

SFX-500W

Generic SFX-500W Power Supply User Manual

Model: SFX-500W

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Generic SFX-500W Power Supply. Please read this manual thoroughly before using the product and retain it for future reference.

The SFX-500W is a compact SFX form factor power supply designed for small form factor (ITX) personal computers, providing a rated output of 500W and a peak output of 600W.

2. SAFETY INFORMATION

WARNING: Improper installation or use can lead to electric shock, fire, or damage to the power supply and other components. Always follow these safety guidelines.

- **Disconnect Power:** Always disconnect the power cord from the wall outlet before installing, removing, or servicing the power supply.
- **Qualified Personnel:** Installation and servicing should only be performed by qualified personnel.
- **Ventilation:** Ensure adequate ventilation around the power supply. Do not block any ventilation openings.
- **Moisture:** Do not expose the power supply to water or excessive humidity.
- **Voltage:** Ensure the input voltage matches the specifications of your region.
- **Grounding:** Ensure the power supply and your computer system are properly grounded.
- **High Voltage:** The power supply contains high voltage components. Do not open the power supply casing. There are no user-serviceable parts inside.

3. SETUP AND INSTALLATION

Follow these steps to install the SFX-500W power supply into your computer system.

3.1 Unpacking

Carefully remove the power supply from its packaging. Inspect for any visible damage. If damage is present, do not proceed with installation and contact your vendor.

SFX-500W



Figure 3.1: The SFX-500W power supply shown with its packaging, indicating its compact dimensions suitable for ITX builds.

3.2 Mounting the Power Supply

1. Ensure your computer case supports the SFX form factor.
2. Align the power supply with the mounting holes in your computer case's PSU bay.
3. Secure the power supply using the provided screws. Do not overtighten.



Figure 3.2: Side view of the SFX-500W power supply, showing the model label and ventilation grille.

3.3 Connecting Cables

The SFX-500W is a non-modular power supply, meaning its cables are permanently attached. Connect the necessary cables to your motherboard and other components.



Figure 3.3: The SFX-500W power supply showing its integrated cooling fan and permanently attached power cables.



Non-Modular



Full Modular

Figure 3.4: This image illustrates the difference between non-modular (cables permanently attached, like the SFX-500W) and full modular power supplies (cables detachable). The SFX-500W is a non-modular unit.

- **24-pin ATX Motherboard Connector:** Connect to the main power socket on your motherboard.
- **4+4-pin EPS/ATX 12V Connector:** Connect to the CPU power socket on your motherboard.
- **PCI-E Connectors:** Connect to your graphics card(s) if required.
- **SATA Power Connectors:** Connect to SATA devices such as SSDs, HDDs, and optical drives.
- **Peripheral (Molex) Connectors:** Connect to older peripherals or case fans if needed.

Ensure all connections are secure. Loose connections can cause system instability or damage.

4. OPERATING INSTRUCTIONS

4.1 Powering On

1. After all components are securely connected and the power supply is mounted, connect the AC power cord to the power supply's inlet and then to a grounded wall outlet.
2. Flip the power switch on the back of the power supply to the 'ON' (I) position.
3. Press the power button on your computer case to start the system.

4.2 Cooling Fan Operation

The SFX-500W features an integrated cooling fan to dissipate heat. The fan speed is automatically regulated based on the power supply's temperature and load to maintain optimal operating conditions and minimize noise.



Figure 4.1: Internal view of the SFX-500W power supply, highlighting the cooling fan and internal circuitry.

5. MAINTENANCE

Proper maintenance ensures the longevity and stable operation of your power supply.

- **Cleaning:** Periodically clean the exterior of the power supply and its fan grille to prevent dust buildup. Use a soft, dry cloth or compressed air. Ensure the power supply is turned off and unplugged before cleaning.
- **Ventilation:** Ensure that the air intake and exhaust vents are clear of obstructions.
- **Environmental Conditions:** Operate the power supply within its specified temperature and humidity ranges. Avoid extreme temperatures and dusty environments.

6. TROUBLESHOOTING

If you encounter issues with your SFX-500W power supply, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
System does not power on.	<ul style="list-style-type: none">• Power cord not connected.• Power switch is OFF.• Loose cable connections.• Faulty power supply.	<ul style="list-style-type: none">• Ensure AC power cord is securely connected to PSU and wall outlet.• Flip power switch to 'ON' (I) position.• Check all internal power connections (24-pin, 4+4-pin, etc.).• Test with a known good power supply if possible.

Problem	Possible Cause	Solution
System powers on but shuts down unexpectedly.	<ul style="list-style-type: none">• Overload.• Overheating.• Faulty power supply.	<ul style="list-style-type: none">• Ensure total power draw does not exceed 500W.• Check for proper ventilation and clean fan/vents.• Verify all components are correctly installed.
Fan is not spinning or is excessively loud.	<ul style="list-style-type: none">• Dust buildup.• Fan malfunction.	<ul style="list-style-type: none">• Clean the fan and vents.• If fan is faulty, contact support. Do not attempt to replace the fan yourself.

If the problem persists after attempting these solutions, contact customer support for further assistance.

7. SPECIFICATIONS

Feature	Specification
Brand	Generic
Model Name	SFX-500W
Part Number	ZZIH_DNC_18980
Form Factor	SFX
Rated Wattage	500 Watts
Peak Output Wattage	600 Watts
Compatible Devices	Personal Computer
Cooling Method	Air
Cable Type	Non-Modular

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact the vendor directly. Keep your proof of purchase for warranty claims.