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**Corsair CP-9020296-NA**

# CORSAIR RM850e (2025) Power Supply Instruction Manual

MODEL: CP-9020296-NA | BRAND: CORSAIR

## 1. Introduction

This manual provides essential information for the installation, operation, maintenance, and troubleshooting of your CORSAIR RM850e (2025) Fully Modular Low-Noise ATX Power Supply. Designed for high-performance PC builds, this power supply unit (PSU) offers reliable and efficient power delivery with advanced features such as ATX 3.1 and PCIe 5.1 compliance, Cybenetics Gold efficiency, and a low-noise design.



Figure 1: Front view of the CORSAIR RM850e (2025) Power Supply.

## 2. Safety Guidelines

Please read and follow all safety instructions carefully before installing or operating the power supply. Failure to do so may result in personal injury or damage to your equipment.

- **High Voltage:** The power supply contains high voltage components. Do not open the power supply casing. There are no user-serviceable parts inside.
- **Professional Installation:** Installation should be performed by qualified personnel.
- **Proper Grounding:** Ensure the power supply is properly grounded to prevent electrical shock.
- **Ventilation:** Do not block any ventilation openings. Ensure adequate airflow around the power supply.
- **Moisture:** Do not expose the power supply to water or excessive humidity.
- **Power Disconnection:** Always disconnect the power cable from the wall outlet before performing any installation, maintenance, or troubleshooting.

## 3. Package Contents

Verify that all items listed below are included in your CORSAIR RM850e (2025) package:

- 1x CORSAIR RM850e (2025) Power Supply Unit

- 1x 24-pin ATX (24-pin) Connector Cable
- 2x 8-pin ATX 12V/EPS12V (4+4-pin) Connector Cables
- 1x 8-pin PCIe (6+2-pin) Connector Cable
- 1x 600W 12V-2x6 (12+4-pin) Connector Cable
- 1x 12V-2x6 (12+4-pin) to dual 8-pin PCIe (6+2-pin) Cable
- 6x SATA Connectors
- 2x PATA Connectors
- Mounting Screws
- Cable Ties

