

Seasonic SSR-1200PD

Seasonic Prime Series SSR-1200PD 1200W Platinum Power Supply

USER MANUAL

Model: SSR-1200PD | Brand: Seasonic

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Seasonic Prime Series SSR-1200PD 1200W Platinum power supply. This high-performance unit is designed with premium components and advanced technologies to deliver stable and clean power to your computer system, ensuring reliability and extended component lifespan. It features 80 PLUS Platinum efficiency and Seasonic's Premium Hybrid fan control for quiet operation.

2. What's in the Box

Carefully unpack all components and ensure the following items are present:

- Seasonic Prime Series SSR-1200PD 1200W Platinum Power Supply Unit
- 16-gauge AC Power Cable
- Standard 24-pin ATX Cable
- 2 x 8-pin (4+4 pin) CPU Cables
- 4 x 8-pin (6+2 pin) PCIe Cables
- 3 x SATA Cables (each with 4 connectors)
- 1 x Molex Cable (with 3 connectors)
- 1 x Molex Cable (with 2 connectors)
- 1 x Molex to Floppy Adapter
- Mounting Screws
- Cable Ties (Velcro and Zip Ties)
- Storage Bag for extra cables



Image: All components included with the Seasonic Prime Series SSR-1200PD power supply.

3. Setup and Installation

The SSR-1200PD is a fully modular power supply, allowing you to connect only the cables necessary for your system. This helps improve airflow and cable management within your PC case.

3.1 Connecting Modular Cables

Before installing the power supply into your PC case, it is recommended to connect all necessary modular cables to the PSU. This provides more room to maneuver and better leverage for seating the connectors securely.

- **24-pin ATX Cable:** Connect the 24-pin ATX cable to the large motherboard connector on the PSU.
- **8-pin CPU Cables:** Connect the 8-pin (4+4 pin) CPU cables to the CPU power ports on the PSU. Your motherboard may require one or two of these.
- **8-pin PCIe Cables:** Connect the 8-pin (6+2 pin) PCIe cables to the GPU/PCI-E ports. For graphics cards requiring two connectors, use two separate PCIe cables for optimal power delivery.
- **Peripheral Cables (SATA/Molex):** Connect SATA cables for storage drives and Molex cables for other peripherals as needed.



Image: Modular cable connection ports on the SSR-1200PD.

3.2 Video Guide: Cable Connection

Your browser does not support the video tag.

Video: This official video demonstrates how to connect the ATX, CPU, PCIe, SATA, and Molex cables to the Seasonic Prime Series SSR-1200PD power supply.

3.3 Installing the PSU in the Case

Once all necessary cables are connected to the power supply, install the PSU into its designated bay within your PC case and secure it with the provided mounting screws. Then, route the cables to their respective components (motherboard, graphics card, storage drives, etc.) and connect them securely.

4. Operating Instructions

The Seasonic Prime Series SSR-1200PD features a main power switch and a Hybrid Fan Control switch located on the rear of the unit.



Image: Rear panel of the SSR-1200PD with power and fan control switches.

4.1 Hybrid Fan Control

The Hybrid Fan Control switch allows you to choose between two fan operating modes:

- **Normal Mode (Switch Pressed Down):** In this mode, the fan will always spin, regardless of the system load. This ensures continuous airflow through the PSU.
- **Hybrid Mode (Switch in Out Position):** This mode activates a fanless operation up to a minimum 30% load. Between 40% to 50% load, the PSU enters hysteresis, where the system determines the necessary fan RPM to cool the PSU based on the load. Above 50% load, the fan will operate at full RPM to maintain optimal cooling. This mode is designed for quieter operation under low to moderate loads.

4.2 Video Guide: Hybrid Fan Control

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Video: This official video demonstrates the functionality of the Hybrid Fan Control switch on the Seasonic Prime Series SSR-1200PD power supply.

5. Key Features and Technologies

- **80 PLUS Platinum Certified:** Ensures high power efficiency, reducing energy waste and operating

costs.

- **Fluid Dynamic Bearing (FDB) Fan:** High-performance FDB fans are designed for quiet operation and extended lifespan, utilizing the impact absorbance effects of oil.
- **Premium Hybrid Fan Control:** Minimizes noise output by allowing fanless operation under low loads and intelligent fan speed adjustment based on system demand.
- **Tight Voltage Regulation:** Seasonic's design maintains output voltage within a very tight range (under 0.5% for this model), providing stable power to sensitive components.
- **Cable-Free Connection Design:** The back panel and PCB are connected by a copper plate, eliminating cables for improved performance and reliability.
- **High-Quality Components:** Built with carefully sourced, first-rate quality components, including gold-plated terminals, highly conductive copper plates, and reliable high-temperature aluminum solid capacitors.

6. Specifications

Model Name	PRIME 1200 Platinum
Brand	Seasonic
Model Number	SSR-1200PD
Output Wattage	1200 Watts
80 PLUS Certification	Platinum
Form Factor	ATX12V
Power Supply Design	Full Modular
Cooling Method	Air
Number of Fans	1
Fan Size	135 Millimeters
Item Dimensions (L x W x H)	6.7 x 3.4 x 5.9 inches
Item Weight	2.1 Kilograms
Compatible Devices	Personal Computer
Connector Types	ATX, EPS

7. Maintenance

To ensure optimal performance and longevity of your power supply, regular maintenance is recommended:

- **Dust Removal:** Periodically clean the power supply's fan and vents to prevent dust buildup, which can impede airflow and lead to overheating. Use compressed air for best results.
- **Cable Inspection:** Occasionally check all connected cables for secure connections and any signs of wear or damage.
- **Environmental Conditions:** Ensure the power supply operates in a well-ventilated environment with appropriate ambient temperatures.

8. Troubleshooting

If you encounter issues with your Seasonic power supply, consider the following basic troubleshooting steps:

- **No Power:** Ensure the main power switch on the PSU is in the 'ON' position and the AC power cable is securely connected to both the PSU and a working wall outlet. Check all modular cable connections.
- **System Instability/Crashes:** Verify that all power connectors to your motherboard, CPU, and graphics card are firmly seated. Ensure your system's power requirements do not exceed the PSU's capacity.
- **Fan Noise:** If the fan is excessively loud, check if the Hybrid Mode switch is in the desired position. Dust buildup can also cause increased fan noise.

For more complex issues or if troubleshooting steps do not resolve the problem, please contact Seasonic customer support.

9. Warranty and Support

Your Seasonic Prime Series SSR-1200PD power supply comes with a **10-Year Warranty**, covering defects in materials and workmanship under normal use. For warranty claims, technical support, or any other inquiries, please contact Seasonic customer service.

Contact Information:

- Email: usa@seasonic.com
- Website: Visit the official Seasonic website for support resources and contact options.