AeroCool LUXPRO550

Aerocool LUXPRO550 550W Power Supply Unit User Manual

Model: LUXPRO550

1. INTRODUCTION

The Aerocool LUXPRO550 is a 550W power supply unit designed for desktop computers, offering reliable and efficient power delivery. This unit is 80 Plus 230V EU Bronze certified, ensuring over 88% efficiency. It features high-quality 105°C Japanese capacitors and a 14cm FDB fan for enhanced durability and optimized thermal performance. This manual provides essential information for the safe and correct installation, operation, and maintenance of your LUXPRO550 power supply.

Image 1.1: The Aerocool LUXPRO550 Power Supply Unit, highlighting its high efficiency and 80 Plus Bronze certification.

2. SAFETY PRECAUTIONS

- Always disconnect the power cord from the wall outlet before installing or removing the power supply.

- Do not open the power supply casing. High voltages are present inside, which can cause electric shock.

- Ensure proper grounding to prevent electrical hazards.

- Install the power supply in a well-ventilated area, away from heat sources and moisture.

- Use only the cables provided with the power supply.

- This product is designed for use in computer systems only. Do not use it for any other purpose.

3. INSTALLATION GUIDE

The LUXPRO550 power supply supports all Intel ATX12V formats and features flat, black cables for optimized internal airflow and ease of installation.

3.1. Preparing for Installation

1. Turn off your computer and disconnect the power cord from the wall outlet.

2. Open your computer case. Refer to your computer case manual for specific instructions.

3. If replacing an existing power supply, disconnect all cables from the old PSU and remove it from the case.

3.2. Installing the Power Supply

1. Carefully place the LUXPRO550 into the power supply bay of your computer case.

2. Secure the power supply to the case using the provided screws.

3. Connect the 20+4 pin ATX motherboard power connector to your motherboard.

4. Connect the 4+4 pin CPU power connector to your motherboard.

5. Connect SATA power connectors to your storage drives (HDDs, SSDs) and optical drives.

6. Connect PCIe 6+2 pin connectors to your graphics card(s) if required.

7. Connect any other peripheral connectors (e.g., Molex) as needed for case fans or other components.

8. Ensure all connections are secure. Use cable ties to manage cables for better airflow.

LUX Pro | 550W

80 PLUS BRONZE

Aero Cool

AC Input	200-240V~, 4.5A, 47-63Hz				
DC Output Voltage	+3.3V	+5V	+12V	-12V	+5Vsb
Max. Output Current	19A	19A	42A	0.3A	2.5A
Max. Combined Power	110W		504W	3.6W	12.5W
	550W				

Model Name : LUX 550W   MADE IN CHINA

PELIGRO
Esta fuente de poder utiliza alta tension.
No contiene ningun elemento reparable por el usuario favor de enviar al centro de servicio para su reparacion.

ACHTUNG
Netzteil steht unter gefährlicher Spannung.
Gehäuse unter keinen Umständen öffnen.
Reparatur nur durch Fachpersonal.

UYARI
Bu güç kaynağının içindeki gerilim insan sağlığını olumsuz etkileyebilecek kadar yüksektir. Lütfen arıza durumunda ürünü yetkili servise gönderiniz.

ATTENTION
Tensions dangereuses ne paut etre repare par lutilisateur.
Pour toute reparation renvoyer au service apres vente.

WARNING
Hazardous voltages contained within this power supply.
Not user serviceable.
Return to service center for repair.

CB CE FC EAC UKCA

LUX PRO 550W

3.3. Final Steps

1. Close your computer case.

2. Connect the AC power cord to the power supply and then to a wall outlet.

3. Flip the power switch on the back of the PSU to the 'ON' position.

4. Power on your computer.

4. OPERATING INSTRUCTIONS

The Aerocool LUXPRO550 is designed for continuous and stable operation once correctly installed. Its 80 Plus Bronze certification ensures high energy efficiency, reducing power consumption and heat generation.

4.1. Active PFC Technology

The integrated Active Power Factor Correction (APFC) technology ensures efficient and reliable power distribution, contributing to overall system stability and energy savings.

