**Saved from manuals.plus.**
**Open the live page for links to other documents and user manuals.**



**DALY R24TM**

# DALY BMS 24V 200A - 1A Active Balance Battery Management System User Manual

Model: R24TM

## 1. Introduction

The DALY BMS 24V 200A with 1A Active Balance is a sophisticated Battery Management System designed for 8S 24V LiFePO4 battery packs. It provides essential protection and management functions to ensure the safety, performance, and longevity of your battery system. This manual provides detailed instructions for the proper installation, operation, and maintenance of your DALY BMS.

## 2. Product Features

- **Enhanced Battery Safety:** Provides comprehensive protection, including cell balancing, low voltage cutoff, high voltage cutoff, short-circuit protection, and temperature protection. These features enhance the performance and extend the lifespan of your 8S 24 volt 200 amp battery systems.
- **Extra Protection Features:** Includes pre-charge protection, detection for wrong or missing wire connections, parallel connection current limiting, and active cell balancing.
- **Easy Connection:** Manage your battery easily with the dedicated Android or iOS mobile application. With built-in Bluetooth connectivity, you can monitor the battery status, adjust settings, and control the charge/discharge process directly from your device.
- **Compact Size:** The BMS features a compact design, saving valuable battery space, and includes integrated Bluetooth functionality without requiring an external module.




*Figure 1: DALY BMS compact design with integrated Bluetooth.*

## 3. Specifications

The DALY BMS 24V 200A is engineered with precise parameters to ensure optimal performance and safety for your LiFePO4 battery pack. Refer to the table below for detailed specifications.

| Specification | Value |
|---|---|
| Brand | DALY |
| Model Number | R24TM |
| Item Dimensions (L x W x H) | 6.97 x 0.63 x 2.6 inches |
| Single Cell Over-charging Voltage Protection (2nd level) | 3.75V ± 0.05V |
| Single Cell Over-charging Voltage Recovery (2nd level) | 3.65V ± 0.05V |

| Specification | Value |
|---|---|
| Total Voltage Over-charging Protection (2nd level) | 29.6V |
| Total Voltage Over-charging Recovery (2nd level) | 28.8V |
| Single Cell Over-discharging Voltage Protection (2nd level) | 2.2V ± 0.05V |
| Short Circuit Protection Conditions | External load short circuit |
| Active Balance Current | 1A |
| Operating Temperature | -40°C to 85°C |




| Index | Specification |
|---|---|
| Cell sampling voltage range | 1.5V-4.9V |
| Operating voltage range | >10V |
| Active Balance Current | 1A |
| Working power consumption | 1.25W |
| Sleep current | <0.025mA |
| Working temperature | -40°C-85°C |
| Quantity of Temperature Detection | 4 |

| Index | Specification |
|---|---|
| Temp Protection | Yes |
| Short Circuit protection | Yes |
| Coulomb Counter | Yes |
| Indicator light | Green:works properly<br>Red:Alarm or protection |
| Support communication port | UART |
| Customizable communication port | CAN/485 |

*Figure 2: Detailed product parameters and dimensions for DALY BMS models.*

## 4. Setup and Installation

Proper installation is crucial for the safe and effective operation of your DALY BMS. Ensure all connections are secure and follow the wiring diagram provided in the packaging or official documentation. Incorrect wiring can lead to damage to the BMS, battery, or connected equipment.

### 4.1 Wiring Connections

- Connect the main battery positive (B+) and negative (B-) terminals to the corresponding BMS terminals.
- Connect the P- terminal of the BMS to the negative terminal of your load/charger.
- Carefully connect the sampling cable (balance wires) to each cell of your 8S LiFePO4 battery pack in the correct sequence, starting from the lowest voltage cell (B0) to the highest (B8).
- Connect the NTC (Negative Temperature Coefficient) sensor to the battery pack for temperature monitoring.

Always double-check all connections before applying power to prevent short circuits or damage.

## 5. Operating Instructions

The DALY BMS features built-in Bluetooth for convenient monitoring and control via a mobile application (Android/iOS). This allows for real-time data access and parameter adjustments.

