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Apevia ATX-PM650W

Apevia ATX-PM650W Premier 650W Power Supply User Manual

Model: ATX-PM650W
Brand: Apevia

Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Apevia ATX-PM650W Premier 650W 80+ Gold Certified Active PFC ATX Semi-Modular Gaming Power Supply. Please read this manual thoroughly before installation and use to ensure proper functionality and safety.

Safety Information

- Always disconnect the power supply from the wall outlet before installing or removing any components.
- Do not open the power supply unit. High voltages are present inside, even when disconnected, which can cause serious injury or death.
- Ensure proper grounding of your computer system.
- Install the power supply in a well-ventilated area to prevent overheating.
- Use only the cables provided with your power supply unit.
- This power supply automatically switches between 110V and 230V depending on the power grid; no manual toggle switch is required.

Package Contents

Verify that all items are present in your package:

- Apevia ATX-PM650W Premier 650W Power Supply Unit
- AC Power Cord
- Modular Cables (PCI-E, SATA, Peripheral)
- Mounting Screws

Image: The Apevia ATX-PM650W Premier 650W Power Supply unit, its retail box, user manual, and the included modular cables (AC power cord, PCI-E, SATA, and peripheral cables).

Setup

Follow these steps to install your power supply:

1. **Mounting the PSU:** Secure the power supply unit into the designated bay in your computer case using the provided mounting screws. Ensure the fan is oriented correctly for optimal airflow (typically facing downwards or towards the interior of the case, depending on case design).
2. **Connecting Main Power:** Connect the 20/24-pin Main Power connector to your motherboard. Note that the 24-pin motherboard connector can be split into a 20+4 connector for motherboards requiring a 20-pin power connection.
3. **Connecting CPU Power:** Connect the 8-pin ESP 12V connector to your motherboard's CPU power socket. The 8-pin CPU connector can be split into a 4+4 connector for motherboards that require a 4-pin power connector.

4. **Connecting PCI-E Devices:** Use the 8(6+2)-pin PCI-E connectors for your graphics cards. The 8-pin PCI-E GPU connector can be split into a 6+2 connector for graphics cards that require a 6-pin power connector.
5. **Connecting SATA Devices:** Connect the SATA power cables to your storage drives (SSDs, HDDs) and optical drives.
6. **Connecting Peripheral Devices:** Use the Peripheral (Molex) connectors for older components or case fans that require this type of power. A Floppy connector is also available for legacy devices.
7. **Cable Management:** Utilize the semi-modular design to connect only the necessary cables, improving airflow and aesthetics within your PC case. Store unused modular cables for future use.
8. **Final Power Connection:** Once all internal components are connected, plug the AC power cord into the power supply and then into a wall outlet.

IMPORTANT: The power supply will not power on simply by connecting the power cord to both the power supply and wall outlet. Ensure that all the power supply cables are properly connected to the PC for it to power on.