4.2. Fan Operation

The 14cm FDB (Fluid Dynamic Bearing) fan features optimized thermal speed control. It operates silently, starting at less than 700 RPM, and only increases speed as the load approaches 40% at ambient temperatures of 25°C, ensuring quiet operation under typical loads.
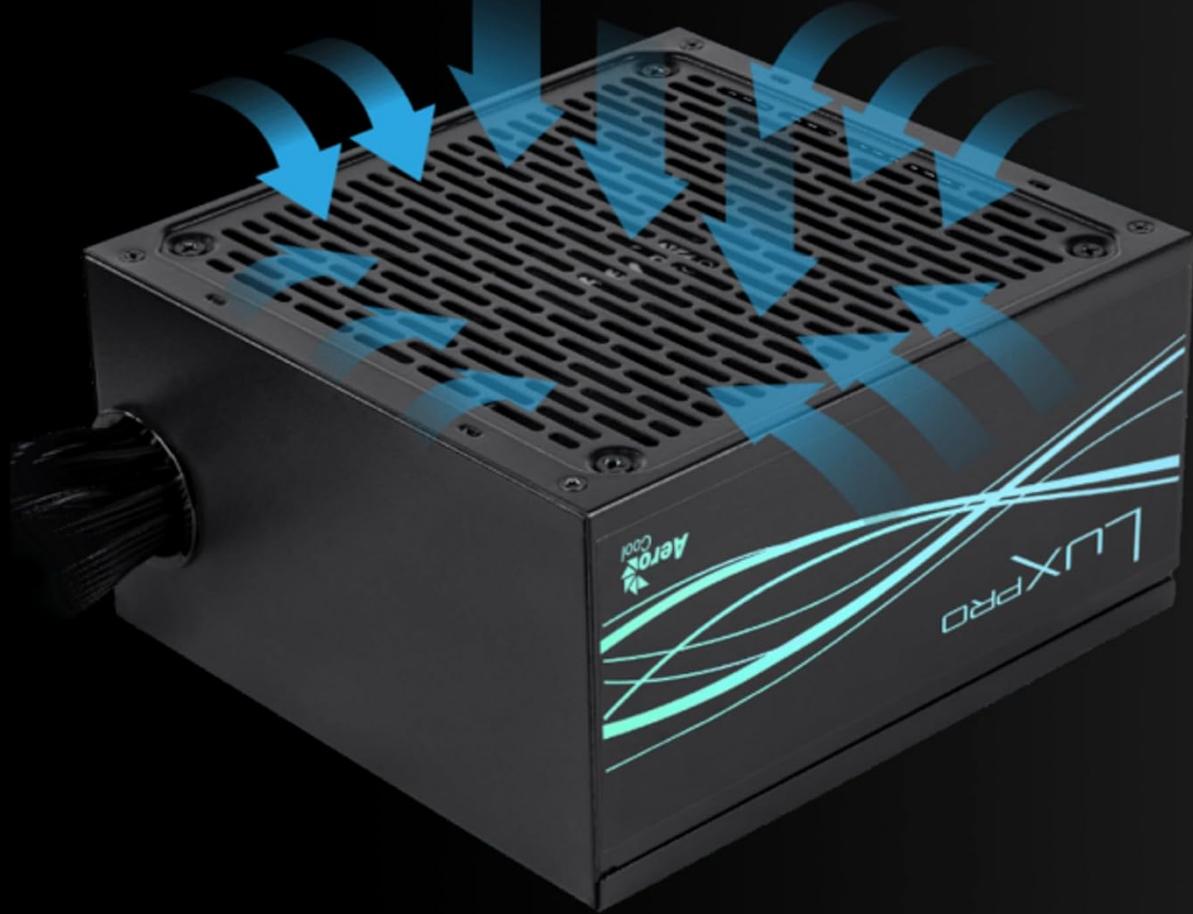
Image 4.1: The 14cm FDB fan of the LUXPRO550, illustrating its optimized thermal speed control for efficient cooling.

5. MAINTENANCE

The LUXPRO550 is built with high-quality components, including 105°C Japanese capacitors, designed for maximum reliability and a long operational lifespan with minimal maintenance.

Image 5.1: High-quality 105°C Japanese capacitors, contributing to the power supply's reliability and extended lifespan.

5.1. General Care

- Keep the power supply and computer case free from dust. Dust accumulation can hinder cooling and reduce efficiency.

- Use compressed air to gently clean the fan and ventilation grilles periodically. Ensure the computer is powered off and unplugged before cleaning.

- Do not obstruct the airflow around the power supply.

No user-serviceable parts are inside. Do not attempt to open or repair the unit yourself.

6. TROUBLESHOOTING

If you encounter issues with your LUXPRO550 power supply, please follow these basic troubleshooting steps:

- **No Power:**
  - Ensure the AC power cord is securely connected to both the power supply and the wall outlet.

- Check that the power switch on the back of the PSU is in the 'ON' position.
- Verify that the wall outlet is functional by plugging in another device.

- **System Not Booting:**
  - Double-check all power connections to the motherboard, CPU, graphics card, and storage devices.
  - Ensure all components are properly seated in their slots.
  - If possible, test the power supply with another known working system or test another power supply with your system to isolate the issue.

- **Unusual Noises:**
  - A slight hum is normal. If you hear grinding or loud fan noises, ensure the fan is not obstructed by cables or dust.
  - If the noise persists, contact customer support.

If these steps do not resolve the issue, please contact Aerocool customer support or your retailer for further assistance. Do not attempt to repair the unit yourself.

7. SPECIFICATIONS

Feature	Specification
Model Name	LUXPRO550
Brand	AeroCool
Wattage	550 Watts
Efficiency Certification	80 Plus Bronze 230V EU (over 88% efficiency)
Form Factor	ATX
Capacitors	Japanese 105°C
Fan Type	14cm FDB (Fluid Dynamic Bearing) with thermal speed control
PFC	Active PFC
Dimensions (LxWxH)	16 x 15 x 8.5 cm
Weight	1.4 kg
Compatible Devices	PC

7.1. DC Output Voltage Table

The following table details the DC output voltages and maximum currents for the LUXPRO550:

DC Output Voltage	+3.3V	+5V	+12V	-12V	+5Vsb
Max. Output Current	19A	19A	42A	0.3A	2.5A
Max. Combined Power	110W		504W	3.6W	12.5W
Total Combined Power	550W				

8. WARRANTY AND SUPPORT

8.1. Warranty Information

The Aerocool LUXPRO550 power supply comes with an extended **5-year warranty**, reflecting its high reliability and the quality of its components, such as the 105°C Japanese capacitors.
Please retain your proof of purchase for warranty claims.

8.2. Customer Support

For technical assistance, warranty claims, or any questions regarding your Aerocool LUXPRO550 power supply, please contact Aerocool customer support through their official website or your local retailer.
Do not attempt to open or repair the power supply unit, as this will void the warranty.