MSI MAG A750BN PCIE5

MSI MAG A750BN PCIE 5 Gaming Power Supply

User Manual

Model: MAG A750BN PCIE5 | Brand: MSI

1. Introduction

This manual provides comprehensive instructions for the installation, operation, and maintenance of your MSI MAG A750BN PCIE 5 Gaming Power Supply. Please read this manual thoroughly before installation and keep it for future reference. Proper installation and usage will ensure optimal performance and longevity of your power supply unit.

2. Safety Information

Always observe the following safety precautions to prevent injury and damage to your equipment:

- **Electrical Hazard:** Do not open the power supply casing. High voltages are present inside, even when the unit is unplugged. There are no user-serviceable parts.
- **Proper Grounding:** Ensure the power supply is properly grounded to prevent electrical shock.
- **Ventilation:** Install the power supply in a well-ventilated area. Do not block any ventilation openings.
- **Moisture:** Keep the power supply away from water, humidity, and damp environments.
- **Temperature:** Operate the power supply within the specified temperature range. Avoid extreme heat or cold.
- **Power Cord:** Use only the provided power cord. Do not use damaged power cords.
- **Professional Installation:** If you are unsure about any installation steps, consult a qualified technician.

3. Package Contents

Verify that all items are present in your package. If any items are missing or damaged, contact your retailer.

- MSI MAG A750BN PCIE 5 Power Supply Unit
- AC Power Cord
- Mounting Screws
- Main ATX 20+4 Pin Cable (x1)
- CPU 4+4 Pin Cable (x2)

- PCIe 5.0 16 Pin Cable (x1)
- PCI-E 6+2 Pin Cable (x2)
- SATA Power Cable (x5 connectors)
- Molex Power Cable (x2 connectors)
- FDD Power Cable (x1 connector)



Image: The MSI MAG A750BN PCIE 5 Power Supply, its retail packaging, included AC power cord, and mounting screws.

4. Key Features

- **80 PLUS Bronze Certified:** Ensures high power efficiency, reducing energy waste and operating costs.
- **PCIE 5.1 Ready:** Equipped with a native 16-pin PCIe 5.0 connector for compatibility with the latest graphics cards.
- **Compact Size:** Designed to fit easily into various PC cases.
- **DC to DC Circuit Design:** Provides stable and reliable power output to all components.
- **Comprehensive Protection Design:** Includes Over Current Protection (OCP), Over Power Protection (OPP), Over Voltage Protection (OVP), and Short Circuit Protection (SCP) for system safety.
- **Temperature Adaptation:** Engineered to perform reliably across a range of operating temperatures.
- **120mm Low Noise Fan:** Features a quiet fan for efficient cooling with minimal acoustic output.



Image: The MSI MAG A750BN PCIE 5 Power Supply highlighting its 80 PLUS Bronze certification, PCIe 5.0 readiness, and compact form factor.



Image: Detail of the PCIe 5.0 16-pin connector, demonstrating compatibility with modern graphics cards such as the 4070 Ti Gaming X Trio and 4070 Ventus 3X.

