIOS/UEFI Updates

Periodically check the manufacturer's website for BIOS/UEFI updates. Updates can improve stability, add support for new hardware, or fix bugs. Follow the manufacturer's instructions carefully when performing a BIOS update.

### 3. Driver Updates

Keep your motherboard drivers updated to ensure optimal performance and compatibility with new software and hardware. Download drivers only from the official manufacturer's website.

## TROUBLESHOOTING

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### 1. No Power / No POST (Power-On Self-Test)

- Check all power connections (24-pin ATX, 8-pin EPS) are securely seated.
- Ensure the power supply switch is in the 'ON' position.
- Verify the front panel power switch connector is correctly installed.
- Try booting with only essential components (CPU, one RAM stick, GPU if no integrated graphics).
- Clear CMOS by removing the CMOS battery for 5-10 minutes or using the clear CMOS jumper.

### 2. No Display Output

- Ensure your monitor is connected to the correct display output (either integrated graphics or dedicated GPU).
- Check that the graphics card is properly seated in its PCIe slot and has adequate power.
- Test with a different display cable or monitor if possible.

### 3. Operating System Not Booting

- Check the boot order in BIOS/UEFI to ensure your primary storage drive is selected.
- Verify that your storage drive (HDD/SSD) is correctly connected (SATA data and power, or M.2).
- If recently installed, ensure the operating system was installed correctly.

## SPECIFICATIONS

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Feature	Detail
Model Number	MPEEPPYPP-MOTHERBOARDS
Brand	Generic
CPU Support	AMD Ryzen 1st to 5th Gen Processors (AM4 Socket)
Memory Support	DDR4 (Specific speeds and capacities should be verified with manufacturer)
Storage Interface	M.2 NVMe, SATA 3.0
Form Factor	ATX
Connectivity	USB 3.1, HDMI, Ethernet (Specific port count and types should be verified with manufacturer)
Parcel Dimensions	1 x 1 x 1 cm
Item Weight	386 g

*Note: For the most accurate and up-to-date specifications, please refer to the official product page or manufacturer's documentation.*

## WARRANTY AND SUPPORT

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Specific warranty terms and conditions for the SOYO B450M ATX Gaming Motherboard are provided by the retailer or manufacturer at the time of purchase. Please retain your proof of purchase for warranty claims. For technical support, driver downloads, and further assistance, please visit the official website of the motherboard manufacturer or contact your retailer.