Mehrpow MP-48V160Ah-200A-EVE

Mehrpow 48V 160Ah Lithium Golf Cart Battery User Manual

Model: MP-48V160Ah-200A-EVE

1. Introduction

Thank you for choosing the Mehrpow 48V 160Ah Lithium Golf Cart Battery. This manual provides essential information for the safe and efficient operation, installation, and maintenance of your battery. Please read this manual thoroughly before using the product and retain it for future reference.

1.1 About This Manual

This manual is designed to guide you through the features, setup, operation, and care of your Mehrpow lithium battery. It contains important safety warnings and instructions that must be followed to prevent injury or damage.

1.2 Intended Use

The Mehrpow 48V 160Ah Lithium Golf Cart Battery is specifically designed for use in 48V golf carts, including models from Clubcar, EZGO, YAMAHA, ICON, and Marshell. It is also suitable for other applications requiring a reliable 48V power source, such as sight-seeing shuttles, UTVs, and cart tuggers.



Image: The Mehrpow battery is compatible with various 48V applications, including golf carts, sight-seeing shuttles, UTVs, and cart tuggers.

2. Safety Information

Always observe the following safety precautions to ensure safe operation and prevent damage to the battery or connected equipment.

2.1 General Safety Precautions

- Do not disassemble, modify, or attempt to repair the battery. Unauthorized modifications can lead to serious injury or damage and will void the warranty.
- Keep the battery away from heat sources, open flames, and flammable materials.
- Ensure proper ventilation during charging and discharging.
- Do not short-circuit the battery terminals.
- Use only the specified charger provided with the battery.
- Avoid dropping or subjecting the battery to severe impacts.
- If the battery emits an unusual odor, heat, or changes shape, discontinue use immediately and contact customer support.
- Wear appropriate personal protective equipment (PPE), such as gloves and eye protection, when handling the battery.
- Keep out of reach of children.

3. What's in the Box

Upon unpacking, please verify that all the following components are included:

- 1 x Mehrpow 48V 160Ah LiFePO4 Battery
- 1 x 58.4V 22A Li-FePO4 Charger
- 1 x 2.8-inch LCD Touchscreen Display

- 1 x Screen Connection Cable
- 1 x Set of Screws for installation



Image: The Mehrpow 48V 160Ah Lithium Golf Cart Battery, accompanied by its dedicated charger and smart LCD display.

4. Product Overview

4.1 Key Features

- **EVE A+ Cell Technology:** Composed of 16 EVE A+ class 2C power cells (LF160) for fast charging/discharging, excellent consistency, and stable performance.
- **High Power Output:** Provides 8.19kWh of energy and 10.24kW of power, with a continuous discharge current up to 200A (Peak 400A for 35s, 600A for 3s).
- **Extended Cycle Life:** Offers over 6,000 recharge cycles, significantly outperforming lead-acid batteries.
- **Integrated JBD 200A BMS:** Built-in Battery Management System provides comprehensive protection against over-charge/discharge, over-current, high/low temperatures, and short-circuiting.
- **Durable Construction:** The battery case is made of high-strength cold-rolled sheet metal, offering fireproof properties and good thermal/chemical stability.
- **LCD Touchscreen Display:** A 2.8-inch touchscreen allows for real-time viewing and control of battery level and other parameters.
- **Mobile APP Monitoring:** Connect via a mobile application to monitor battery data (SOC) and control charge/discharge switches remotely.

- **Fast Charging:** Includes a 58.4V 22A Li-FePO4 charger, capable of charging from 0% to 100% in approximately 7.27 hours.
- **Maintenance-Free:** Requires no daily maintenance, reducing ownership costs.