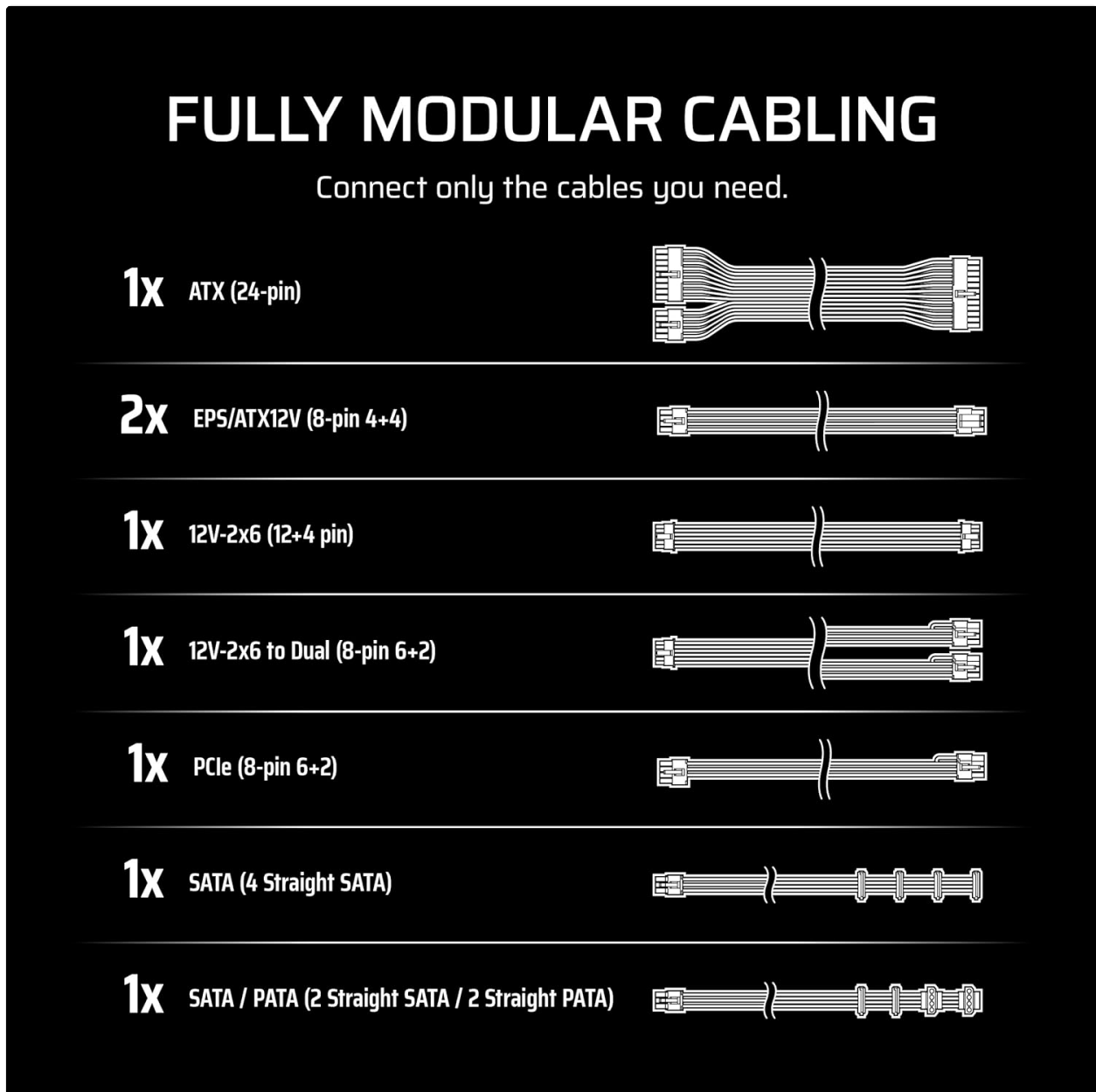


Figure 2: Diagram illustrating the fully modular cabling included with the power supply.

## 4. Setup

### 4.1. Physical Installation

1. Ensure your computer is powered off and the power cable is disconnected from the wall outlet.
2. Remove your existing power supply, if applicable.
3. Carefully place the CORSAIR RM850e (2025) into the power supply bay of your PC case.
4. Secure the power supply to the case using the provided mounting screws.

## 4.2. Cable Connections

The CORSAIR RM850e (2025) is a fully modular power supply, allowing you to connect only the cables necessary for your system, which helps improve airflow and cable management.

