

Redodo bluetooth 12V 280Ah lifepo4 battery

Redodo 12V 280Ah Bluetooth LiFePO4 Battery User Manual

Model: bluetooth 12V 280Ah lifepo4 battery

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your Redodo 12V 280Ah Bluetooth LiFePO4 Battery. Please read this manual thoroughly before installation and operation to ensure proper function and longevity of the battery.

Package Contents:

- Bluetooth 12.8V 280Ah LiFePO4 Battery
- Insulating Caps for Bolts
- M8- 5/8" Terminal Bolts

2. SAFETY INSTRUCTIONS

Observe the following safety precautions to prevent personal injury or damage to the battery and connected equipment:

- Do not short-circuit the battery terminals.
- Do not expose the battery to fire or extreme heat.
- Do not immerse the battery in water.
- Use only compatible LiFePO4 chargers.
- Ensure proper ventilation during charging and discharging.
- Avoid dropping or subjecting the battery to severe impacts.
- Do not attempt to open or disassemble the battery.
- Wear appropriate personal protective equipment (PPE) when handling batteries.

3. KEY FEATURES

- **Bluetooth 5.0 Connectivity:** Monitor battery status in real-time via the Redodo app (within 10 meters).
- **Low-Temperature Cut-off Protection:**

- Discharging stops below -20°C.
- Charging halts at 0°C.
- Charging resumes above 5°C.
- **Advanced Battery Management System (BMS):** Provides protection against overcharge, over-discharge, overcurrent, overheating, low temperature, and short circuits. Includes moisture and salt spray resistance, pre-charging, and self-recovering overload protection (30 seconds).
- **High Cycle Life:** Offers 4000+ charge/discharge cycles.
- **Long Lifespan:** Designed for a 10-year operational lifespan.
- **High Energy Capacity:** 3584Wh, suitable for various power requirements.
- **Scalable Configuration:** Can be configured in up to 4 series and 4 parallel (4S4P) for higher voltage and capacity systems.

BLUETOOTH 5.0

MONITOR AND MANAGE BATTERY INFORMATION THROUGH THE REDODO APP



✳️The connection distance must not exceed 10M

Image: The Redodo 12V 280Ah LiFePO4 battery showcasing its Bluetooth 5.0 capability, allowing real-time monitoring via a smartphone application. The app displays charging status, power, current, voltage, and capacity.

EXCELLENT BMS PROTECTION



Low Temperature
Protection



Over-charge
Protection



Over-discharge
Protection



Over Current
Protection



Short Circuit
Protection



High Temperature
Protection

Image: An illustrative diagram detailing the various protection features of the integrated Battery Management System (BMS), including safeguards against low temperature, overcharge, over-discharge, overcurrent, short circuit, and high temperature.

LOW TEMPERATURE CUT-OFF PROTECTION

$< -20^{\circ}\text{C}$

Stop
Discharging

$< 0^{\circ}\text{C}$

Stop
Charging

$\geq 5^{\circ}\text{C}$

Resume
Charging



Image: Visual representation of the low-temperature cut-off protection, indicating that discharging stops below -20°C , charging stops below 0°C , and charging resumes above 5°C , ensuring battery safety in cold environments.

4. SETUP AND INSTALLATION

4.1 Initial Inspection

Upon receiving your battery, inspect it for any visible damage. Verify that all package contents are present.

4.2 Connecting the Battery

1. Ensure all connected devices are turned off before making connections.
2. Connect the positive (+) terminal of the battery to the positive (+) terminal of your load/charger.
3. Connect the negative (-) terminal of the battery to the negative (-) terminal of your load/charger.
4. Use the provided M8 terminal bolts and insulating caps to secure connections. Ensure connections are tight to prevent resistance and overheating.
5. For multiple battery configurations (series or parallel), consult a qualified electrician or refer to advanced wiring

diagrams.

4.3 Bluetooth App Installation

Download the official Redodo app from your smartphone's app store. Follow the in-app instructions to pair your device with the battery via Bluetooth 5.0. Ensure your device is within 10 meters of the battery for a stable connection.

5. OPERATION

5.1 Charging

- Use a LiFePO4 compatible charger.
- Recommended charging current: 56A (0.2C). At this rate, the battery will be fully charged in approximately 5 hours.
- The BMS will automatically stop charging if the temperature drops below 0°C and resume above 5°C.
- Monitor charging status via the Redodo Bluetooth app.