### 5.1 Bluetooth App Connection

1. Download the official DALY BMS app from your device's app store (search for "DALY BMS").
2. Ensure Bluetooth is enabled on your mobile device.
3. Open the DALY BMS app and search for available BMS devices.
4. Select your DALY BMS from the list to establish a connection.

### 5.2 Monitoring and Control

Once connected, the app allows you to monitor various battery parameters, including:

- Overall battery voltage and current
- Individual cell voltages
- Battery temperature
- State of Charge (SOC)
- Protection status (e.g., over-charge, over-discharge, short circuit)

The app also provides options to adjust certain BMS parameters, such as protection thresholds, if permitted by the BMS firmware. Refer to the app's internal help or the official DALY documentation for specific functionalities.

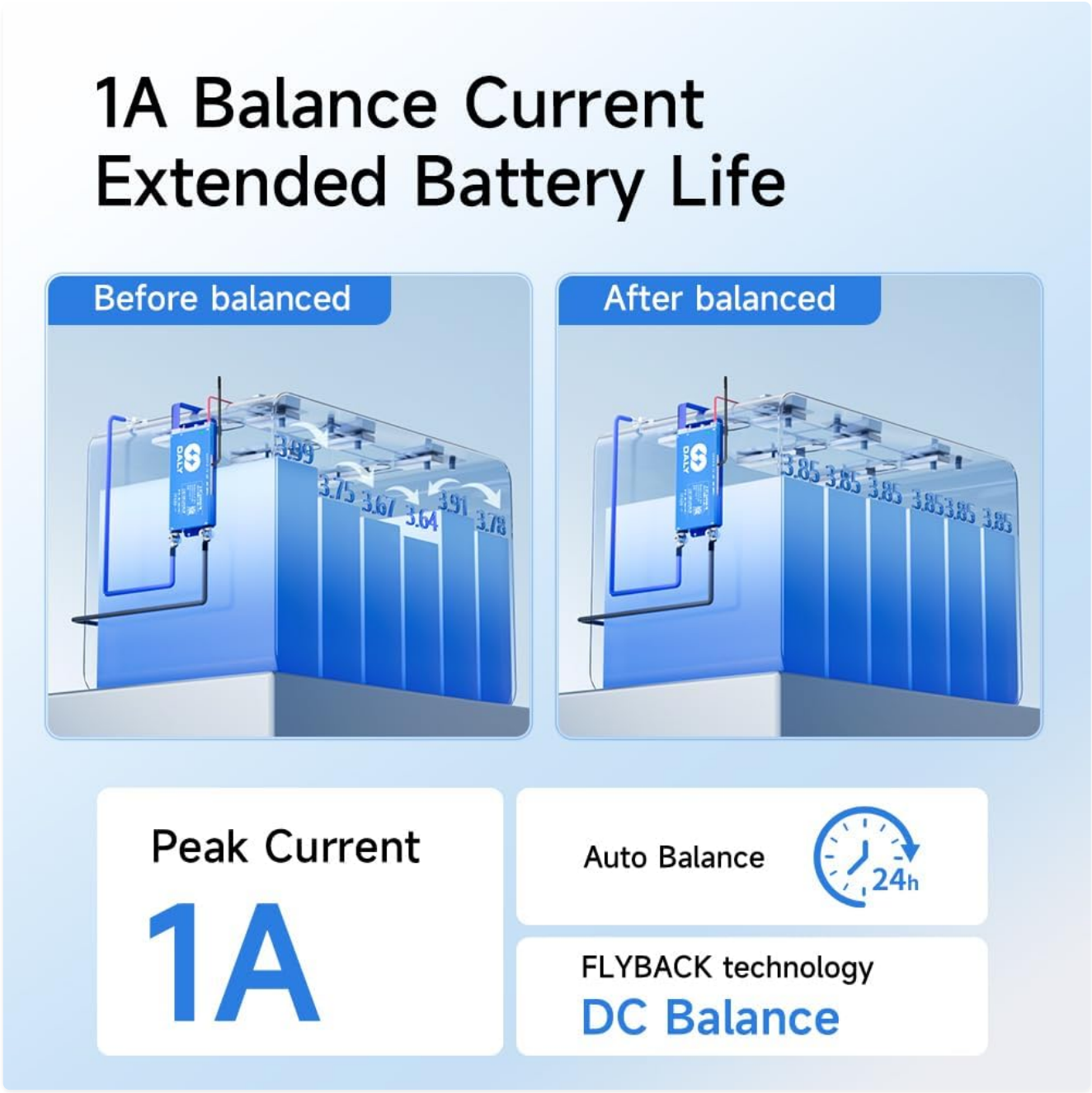



*Figure 3: Illustration of 1A active balancing in action, extending battery life.*