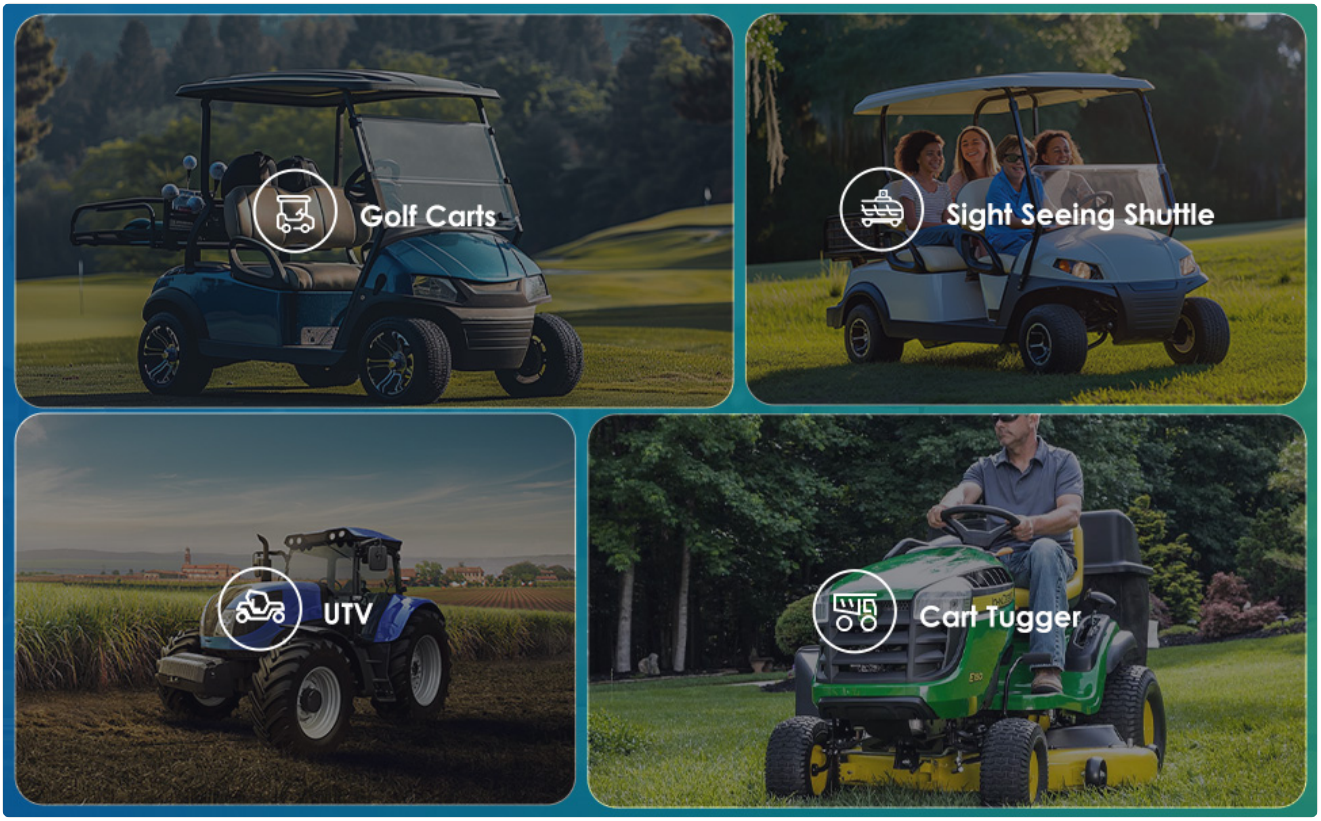


Image: An illustration of the battery's internal structure highlighting its 160Ah capacity, 200A continuous discharge, 10.24kW maximum load power, and 8.192kWh usable energy.

4.2 Components

The Mehrpow battery system includes the main battery unit, a dedicated charger, and an LCD touchscreen for monitoring. The battery features M8 terminals for secure connections.



Image: The Mehrpow battery unit with its physical dimensions (12.2"D x 21.26"W x 10.24"H) and weight (145 lbs) indicated.

5. Setup

5.1 Unpacking

Carefully remove all components from the packaging. Inspect the battery and accessories for any signs of damage during transit. If any damage is found, do not proceed with installation and contact customer support immediately.

5.2 Installation

The Mehrpow battery is designed for convenient installation. Follow these general steps:

1. Ensure the golf cart's power is completely off and disconnected.
2. Remove the old battery (if applicable) and clean the battery compartment.
3. Carefully place the Mehrpow battery into the compartment. Its compact design allows for easy fitting.
4. Connect the battery terminals to the golf cart's electrical system using appropriate cables. Ensure correct polarity (positive to positive, negative to negative).
5. Connect the display screen cable from the battery to the LCD touchscreen.

6. Secure the battery using the provided screws and ensure it is stable and non-wobbly.
7. Connect the charger plug when ready to charge.



Image: An installation diagram showing the connection points for the charger, display screen, and the secure mounting of the battery.

6. Operating Instructions

6.1 Charging the Battery

Use only the provided 58.4V 22A Li-FePO4 charger. Connect the charger to the battery's charging port, then plug the charger into a standard AC outlet. The LCD display will show charging status. A full charge from 0% to 100% takes approximately 7.27 hours.



Image: The Mehrpow battery connected to its charger, demonstrating the fast charging capability.

