

Aigo GP550

Aigo GP550 550W 80 Plus Bronze ATX Desktop PC Power Supply Unit User Manual

Model: GP550 | Brand: Aigo

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Aigo GP550 550W 80 Plus Bronze ATX Power Supply Unit (PSU). Please read this manual carefully before installation and retain it for future reference. Proper installation and usage are crucial for optimal performance and safety.

2. SAFETY INFORMATION

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

- Do not open the PSU casing.** High voltages inside can cause electric shock. There are no user-serviceable parts.
- Ensure the power supply is disconnected from the main power outlet before installation or maintenance.
- Install the PSU in a well-ventilated area to prevent overheating.
- Use only the cables provided with the power supply.
- Avoid exposing the PSU to moisture or extreme temperatures.
- Ensure all connections are secure before powering on your system.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x Aigo GP550 Power Supply Unit
- 1 x AC Power Cable
- 1 x Installation Guide (this document)

4. PRODUCT FEATURES

The Aigo GP550 Power Supply Unit offers the following key features:

- 550W Rated Power:** Suitable for advanced computer configurations, providing stable power delivery.
- ATX12V Compatibility:** Fully compatible with Intel ATX12V specifications, supporting both Intel and AMD dual-

core platforms.

- **Integrated Active PFC:** Features an integrated Active Power Factor Correction (PFC) circuit for improved efficiency and stable power output.
- **Advanced Circuitry:** Incorporates a dual-ring magnetic amplifier circuit and high-frequency low-resistance filter capacitors to ensure pure and stable current output.
- **Quiet Cooling:** Equipped with a 12cm hydraulic bearing fan, designed for silent operation and efficient airflow, enhancing durability.
- **Intelligent Temperature Control:** An intelligent temperature control circuit automatically adjusts fan speed, optimizing cooling performance and extending the PSU's lifespan.
- **High Capacity:** Designed with high horn capacity, allowing for wide usage and stable operation even in environments with unstable voltage.
- **Multi-Function Protection:** Includes comprehensive protection circuits against over-voltage (OVP), over-current (OCP), over-load (OPP), under-voltage (UVP), short-circuit (SCP), and light protection.
- **Pest Control Technology:** Innovative design incorporating pest control technology.

5. SETUP AND INSTALLATION

Follow these steps to install the Aigo GP550 PSU into your desktop computer:

1. **Prepare Your System:** Ensure your computer is completely powered off and unplugged from the wall outlet. Open your computer case.
2. **Remove Old PSU (if applicable):** Disconnect all cables from your old power supply. Unscrew and remove the old PSU from the case.
3. **Mount the New PSU:** Carefully slide the Aigo GP550 PSU into the designated PSU bay in your computer case. Align the screw holes and secure it with the provided screws.
4. **Connect Motherboard Power:**



Image: The Aigo GP550 power supply unit showing its various modular cable connections, including 24-pin, CPU/PCI-E, and IDE/SATA ports.

Connect the 20+4 pin ATX main power connector to your motherboard's 24-pin power socket. Ensure it clicks into place.

5. **Connect CPU Power:** Connect the 4+4 pin (P4+4) CPU power connector to the corresponding socket on your motherboard.
6. **Connect Graphics Card Power (if applicable):** If your graphics card requires external power, connect the 6+2 pin PCI-E power connectors to the graphics card. The GP550 provides two (6+2 pins) connectors.



Image: A close-up view of the 120mm fan grill on the Aigo GP550 power supply, indicating the cooling mechanism.

7. **Connect Peripherals:** Connect SATA power connectors to your storage drives (HDDs, SSDs) and optical drives. Connect IDE power connectors to any older peripherals that require them. The GP550 has 4 SATA and 2 IDE interfaces.



Image: The Aigo GP550 power supply unit shown installed within a computer case, highlighting its compact fit and cable management.

8. **Cable Management:** Route cables neatly to improve airflow and aesthetics.
9. **Close Case and Connect Power:** Close your computer case. Connect the AC power cable to the PSU and then to a wall outlet.

