XS Power PWR-S5

XS Power PWR-S5 Lithium Racing Battery User Manual

Model: PWR-S5 | Brand: XS Power

Introduction

This manual provides essential information for the safe and effective use of your XS Power PWR-S5 Lithium Titanate (LTO) Racing Battery. The PWR-S5 is a 12-volt deep cycle lithium battery designed for high-performance applications, including car audio systems and powersports vehicles, offering 5000 Watts, 2000 Amps, and 10 Amp-hours (AH) capacity. Please read this manual thoroughly before installation and operation.

Safety Information

Always prioritize safety when handling and installing batteries. Failure to follow these instructions can result in serious injury or damage to property.

- Wear appropriate personal protective equipment, including safety glasses and gloves, when working with batteries.
- Do not short-circuit the battery terminals. This can cause severe sparks, heat, and potential explosion.
- Keep the battery away from open flames, sparks, and heat sources.
- Ensure proper ventilation during charging and operation.
- Do not disassemble, puncture, or modify the battery. Internal components are hazardous.
- If the battery casing is damaged, discontinue use immediately and contact XS Power support.
- Dispose of batteries according to local regulations. Do not dispose of in household waste.
- **Proposition 65 Warning:** This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Product Overview



Image: The XS Power PWR-S5 Lithium Racing Battery, a compact and powerful 12-volt unit.

Key Features:

- **Lithium Titanate Oxide (LTO) Technology:** These 12V LTO batteries offer a significantly longer lifespan than traditional AGM batteries, high energy density, and a lightweight design, making them suitable for powering vehicle accessories like LED lighting, electronics, or high-power stereo systems.
- **High Performance:** This 12-Volt deep cycle lithium ion battery delivers an impressive 1000 cranking amps, enabling quick and reliable engine starts even in extreme temperatures.
- **Durable and Safe Construction:** The powersports battery features a sealed, leak-proof, and maintenance-free design, ensuring durability in harsh conditions.
- **Compact and Lightweight:** Weighing approximately 8 lbs, its compact size (7.4" L x 5" H x 4.85" W) facilitates easy transport and installation, making it an ideal choice for powering various accessories without the bulk of heavier batteries.
- **M6 Terminal Hardware:** Included M6 terminal hardware simplifies the installation process.

What's in the Box:

- 1 x XS Power Titan8 PWR-S5, 12 Volt Lithium Titanate Car Audio Battery
- M6 Terminal Hardware

Setup and Installation

Proper installation is crucial for the performance and longevity of your PWR-S5 battery. If you are unsure about any steps, it is

recommended to seek professional assistance.

1. **Preparation:** Ensure the vehicle's ignition is off and disconnect the negative terminal of the existing battery first, followed by the positive terminal.
2. **Mounting Location:** Select a secure, well-ventilated location for the PWR-S5 battery. The battery can be mounted in any position due to its sealed design. Ensure it is protected from excessive heat and physical damage.
3. **Terminal Connections:**
    - Connect the positive (+) cable from your vehicle to the positive terminal of the PWR-S5 using the provided M6 terminal hardware. Ensure a tight and secure connection.
    - Connect the negative (-) cable from your vehicle to the negative terminal of the PWR-S5, also using the M6 terminal hardware. Ensure a tight and secure connection.
4. **Secure the Battery:** Use appropriate battery hold-downs or straps to firmly secure the PWR-S5 in its chosen location to prevent movement during vehicle operation.
5. **Final Check:** Double-check all connections for tightness and ensure no tools or foreign objects are left near the battery terminals.

Note: The PWR-S5 is designed to work with existing AGM batteries and may not require an isolator in many car audio applications. However, always consult with a professional installer for complex setups.

Operating Instructions

The XS Power PWR-S5 is a deep cycle battery, optimized for providing consistent power to vehicle accessories and for engine starting.

