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› Litime 12V 100Ah LiFePO4 Trolling Motor Battery User Manual

Litime L12V100-100-TM-BT-4-A100-3

Litime 12V 100Ah LiFePO4 Trolling Motor Battery User Manual

Model: L12V100-100-TM-BT-4-A100-3

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your Litime 12V 100Ah LiFePO4 Trolling Motor Battery. Please read this manual thoroughly before installation and operation to ensure proper handling and to maximize battery performance and longevity. This battery is designed for deep cycle applications in marine, RV, and solar systems.



Figure 1: Litime 12V 100Ah LiFePO4 Trolling Motor Battery

2. PRODUCT OVERVIEW

2.1 Key Features


- **Smart Bluetooth Monitoring:** Connects automatically to your phone for real-time battery status, discharge control, and system checks.
- **Low-Temperature Protection:** Automatically stops charging below 0°C (32°F) and discharging below -20°C (-4°F) to prevent damage in cold conditions.
- **Advanced Safety:** Integrated Battery Management System (BMS) provides over 20 protections against overcharge, overheating, short circuits, and more.
- **Durable Construction:** IP65 waterproof, dustproof, and salt-resistant for reliable performance in

harsh environments.

- **Lightweight Design:** Weighs approximately 22.2 lbs, reducing overall weight for improved handling in marine applications.
- **Extended Lifespan:** Utilizes premium LiFePO4 cells, offering up to 15,000 deep cycles at 60% Depth of Discharge (DOD) and a 10-year design life.
- **Expandable Capacity:** Can be configured in series (up to 4S) and parallel (up to 4P) for a maximum system capacity of 51.2V 400Ah (20.48kWh).

2.2 What's Included

What's Included?




8.5 inch


13 inch

6.77 inch


12V100Ah TM BT LiFePO4 Battery *1




Flat Washer *2



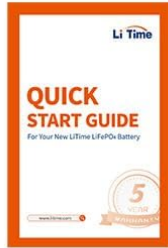
Insulation Caps *2



M8 Screws *2



Product Manual *1



Quick Start Guide *1

Figure 2: Package Contents

- 1 x Litime 12V 100Ah Trolling Motor LiFePO4 Battery
- 2 x Flat Washers

- 2 x Insulation Caps (Red, Black)
- 2 x M8 Screws
- 1 x Product Manual (this document)
- 1 x Quick Start Guide

3. SAFETY INFORMATION

- Always wear appropriate personal protective equipment (PPE) such as safety glasses and gloves when handling batteries.
- Ensure proper ventilation during installation and charging.
- Do not short-circuit the battery terminals.
- Do not disassemble, puncture, or damage the battery.
- Keep the battery away from heat sources, open flames, and flammable materials.
- Use only chargers specifically designed for LiFePO₄ batteries.
- **Important Note:** This LiFePO₄ battery is designed for energy storage and deep cycle applications. It is **not** intended for use as a starting battery for engines, in golf carts, or for jack applications.
- The battery features IP65 waterproofing, dustproofing, and salt-spray resistance, making it suitable for marine environments.

No Worries In Wet & Dust



Water



Dust



Salt-Spary



Figure 3: Environmental Protection Features

4. SETUP

4.1 Initial Activation

For the first use, or if the battery has been switched off (voltage below 10V), it needs to be activated. Connect the battery to a compatible lithium-activation charger or an MPPT solar charge controller. The battery will activate automatically upon receiving a charge.

4.2 Connecting the Battery

1. Ensure all connections are clean and free of corrosion.
2. Connect the positive (+) terminal of the battery to the positive (+) terminal of your load/system.

3. Connect the negative (-) terminal of the battery to the negative (-) terminal of your load/system.
4. Use the provided M8 screws and washers to secure connections tightly. Apply insulation caps over the terminals for added safety.
5. For 24V or 36V systems, connect multiple batteries in series as required (2 batteries for 24V, 3 batteries for 36V). Ensure all batteries are of the same voltage and capacity when connecting in series or parallel.



Figure 4: Example of Battery Connection for Trolling Motor

4.3 Bluetooth App Connection

The battery features smart Bluetooth monitoring. Download the LiTime app from your smartphone's app store. Scan the QR code located on the battery to establish a connection. The app will auto-connect in seconds, allowing you to monitor battery status.

Your browser does not support the video tag.

Video 1: Overview of the 12V 100Ah Trolling Motors LiFePO4 Battery, including its features and Bluetooth connectivity.