6. OPERATING INSTRUCTIONS

After successful installation, follow these steps to operate your system with the Aigo GP550 PSU:

1. **Power On:** Ensure the power switch on the back of the PSU is in the 'ON' (I) position.
2. **System Start-up:** Press the power button on your computer case. The PSU will provide power to all components, and your system should boot normally.
3. **Monitoring:** The intelligent temperature control feature will automatically manage the fan speed based on the PSU's internal temperature, ensuring efficient cooling and quiet operation.
4. **Power Off:** Always shut down your computer through the operating system. Once the system is off, you can

switch the PSU's power switch to 'OFF' (O) if you plan to leave the computer unused for an extended period or perform maintenance.

7. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your Aigo GP550 PSU:

- **Dust Removal:** Periodically clean the PSU's fan and vents to prevent dust buildup, which can impede airflow and cause overheating. Use compressed air for this purpose. **Always disconnect the PSU from power before cleaning.**
- **Cable Inspection:** Occasionally check all power cables for any signs of wear, fraying, or damage. Replace damaged cables immediately.
- **Environment:** Ensure the computer is in a cool, dry, and well-ventilated environment. Avoid placing it near heat sources or in direct sunlight.
- **Do Not Disassemble:** Never attempt to open the PSU casing for cleaning or repair. This will void your warranty and poses a significant electrical hazard.

8. TROUBLESHOOTING

If you encounter issues with your Aigo GP550 PSU, refer to the following common problems and solutions:

- **No Power:**
 - Check if the AC power cable is securely connected to both the PSU and the wall outlet.
 - Ensure the power switch on the back of the PSU is in the 'ON' (I) position.
 - Verify that the 24-pin and CPU power connectors are firmly seated on the motherboard.
 - Test the wall outlet with another device to confirm it has power.
- **System Shuts Down Randomly:**
 - This could indicate an overloaded PSU or overheating. Ensure your system's power requirements do not exceed the PSU's 550W rated power.
 - Check for proper ventilation and clear any dust from the PSU fan and case vents.
 - Ensure all internal components are properly connected.
- **Loud Fan Noise:**
 - While the GP550 features a quiet fan, excessive noise might indicate dust buildup. Clean the fan and vents.
 - If the noise persists and is unusual, contact support.
- **Burning Smell:**
 - **Immediately disconnect the power supply from the wall outlet.** Do not attempt to use the PSU again. This indicates a serious internal fault. Contact support.

If troubleshooting steps do not resolve the issue, contact Aigo customer support for further assistance.

9. SPECIFICATIONS

Detailed technical specifications for the Aigo GP550 Power Supply Unit:

Feature	Specification
Model Number	G5 HJ PLUS / 550W
Power Supply Size	160mm x 150mm x 85mm
Power Standard	ATX 12V
CPU Compatibility	AMD, Intel
PFC Type	Active PFC
Rated Power	550W
Maximum Power	750W
Efficiency	80 Plus Bronze
Input Voltage	160V-264V
Output Current (+3.3V)	20A
Output Current (+5V)	15A
Output Current (+12V1)	48A
Output Current (-12V)	0.3A
Output Current (+5Vsb)	2.5A
Wide Voltage Support	Yes
PWM Temperature Control	Yes
Certifications	CB, CCC, FCC Class B, CE, ROHS
Product Weight	1.9 kg (1900 grams)
Motherboard Power Support	20P/24P
Power Output Design	Multiplex +12V
IDE Interface	2
SATA Interface	4
CPU Interface	P4+4
Video Card Interface	(6+2 pins) x 2
Fan Size	120mm
Number of Fans	1
Cooling Method	Air
Form Factor	ATX
Compatible Devices	PC
Connector Type	SATA

Feature	Specification
Color	Black
Shipping Dimensions	26 x 19 x 11.5 cm
Item Weight (Shipping)	1.85 Kilograms

Note: Specifications are subject to change without prior notice.

10. WARRANTY AND SUPPORT

Aigo products are designed for reliability and performance. For warranty information and technical support, please refer to the official Aigo website or contact your local retailer.

- **Warranty:** Specific warranty terms and duration may vary by region. Please check your product packaging or the official Aigo website for details.
- **Technical Support:** For assistance with installation, troubleshooting, or product inquiries, please visit the Aigo support page or contact their customer service team.