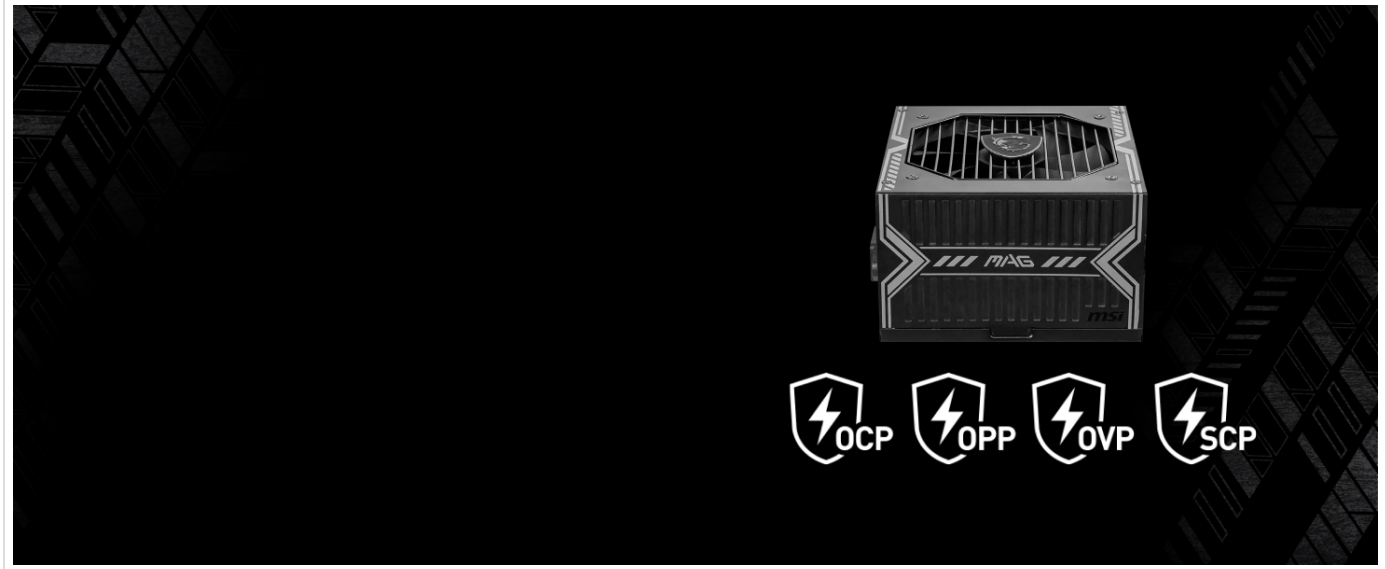


Image: The power supply unit emphasizing its DC to DC circuit design for enhanced power stability.

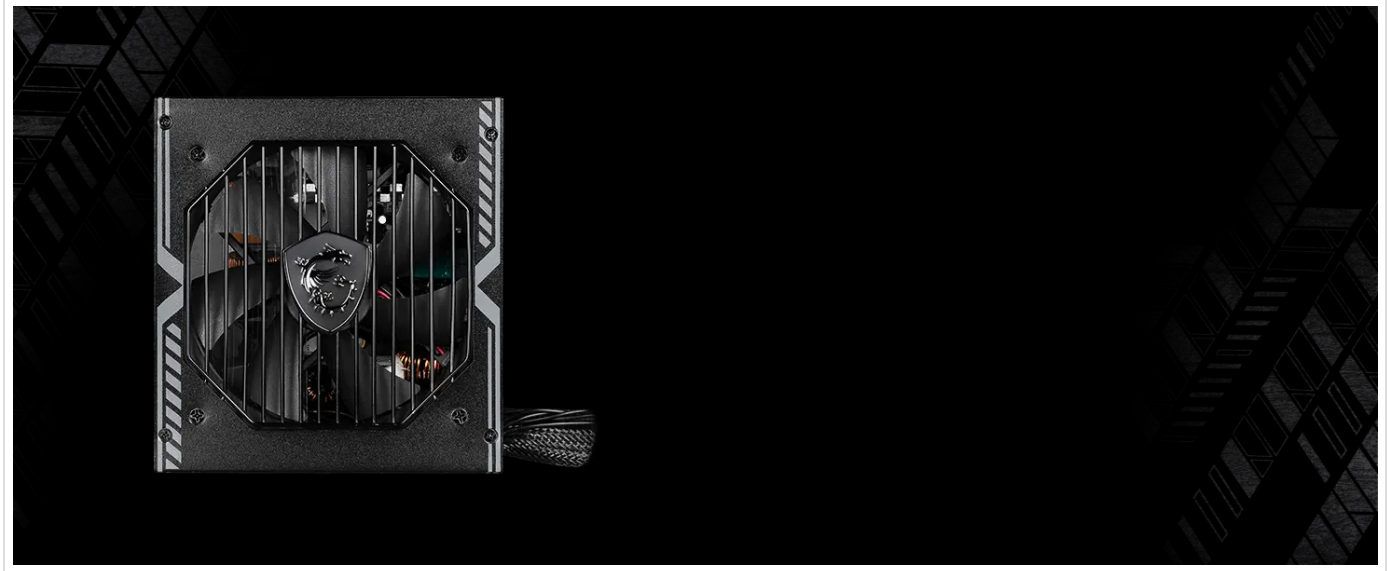


Image: The power supply unit illustrating its robust protection features, including OCP, OPP, OVP, and SCP.

5. Setup and Installation

Before beginning installation, ensure your computer is powered off and unplugged from the wall outlet. It is recommended to wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to components.