Your browser does not support the video tag.

Video 2: Demonstrating the Bluetooth features of the Litime 12V 100Ah Trolling Motor Lithium Battery.

5. OPERATING INSTRUCTIONS

5.1 General Operation

Once connected and activated, the battery is ready for use. It is compatible with 12V 30-70lb trolling motors (less than 100A current) and various marine, RV, and solar applications.

Compatible with Most of Popular Brands

For 12V 30-70lb Trolling Motors
(Less than 100A Current)

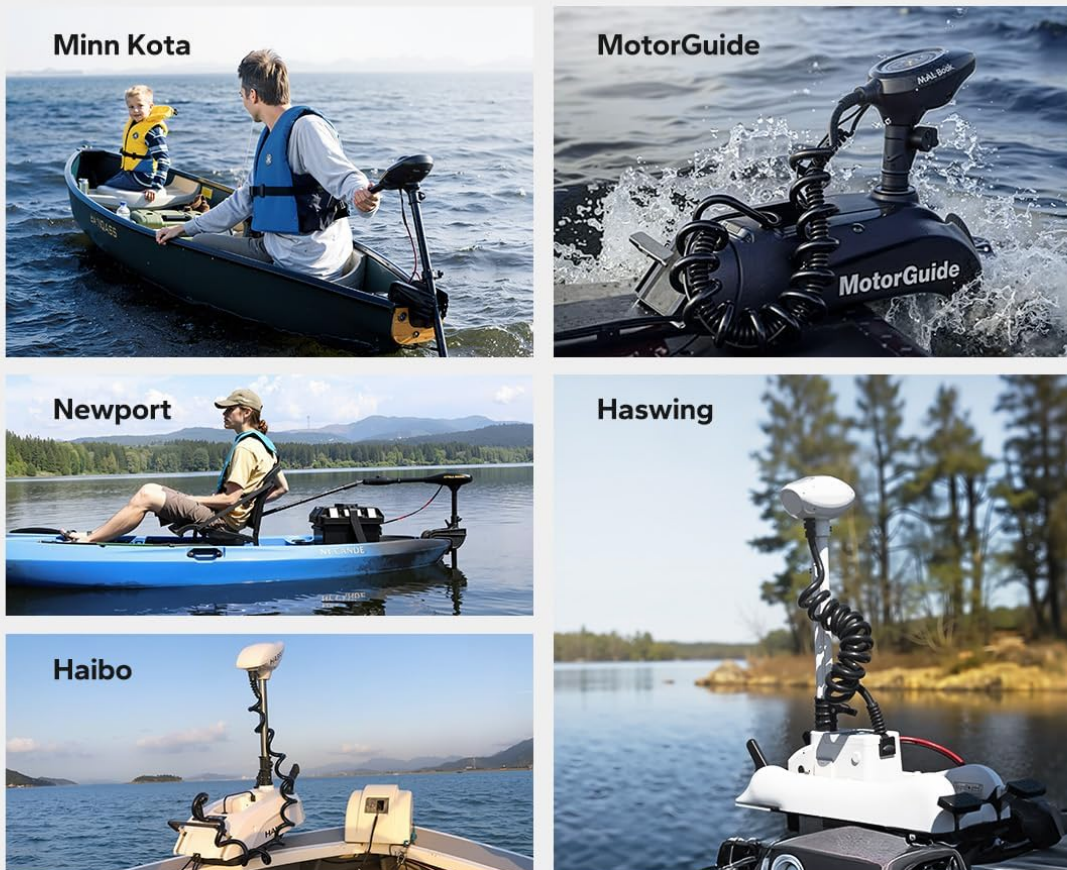


Figure 5: Compatibility with Popular Trolling Motor Brands

5.2 Bluetooth Monitoring

Use the LiTime app to monitor the battery's State of Charge (SOC), voltage, current, temperature, and other parameters in real-time. The app also allows you to control discharge and perform system checks.

