

Enermax Revolution III 850

ENERMAX Revolution III 850W Power Supply User Manual

Model: Revolution III 850 | Brand: Enermax

1. INTRODUCTION

This manual provides essential information for the installation, operation, maintenance, and troubleshooting of your ENERMAX Revolution III 850W Fully Modular PC Power Supply. Please read this manual thoroughly before installation and retain it for future reference.



Figure 1: ENERMAX Revolution III 850W Power Supply

2. KEY FEATURES

- **ATX 3.1 Compliance:** Adheres to the latest Intel ATX 3.1 specifications, ensuring compatibility with current and future components. The 850W model includes a native 600W 12V-2x6 connector for reliable power delivery to high-end GPUs.
- **High Efficiency:** 80 PLUS Gold certified, achieving up to 93% efficiency at 50% load. This reduces energy consumption and heat generation, contributing to more efficient system performance.
- **Superior Performance for High-End GPUs:** Accommodates up to 200% power excursion, allowing stable operation with demanding graphics cards.
- **Silent Operation and Durability:** Features 100% industrial-grade Japanese capacitors for high-end performance and longevity. The built-in 120mm Fluid Dynamic Bearing (FDB) fan provides ultra-quiet operation, even under heavy loads.
- **Optimized Safety:** Includes multiple protection circuitries: Over Current Protection (OCP), Over Voltage Protection (OVP), Under Voltage Protection (UVP), Over Power Protection (OPP), Short Circuit Protection (SCP), and Over Temperature Protection (OTP). Certified for use at altitudes up to 5000m.



