启动深循环双用锂电池
产品说明书

本说明书适用于S110bt,S200bt以及S24110bt

LiLeMd

安 全 须 知


使用电池前，请仔细阅读本手册。


操作电池时请佩戴防护手套和护目镜。


请远离明火、火花和高温环境。


严禁短路、过充、过放或自行拆解电池。


充电或使用过程中请保持通风良好。


请将电池放置在儿童接触不到的地方。

使 用 说 明

1.电池安装

－检查电池：安装前，请检查电池是否有物理损伤。

－连接极柱：产品分别有两个正极柱（+）和两个负极柱（-），安装可以任意使用其中一对。支持同时连接多个设备。

－确保极性正确：先连接正极（+），再连接负极（-）

－连接牢固：确保所有端子连接牢靠，防止松动。

－检查兼容性：确保电池的电压和容量满足发动机要求。

－牢固安装：将电池安装在通风良好的位置，并固定稳妥以避免振动。

2.电池使用

－本锂电池为启动应用以及深循环应用设计。
－具备自动断电与低温保护功能，防止过度放电。
－若发动机无法启动，请等待至少 30 秒后再尝试。

3. 电线规格建议

电流（安培）	建议电线规格						
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
	电线长度						

注意:线径根据最大持续电流以及线长选取，不考虑启动电流。如果启动频繁，建议适当增加线径防止过热。

4. 充电说明

－电池使用前必须完全充电，以确保最佳性能。
－请使用兼容的锂电池充电器，并设置正确的电压和电流。

－将充电器的正极(+)连接至电池正极，负极(-)连接至电池负极。
－遵循充电器制造商提供的安全充电指南。
－电池充满后请及时停止充电，避免过充。

5. 串并联连接指南

并联连接(增加容量)：
－所有电池在连接前必须完全充满电；
－所有电池正极连接在一起，负极也连接在一起；
－电缆规格必须符合要求，以防止过热或损坏

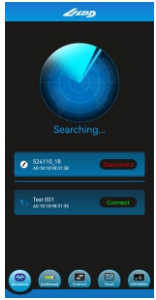
串联连接(增加电压)：
－应用于启动用途，严禁串联；
－应用于深循环用途，总电压最高不超过48V
－所有电池在连接前必须完全充满电；
－将第一颗电池的正极连接至第二颗电池的负极，以此类推；
－确保总电压符合设备要求，以避免损坏。

6. Lilead电池手机蓝牙智能应用

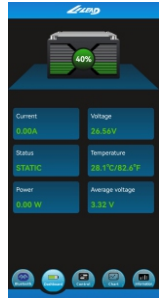
a.手机扫码下载Lilead应用

安卓系统　　苹果系统

b.从列表选择对应的电池，如果多个电池，可以在电池上找到相应的蓝牙识别码



c.可以从面板查看电池基本数据，包括电池电压，电流，温度以及电芯电压等状态。



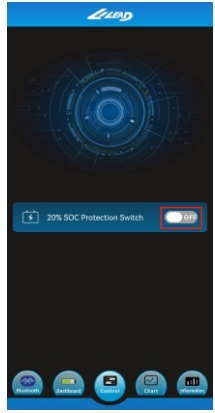
d.智能备用启动

－该功能用于强制保留备用电量,防止电池耗尽无法启动发动机；出厂默认关闭(OFF)，如需使用请手动在右图所示界面切换致打开(On)状态

－当该功能打开（On）且电量低于 20% 时，电池将自动进入休眠模式。保留电量以作备用启动。

－退出休眠模式激活电池，需要点击屏幕切换状态至关闭（OFF）。

－如需再次启用“智能备用启动功能”，请等待电池充满电后，重新切换至打开(On)。



7. 电池维护

－确保电池牢固安装，以尽量减少振动影响。
－长时间不使用时，请将电池存放在阴凉干燥处，并每3个月充电一次。
－请勿在电池完全放电后长时间存放，建议至少保留50%~60%电量。

8. 故障排查

问题	可能原因	解决方法
发动机无法启动	电池电量不足	给电池充电
电池无法保持电量	电池过放或老化	重新充电或更换电池
低温环境无法工作	启动了低温保护功能	使电池升温或等待环境温度升高

9. 回收与处理

－请勿将锂电池作为普通生活垃圾处理。
－请遵守当地的电池回收规定。
－请联系授权的回收中心进行妥善处理。

Dual-Purpose Lithium Battery User Manual

This manual applies to S110bt, S200bt and S24110bt

LiLeAd

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

• This lithium battery is designed for starting applications and supports high-power discharge.

• 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):

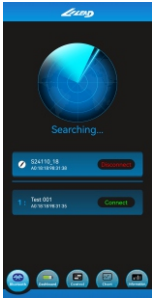
• **For engine starting, series connect is forbidden.**
• **For deep cycle purpose, series connect up to 48V**.
• Fully charge all batteries before connecting.
• Connect the first battery's positive (+) to the second battery's negative (−), and continue in sequence.
• Ensure total voltage matches your device's requirement.

6.Lilead APP via bluetooth

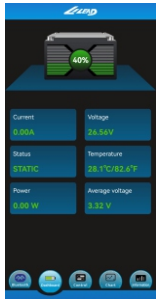
a.Download the app by scanning the QR code

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.



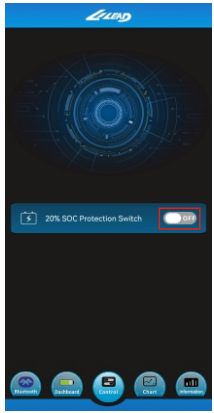
d. Reserve Jump Start

•This function reserves backup power to prevent the battery from running out and the engine from failing to start. It is OFF by default—switch it ON in the interface shown on the right to use it.

•When ON and battery level is below 20%, the battery enters sleep mode to keep backup power.

•To wake the battery, tap the screen and switch to OFF.

•To re-enable this function, wait until the battery is fully charged, then switch it back to ON.



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
Engine won't start	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.