6.2 Using the LCD Touchscreen

The 2.8-inch LCD touchscreen provides real-time battery information. You can view:

- Current battery level (SOC - State of Charge)
- Voltage
- Current (charge/discharge)
- Temperature
- Cycle count
- Individual cell voltages (on detailed pages)

Navigate through the display pages by touching the screen to access different data sets.



Image: The LCD touchscreen and mobile app providing real-time battery information during operation.

6.3 Mobile APP Monitoring

Download the Mehrpow mobile application to connect to your battery via Bluetooth. The app allows you to:

- Monitor battery data (SOC, voltage, current, temperature, cell balance) in real-time.
- Control the charge/discharge switch directly from your smartphone.



Image: The mobile application interface for remote monitoring and control of the battery.

6.4 Discharge and Performance

The 160Ah capacity provides an ultra-long range of up to 80 miles on a single charge, depending on terrain and usage. The powerful 200A continuous discharge current (with peak capabilities) ensures robust performance, even on challenging inclines.



Image: The battery provides sufficient power for navigating challenging terrains, including steep inclines.



Image: The 160Ah capacity allows for an extended range of up to 80 miles on a single charge.

7. Maintenance

7.1 General Care

- The Mehrpow lithium battery is maintenance-free and does not require watering or acid checks.
- Keep the battery terminals clean and free of corrosion. Use a dry cloth to wipe them if necessary.
- Ensure the battery compartment is clean and dry.
- Regularly check the battery and cable connections for any signs of wear or damage.

7.2 Storage

If storing the battery for an extended period:

- Charge the battery to approximately 50-70% State of Charge (SOC) before storage.
- Store the battery in a cool, dry place, away from direct sunlight and extreme temperatures.
- Disconnect the battery from the golf cart or any loads to prevent parasitic drain.
- Periodically check the battery's SOC during storage and recharge if it drops significantly.

8. Troubleshooting

This section provides solutions to common issues you might encounter. For problems not listed here, please contact customer support.

Problem	Possible Cause	Solution
Battery not charging	Charger not connected properly; Charger malfunction; Battery BMS in protection mode.	Ensure charger is securely connected to battery and power outlet. Check charger indicator lights. Disconnect and reconnect battery to reset BMS.

Problem	Possible Cause	Solution
Battery not powering golf cart	Battery discharged; Loose connections; BMS in protection mode (e.g., over-discharge, over-current).	Check battery SOC on display/app and recharge if low. Verify all cable connections are tight. Disconnect and reconnect battery to reset BMS.
LCD display not working	Display cable loose or damaged; Display unit malfunction.	Check the connection of the display cable to the battery. Ensure it is securely plugged in.
Mobile APP not connecting	Bluetooth not enabled; Battery too far from device; App issue.	Ensure Bluetooth is enabled on your device. Move closer to the battery. Restart the app or your device.
Reduced range/performance	Battery not fully charged; Extreme temperatures; Heavy load/terrain.	Ensure battery is fully charged before use. Operate within recommended temperature ranges. Reduce load or avoid excessively challenging terrain if possible.

9. Specifications

Specification	Value
Model	MP-48V160Ah-200A-EVE
Nominal Voltage	48V (51.2V)
Nominal Capacity	160Ah
Energy	8.19 kWh
Max Load Power	10.24 kW
Continuous Discharge Current	200A
Peak Discharge Current	400A (35s), 600A (3s)
Cycle Life	6,000+ cycles
Charger Voltage	58.4V
Charger Current	22A
Charging Time (0-100%)	Approx. 7.27 hours
Battery Management System (BMS)	Built-in JBD 200A BMS
Protection Features	Over-charge/discharge, over-current, high/low temperature, short-circuit
Terminal Type	M8 Terminal
Product Dimensions (D x W x H)	12.2" x 21.26" x 10.24"
Item Weight	145 lbs
Case Material	High-strength cold-rolled sheet metal
Compatibility	Clubcar, EZGO, YAMAHA, ICON, Marshell, Universal Fit

10. Warranty and Support

10.1 Warranty Information

Mehrpow provides a **5-year warranty** for the entire battery unit. This warranty covers defects in materials and workmanship under normal use and service conditions. Please retain your proof of purchase for warranty claims.

10.2 Customer Support

For any questions, technical assistance, or warranty claims, please contact Mehrpow customer support. Our team is available to provide installation video tutorials and address any inquiries you may have.

Please refer to the contact information provided with your purchase or visit the official Mehrpow website for support details.