

## JOSMA JA-48150

# JOSMA 48V 150Ah LiFePO4 Golf Cart Battery User Manual

Model: JA-48150

Brand: JOSMA

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your JOSMA 48V 150Ah LiFePO4 Golf Cart Battery. This lithium iron phosphate battery is designed as a high-performance replacement for traditional lead-acid batteries, offering increased power, longer lifespan, and advanced monitoring capabilities. Please read this manual thoroughly before installation and operation.



The JOSMA 48V 150Ah LiFePO<sub>4</sub> Golf Cart Battery system, including the battery unit, charger, LCD monitor, and mobile app interface.



# **LiFePO4**

## **Lithium battery**



- ✓ 6000+ deep cycle life
- ✓ 125LB & Metal Case
- ✓ BMS & More Safe
- ✓ Intelligent & Efficient

# **LEAD-ACID**

## **battery**



- ✗ 300+ cycle life
- ✗ 200+LB
- ✗ Low Security
- ✗ Traditional

A visual comparison highlighting the advantages of LiFePO4 batteries over traditional lead-acid batteries, including longer cycle life, lighter weight, and integrated safety features.

## **2. SAFETY INFORMATION**

Always observe the following safety precautions to prevent injury or damage to the battery and connected equipment:

- Do not disassemble, puncture, or modify the battery.
- Avoid exposing the battery to fire, extreme heat, or direct sunlight for prolonged periods.
- Do not immerse the battery in water or other liquids.
- Use only the provided 58.4V 18A charger for charging.
- Ensure proper ventilation during charging and operation.
- Keep out of reach of children.
- Wear appropriate personal protective equipment (PPE) such as gloves and eye protection during installation and handling.



- Ensure all connections are secure and correctly polarized (positive to positive, negative to negative).

### 3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 × JOSMA 48V 150Ah Lithium Golf Cart Battery
- 1 × 58.4V 18A Charger
- 1 × LCD Touch Monitor
- 1 × User Manual (this document)
- Screws & Accessories (M3 Screws\*8, M4 Screws\*8, M5 Screws\*10, M8 Screws\*2, Display Brackets)



The package includes the battery, charger, LCD display, and various screws and brackets for installation.

### 4. SETUP

## 4.1. Battery Installation

The JOSMA LiFePO4 battery is designed for easy replacement of existing lead-acid batteries in compatible golf carts. Its lighter weight (50% less than lead-acid) simplifies handling.

1. Ensure the golf cart is powered off and disconnect the old battery system.
2. Carefully remove the old lead-acid batteries.
3. Place the JOSMA LiFePO4 battery into the battery compartment. The battery features mounting feet and comes with fixing buckles and screws for secure and stable installation.
4. Connect the battery terminals: positive (red) to positive, and negative (black) to negative. Ensure all connections are tight and secure.

# GRADE A CELLS

Super Power & Quality Battery



**BMS: 10S/220A**

**Cycle Life: 6000+**

|              |                      |                    |                |
|--------------|----------------------|--------------------|----------------|
| <b>150Ah</b> | <b>200A max</b>      | <b>10.24kw Max</b> | <b>7.68kwh</b> |
| Capacity     | Continuous Discharge | Load Power         | Usable Energy  |

A person installing the JOSMA LiFePO4 battery into a golf cart, demonstrating the ease of placement and secure fastening with buckles and screws.

## 4.2. Charging the Battery

Use the provided 58.4V 18A charger to ensure optimal charging and battery longevity.

1. Connect the charger to the battery's charging port.



2. Plug the charger into a standard AC power outlet.
3. The charger's indicator lights will show the charging status. A full charge typically takes approximately 6 hours.
4. Once fully charged, disconnect the charger from the power outlet and then from the battery.



Detailed view of the 58.4V 18A charger, highlighting its dimensions, input/output cables, and cooling fan for efficient charging.

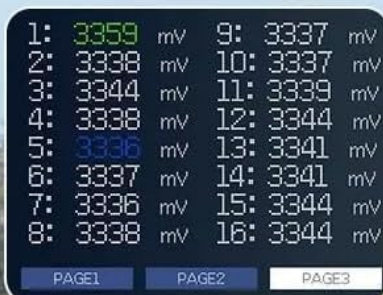
### 4.3. LCD Monitor & Mobile App Connection

The intelligent LCD monitor and mobile app allow real-time monitoring of battery information.