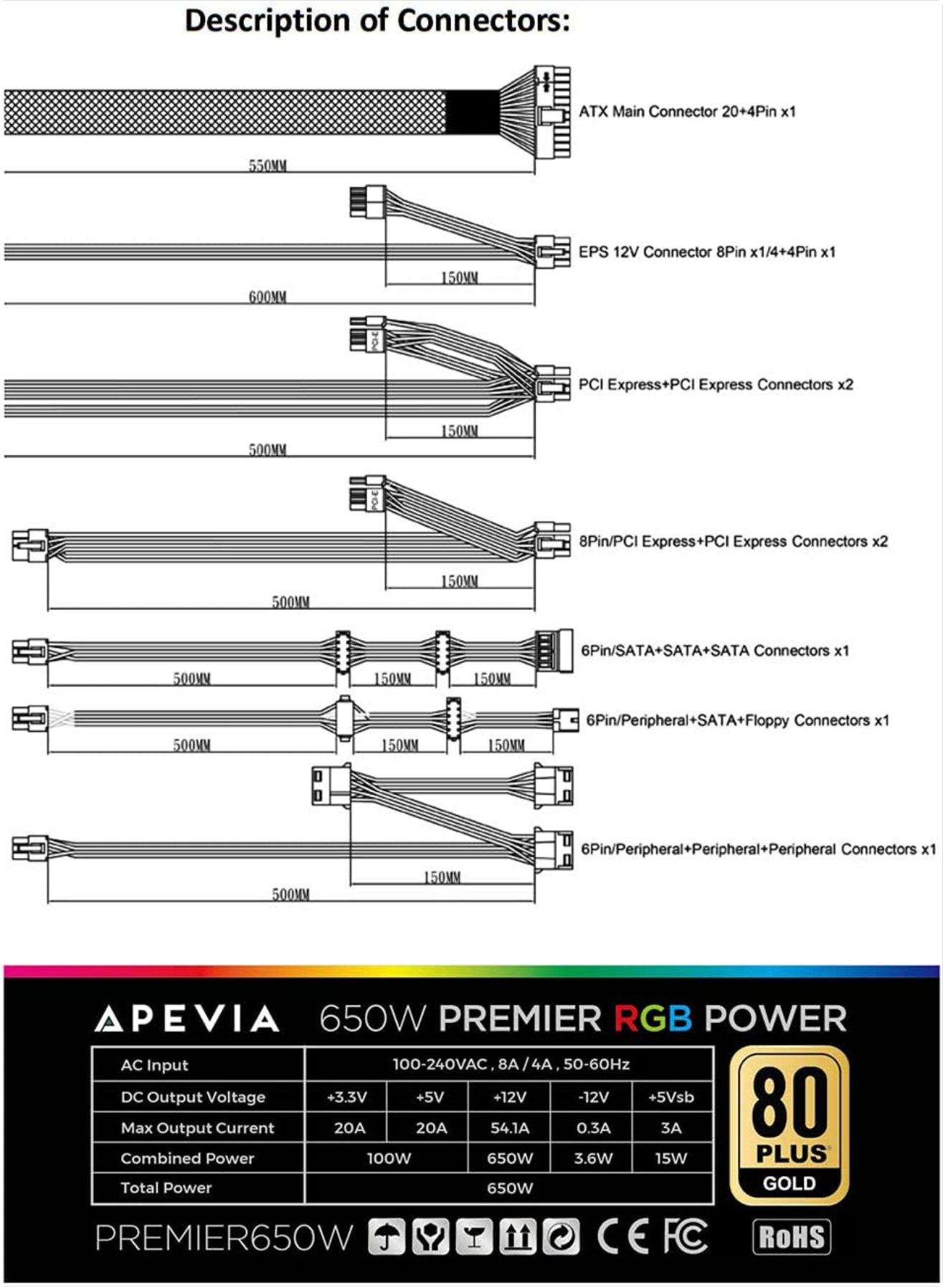

Image: A detailed diagram illustrating the various connectors of the Apevia power supply, including the ATX Main, EPS 12V, PCI Express, SATA, and Peripheral/Floppy connectors, along with their respective cable lengths.

Operating Instructions

Your Apevia ATX-PM650W Premier power supply is designed for efficient and stable operation.

Power On/Off

After connecting all necessary cables, turn on your computer using the case's power button. The power supply's fan and RGB lighting will activate.

RGB Lighting Modes

The 135mm RGB fan features 366 selectable lighting modes. To change the lighting mode, press the dedicated button located on the back of the power supply unit. Modes include RGB Cycle, Breathe Cycle, Breathe Mode, RGB Mode, and various solid colors (Red, Blue, Green, Pink, Orange, White), as well as an Off Mode.

Image: The Apevia power supply unit showcasing its 135mm RGB fan with various vibrant lighting modes, alongside the prominent 80 Plus Gold certification logo.

Thermal Control

The 135mm RGB fan is auto-thermally controlled. This means the fan speed will automatically adjust based on the power supply's internal temperature, spinning faster when hotter and slower when cooler, ensuring optimal cooling and reduced noise levels.

Maintenance

To ensure the longevity and optimal performance of your Apevia power supply, consider the following maintenance tips:

- **Dust Removal:** Periodically clean dust from the power supply's fan and vents using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Airflow:** Ensure that the power supply's intake and exhaust vents are not obstructed. Good airflow within your PC case is crucial for efficient cooling.
- **Cable Management:** While the semi-modular design aids in cable management, periodically check that cables are not obstructing airflow or pressing against components.

Troubleshooting

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

- **Power Supply Not Turning On:**
  - Ensure the AC power cord is securely plugged into both the power supply and the wall outlet.
  - Verify that the power switch on the back of the PSU is in the 'ON' position.
  - Crucially, confirm that **all** power supply cables (20/24-pin Main, CPU, PCI-E, SATA, etc.) are properly and securely connected to their respective components within the PC. The PSU requires a load to power on.
  - Test the wall outlet with another device to ensure it is supplying power.
- **System Instability/Random Shutdowns:**
  - Check all cable connections for looseness.
  - Ensure adequate ventilation around the power supply and within the PC case to prevent overheating.
  - Verify that your system's power requirements do not exceed the 650W capacity of the PSU.
- **RGB Fan Not Lighting Up:**
  - Press the RGB mode button on the back of the PSU to cycle through modes or turn it on.
  - Ensure the PSU is receiving power and the system is running.

Specifications

Detailed specifications for the Apevia ATX-PM650W Premier 650W Power Supply:

Feature	Description
Model Number	ATX-PM650W
Wattage	650 Watts
80 PLUS Certification	Gold Certified (90%+ Efficiency)
PFC Type	Active PFC
Form Factor	ATX
Design	Semi-Modular
Cooling Method	Air (135mm Auto-Thermally Controlled RGB Fan)

Feature	Description
Dimensions (L x W x H)	6.2 x 5.9 x 3.4 inches
Item Weight	4.95 pounds
Protections	Short-Circuit (SCP), Over-Voltage (OVP), Over-Power (OPP), Under-Voltage (UVP)
Capacitor	Large Japanese Capacitor
Compatibility	Supports ATX 12V 2.3 Version, Dual/Quad Core CPUs, SLI/Crossfire/Haswell

Output Table

DC Output Voltage	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	20A	20A	83.3A	0.3A	3A
Combined Power	100W		650W	3.6W	15W
Total Power	650W				

Image: The Apevia ATX-PM650W Premier 650W Power Supply unit, showcasing its sleek black design and the main fixed cables, including the 20/24-pin ATX and 8-pin CPU power connectors.

Warranty and Support

Apevia products are designed for reliability and performance. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Apevia website. For technical support, product inquiries, or warranty claims, please contact Apevia customer service through their official channels.
You can find more information and contact details on the Apevia Store on Amazon.