Figure 2: Overview of Key Features

ATX 3.1 Ready

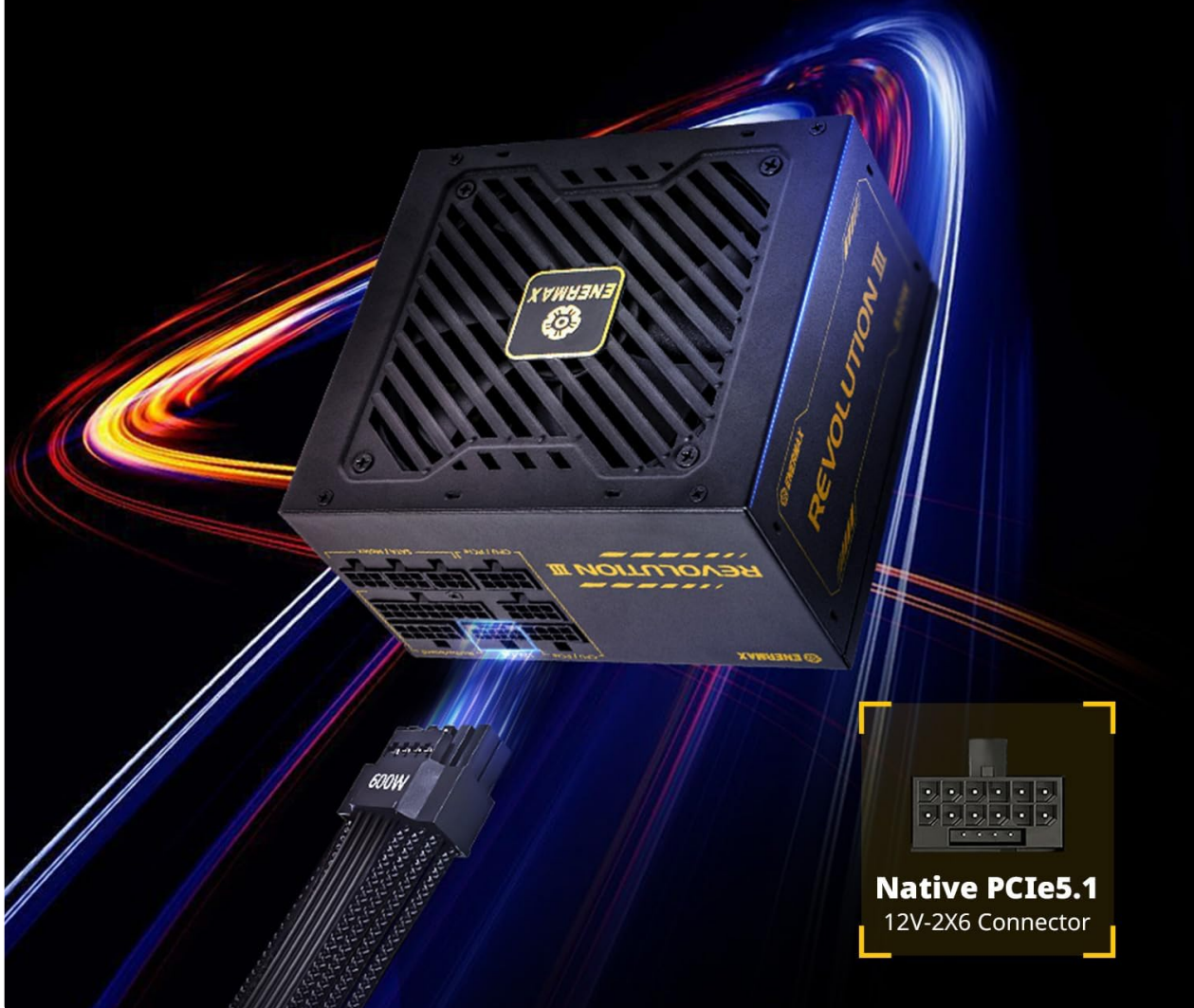


Figure 3: ATX 3.1 Ready with 12V-2x6 Connector

Your browser does not support the video tag.

Video 1: Enermax Revolution III ATX 3.1 Power Supply Overview. This video highlights the ATX 3.1 compliance and key features of the power supply.

3. SETUP AND INSTALLATION

3.1 Safety Precautions

- Ensure your system is completely powered off and unplugged from the wall outlet before installation.
- Discharge any static electricity by touching a grounded metal object before handling components.
- Do not open the power supply unit. High voltages are present inside.

3.2 Installation Steps

1. **Mount the Power Supply:** Secure the ENERMAX Revolution III 850W PSU into the designated power supply bay of your PC case using the provided screws.
2. **Connect Motherboard Power:** Connect the 24-pin ATX motherboard cable to the corresponding port on your motherboard and the PSU.

3. **Connect CPU Power:** Connect the 8-pin (4+4 pin) CPU power cable(s) to your motherboard and the PSU.
4. **Connect GPU Power:** For graphics cards requiring a 12V-2x6 connector, use the native 600W cable. For other GPUs, use the appropriate PCIe (6+2 pin) cables. Ensure all connections are secure.
5. **Connect Peripherals:** Connect SATA power cables to your storage drives (HDDs, SSDs) and Molex cables to any other peripherals as needed.
6. **Cable Management:** Utilize the fully modular design and mesh-sleeved cables to organize your cables for optimal airflow and a clean build.
7. **Power On:** Once all connections are secure, connect the AC power cord to the PSU and a wall outlet. Flip the power switch on the PSU to the 'On' position.



Figure 4: Modular Connector Layout

Premium Mesh-Sleeved Cables

21 pcs cable combs included for a clean and organized build



Figure 5: Premium Mesh-Sleeved Cables

4. OPERATING INSTRUCTIONS

After successful installation, your ENERMAX Revolution III 850W Power Supply is ready for operation. The unit is designed for continuous, stable power delivery.

- **Power On/Off:** Use the main power switch located on the rear of the PSU to turn the unit on or off. Always ensure the system is properly shut down via the operating system before switching off the PSU.
- **Fan Operation:** The 120mm FDB fan operates intelligently, adjusting its speed based on the power supply's temperature and load. This ensures optimal cooling while maintaining quiet operation.

5. MAINTENANCE

To ensure the longevity and optimal performance of your power supply, periodic maintenance is recommended.

- **Cleaning:** Regularly clean the fan grill and ventilation openings of the power supply to prevent dust buildup. Use compressed air or a soft brush. Ensure the system is powered off and unplugged before

cleaning.

- **Cable Inspection:** Periodically check all modular cable connections to ensure they are seated firmly.
- **Environment:** Operate the power supply in a well-ventilated area, away from excessive heat, humidity, or dust.

