MSI MAG A750GL PCIE5

MSI MAG A750GL PCIE 5.1 & ATX 3.1 Gaming Power Supply User Manual

Model: MAG A750GL PCIE5
Brand: MSI

1. Introduction

This user manual provides comprehensive instructions for the installation, operation, and maintenance of your MSI MAG A750GL PCIE 5.1 & ATX 3.1 Gaming Power Supply. Designed for high-performance gaming systems, this fully modular power supply offers reliable and efficient power delivery. Please read this manual thoroughly before installation and operation to ensure optimal performance and safety.

2. Key Features

- **80 PLUS Gold Certified:** Ensures high power efficiency, reducing energy waste and operating costs.
- **10-Year Limited Warranty:** Guarantees long-term reliable operation and peace of mind.
- **Fully Modular Design:** Allows for cleaner cable management and improved airflow within your PC case by only using the necessary cables.
- **ATX 3.1 & PCIe 5.1 Ready:** Future-proof compatibility with the latest generation of graphics cards and motherboards, including native 12VHPWR connector support.
- **Compact Size:** Smaller than typical PSUs, saving space and simplifying cable organization.
- **Fluid Dynamic Bearing Fan:** Provides quiet and efficient cooling, balancing performance and noise levels.
- **Full Bridge DC to DC Design:** Achieves higher conversion efficiency, stable output voltage, and quicker voltage adjustment.

3. Package Contents

Upon unpacking your MSI MAG A750GL PCIE5 power supply, please ensure all the following items are present and in good condition:



Figure 3.1: MSI MAG A750GL PCIE5 Power Supply unit and all included modular cables and accessories.

- MSI MAG A750GL PCIE5 Power Supply Unit
- AC Power Cord
- Modular Cables (flat black design for easy cable management):
  - 1x ATX 24-Pin Motherboard Cable
  - 2x CPU 8-Pin (4+4) Cables
  - 1x 12VHPWR (PCIe 5.1) 600W GPU Cable (with yellow tip ends for proper seating indication)
  - 2x PCIe 8-Pin (6+2) Cables

    - 4x SATA Power Cables
    - 1x Molex Power Cable
- Mounting Screws
- Cable Storage Pouch

4. 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.

4.1 Physical Installation

1. Open your PC case and locate the power supply mounting area, typically at the bottom or top rear.
2. Carefully slide the MSI MAG A750GL PCIE5 power supply into the designated bay.
3. Align the screw holes on the PSU with those on the case and secure it using the provided mounting screws.



Figure 4.1: The compact size of the MSI MAG A750GL PCIE5 allows for easier installation and improved internal airflow.

4.2 Cable Connections

Utilize the fully modular design by connecting only the cables required for your system components. This reduces clutter and improves airflow.