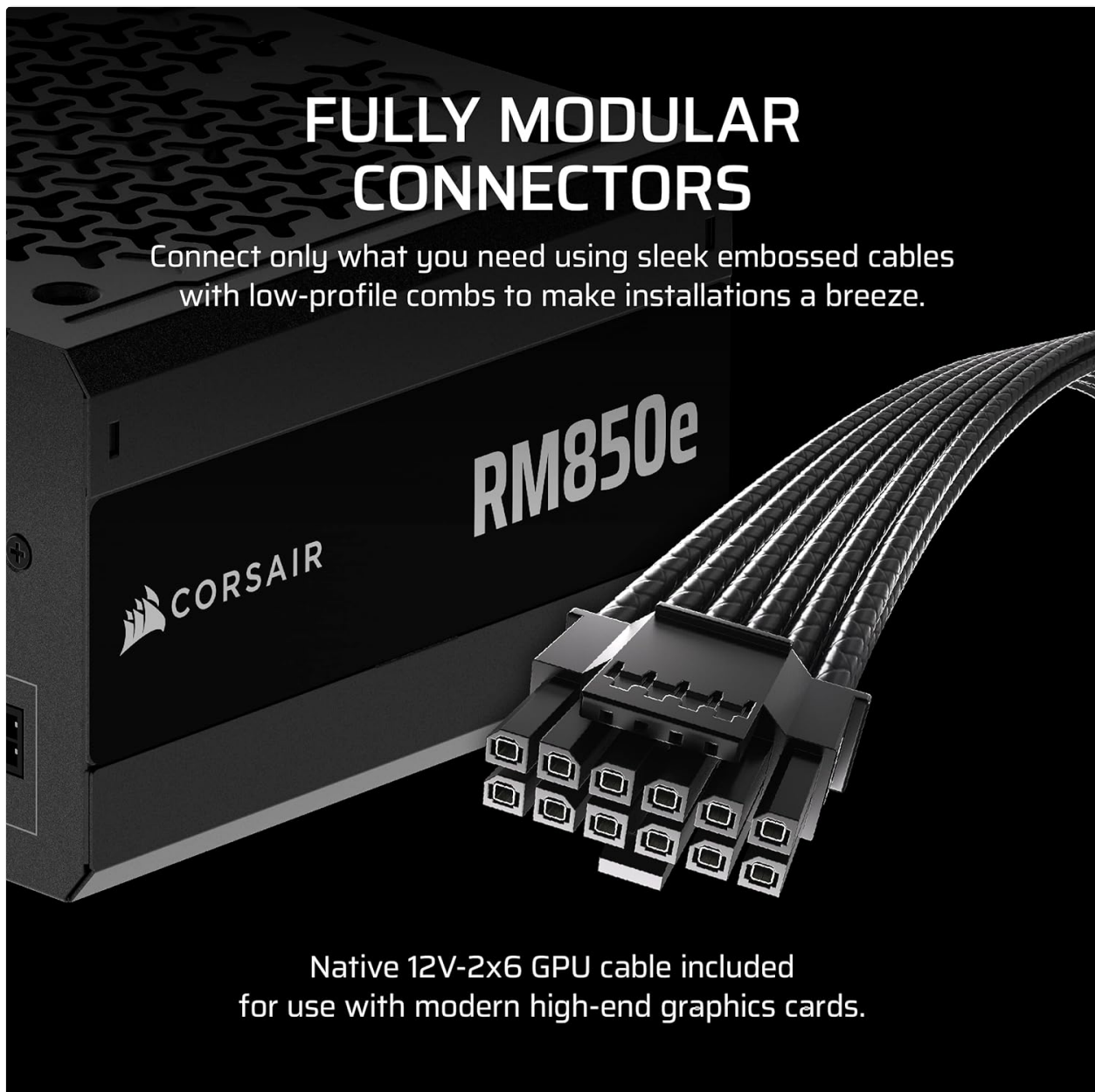


Figure 3: View of the fully modular connectors on the power supply unit.

1. **24-pin ATX Cable:** Connect the 24-pin ATX cable to the motherboard.
2. **8-pin ATX 12V/EPS12V Cables:** Connect one or two 8-pin (4+4-pin) ATX 12V/EPS12V cables to the corresponding ports on your motherboard for GPU power.
3. **PCIe Cables:** For graphics cards requiring 8-pin PCIe connectors, use the provided 8-pin (6+2-pin) PCIe cables.
4. **12V-2x6 Cable (PCIe 5.1):** This PSU is ATX 3.1 and PCIe 5.1 compliant and includes a native 12V-2x6 (12+4-pin) connector and cable. Use this cable for modern high-end graphics cards that support the

12V-2x6 standard, providing up to 600W of continuous power directly. An additional 12V-2x6 to dual 8-pin PCIe cable is also provided for compatibility.

5. **SATA and PATA Cables:** Connect SATA cables for storage drives (HDDs, SSDs) and PATA cables for older peripherals if needed.

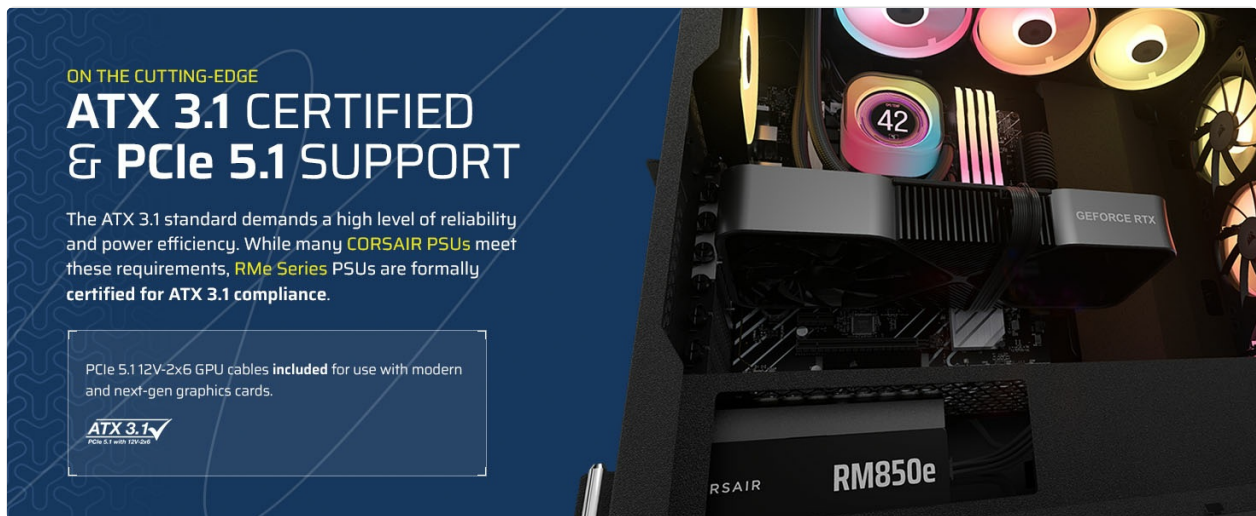


Figure 4: The power supply supports ATX 3.1 and PCIe 5.1 standards for modern hardware.