5.2 Discharging

- The BMS will automatically stop discharging if the temperature drops below -20°C or if other protection limits (over-discharge, overcurrent) are reached.
- Avoid consistently discharging the battery to 0% state of charge to maximize lifespan.

5.3 Bluetooth Monitoring

Use the Redodo app to view real-time battery voltage, current, temperature, state of charge (SOC), and cycle count. This allows for proactive management and understanding of battery performance.

3584WH SUPER CAPACITY ENERGY



Laptop (60W)
59 hours



Refrigerator (50W)
71 hours



Rice cooker (600W)
5.9 hours



Microwave oven (800W)
4.4 hours



Air conditioning (1500W)
2.3 hours





Moisture
- proof



Salt spray
- proof

Image: Examples of how the 3584Wh capacity can power various appliances, such as laptops, refrigerators, rice cookers, microwave ovens, and air conditioning units, along with moisture-proof and salt spray-proof indicators.

6. MAINTENANCE AND STORAGE

- **Regular Inspection:** Periodically check battery terminals for corrosion or loose connections.
- **Cleaning:** Keep the battery clean and dry. Use a dry cloth to wipe the exterior.
- **Storage:** If storing the battery for an extended period, charge it to approximately 50% state of charge and store in a cool, dry place. Recharge every 3-6 months to prevent deep discharge.
- **Temperature:** Avoid storing the battery in extreme temperatures.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Battery not charging	Charger not compatible with LiFePO4. Temperature below 0°C (low-temp cut-off). Loose connections. BMS protection activated (e.g., over-discharge).	Use a dedicated LiFePO4 charger. Move battery to an environment above 5°C. Check and tighten all connections. Allow battery to warm up or reset BMS if applicable (consult support).
Battery not discharging/no power output	Temperature below -20°C (low-temp cut-off). BMS protection activated (e.g., overcurrent, short circuit, over-discharge). Battery is fully discharged. Loose connections.	Move battery to an environment above -20°C. Reduce load, check for short circuits, or charge the battery. BMS may self-recover after 30 seconds for overload. Charge the battery. Check and tighten all connections.
Bluetooth connection issues	Device too far from battery. Interference. App not updated or malfunctioning.	Ensure device is within 10 meters of the battery. Minimize other Bluetooth devices or sources of interference. Restart the app, update to the latest version, or reinstall.

8. TECHNICAL SPECIFICATIONS

Specification	Value
Brand	Redodo
Model	bluetooth 12V 280Ah lifepo4 battery
Nominal Voltage	12.8V
Nominal Capacity	280Ah
Energy	3584Wh
Product Dimensions (D x W x H)	9.33" x 20.55" x 8.58"
Item Weight	51.1 pounds
Terminal Type	M8
Internal Resistance	40 Ohms
BMS	200A
Cycle Life	4000+ cycles
Lifespan	Up to 10 years
Bluetooth Version	5.0

Specification	Value
Low Temperature Discharging Cut-off	-20°C
Low Temperature Charging Cut-off	0°C
Charging Resume Temperature	>5°C
Recommended Charging Current	56A (0.2C)
Automotive Fit Type	Universal Fit



Image: Detailed illustration of the battery's physical dimensions (9.33"D x 20.55"W x 8.58"H) and weight (51.12 lbs), including a close-up of the M8 terminal bolts.

9. WARRANTY AND SUPPORT

9.1 Warranty Information

The Redodo 12V 280Ah LiFePO4 Battery comes with a **5-year guarantee**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

9.2 Technical Support

Redodo offers **24/7 one-on-one technical support**. For any questions, concerns, or assistance with your battery, please contact Redodo customer service. Contact information can typically be found on the official Redodo website or through your purchase platform.

10. TYPICAL APPLICATIONS

This battery is designed for a wide range of applications, including:

- Trolling motors
- Marine applications
- Recreational Vehicles (RVs)
- Off-grid power systems
- Home energy storage
- Camping power

FIT MANY APPLICATIONS WITH GREEN ENERGY

Home Energy Storage



RV



Off-Grid



Marine



Camping



Image: A collage illustrating various applications for the Redodo LiFePO4 battery, including home energy storage, RV power, off-grid setups, marine use, and camping.

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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