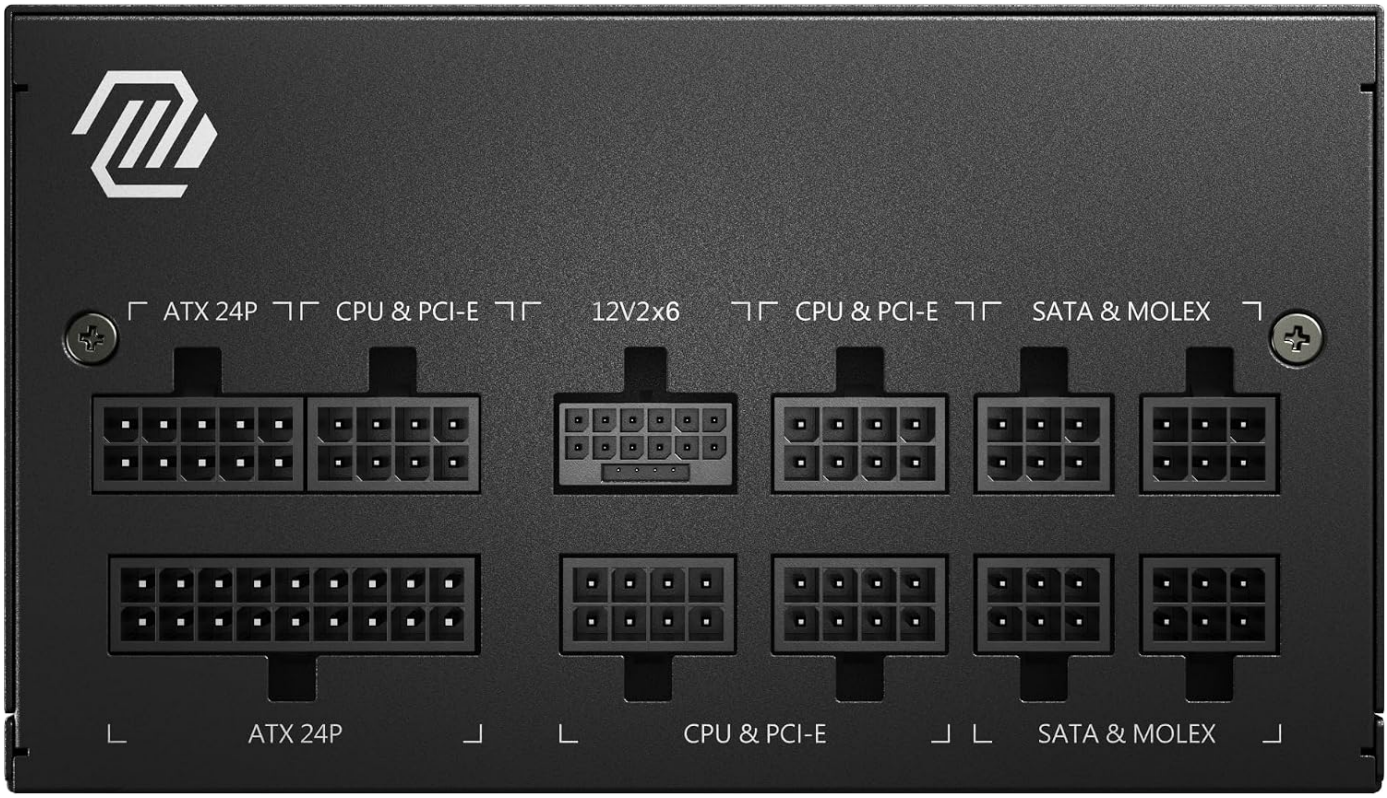


Figure 4.2: Modular ports on the MSI MAG A750GL PCIE5. Each port is clearly labeled for easy identification.

1. **ATX 24-Pin Motherboard Cable:** Connect the 24-pin cable to the corresponding port on the PSU and your motherboard.
2. **CPU Power Cables:** Connect the 8-pin (4+4) CPU cables to the CPU ports on the PSU and your motherboard. Use one or two cables as required by your motherboard and CPU.
3. **PCIe 5.1 (12VHPWR) GPU Cable:** For compatible NVIDIA RTX 40-series GPUs, connect the native 12VHPWR cable to the PSU's 12V-2x6 port and directly to your graphics card. Ensure the yellow tips are fully seated and not visible to confirm proper connection.