Figure 5: The native 12V-2x6 GPU connector for high-power graphics cards.

## 5. Operating Instructions

### 5.1. Power On/Off

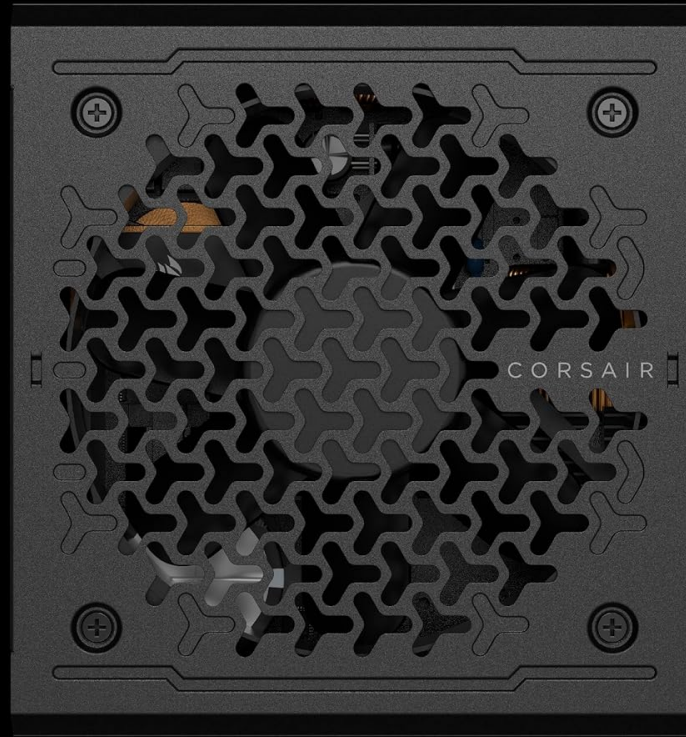
After all connections are securely made, connect the main AC power cable to the power supply and then to a wall outlet. Flip the power switch on the back of the PSU to the 'ON' position. You can then power on your computer using the case's power button.

### 5.2. Fan Operation (Zero RPM Mode)

The CORSAIR RM850e (2025) features a 120mm rifle bearing fan with a specially calculated fan curve. It operates in 'Zero RPM Mode' at low to moderate loads, meaning the fan will not spin, ensuring silent operation. The fan will automatically spin up when the load increases to maintain optimal temperatures.

# TUNED FOR LOW NOISE

A 120mm rifle bearing fan with a specially calculated fan curve keeps fan noise down.



**ZERO  
RPM  
MODE** 

Figure 6: The 120mm rifle bearing fan designed for low-noise operation.

## 5.3. Modern Standby Mode

This power supply is compatible with Modern Standby mode, enabling extremely fast wake-from-sleep times and improved low-load efficiency. Ensure your operating system and motherboard support and are configured for Modern Standby to utilize this feature.

## 6. Maintenance

Regular maintenance helps ensure the longevity and optimal performance of your power supply.

- **Dust Removal:** Periodically clean the exterior of the power supply and the fan grille to prevent dust buildup, which can impede airflow and lead to overheating. Use compressed air or a soft brush.
- **Internal Cleaning:** Do not attempt to open the power supply for internal cleaning. This should only be done by authorized service personnel.
- **Cable Inspection:** Occasionally check all connected cables to ensure they are securely seated and free

from damage.

## 7. Troubleshooting

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If you encounter issues with your CORSAIR RM850e (2025), try the following basic troubleshooting steps:

- **No Power:**

- Ensure the main AC power cable is securely connected to both the power supply and the wall outlet.
- Verify the power switch on the back of the PSU is in the 'ON' position.
- Check all modular cables are firmly connected to both the PSU and the respective components (motherboard, CPU, GPU, drives).
- Test the wall outlet with another device to ensure it is functional.