1. **LCD Monitor Installation:** Use the provided bracket and screws to install the LCD monitor in a convenient location on your golf cart dashboard. Connect the monitor cable to the battery's dedicated monitor port.
2. **Mobile App Connection:** Download the JOSMA battery monitoring app from your device's app store. Enable Bluetooth on your mobile device and pair it with the battery. Follow the in-app instructions to connect and view real-time battery data.

# REAL-TIME BATTERY INFORMATION

MOBILE APP & LCD DISPLAY



Screenshots illustrating the real-time battery information available on both the intelligent LCD monitor and the mobile application, including percentage, voltage, current, and capacity.

Your browser does not support the video tag.

This video demonstrates the installation process, charging, and the use of the LCD monitor and mobile app for the JOSMA 48V 150Ah Lithium Golf Cart Battery.

## 5. OPERATING INSTRUCTIONS

### 5.1. General Operation

The JOSMA 48V 150Ah LiFePO<sub>4</sub> battery provides reliable power for various applications:

- **Golf Carts:** Compatible with popular brands like EZGO, Club Car, and Yamaha. Offers a maximum range of up to 70 miles on a single charge.
- **Other Applications:** Suitable for RVs, UTVs, boats, trolling motors, electric lawn mowers, camping setups, and solar energy systems.

# Packing List



LCD Display



Charger



M3 Screws\*8



M4 Screws\*8



M5 Screws\*10



M8 Screws\*2



Display Brackets



The JOSMA LiFePO4 battery is versatile, powering golf carts, street-legal carts, RVs, and lawn mowers.



# UP TO 70 MILES ON A SINGLE CHARGE

Go Further and Faster



A golf cart in operation, emphasizing the battery's capability to provide up to 70 miles of driving range on a single charge.

Your browser does not support the video tag.

This video showcases the JOSMA 48V 150Ah Lithium Golf Cart Battery's performance, highlighting its ability to provide up to 70 miles of range.

## 5.2. Monitoring Battery Status

The LCD monitor and mobile app provide comprehensive real-time data:

- **LCD Monitor:** Displays battery percentage, voltage, current, capacity, and temperature.
- **Mobile App:** Offers detailed battery information, including charge/discharge status, cell balance, and protection alerts.

## 6. MAINTENANCE

### 6.1. General Care

LiFePO4 batteries require minimal maintenance compared to lead-acid batteries:

- No watering or acid checks are required.
- Keep the battery terminals clean and free from corrosion.
- Ensure the battery case is free from physical damage. The high-strength cold-rolled sheet metal case provides robust protection.

## 6.2. Temperature Management

The battery features multi-stage temperature protection to ensure optimal performance and longevity:

- **Charging Temperature:** The battery can be charged between 32°F (0°C) and 131°F (55°C). If the temperature drops below 23°F (-5°C), the BMS automatically disconnects the charging circuit and resumes at 32°F (0°C).
- **Discharging Temperature:** The battery can be discharged between -4°F (-20°C) and 131°F (55°C). Discharge cuts off at -22°F (-30°C) and restores at -4°F (-20°C).



The battery is equipped with intelligent low-temperature safeguards to prevent damage in cold conditions.

## 7. TROUBLESHOOTING

### 7.1. BMS Protections

The built-in 200A Battery Management System (BMS) provides multiple layers of protection:

- **Overcharge Protection:** Prevents the battery from being charged beyond its safe voltage limit.
- **Overdischarge Protection:** Prevents the battery from being discharged below its safe voltage limit.
- **Overcurrent Protection:** Protects against excessive current draw.
- **Short-Circuit Protection:** Automatically disconnects the battery in case of a short circuit.
- **High Temperature Protection:** Monitors and manages internal battery temperature to prevent overheating.
- **Voltage Balance:** Ensures all cells within the battery pack are balanced for optimal performance and lifespan.

# SMART BMS SYSTEM



**Overcharge Protection**



**Overcurrent Protection**



**Short Circuit Protection**



**Temperature Protection**



**Overdischarge Protection**



**Voltage Balance**

An illustration of the integrated Smart BMS System, detailing its various protection mechanisms including overcharge, overcurrent, short circuit, temperature, overdischarge, and voltage balance.