## 6. Maintenance

To ensure the long-term reliability and performance of your DALY BMS and battery system, follow these maintenance guidelines:

- **Regular Inspection:** Periodically inspect all wiring connections for signs of corrosion, looseness, or damage. Ensure all terminals are clean and securely fastened.
- **Cleanliness:** Keep the BMS unit clean and free from dust, dirt, and moisture. Use a dry, soft cloth for cleaning. Avoid using solvents or abrasive cleaners.
- **Ventilation:** Ensure adequate ventilation around the battery pack and BMS to prevent overheating, especially during high current discharge or charge cycles.
- **Environmental Conditions:** Operate the BMS within its specified temperature range (-40°C to 85°C) and avoid exposure to extreme humidity or direct sunlight.

## 7. Troubleshooting

The DALY BMS is designed with multiple protection features. If the system stops functioning or exhibits unusual behavior, consult the following common troubleshooting steps:

### 7.1 Common Issues and Solutions

- **BMS Disconnects Power:** This typically indicates a protection event has been triggered. Check the mobile app for specific fault codes or indicators. Common triggers include:
  - *Over-charging:* Battery voltage exceeded 29.6V (total) or 3.75V (per cell). Reduce charging voltage or current.
  - *Over-discharging:* Battery voltage dropped below 2.2V (per cell). Recharge the battery immediately.
  - *Over-current:* Discharge or charge current exceeded the BMS's rated limit. Reduce load or charging current.
  - *Short Circuit:* An external load short circuit was detected. Disconnect the load and inspect wiring for faults.
  - *Over-temperature:* Battery or BMS temperature exceeded safe limits. Allow the system to cool down and ensure proper ventilation.
- **Bluetooth Connection Issues:** Ensure the BMS is powered on and within range. Restart the mobile app and your device's Bluetooth.
- **Unbalanced Cells:** The 1A active balance feature works continuously. If significant imbalance persists, verify all sampling wires are correctly connected and undamaged.

After resolving the underlying issue, the BMS may automatically reset, or you may need to cycle the power to the BMS or battery pack to clear the protection state.

## 8. Application

The DALY BMS 24V 200A is a versatile solution suitable for a wide range of 8S LiFePO4 battery applications due to its robust protection features and active balancing capabilities.

- **Recreational Vehicles (RVs) & Marine Vessels:** Provides reliable power management for onboard systems.
- **Portable Power Stations:** Enhances safety and longevity for mobile power solutions.
- **Solar Energy Storage:** Ideal for home solar systems and off-grid energy storage.
- **Electric Vehicles:** Suitable for golf carts, e-bikes, and e-trikes.
- **Trolling Motors & Fish Finders:** Ensures consistent and safe power for marine electronics.




*Figure 4: Diverse applications of the DALY BMS.*

## 9. Packing List

Upon opening your DALY BMS package, you should find the following items:

- Smart Active Balance BMS (8S 24V 200A) x 1
- P-&B-&B+ Cable x 1
- Sampling Cable x 1
- NTC (Temperature Sensor) x 1
- Operate Manual x 1
- Screws (for mounting)




*Figure 5: Contents included in the DALY BMS package.*

## 10. Warranty and Support

Your DALY BMS is backed by a commitment to quality and customer satisfaction.

### 10.1 Warranty Information

This DALY BMS comes with a **5-year extended warranty**, covering defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

### 10.2 Return Policy

A 30-day return policy for refund or replacement is typically offered from the date of purchase, subject to the seller's terms and conditions.

### 10.3 Technical Support

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact DALY customer service or your authorized dealer. Contact information can usually be found on the product packaging or the official DALY website.

## Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

**Name**

Anonymous

**Email**

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

**Question**

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

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

**Submit question**

---

**Open the live page**

**https://manuals.plus/asin/B0F8NRR4NV**

More documents and user manuals: **https://manuals.plus/**