- **System Instability/Crashes:**

- Ensure your system's power requirements do not exceed the PSU's 850W capacity.
- Verify all power connections are secure.
- Check for proper ventilation within your PC case to prevent overheating.

- **Excessive Fan Noise:**

- Confirm the PSU is not under heavy load, as the fan will spin up to cool the unit.
- Ensure the fan grille is free from dust or obstructions.
- If the noise persists at low loads, contact Corsair support.

If these steps do not resolve the issue, please refer to the Corsair support website or contact their customer service for further assistance.

## 8. Specifications

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Feature	Specification
Model Name	CORSAIR RM850e
Item Model Number	CP-9020296-NA
Output Wattage	850 Watts
Form Factor	ATX
Efficiency Rating	Cybenetics Gold
Capacitors	105°C-Rated Industrial-Grade
Fan Type	120mm Rifle Bearing
Cooling Method	Air
Dimensions (L x W x H)	5.91 x 5.51 x 3.35 inches (150mm x 140mm x 85mm)
Item Weight	3.37 pounds (1.53 kg)
ATX Compliance	ATX 3.1
PCIe Compliance	PCIe 5.1 (with 12V-2x6 cable)
Modern Standby	Compatible

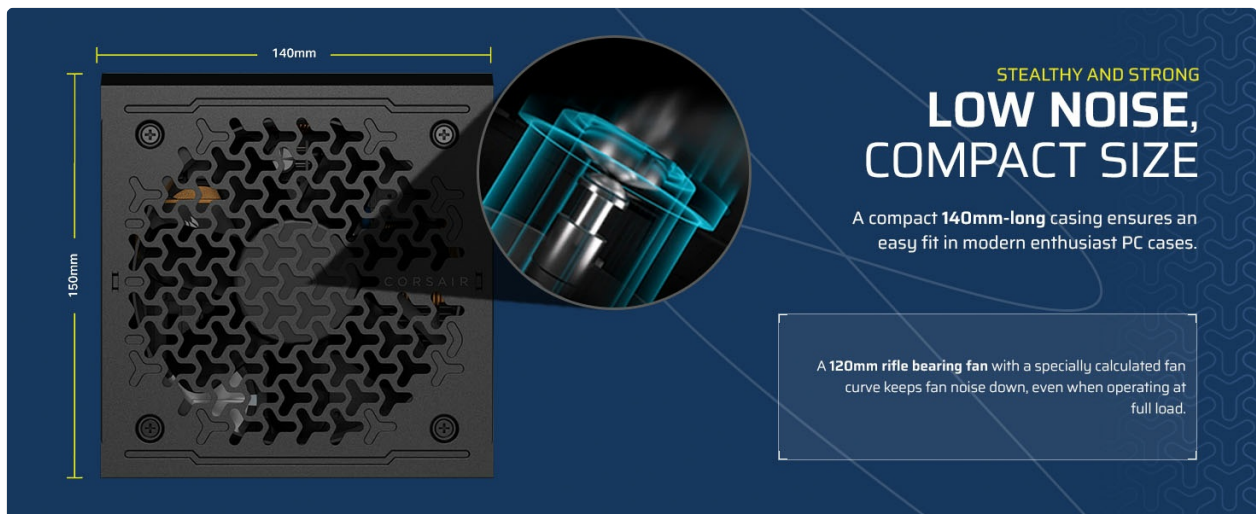


Figure 7: The compact dimensions of the RM850e, designed for easy integration.

**BUILT TO LAST**

# TECHNOLOGY AND RELIABILITY

For consistent, reliable power and **superb electrical performance**, each **RMe Series** power supply features a robust resonant LLC topology with DC-DC conversion and 105° rated **industrial-grade** capacitors.

With precise timings, **RMe** supports Modern Standby, ensuring **extremely fast** wake-from-sleep times and better low-load efficiency.



Figure 8: High-quality 105°C-rated industrial-grade capacitors for reliable performance.

## 9. Warranty and Support

The CORSAIR RM850e (2025) Power Supply is backed by a **seven-year warranty**, ensuring long-term reliability and peace of mind. For detailed warranty terms, technical support, or to register your product, please visit the official Corsair support website:

**[www.corsair.com/support](http://www.corsair.com/support)**

You can also find frequently asked questions (FAQs) and community forums on their website for additional assistance.