## 7.2. Common Issues

- **LCD Monitor Malfunction:** If the LCD monitor does not display information or functions sporadically, first ensure all cable connections are secure. If the issue persists, the mobile app can be used as an alternative for monitoring battery status. Contact customer support if the monitor remains non-functional.
- **Charger Issues:** If the charger is not functioning, verify the power outlet is working and the connections to both the battery and the wall are secure. If the charger is defective, contact customer support for a replacement.

## 8. SPECIFICATIONS

| Feature | Specification |
|---------|---------------|
| Brand   | JOSMA         |



| Feature                           | Specification  |
|-----------------------------------|--|
| Model                             | JA-48150   |
| Nominal Voltage                   | 51.2 Volts (48V system)  |
| Nominal Capacity                  | 150Ah  |
| Energy Capacity                   | 7.68 kWh   |
| Max Load Power                    | 10.24 kW   |
| Continuous Discharge Current      | 200A (BMS controlled)  |
| Cycle Life                        | 6000+ cycles   |
| Charging Voltage                  | 58.4V  |
| Charger Output                    | 58.4V 18A  |
| Charging Time (0-100%)            | Approx. 6 hours  |
| Battery Cell Composition          | Lithium Iron Phosphate (LiFePO4)   |
| Dimensions (D x W x H)            | 9" x 26.2" x 13"   |
| Item Weight                       | 125 pounds   |
| Terminal Type                     | M8 Terminal  |
| Case Material                     | High-strength cold-rolled sheet metal  |
| Operating Temperature (Discharge) | -4°F to 131°F (-20°C to 55°C)  |
| Operating Temperature (Charge)    | 32°F to 131°F (0°C to 55°C)  |
| Features                          | Built-in 200A BMS, Touch LCD Monitor, Mobile APP (Bluetooth), Multi-Stage Temperature Protection |

## 9. WARRANTY AND SUPPORT

JOSMA provides a comprehensive 10-year after-sales service, which includes repairs and replacements. Additionally, the product comes with a 15-year warranty.

For any questions, technical assistance, or warranty claims, please contact JOSMA customer support. Our US-based warehouse ensures fast and efficient issue resolution, with responses typically provided within 24 hours.

Contact information can be found on the official JOSMA website or through your purchase platform.

|   |   |
|---|---|
|    | <p><a href="#">Hollyland LARK M2 Wireless Microphone System User Manual</a></p> <p>Comprehensive user manual for the Hollyland LARK M2 wireless microphone system, covering product overview, usage instructions for mobile and camera versions, indicator light explanations, technical specifications, app information, and support contacts.</p>                                       |
|    | <p><a href="#">JABLOTRON JA-150R One-way Signal Repeater for JA-100 Wireless Devices</a></p> <p>The JABLOTRON JA-150R is a one-way signal repeater designed to extend the communication distance and increase transmission reliability for JABLOTRON 100+ wireless devices. It supports various detectors, key fobs, and PG modules, and is powered by mains with battery backup.</p>     |
|    | <p><a href="#">JABLOTRON JA-113A RB KÜLSŐ BUSZSZÍRÉNA – Telepítési és Konfigurációs Útmutató</a></p> <p>Ez a dokumentum részletes útmutatást nyújt a JABLOTRON JA-113A RB külső buszsziréna telepítéséhez, konfigurálásához és karbantartásához. Ismerteti a termék funkcióit, műszaki specifikációit és a biztonsági rendszerbe való integrálását.</p>                                   |
|   | <p><a href="#">JA-160PC Wireless PIR Motion Detector with Verification Camera - Installation and Technical Guide</a></p> <p>Comprehensive guide for the JABLOTRON JA-160PC wireless PIR motion detector with verification camera, detailing installation, internal settings, camera operation, technical specifications, and maintenance.</p>   |
|  | <p><a href="#">JA-160PC (90) Wireless PIR Motion Detector with 90° Verification Camera   Jablotron</a></p> <p>Detailed information on the JABLOTRON JA-160PC (90) Wireless PIR motion detector with a 90° verification camera, covering installation, internal settings, camera and basic reactions, saving and browsing pictures, and technical specifications for security systems.</p> |
|  | <p><a href="#">JABLOTRON JA-151ST-A Series: Wireless Combined Smoke and Heat Detector Manual</a></p> <p>Comprehensive guide for the JABLOTRON JA-151ST-A, JA-151ST-A-AN, and JA-151ST-A-GR wireless combined smoke and heat detectors, covering installation, settings, testing, and technical specifications.</p>  |