- **Initial Use:** After installation, the battery may require an initial charge to reach full capacity.
- **Charging:** The PWR-S5 charges rapidly. When connected to a vehicle's charging system (alternator), it can achieve a full charge quickly, often within 15 minutes or less from a partially discharged state, depending on the alternator output. For external charging, use a charger compatible with Lithium Titanate Oxide (LTO) batteries.
- **Accessory Power:** This battery is ideal for powering high-demand accessories such as car audio systems, LED lighting, and other electronics without significant voltage drop.
- **Engine Starting:** The 1000 cranking amps ensure reliable engine starts, even in varying temperatures.
- **Monitoring:** While the battery is designed for robust performance, occasional monitoring of its voltage can help ensure optimal system health.

Maintenance

The XS Power PWR-S5 battery is designed to be largely maintenance-free due to its sealed, leak-proof construction.

- **Cleaning:** Keep the battery terminals and casing clean and free of dirt or corrosion. Use a dry cloth or a slightly damp cloth if necessary. Do not use harsh chemicals.
- **Terminal Inspection:** Periodically check the M6 terminal connections to ensure they remain tight and secure. Loose connections can lead to poor performance and heat buildup.
- **Storage:** If storing the battery for an extended period, ensure it is fully charged and stored in a cool, dry place. Lithium batteries generally have a low self-discharge rate.
- **Avoid Deep Discharge:** While it is a deep cycle battery, consistently discharging it to extremely low voltages can reduce its overall lifespan.

Troubleshooting

If you encounter issues with your PWR-S5 battery, consider the following common troubleshooting steps:

Problem	Possible Cause	Solution
Battery not holding charge / Low voltage	• Loose or corroded terminals • Insufficient charging from vehicle's alternator • Excessive parasitic draw • Faulty external charger	• Check and tighten all terminal connections. Clean any corrosion. • Inspect alternator and charging system. Consult an automotive electrician. • Identify and eliminate sources of power drain when the vehicle is off. • Use a compatible LTO battery charger.
Engine cranks slowly or not at all	• Low battery charge • Loose or corroded battery cables • Starter motor issue	• Charge the battery. • Verify all battery and starter connections are clean and tight. • Have the starter motor inspected by a professional.
Battery appears damaged (swelling, leaking)	• Overcharging • Physical impact • Internal fault	• **Immediately disconnect the battery. Do not use.** Contact XS Power support for assistance.

If these steps do not resolve the issue, please contact XS Power customer support or an authorized service center.

SPECIFICATIONS

Specification	Value
Model Name	XS Power Titan8 PWR-S5
Battery Type	Lithium Titanate Oxide (LTO) Deep Cycle
Voltage	12 Volts (DC)
Maximum Amps	2000 Amps
Cranking Amps (CA Pb Eq*)	1500A
Amp-Hours (AH)	10 Ah
Wattage	5000 Watts
Energy (Wh)	120 Wh
Dimensions (L x W x H)	7.4" x 4.85" x 5" (approx. 18.8 cm x 12.3 cm x 12.7 cm)
Item Weight	8 Pounds (approx. 3.6 kg)
Terminal Hardware	M6
Manufacturer Part Number	PWR-S5
UPC	692209054320

*Pb Eq: Lead Acid Equivalent

Warranty Information

The XS Power PWR-S5 battery is backed by a **1-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

Important: To ensure full warranty coverage and expert support, it is crucial to purchase XS Power products from an authorized dealer. Purchases made from unauthorized sellers will void your product protection. Each product is tracked by serial number.

For detailed warranty terms and conditions, please refer to the official XS Power website or contact customer support.

Customer Support

For technical assistance, warranty claims, or any questions regarding your XS Power PWR-S5 battery, please contact XS Power customer support.

- **Online Support:** Visit the official XS Power website for FAQs, product information, and contact forms.
- **Authorized Dealers:** Use the dealer locator on the XS Power website to find an authorized dealer near you for sales and service.

Always provide your product model (PWR-S5) and serial number when contacting support for faster service.

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Question

Example: How do I reset this device or fix this error?

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