6. TROUBLESHOOTING

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

- **No Power:**
 - Check if the AC power cord is securely connected to both the PSU and the wall outlet.
 - Ensure the main power switch on the PSU is in the 'On' position.
 - Verify that the wall outlet is functional by plugging in another device.
- **System Instability/Random Shutdowns:**
 - Ensure all modular cables are correctly and firmly seated in both the PSU and the components.
 - Confirm that your system's power requirements do not exceed the 850W capacity of the PSU.
 - The PSU's built-in protection circuitries (OCP, OVP, UVP, OPP, SCP, OTP) may trigger a shutdown to protect components if an anomaly is detected. If this occurs, identify and resolve the underlying issue (e.g., short circuit, excessive load).
- **Excessive Fan Noise:**
 - Clean the fan and ventilation areas to remove any dust buildup.
 - Ensure the PSU is operating within its normal temperature range. High temperatures can cause the fan to spin faster.

If problems persist after following these steps, please contact customer support.

7. SPECIFICATIONS

Feature	Detail
Model Name	REVOLUTION III 850
Item Model Number	EP-RV3-850G-FR
Brand	Enermax
Wattage	850 Watts
Form Factor	ATX
Power Supply Design	Full Modular
Efficiency Certification	80 PLUS Gold
Cooling Method	Air (120mm FDB Fan)
Product Dimensions	5.51 x 5.91 x 3.39 inches
Item Weight	5.1 pounds

Feature	Detail
Compatible Devices	Desktop
Connector Type	ATX, PCI Express (Native 12V-2x6)
Capacitors	100% Japanese Industrial-Grade
Protection Circuitries	OCP, OVP, UVP, OPP, SCP, OTP

8. WARRANTY AND SUPPORT


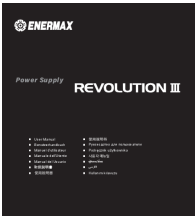
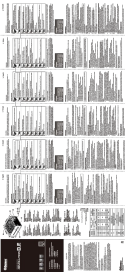
8.1 Warranty Information




The ENERMAX Revolution III 850W Power Supply comes with a **10-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

8.2 Customer Support

For technical assistance, warranty claims, or any questions regarding your ENERMAX product, please visit the official Enermax website or contact their customer support department. Refer to the product packaging or Enermax's official website for the most up-to-date contact information.

Related Documents - Revolution III 850

	<p>ENERMAX REVOLUTION SFX Power Supply Unit User Manual</p> <p>Comprehensive user manual for the ENERMAX REVOLUTION SFX series power supply units (PSUs), covering installation, specifications, compatibility, safety guidelines, and troubleshooting for 550W and 650W models. Includes details on SFX-to-ATX adapter, fanless operation, and multi-GPU setup recommendations.</p>
	<p>ENERMAX REVOLUTION III Power Supply User Manual, Specifications, and Safety Guide</p> <p>Comprehensive user manual for the ENERMAX REVOLUTION III series power supplies. Covers installation, component lists, specifications, protection features, FAQs, safety precautions, and warranty information. Includes multilingual support.</p>
	<p>ENERMAX Revolution D.F. 750W Power Supply User Manual</p> <p>Comprehensive guide for the ENERMAX Revolution D.F. 750W (ERF750EWT) PC power supply unit, detailing its advanced features, technical specifications, installation procedures, and safety precautions for optimal performance and reliability.</p>

	<p>Enermax Revolution D.F.2 80 PLUS Gold Power Supply Unit Manual</p> <p>User manual for the Enermax Revolution D.F.2 series of 80 PLUS Gold certified, fully modular ATX power supply units. Provides detailed specifications, features, installation instructions, and troubleshooting tips for reliable PC power.</p>
	<p>ENERMAX MARBLEBRON II Switching Power Supply User Manual and Specifications</p> <p>Comprehensive user manual and technical specifications for the ENERMAX MARBLEBRON II Switching Power Supply, covering installation, features, protection, and warranty information.</p>
	<p>Enermax Revolution ATX 3.0 1000W PSU - User Manual</p> <p>Comprehensive guide to the Enermax Revolution ATX 3.0 1000W power supply unit (ERA1000EWT), detailing features, specifications, installation, and safety.</p>