

KEEPKNOW

Golf Cart LiFePO₄ Battery

USER MANUAL

— 51.2V 100Ah





Read Berfore Install

			
Heavy Object Team Lift Required	High Voltage Handle With Care	Do Not Pressure Wash Or Submerge	Charge Battery Before Use

Charge

- Before using for the first time, please fully charge the battery to calibrate the SOC.
- When the SOC drops to 10%, please charge it in time.
- If the battery is fully discharged, be sure to charge it within 24 hours.
- Please use an appropriate lithium battery charger to charge the battery.

Warning

- High Voltage. DO NOT install or service this battery unless you are properly trained.
- Use only with components that have the same voltage and current rating as the battery.
- DO NOT touch or connect to the terminals unless the battery is manually turned off.
- DO NOT open or attempt to service the battery, there are no user serviceable parts inside.

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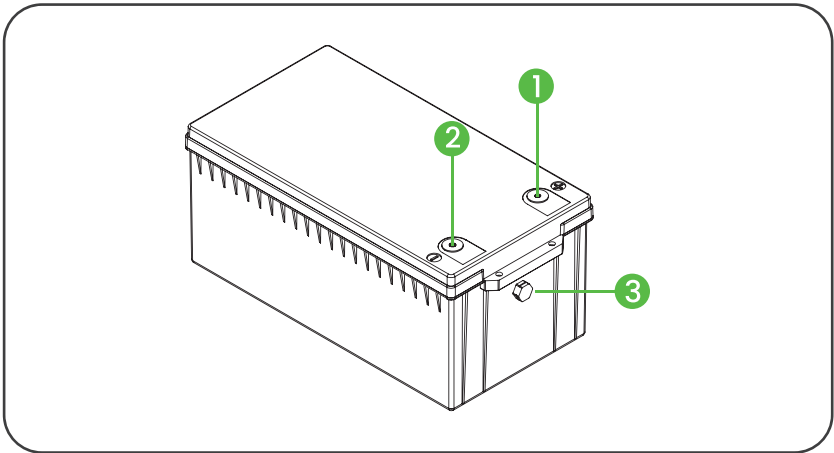
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1. Electrical Layout

The battery is equipped with an integrated battery management system with the following features:

- Cell balancing.
- Battery voltage monitoring.
- Battery current monitoring.
- Battery temperature monitoring (integrated temperature sensor).
- Support Bluetooth APP to monitor the battery in real time.



No.	Label	Describe
1		Positive Terminal
2		Negative Terminal
3	VENT	VENT

2. Packing List

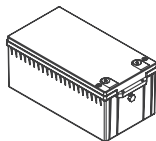
Check the PACK package before open it. If any abnormality is detected, do not open the Package and contact us.

Check the quantity of all parts inside according to the package list. If there is any part missing or damaged, please contact us.

Accessories are optional. The accessories you ordered will be included in the package.

1

Golf Cart
LiFePO4 Battery



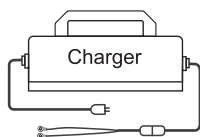
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User Manual



3

LiFePO4 Battery
Charger X 1



4

Bluetooth LCD
Display



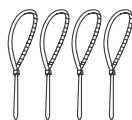
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Screw



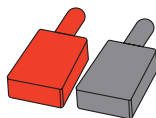
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Cable Tie



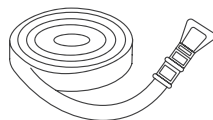
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Insulation Protective
Cover



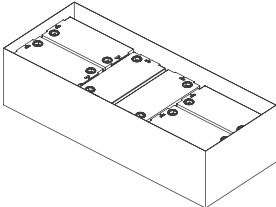
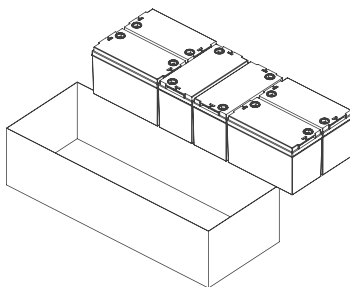
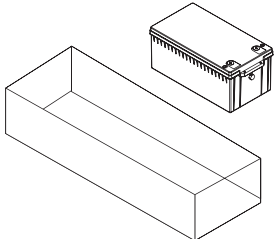
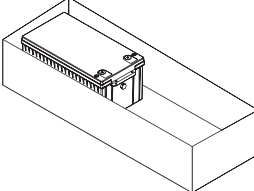
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Clip-ON Straps
X 2



3. Installation

- Make sure all electrical appliances are turned off before installation.
- Only authorized personnel are allowed to operate or adjust the battery.
- Please fully secure the battery during installation, and do not leave it hanging or shaking.
- Please install the power cables and charger cable to the battery together, pay attention to distinguish the positive and negative poles, and cover the insulation cover.
- Install the communication cable for communication with the golf cart controller (if any).
- Install the external display screen and power cable, and the screen and cable need to be fixed (if any).

1 Open the golf cart compartment. You will see the original lead-acid batteries. Make sure all appliances are OFF before installation. 	2 Safely disconnect all the wires. Pull the old batteries out. 
3 Put the Battery pack inside and fasten the Battery pack to the bracket base. 	4 Connect the wires safely, and your cart will be ready to go! 

Steps to install the battery meter:

- ① Install the battery meter in a suitable position on the dashboard area.
- ② Connect one end of the RS485 cable to the RS485 connector on the battery, and then connect the other end to the battery meter.