Smart Bluetooth with App Monitoring



Remote Control



Auto-Connection



Real-time Monitor

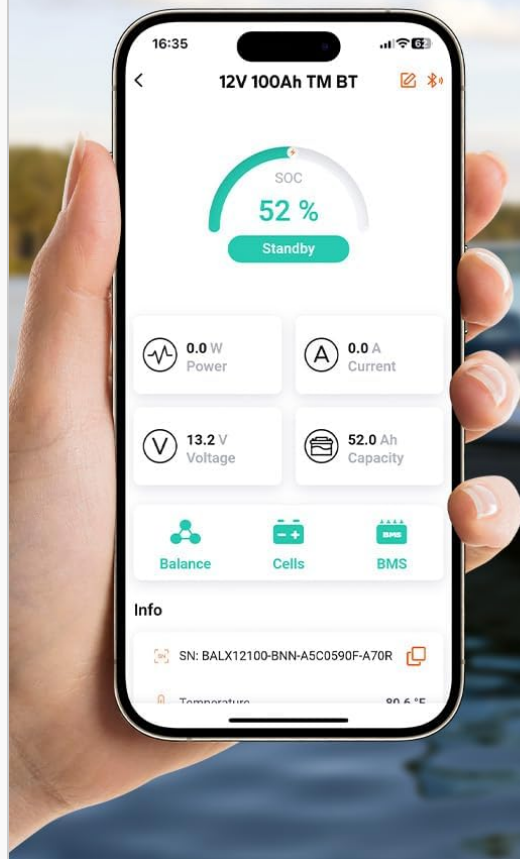


Figure 6: Smart Bluetooth App Monitoring

5.3 Low-Temperature Protection

The battery's intelligent BMS includes low-temperature protection. Charging will automatically halt if the battery temperature drops below 0°C (32°F) and resume when the temperature rises to 5°C (41°F).

Discharging will stop if the temperature falls below -20°C (-4°F).

Cold-Safe Lithium Battery

Auto Halt Charging in Freeze, Resume Safely—No Manual Fuss



Figure 7: Cold-Safe Lithium Battery Operation

6. MAINTENANCE

6.1 Charging

Always use a LiFePO4 compatible charger. Ensure the charger's voltage and current settings are appropriate for a 12V 100Ah LiFePO4 battery. Avoid overcharging or undercharging. The integrated BMS will manage charging parameters, but using a dedicated LiFePO4 charger is crucial.

6.2 Storage

If storing the battery for an extended period, ensure it is charged to approximately 50% State of Charge (SOC). Store the battery in a cool, dry place, away from direct sunlight and extreme temperatures.

Periodically check the battery's SOC during storage and recharge if necessary.

6.3 Cleaning

Keep the battery terminals and casing clean and dry. Use a dry cloth to wipe away any dust or debris. If corrosion is present on terminals, clean with a wire brush and a baking soda solution, then rinse with distilled water and dry thoroughly.

7. TROUBLESHOOTING

- **Battery Not Activating:** If the battery voltage is below 10V, connect it to a LiFePO4 charger with an activation function or an MPPT solar charge controller.
- **Bluetooth Connection Issues:** Ensure Bluetooth is enabled on your device and the LiTime app has necessary permissions. Try restarting the app or your device. Ensure you are within range of the battery.
- **No Power Output:** Check all cable connections for tightness and proper polarity. Verify the battery's State of Charge via the app. If the battery is too cold, low-temperature protection may be active (refer to section 5.3).
- **Reduced Performance:** Ensure the battery is fully charged. Check for any error codes or warnings in the LiTime app.

For further assistance, refer to the LiTime app for detailed diagnostics or contact customer support.

8. SPECIFICATIONS

Specification	Value
Brand	Litime
Model Number	L12V100-100-TM-BT-4-A100-3
Battery Cell Composition	Lithium Iron Phosphate (LiFePO4)
Voltage	12.8 Volts
Battery Capacity	100 Amp Hours
Energy Capacity	1280 Wh
Max. Continuous Discharge Current	100A
Max. Continuous Output Power	1280W
Cycle Life	4000+ cycles @ 100% DOD, 15000 cycles @ 60% DOD
Low-Temp Charge Cut-off	0°C (32°F)
Low-Temp Discharge Cut-off	-20°C (-4°F)
Protection	Built-in 100A BMS (Overcharge, Over-discharge, Over-current, Short-circuit, Over-temperature)

Environmental Rating	IP65 Waterproof, Dustproof, Salt-resistant
Item Dimensions (L x W x H)	13 x 6.77 x 8.5 inches
Item Weight	22.2 Pounds
Recommended Uses	Trolling Motor, Marine, RV, Solar

9. WARRANTY AND SUPPORT

9.1 Warranty

The Litime 12V 100Ah LiFePO4 Trolling Motor Battery comes with a **5-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

9.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact Litime customer support through the official website or the contact information provided with your product packaging. Our team is available to assist you with any questions or concerns.