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Power Watchdog PWD30EPOH

Hughes Autoformers PWD30-EPO-H Power Watchdog Smart Bluetooth Surge Protector User Manual

Model: PWD30EPOH

INTRODUCTION

The Power Watchdog PWD30-EPO-H is a smart RV surge protector designed to safeguard your recreational vehicle's electrical system from damaging power fluctuations. It features Emergency Power Off (EPO) functionality, which automatically disconnects power during extreme voltage conditions, and Bluetooth connectivity for real-time monitoring via a mobile application. This manual provides essential information for the proper installation, operation, and maintenance of your Power Watchdog unit.

SAFETY INFORMATION

Always prioritize safety when working with electrical systems. Ensure the power source is disconnected before installation or maintenance. The Power Watchdog is designed to protect your RV's electrical system; however, it is not a substitute for proper electrical wiring and safe practices. For any technical issues or concerns beyond the scope of this manual, contact the manufacturer directly.

PRODUCT OVERVIEW

The Power Watchdog PWD30-EPO-H is a compact, hardwired unit. It features an illuminated bulldog face that changes color to indicate power status and fault conditions, along with a digital display for error codes.



Figure 1: Front view of the Power Watchdog PWD30-EPO-H unit. The unit features a prominent bulldog logo, a "30 AMP Smart Surge Protector + EPO" label, a Bluetooth symbol, a QR code, and a digital display for status and error codes.



Figure 2: Angled view of the Power Watchdog PWD30-EPO-H, highlighting the robust casing and the wiring terminals at the bottom. This view provides a clearer perspective of the unit's physical dimensions and connection points.

INSTALLATION

The PWD30-EPO-H is designed for hardwired installation within your RV's electrical system. This provides a secure, theft-resistant solution. It is recommended that installation be performed by a qualified technician.

Installation Steps:

- Preparation:** Ensure all power to the RV is disconnected at the source (shore power pedestal or generator).
- Mounting:** Select a secure, dry location inside your RV for mounting the unit.
- Wiring:** Connect the RV's incoming shore power cable to the "IN" terminals and the RV's internal electrical panel wiring to the "OUT" terminals. Pay close attention to the embossed "IN" and "OUT" markings on the wiring blocks to ensure correct polarity (typically, "IN" is at the bottom and "OUT" is at the top, but always verify with the unit's specific markings).

4. **Secure Connections:** Ensure all wire connections are tight and secure.

5. **Final Check:** Double-check all wiring before restoring power.

Once installed, the unit will automatically begin monitoring power conditions when your RV is plugged into a power source.

OPERATING INSTRUCTIONS

Power-On Analysis:

Upon connecting to shore power, the Power Watchdog performs a quick 4-second analysis of the incoming power. During this time, the bulldog face may cycle through colors. Once the analysis is complete, the face will illuminate white if the power is good, or red if a fault is detected.

Status Indicators:

- **White Bulldog Face:** Indicates safe and stable power conditions.
- **Red Bulldog Face:** Indicates a hazardous power condition detected, and the EPO (Emergency Power Off) function has activated, shutting off power to the RV. An error code will be displayed on the digital screen.

Bluetooth App Monitoring:

Download the free Power Watchdog mobile application (available for iOS and Android) to monitor your RV's electrical parameters in real-time. The app provides insights into voltage, amperage, and wattage levels. It also delivers wireless alerts for hazardous conditions and allows for customizable alert thresholds.

To connect via Bluetooth:

1. Ensure your Power Watchdog unit is powered on.
2. Open the Power Watchdog app on your smartphone.
3. Follow the in-app instructions to pair with your device. You may need to scan the QR code on the unit.

MAINTENANCE

The Power Watchdog PWD30-EPO-H is designed for durability. Regular maintenance is minimal but crucial for continued protection.

Replaceable Surge Module:

One of the key features of this unit is its replaceable surge module. If the unit experiences a significant surge event and the "Surge protection used up" error (E9) is displayed, the internal surge module can be replaced without needing to replace the entire unit. This reduces waste and offers a cost-effective solution for long-term protection.

To replace the surge module, refer to the detailed instructions provided with the replacement module or consult a qualified technician.