1. **Prepare Your PC Case:** Open your PC case and locate the power supply mounting area, typically at the bottom or top rear.
2. **Mount the Power Supply:** Carefully slide the MSI MAG A750BN PCIE 5 into the designated slot. Secure it with the provided mounting screws from the outside of the case.
3. **Connect the Main ATX Cable:** Connect the 20+4 Pin ATX cable to the corresponding port on your motherboard. Ensure it clicks securely into place.
4. **Connect the CPU Power Cables:** Connect the 4+4 Pin CPU power cables to the CPU power ports on your motherboard. Most motherboards require one 8-pin connector, some high-end boards may require two.
5. **Connect PCIe Power Cables:**
    - For modern graphics cards requiring a 16-pin connector, use the dedicated PCIe 5.0 16 Pin cable.
    - For other graphics cards or components, use the PCI-E 6+2 Pin cables. Connect them firmly to your graphics card(s).
6. **Connect SATA and Peripheral Cables:** Connect the SATA power cables to your SSDs, HDDs, and optical drives. Use

Molex cables for other peripherals as needed.

7. **Cable Management:** Route cables neatly to improve airflow and aesthetics within your case.
8. **Final Checks:** Double-check all connections to ensure they are secure. Close your PC case.
9. **Power On:** Connect the AC power cord to the power supply and then to a wall outlet. Flip the power switch on the PSU to the 'ON' position. You can now power on your computer.



Image: An illustration detailing the types and quantities of power connectors included with the MSI MAG A750BN PCIE 5 Power Supply, including MB, CPU, PCIe 5.0, PCI-E, SATA, Molex, and FDD connectors.

6. Operating Instructions

The MSI MAG A750BN PCIE 5 Power Supply operates automatically once installed and powered on. It provides stable and efficient power to all connected components. No specific user interaction is required during normal operation beyond ensuring proper ventilation and a stable power source.

- **Power On/Off:** Use your computer's power button to turn the system on or off. The power supply will respond accordingly.
- **System Stability:** The 80 PLUS Bronze certification and DC to DC circuit design contribute to overall system stability and energy efficiency.
- **Fan Operation:** The 120mm low noise fan will operate as needed to maintain optimal internal temperatures within the PSU.

7. Maintenance

Regular maintenance helps ensure the longevity and optimal performance of your power supply.

- **Dust Removal:** Periodically clean dust from the power supply's fan grille and ventilation openings using compressed air. Ensure the computer is powered off and unplugged before cleaning.
- **Airflow:** Ensure that there is unobstructed airflow around the power supply. Avoid placing the PC case in confined spaces.
- **No User-Serviceable Parts:** Do not attempt to open or repair the power supply unit. Doing so will void the warranty and poses a risk of electrical shock.

8. Troubleshooting

If you encounter issues with your power supply, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
System does not power on.	Power cord not connected, PSU switch off, loose internal connections, faulty wall outlet.	Ensure the AC power cord is securely connected to both the PSU and the wall outlet. Verify the power switch on the back of the PSU is in the 'ON' (I) position. Check all internal power connections (20+4 Pin ATX, CPU, PCIe) are firmly seated. Test the wall outlet with another device.
System powers on but shuts down unexpectedly.	Overload, overheating, faulty component, unstable power.	Ensure adequate ventilation for the PSU and other components. Verify that your system's power requirements do not exceed the PSU's 750W capacity. Check for any loose connections or damaged cables. If the issue persists, consult a qualified technician.
Fan is excessively noisy.	Dust accumulation, fan obstruction, faulty fan.	Clean any dust from the fan grille using compressed air (with power off and unplugged). Ensure no cables or objects are obstructing the fan blades. If noise persists and is unusual, contact support.

If these steps do not resolve your issue, please contact MSI customer support or your retailer for further assistance.

9. Specifications

Feature	Detail
Brand	MSI
Model Number	MAG A750BN PCIE5
Wattage	750 Watts
Efficiency Certification	80 PLUS Bronze
Form Factor	ATX
Cooling Method	Air (120mm Fan)
Product Dimensions (LxWxH)	11.5 x 9.25 x 5 inches
Item Weight	4.5 Pounds
Connector Type	ATX (Non-Modular)
PCIE 5.0 Ready	Yes (1x 16-pin connector)
Protection Features	OCP, OPP, OVP, SCP

10. Warranty and Support

Warranty Information: The MSI MAG A750BN PCIE 5 Gaming Power Supply comes with a **5-year limited warranty**, guaranteeing long-term reliable operation. Please retain your proof of purchase for warranty claims.

Customer Support: For technical assistance, warranty claims, or further inquiries, please visit the official MSI website or contact your local MSI support center. You can find contact information and FAQs on the MSI Official Website.

© 2025 MSI. All rights reserved. Information in this manual is subject to change without notice.