Redragon RGPS-850W

Redragon RGPS-850W Power Supply User Manual

80+ Gold 850 Watt ATX 3.0 & PCIe 5.0 Fully Modular Power Supply

1. Introduction

Thank you for choosing the Redragon RGPS-850W Power Supply. This manual provides essential information for the proper installation, operation, and maintenance of your new power supply unit (PSU). Designed for high-performance gaming systems, the RGPS-850W offers reliable and efficient power delivery with advanced features.

Please read this manual thoroughly before installation to ensure optimal performance and safety.

2. Safety Information

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

- Ensure the power supply is disconnected from the main power outlet before installation or maintenance.
- Do not open the PSU casing. High voltages are present inside, which can cause electric shock.
- Install the PSU in a well-ventilated area to prevent overheating.
- Avoid exposing the PSU to moisture or extreme temperatures.
- Use only the modular cables provided with the PSU to ensure compatibility and safety.

3. Package Contents

Verify that all items are present in your package:

- Redragon RGPS-850W Power Supply Unit
- Modular Cable Set:
  - 2 x SATA (3 in 1) cables for Hard Disks
  - 1 x IDE/Molex (3 in 1) cable for Cooling Fans
  - 2 x PCIe 8-Pin (6+2) cables for GPU
  - 2 x ATX 12V 8-Pin (4+4) cables for CPU
  - 1 x ATX 24-Pin (20+4) cable for Mainboard
- Power Cord
- PSU Mounting Screws (4 pieces)

- Cable Zip Ties
- Jumper for PSU testing (may vary by region/batch)
- User Manual (this document)

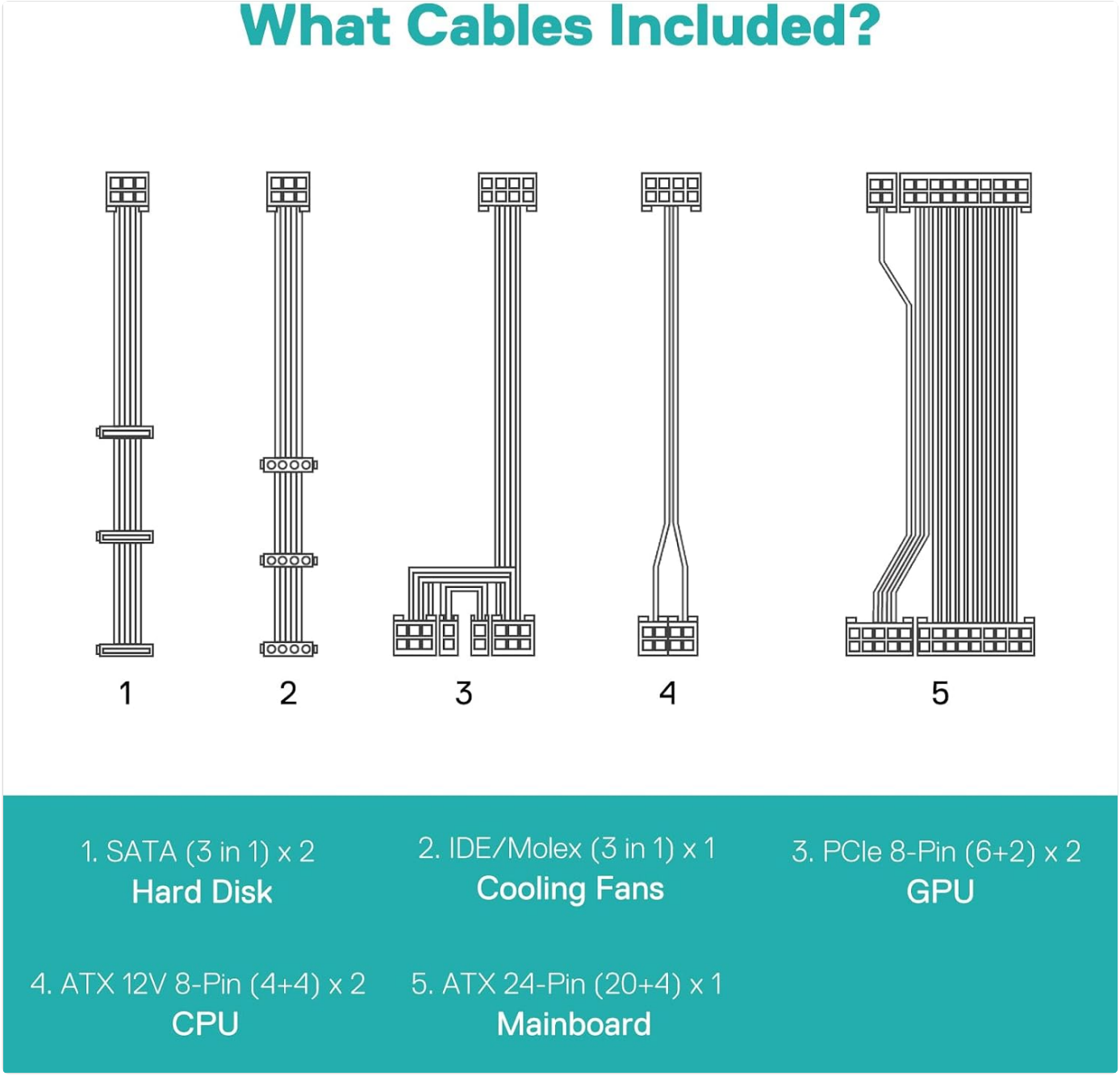


Figure 3.1: Included Modular Cables. This image displays the various modular cables provided with the power supply, including SATA, IDE/Molex, PCIe, ATX 12V, and ATX 24-Pin connectors.

