



Dual-Purpose Lithium Battery User Manual

This manual applies to D24100,D24150,D280



SAFETY PRECAUTIONS



Please read this manual carefully before using the battery.



Wear protective gloves and goggles when handling the battery.



Keep away from open flames, sparks, and high-temperature environments.



Short-circuiting, overcharging, over-discharging, or disassembling the battery is prohibited.



Ensure proper ventilation when charging or using the battery.



Keep the battery out of the reach of children

USER MANUAL

1. Battery Installation

- **Check battery** – Make sure there's no physical damage.
- **Choose terminals** – Two positives and two negatives available; use any pair. Supports multiple devices.
- **Connect terminals** – Positive (+) first, then negative (-).
- **Tighten** – Ensure all connections are firm.
- **Match specs** – Confirm voltage and capacity suit the engine.
- **Mount securely** – Place in a ventilated area, fasten to prevent vibration.

2. Battery Usage

- This lithium battery is designed for starting applications and deep-cycle purpose.
- It features automatic power-off and low-temperature protection functions to prevent over-discharge.
- If the engine does not start, wait at least 30 seconds before attempting again.

3. Wire Gauge Recommendation

Current (AMP)	Wire Gauge Recommendation						
250-300	4AWG	2AWG	2AWG	1/0AWG	1/0AWG	1/0AWG	2/0AWG
200-250	4AWG	4AWG	2AWG	2AWG	1/0AWG	1/0AWG	1/0AWG
150-200	6AWG	4AWG	4AWG	2AWG	2AWG	1/0AWG	1/0AWG
125-150	8AWG	6AWG	4AWG	4AWG	2AWG	2AWG	2AWG
105-125	8AWG	8AWG	6AWG	4AWG	4AWG	4AWG	2AWG
85-105	8AWG	8AWG	6AWG	4AWG	4AWG	4AWG	4AWG
65-85	10AWG	8AWG	8AWG	6AWG	4AWG	4AWG	4AWG
50-65	10AWG	10AWG	8AWG	8AWG	6AWG	6AWG	4AWG
35-50	10AWG	10AWG	10AWG	8AWG	8AWG	8AWG	6AWG
20-35	12AWG	10AWG	10AWG	10AWG	10AWG	8AWG	8AWG
0-20	12AWG	12AWG	12AWG	12AWG	10AWG	10AWG	10AWG
	0-1. 2m	1. 2-2. 1m	2. 1-3m	3-4m	4-4. 9m	4. 9-5. 8m	5. 8-6. 7m
	0-4ft	4-7ft	7-10ft	10-13ft	13-16ft	16-19ft	19-22ft
	Wire Length						

Note: Choose wire size based on maximum continuous current and length, without considering the starting current. For frequent starts, use a thicker wire to avoid overheating.

4. Charging Instructions

- Use a compatible lithium battery charger with correct voltage and current settings.
- Connect charger positive (+) to battery positive (+), and negative (-) to battery negative (-).
- Follow the charger manufacturer's safety instructions.
- Stop charging when the battery is full to prevent overcharging.

5. Series and Parallel Connection Guidelines

Parallel Connection (Increase Capacity):

- Fully charge all batteries before connecting.
- Connect all positives (+) together, and all negatives (-) together.
- Use cables rated for the total current to avoid overheating.

Series Connection (Increase Voltage):

- Do not use for engine starting.
- Fully charge all batteries before connecting.
- Connect the first battery's positive (+) to the second battery's negative (-), and continue in sequence.
- Ensure total voltage matches your device's requirement.

6. LiLead APP via bluetooth

a. Download the app
by scanning the QR code



Android



IOS

- b. Select the battery from the list. For multiple batteries, use the Bluetooth ID on each battery.



- c. You can view basic battery data on the panel, including voltage, current, temperature, and cell voltages.



7. Battery Maintenance

- Ensure the battery is securely installed to minimize the impact of vibration.
- If the battery is not used for a long time, store it in a cool, dry place and charge it every 3 months.
- Do not store the battery fully discharged; it is recommended to keep at least 50%–60% charge.

8. Troubleshooting

Problem	Possible Cause	Solution
The load is unable to run	Battery is low	Charge the battery
Battery can't hold charge	Battery over-discharged or aged	Recharge or replace the battery
Won't work in low temperature	Low-temperature protection activated	Warm up the battery or wait for ambient temperature to rise

9. Recycling & Disposal

- Do not dispose of lithium batteries as regular household waste.
- Follow local regulations for battery recycling.
- Contact an authorized recycling center for proper disposal.