Figure 3: Illustration of the replaceable surge module, highlighting its easy access for maintenance.

General Care:

- Keep the unit clean and free from debris.
- Ensure the rain cover (if applicable for portable versions) is properly closed when not in use to protect the internal components.
- Periodically check wiring connections for tightness, especially after long periods of travel.

TROUBLESHOOTING

The Power Watchdog provides diagnostic error codes on its digital display and through the mobile app to help identify power issues. If the bulldog face turns red, refer to the error code displayed.



Figure 4: Side view of the Power Watchdog unit displaying common error codes and their meanings.

Common Error Codes:

Code	Description	Action
E1	Line voltage error (too high or too low)	Check pedestal voltage with a multimeter. If persistent, try another power source.
E3	Overcurrent	Reduce electrical load in the RV. Check for short circuits.

Code	Description	Action
E5	Line & neutral reversed	Indicates incorrect wiring at the pedestal or within the RV. Consult an electrician.
E7	Missing ground	Indicates a missing or faulty ground connection at the power source. Do not use this power source.
E9	Surge protection used up	The internal surge module has absorbed a significant surge. Replace the surge module.

The unit is designed to automatically restore power once stable conditions return after an EPO event. If an error persists, disconnect power and consult a qualified electrician or the manufacturer.

SPECIFICATIONS

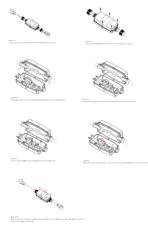
- Model:** PWD30EPOH
- Amperage:** 30 Amp
- Surge Protection:** 3000 Joules
- Features:** Emergency Power Off (EPO), Bluetooth Connectivity, Replaceable Surge Module
- Dimensions:** 12 x 5.5 x 3.75 inches
- Item Weight:** 4.36 pounds

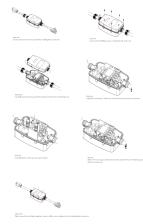
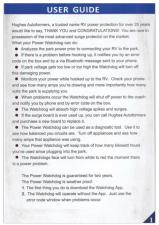
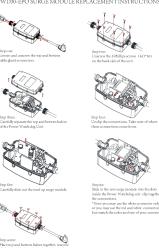
WARRANTY & SUPPORT

The Power Watchdog PWD30-EPO-H comes with a Limited Lifetime Warranty. For detailed warranty information, please refer to the documentation included with your product or visit the manufacturer's official website.

For technical support, troubleshooting assistance, or inquiries regarding replacement parts, please contact the manufacturer directly. Contact information can typically be found on the product packaging or the manufacturer's website.

Related Documents - PWD30EPOH

	<p>Power Watchdog Installation Guide and Wiring Diagram Hughes Autoformers</p> <p>Concise guide to installing the Power Watchdog 50 AMP surge protector from Hughes Autoformers, including step-by-step instructions and a wiring diagram.</p>
	<p>PWD 30A Power Watchdog Unit Surge Module Replacement Guide</p> <p>Step-by-step instructions for replacing the surge module in a PWD 30A Power Watchdog Unit, including disassembly and reassembly.</p>

	<p>Hughes Power Watchdog Surge Module Replacement Guide</p> <p>Detailed, step-by-step instructions for replacing the surge module in your Hughes Power Watchdog portable surge protector. Learn how to safely open the unit, disconnect wiring, swap modules, and reassemble for optimal performance.</p>
	<p>Hughes Autoformers Power Watchdog PWD30-EPO/PWD50-EPO Installation and Operation Guide</p> <p>Comprehensive guide for Hughes Autoformers Power Watchdog surge protectors (PWD30-EPO, PWD50-EPO), covering installation, operation, technical specifications, error code explanations, and mobile app usage for RV power protection.</p>
	<p>Hughes Autoformers Power Watchdog User Guide</p> <p>User guide for the Hughes Autoformers Power Watchdog, a Bluetooth-enabled RV surge protector. Learn about its features, setup, operation, and troubleshooting for reliable RV power protection.</p>
	<p>Hughes Autoformer Power Watchdog Surge Module Replacement Guide</p> <p>Step-by-step instructions for replacing the surge protection module in a Hughes Autoformer Power Watchdog EPO unit.</p>