4. Setup

Follow these steps to install your Redragon RGPS-850W Power Supply:

1. **Prepare your PC Case:** Ensure your PC case is compatible with ATX power supplies. The RGPS-850W features a compact 160mm size for wider compatibility.
2. **Mount the PSU:** Secure the PSU into the designated power supply bay in your PC case using the provided mounting screws.
3. **Connect Modular Cables:** Identify the necessary cables for your components (motherboard, CPU, GPU, storage drives, fans). Connect only the required modular cables to the PSU's corresponding ports. This fully modular design reduces clutter and improves airflow.

4. **Connect to Components:** Route the connected modular cables to their respective components within your PC, ensuring secure connections.
5. **Power On:** Once all connections are secure, connect the power cord to the PSU and then to a wall outlet. Flip the main power switch on the PSU to the 'ON' position.



Figure 4.1: Full Modular Cabling. The image highlights the clearly labeled modular ports on the power supply, allowing for easy and clean cable management.



Figure 4.2: Compact Size. This diagram illustrates the 160mm length of the power supply, indicating its suitability for various PC case sizes.

Video 4.1: Product Overview. This video provides a visual guide to the Redragon RGPS-850W Power Supply, demonstrating its features and modular design for easy cable management.

5. Operating

The Redragon RGPS-850W features an RGB fan with multiple lighting modes and a Smart ECO Low Noise (Zero RPM) fan mode for quiet operation.

5.1 RGB Fan Control

The integrated RGB fan offers up to 9 RGB modes with 26 selected colors. A dedicated button on the PSU allows you to cycle through these modes or turn off the lighting. Long-press the RGB button to disable the fan lights.



Figure 5.1: RGB Illumination. This image illustrates the vibrant RGB lighting capabilities of the power supply's fan, showcasing different color options.

5.2 Smart ECO Low Noise (Zero RPM) Mode

The PSU is equipped with a Zero RPM Mode fan. The fan will only activate when the internal temperature reaches 60°C (140°F). Below this temperature, the fan remains off for silent operation. This intelligent control optimizes noise levels and fan longevity.

6. Maintenance

To ensure the longevity and optimal performance of your Redragon RGPS-850W Power Supply, consider the following maintenance tips:

- **Keep Vents Clear:** Regularly check that the PSU's intake and exhaust vents are free from dust and obstructions. Blocked vents can lead to overheating.
- **Dust Removal:** Periodically use compressed air to gently blow dust out of the PSU's fan and internal components. Ensure the system is powered off and unplugged before cleaning.
- **Cable Management:** While the modular design helps, ensure cables are neatly managed to promote good airflow within your PC case.

7. Troubleshooting

If you encounter issues with your Redragon RGPS-850W Power Supply, refer to the following common troubleshooting steps:

- **No Power:**
  - Ensure the power cord is securely connected to both the PSU and the wall outlet.
  - Check that the main power switch on the PSU is in the 'ON' position.
  - Verify all modular cables are correctly seated in both the PSU and the components.
  - Test the wall outlet with another device to confirm it has power.
- **Fan Not Spinning:**
  - The PSU features a Zero RPM Mode. The fan will only spin when the internal temperature exceeds 60°C (140°F). This is normal operation for low loads.
  - If the system is under heavy load and the fan is still not spinning, or if the system is overheating, contact support.
- **System Instability/Crashes:**
  - Ensure your system's power requirements do not exceed the PSU's 850W capacity.
  - Check all cable connections for looseness.
  - If issues persist, consult the detailed User Guide (PDF) or contact Redragon support.

8. Specifications

Feature	Description
Model Name	RGPS-850W
Wattage	850 Watts
80 Plus Certification	80 Plus Gold Certified
ATX Standard	ATX 3.0 & PCIe 5.0 Ready
Capacitors	100% Japanese Capacitors
Fan Type	Smart ECO Low Noise RGB Fan (Zero RPM Mode)
Form Factor	ATX12V
Dimensions (L x W x H)	160mm x 150mm x 87mm (6.3 x 5.9 x 3.4 inches)
Item Weight	5.69 pounds
Connector Type	SFX, ATX (Fully Modular)



Figure 8.1: 80 PLUS Gold Efficiency. This graph illustrates the high efficiency of the power supply across various load percentages, indicating energy savings and reduced heat generation.



Figure 8.2: 100% Japanese Capacitors. This image highlights the high-quality Japanese capacitors used in the PSU, ensuring reliability and durability.



Figure 8.3: PCIe Gen 5.0 Ready. This diagram explains the power excursion capabilities of the PSU, making it ready for next-generation GPUs.

9. Warranty and Support

The Redragon RGPS-850W Power Supply comes with a 5-year warranty, ensuring long-term reliability and peace of mind.

For further assistance, detailed troubleshooting, or warranty claims, please refer to the official Redragon User Guide (PDF) or visit the Redragon support website.

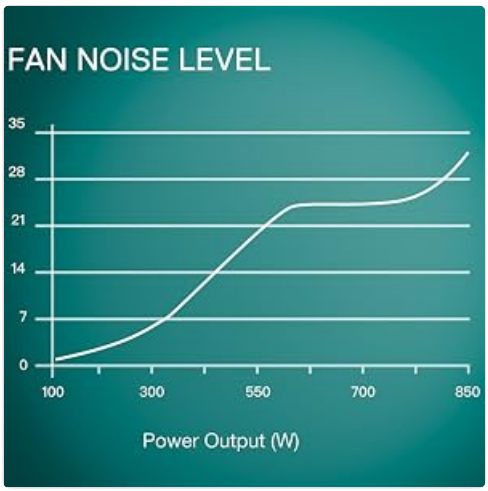


Figure 9.1: 5-Year Warranty. This badge indicates the extensive warranty coverage for the product.

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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

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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