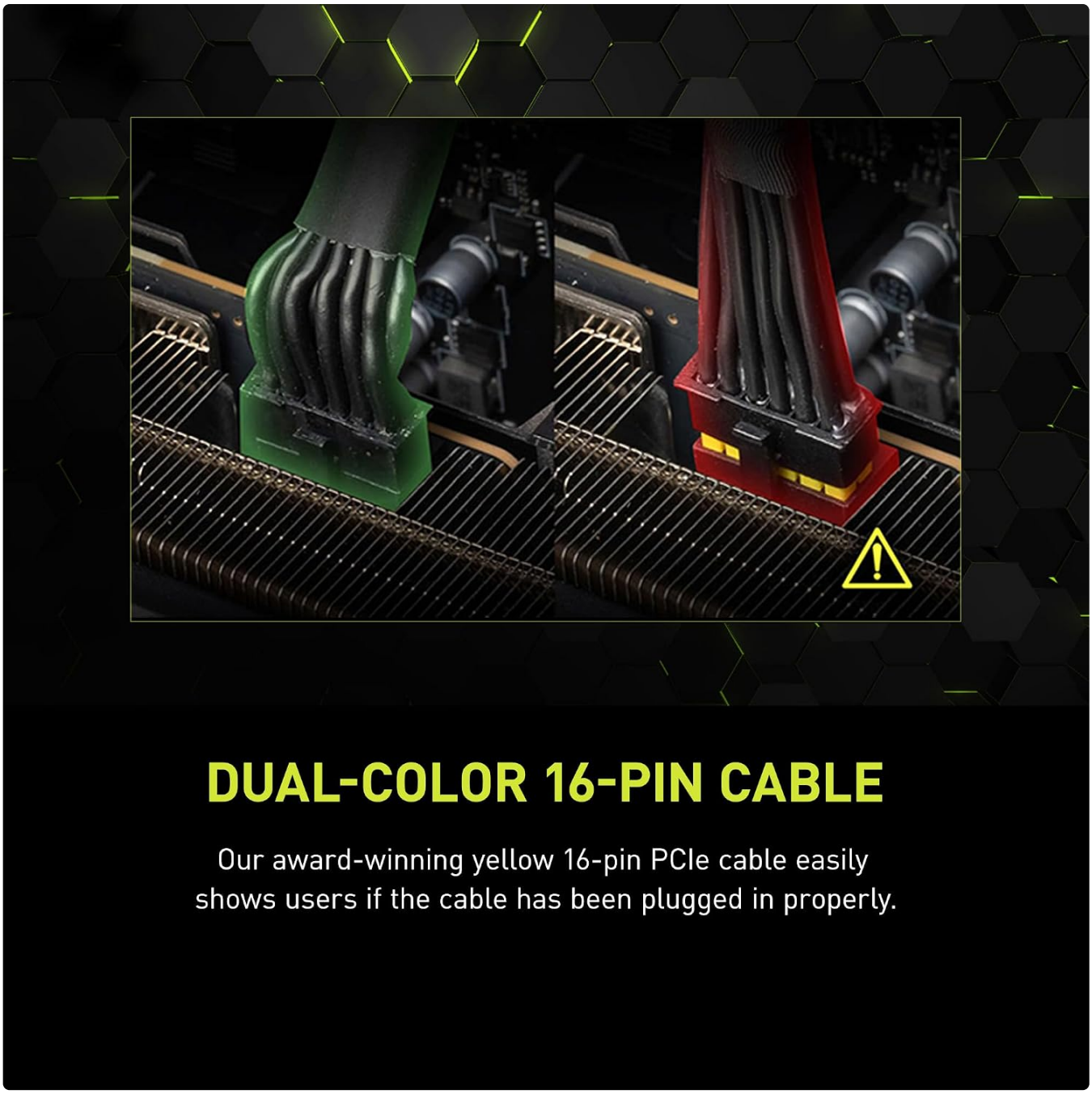


Figure 4.3: The dual-color 16-pin PCIe cable features yellow tips that should not be visible when fully plugged in, indicating a secure connection.

4. **PCIe 8-Pin (6+2) Cables:** For other graphics cards or PCIe devices, connect the 8-pin (6+2) PCIe cables to the CPU & PCI-e ports on the PSU and your devices.
5. **SATA Power Cables:** Connect SATA cables to the SATA & MOLEX ports on the PSU and to your storage drives (SSDs/HDDs) or other SATA-powered peripherals.
6. **Molex Power Cable:** If needed for older peripherals, connect the Molex cable to the SATA & MOLEX port on the PSU.
7. **Cable Management:** Utilize the flat black cables to route and organize them neatly within your PC case for optimal airflow and aesthetics.

5. Operating Instructions

1. Once all internal components are connected, close your PC case.

2. Connect the AC power cord to the power supply's inlet and then to a wall outlet or surge protector.
3. Flip the power switch on the back of the PSU to the "ON" (I) position.
4. Press the power button on your PC case to start your system.

6. Maintenance

Proper maintenance ensures the longevity and optimal performance of your power supply.

- **Cleaning:** Periodically clean the exterior of the power supply and its fan grille to prevent dust buildup, which can impede airflow and cooling. Use compressed air for hard-to-reach areas. Ensure the system is powered off and unplugged before cleaning.
- **Fan Operation:** The Fluid Dynamic Bearing fan is designed for quiet and efficient operation. If you notice unusual fan noise or reduced airflow, ensure there are no obstructions.



Figure 6.1: The Fluid Dynamic Bearing fan ensures efficient cooling and quiet operation for your power supply.

7. Troubleshooting

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

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Power Supply Not Turning On	Power switch is off. AC power cord is loose or disconnected. Loose internal cable connections. Faulty wall outlet or surge protector.	Ensure the power switch on the PSU is in the "ON" (I) position. Check that the AC power cord is securely connected to both the PSU and the wall outlet. Verify all modular cables are firmly seated in both the PSU and component ends. Try plugging the PC into a different wall outlet.
System Instability / Random Shutdowns	Insufficient power delivery. Overheating. Loose cable connections.	Ensure your system's power requirements do not exceed the PSU's capacity. Check for proper airflow within the case and ensure PSU fan is unobstructed. Re-seat all power cables, especially the 12VHPWR cable for GPUs (ensure yellow tips are not visible).
Loud Fan Noise	Dust buildup on fan. Obstruction in fan.	Clean the fan grille and blades with compressed air. Ensure no cables or debris are interfering with the fan's rotation.

8. Specifications

Feature	Detail
Brand	MSI
Model Name	MAG A750GL PCIE5
Wattage	750 watts
Efficiency Certification	80 PLUS Gold Certified
Form Factor	ATX
ATX Standard	ATX 3.1 Ready
PCIe Standard	PCIe 5.1 Ready (Native 12VHPWR)
Modular Type	Fully Modular
Cooling Method	Air (Fluid Dynamic Bearing Fan)
Dimensions (LxWxH)	12 x 9 x 5 inches
Item Weight	6.12 pounds (2.78 Kilograms)
Voltage	110 Volts, 220 Volts

Feature	Detail
Country of Origin	China
Warranty	10-year limited warranty

9. Warranty and Support

The MSI MAG A750GL PCIE5 Power Supply comes with a**10-year limited warranty**, guaranteeing long-term reliable operation. For technical support, warranty claims, or additional product information, please visit the official MSI website or contact their customer service. You can also find more resources and product details on the MSI Store on Amazon.

© 2025 MSI. All rights reserved.

Ask a question about this manual

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

you@example.com

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