



Manuals.plus /

› Progressive Dynamics /

› Progressive Dynamics Intelli-Power 4600 Series Converter/Charger PD4645V User Manual

## Progressive Dynamics PD4645V

# Progressive Dynamics Intelli-Power 4600 Series Converter/Charger PD4645V User Manual

Model: PD4645V | Brand: Progressive Dynamics

## 1. PRODUCT OVERVIEW

The Progressive Dynamics Intelli-Power 4600 Series Converter/Charger, model PD4645V, is designed as an upgrade or replacement for existing RV power center converter/chargers. This unit features a built-in Charge Wizard, which is engineered to significantly extend battery life by optimizing the charging process. It is specifically designed to replace converter sections found in models such as Parallax/Magnatek 6345, Parallax 7345, Parallax 8345, and WFCO 8945.

### Key Features:

- **Charge Wizard 4-stage charging system:** Dramatically increases battery life by providing optimal charging.
- **Battery Protection:** Designed to prevent battery overcharging or "boiling."
- **Intelligent Charging:** Provides an intelligent method to charge and maintain your RV battery.
- **Ease of Installation:** Engineered for straightforward installation.
- **Broad Compatibility:** Direct replacement for several common converter sections.

## 2. SPECIFICATIONS

Brand	Progressive Dynamics
Model	PD4645V
Item Weight	9 pounds
Product Dimensions	8 x 13.2 x 5.3 inches
Input Voltage	12 Volts
Output Voltage	14.4 Volts (DC)
Color	SILVER
Country of Origin	China

### 3. WHAT'S IN THE BOX

---

The package for the Progressive Dynamics Intelli-Power 4600 Series Converter/Charger includes:

- One (1) Progressive Dynamics PD4645V Intelli-Power 4600 Series Converter/Charger with Charge Wizard - 45 Amp.



*Figure 1: Progressive Dynamics PD4645V Intelli-Power 4600 Series Converter/Charger. This image shows the converter/charger unit with its internal components visible, including wiring and a cooling fan.*

### 4. INSTALLATION AND SETUP

---

Installation of the PD4645V unit requires careful attention to electrical connections and safety. It is highly recommended to

consult the official installation manual for detailed, step-by-step instructions and wiring diagrams. A PDF version of the installation manual is available [here](#).

### Important Safety Precautions:

- **Disconnect Power:** Before beginning any installation or maintenance, always unplug your RV from its power source and disconnect the positive lead from the battery terminal.
- **Professional Installation:** If you are not comfortable with electrical work, it is strongly advised to seek assistance from a qualified RV technician.
- **Wire Identification:** Carefully identify and label all wires before disconnecting them from the old unit.

### General Wiring Overview (Refer to PDF for details):

The PD4645V unit typically involves connecting three main wires from the converter to your RV's main electrical panel: a green wire for ground, a white wire for neutral, and a black wire for the hot connection to a circuit breaker. Additionally, two wires (black and white) from the converter connect to the RV's battery terminals. Ensure all connections are secure and follow the specific amperage requirements for fuses and breakers as outlined in the official manual.

The unit is designed for easy replacement of older converter sections. When replacing, transfer existing fuses and wiring to the new unit's fuse board, ensuring correct placement according to the new unit's labeling and the original setup.

## 5. OPERATING THE CHARGE WIZARD

---

The Intelli-Power 4600 Series Converter/Charger features a built-in **Charge Wizard**, an advanced four-stage charging system designed to optimize battery charging and extend battery life. The Charge Wizard automatically monitors battery voltage and adjusts the charging mode as needed.

### Charge Wizard Modes:

- **BOOST Mode (14.4 Volts):** Rapidly recharges the battery up to 90% capacity.
- **NORMAL Mode (13.6 Volts):** Safely completes the charge and maintains the battery.
- **STORAGE Mode (13.2 Volts):** Reduces voltage to minimize gassing and water loss during long-term storage.
- **DESULFATION Mode (14.4 Volts, pulsed):** Periodically pulses voltage to prevent or reverse sulfation, a common cause of battery failure.

The Charge Wizard operates automatically, requiring no user intervention for optimal battery maintenance. This intelligent system ensures your RV battery is always charged efficiently and safely, preventing issues like overcharging or "boiling" that can shorten battery lifespan.

## 6. MAINTENANCE

---

To ensure the longevity and optimal performance of your Progressive Dynamics PD4645V Converter/Charger, regular maintenance is recommended:

- **Keep Clean:** Periodically inspect the unit for dust and debris accumulation, especially around the cooling fan and vents. Use compressed air to gently clear any blockages.
- **Check Connections:** Annually, or if you experience power issues, ensure all electrical connections are tight and free from corrosion. Loose connections can lead to overheating and poor performance.
- **Inspect Fuses:** The unit's fuse board contains various fuses for different circuits. If a circuit is not working, check the corresponding fuse. Replace blown fuses only with those of the correct amperage rating.
- **Ventilation:** Ensure the area around the converter/charger has adequate ventilation to prevent overheating. Do not obstruct the fan or vents.

## 7. TROUBLESHOOTING

---

If you encounter issues with your PD4645V Converter/Charger, consider the following troubleshooting steps:

- **No Power Output:**

- Verify the RV is connected to shore power or that the generator is running.
- Check the main circuit breaker for the converter/charger in your RV's electrical panel.
- Inspect the fuses on the converter's fuse board. Replace any blown fuses.
- Ensure all wiring connections to the converter and the RV's electrical panel are secure.

- **Battery Not Charging:**

- Check the battery connections for corrosion or looseness.
- Verify the battery itself is in good condition and capable of holding a charge.
- Ensure the converter's fan is operating when under load, indicating it's actively working.

- **Overheating/Fan Constantly Running:**

- Check for adequate ventilation around the unit. Clear any obstructions.
- Ensure the cooling fan is clean and free of dust.
- Excessive load on the RV's 12V system can cause the converter to work harder, leading to increased fan operation. Reduce 12V appliance usage if possible.

- **Visible Damage:** If you observe any burnt components, melted wires, or unusual odors, immediately disconnect power and contact a qualified technician. This indicates a serious electrical issue.

For persistent issues, refer to the comprehensive troubleshooting guide in the official installation manual or contact Progressive Dynamics customer support.

## 8. WARRANTY AND SUPPORT

---

For specific warranty information regarding your Progressive Dynamics Intelli-Power 4600 Series Converter/Charger (Model PD4645V), please refer to the documentation included with your product or visit the official Progressive Dynamics website. Warranty terms and conditions typically cover manufacturing defects and may vary.

For technical support, service, or to inquire about replacement parts, please contact Progressive Dynamics customer service directly. Their contact information can usually be found in the product manual or on their official website.

Remember to have your product model number (PD4645V) and purchase date available when contacting support.

