

Powerwerx, Inc.

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## Thank You

Thank you for purchasing the Powerwerx Switching Power Supply Model SS-30DV which is designed to supply 25 Amps continuous and 30 Amps surge (up to 5 minutes) at 13.85 VDC. Loads can be connected to either the rear binding posts or the front Powerpole connectors. Any output may provide up to 30 Amps individually, and the total output is limited at 30 Amps.

## Features

- Front Connection: 2 Powerpole connectors
- Rear Connection: 1/4 inch binding posts that also accept banana plugs or compression connections
- Illuminated Power Switch

## Specifications

### Electrical specifications:

- Input Range: 100-120 VAC or 200-240 VAC, 50/60Hz (Switchable)
- Output Voltage: 13.85 VDC fixed
- Output Amperage: 25 continuous, 30 surge
- Polarity Ground: Negative
- Internal Protection: Thermal, over current
- Internal Input Fuse: 6.3 Amps at 115 VAC
- Ripple Peak-to-Peak Max. <100mVpp
- Noise Peak-to-Peak Max. <100mVpp
- Operating temperature rating: 0 – 50 °C
- Storage temperature: -20 – 85 °C

### Physical dimensions and materials:

- Weight: 3.0 lbs. (48 oz.)
- Overall Dimensions: 6.1 x 5 x 2.5 in (154mm long, 127mm wide, 63mm tall)
- Fan: Quiet internal cooling fan
- Machined metal case front bezel

## Certifications

- Meets FCC CFR Title 47 Part 15 Subpart B: Class B, CISPR: 2005 ANSI C63.4: 2003
- Meets CE/LVD (Low-Voltage Directive 2006/95/EC) standard
- Meets EMC: EN 55022:206+A1: 2007, 2010, EN 61000-3-2:2006

## Package Contents

- Power Supply
- AC Power Cord, 4 ft.

## Powerpole Configuration

The Powerpole connectors mounted on the front panel conform to the RACES/ARES standard orientation.



## Input Voltage Selection

The power supply is set up for 230V AC input as shipped from the factory. For 115V AC applications, set the recessed 115/230 input select switch located on the rear of the power supply into the proper position. Positions are identified on the switch. Use a small screwdriver to slide the switch into position. No adjustment is necessary for either 50 or 60 Hz input.

## Installation Instructions

1. Unplug the power supply from the mains supply outlet.
2. Select the correct input voltage (See Input Voltage Selection).
3. Connect the power cable's positive (red) wire to the positive terminal and connect the negative (black) wire to the negative terminal on the back of the power supply or use the Powerpole connectors mounted on the front panel.
4. Plug the power cable into the power socket on the back of the radio.
5. Plug the power supply into the mains supply outlet.

## Turning the power supply on

Turn the power supply on by pressing the power switch to the 'ON' Position.

## Turning the power supply off

Before you turn the power supply off, turn the radio off as described in the user documentation for the radio. Then turn the power supply off by pressing the power switch to the 'OFF' Position.

## Cooling

The SS-30DV power supply is cooled by convection and forced air cooling (normal airflow around the power supply in combination with a temperature controlled fan to improve cooling at higher levels of use). The fan is activated by a sensor when the temperature rises above 70°C.

**Caution: install indoors**



Install the power supply indoors. It is not designed for operation out-of-doors or in wet environments.

**Warning: Safe Operation**



To reduce the risk of fire or electric shock, please adhere to these warnings:

**Moisture:** Do not expose this appliance to water or moisture.

**Cleaning:** Unplug the power supply from the mains power outlet before cleaning. Switching off the power supply will not reduce this risk.

**Ventilation:** Place the power supply in an area that will allow air to flow freely around the unit. This will prevent the power supply and mobile radio from overheating. Do not block or obstruct any of the ventilation openings on the unit.

**Warning: Servicing**



This power supply should be serviced by a qualified service technician. Incorrect assembly may result in electric shock or fire. This power supply contains no user serviceable parts inside.

Some of the components inside the power supply can operate at voltage levels that may be lethal.

**Warning: Electrical Connections**



To reduce the risk of fire or electric shock, please adhere to these warnings:

The power supply should be properly connected and grounded. Use the provided AC power cable to connect the power supply to a mains power outlet that is properly installed and grounded, in accordance with all local codes and ordinances. If the power supply cord is damaged, it must be replaced with the same type to comply with safety requirements.

**Warranty:**

The Powerwerx support policy is simple: we want you to be happy! If you have a problem, please feel free to contact us and we will do our best to get you up and running as soon as possible.

The SS-30DV has a **three-year limited warranty**. We will repair or replace (at our discretion) your SS-30DV if you encounter any problems within three years from the date of purchase. We reserve the right to charge a reasonable fee for repairing units with user-inflicted damage. It is your responsibility to ship the defective unit back to Powerwerx. We will pay for the return shipping back to you. We reserve the right to upgrade your equipment to an equivalent or better model.

**Troubleshooting**

Condition:	Solution	Possible Cause
No output current	<ol style="list-style-type: none"> <li>1. Power Supply not receiving AC input voltage or is not receiving correct input voltage</li> <li>2. Power Supply limiting output due to overload or ambient over temperature condition</li> <li>3. Defective Power Supply</li> </ol>	<ol style="list-style-type: none"> <li>1. Using a voltmeter, confirm AC input voltage. Check input connections. Confirm correct AC power cable is installed.</li> <li>2. Reduce DC load and/or determine cause of over temperature condition.</li> <li>3. Return to place of purchase or contact Powerwerx for return authorization.</li> </ol>
Power supply repeatedly trips input circuit breaker with no load connected.	<ol style="list-style-type: none"> <li>1. Incorrect input voltage is being applied while should be 100-120 VAC or 200-240 VAC.</li> <li>2. Internal short</li> </ol>	<ol style="list-style-type: none"> <li>1. Using a voltmeter, confirm AC input voltage. Confirm input voltage switch is in the correct position. Confirm correct AC power cable is installed.</li> <li>2. Return to place of purchase or contact Powerwerx for return authorization.</li> </ol>