

## LITHIUM-ION BATTERY FOR ELECTRIC VEHICLE

### USER MANUAL



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AFTER SALES  
WECHAT



## Warranty Terms

- 1.From the date user receives the product, 5-year warranty is provided for faults caused by battery quality problems.
- 2.The warranty covers faults such as the battery being unable to charge or discharge, and the battery capacity decreasing less than 70% of the new battery.
3. The warranty does not cover failures caused by the following circumstances:  
Unauthorized disassembly of the battery pack, wrong wiring, short circuit, water ingress into the battery pack due to improper installation and use, deformation of the appearance due to falling or collision, charging with a charger of incompatible specifications and models, excessive discharge current of the battery pack, long-term storage at low power leading to battery loss, temperature and humidity outside the range of use or storage environment, and other failures not caused by the quality of the battery itself.

## Thank you for choosing

### LifePO4 power lithium battery

Please read user manual carefully to help you install it correctly and use it safely.

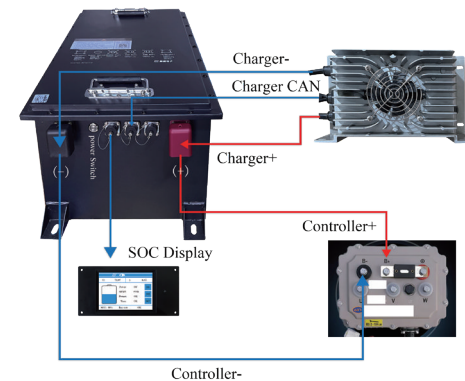
Please do not disassemble or modify lithium battery without authorization to avoid dangerous.

Before use, please check that the lithium battery model is accurate and the appearance is perfect.

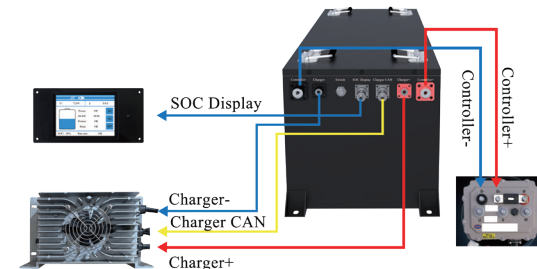
To ensure the best battery performance, when battery leaves from company, capacity is between 30% and 50%. Please charge it before first use.

## Lithium battery pack connection diagram

The first type(Same interface for charging and discharging)



The second type(Different interfaces for charging and discharging)



Tip:

'Charger-' must be connected to Charger negative pole. 'Charger-' can't connect to

'Controller-', it may cause overcharge or even fire.

## Installation Guide

### Step 1:Mechanical installation

✓ **Installation focus:**The installation should be reliable and fixed, and the installation position should be as close to the controller as possible to reduce power line losses. If there is a range extender, it must be separated by a certain distance to prevent the heat from the range extender from being transferred to the battery pack and causing the battery pack to overheat. Try to install it in a location where it will not be immersed in water to reduce the possibility of water entering the battery or rusting of the circuit interface.

✓ **Installation direction:**If the bottom of the battery pack is likely to be splashed with water, the battery pack must be installed horizontally upward; Battery pack is prohibited to place it at an angle.

### Step 2: Electrical Installation

The first type(Different interfaces for charging and discharging)

- 1) The "output **positive pole**" of the lithium battery is connected to the **positive pole** of the electric vehicle controller.
- 2) The "output negative pole" of the lithium battery is connected to the **negative pole of the electric vehicle controller**.
- 3) The "charge positive pole" of the lithium battery is connected to the **positive pole of the charger**.
- 4) The "charge negative pole" of the lithium battery is connected to the **negative pole of the charger**.
- 5) The lithium battery CAN interface is connected to the charger CAN interface.
- 6) The display screen is connected to the battery RS232 interface

The second type(Same interface for charging and discharging)

- 1) The "**positive output**" of the lithium battery is connected to the **positive pole of the electric vehicle controller and the positive pole of the charger**.
- 2) The "output negative pole" of the lithium battery is connected to the **negative pole of the electric vehicle controller and the negative pole of the charger**.
- 3) Connect the lithium battery CAN interface to the charger CAN interface.
- 4) The display screen is connected to the battery RS232 interface

✓ Connection reference: "Lithium battery pack connection diagram" or contact the manufacturer for after-sales service.

Step 1: Refer to the installation instruction for the battery pack to confirm that it is installed correctly and that there are no wrong or missing connections in the wiring harness.

Step 2: Power on the battery pack. See Table 1 for the method.

Table 1 Battery power on and power off method

| Status                                                                                                                                                                                                                                                                                                                                                                                                                                 | Power on method                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Any status                                                                                                                                                                                                                                                                                                                                                                                                                             | Press the switch button                         |
| Not fully charged state                                                                                                                                                                                                                                                                                                                                                                                                                | Press the switch button and connect the charger |
| Press the switch button<br>1： Press and hold the switch on the battery for 3 seconds to turn off the battery;<br>2： if battery current more than 20%, it will automatically shut down in 15 days if there is no working current;<br>3： if battery current less than 20%, it will automatically shut down in 3 days if there is no working current.<br>Therefore, it is recommended that the battery must be charged in time after use. |                                                 |

Step 3:Check the display parameters, cell voltage, temperature and other information on the monitoring display. The light of the display will go out after 60s when there is no operation and battery no working current. Touch display and it can be activated again.

### ■ Connection considerations

! During installation, special attention should be paid to avoid short circuits and the wiring harness connectors should be insulated.

! The "negative charging pole" of the lithium battery pack with negative charging pole needs to be connected to the "negative charging pole" separately, and cannot be connected to the negative pole of the controller or the negative pole of the DC converter. Wrong connection will cause the charging protection to fail, the battery to be overcharged and damaged, or even catch fire.

## Usage and storage requirements

### ■ Usage

1. Must use the charger provided by the manufacturer. Incompatible chargers may damage the battery or cause a fire hazard.
2. Charging environment requirements for lithium battery packs: temperature -5°C~40°C, no flammable substances around, and good ventilation.
3. Please avoid placing the battery pack near heat sources, open flames, flammable and explosive gases (liquids), chemicals and other dangerous sources.
4. Please avoid exposing the battery pack to rain, water, or other corrosive liquids.
5. When charging in winter, when the temperature is below -5°C, the battery pack will stop charging due to low temperature protection.

### ■ Storage

1. If the battery pack not used for a long time, please charge it to about 50% and then turn off the lithium battery management system (for battery packs with a start button, press the button for 3 seconds and then release it). **And check the power every month and recharge it as needed.** If the power is too low during storage, the battery may be exhausted and scrapped (the lithium battery management system will still consume a small amount of battery power after being turned off).
2. The storage environment of the lithium battery pack should be well ventilated, cool and dry, and pay attention to waterproof and moisture-proof. The temperature should be below 40°C and the humidity should be 5%~85%RH. It is strictly forbidden to store the battery in an ambient temperature higher than 40°C, otherwise the battery will experience irreversible capacity decay.