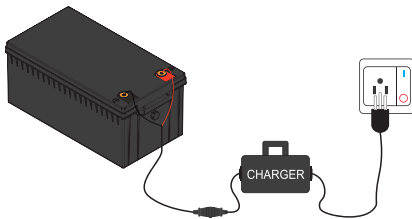
4. Charger

Note

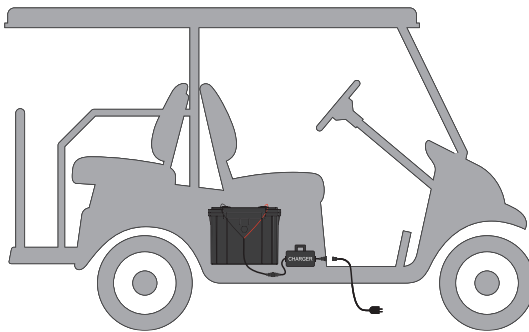
- This battery must be charged with the appropriate lithium battery charger.
- After being fully charged, the battery voltage difference will increase and needs to be left alone for 30 minutes before returning to normal.

Warning

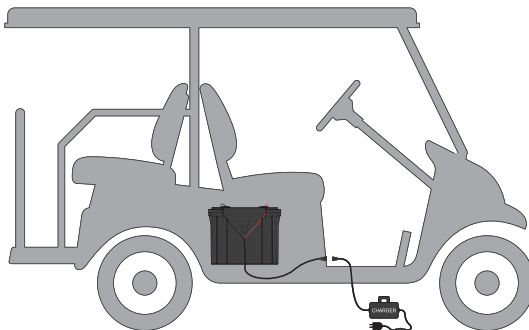
- Using the incorrect charger may cause insufficient charging or battery damage.
Doing so will cause problems and is not covered under warranty.
Do not connect DC output cables to battery with reverse polarity.
Doing so will cause irreversible damage and is not covered under warranty.



Please install the charger according to the actual specifications.
The following are 2 installation methods we recommend.



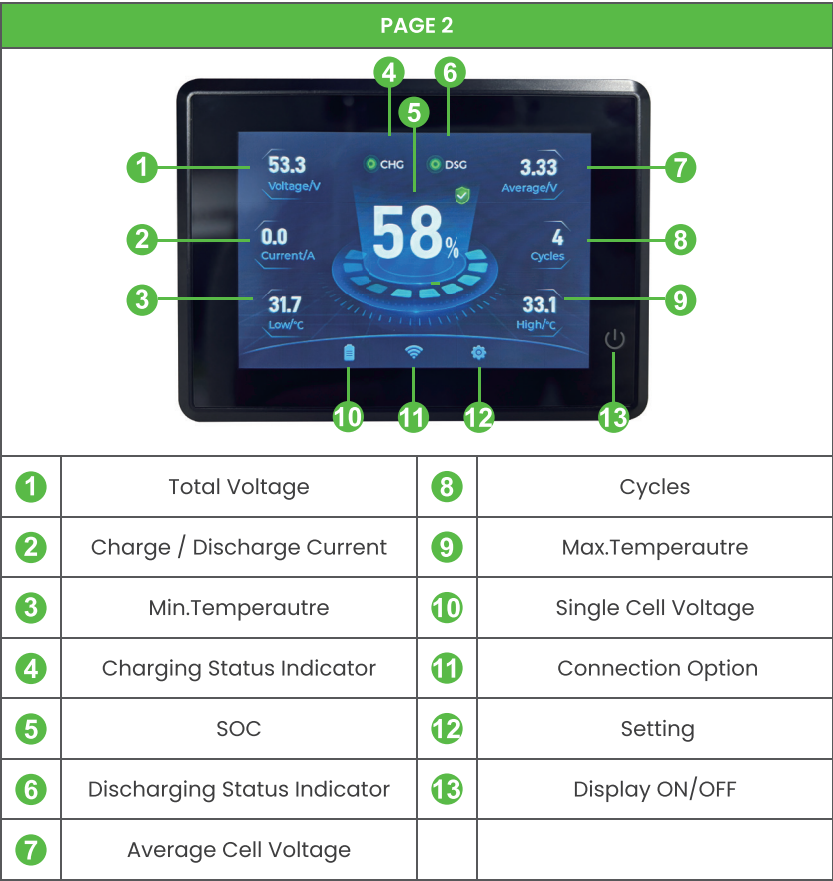
Option 1 (Built in Charger)

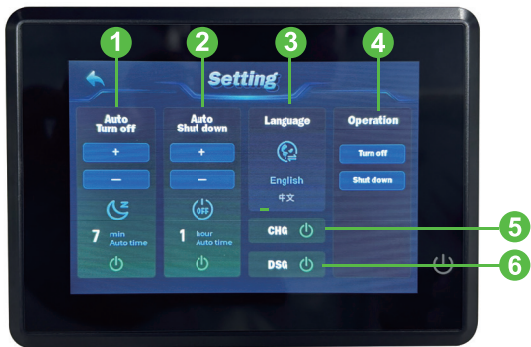


Option 2 (External Charger)

5. Bluetooth LCD Display

The battery comes with a touch screen.
You can view battery information in real time on the LCD.





1	Set Auto Screen Timeout	4	Screen Off / Shutdown Switch
2	Set Auto Shutdown Time	5	Charge Switch
3	Language	6	Discharge Switch

NOTE:

Click "Turn off" to turn off the screen display, and click again to turn it back on.
Click "Shut Down" to turn off the screen, wait for 5 to 10 seconds and click the (power button ) to turn the screen on.



1	Screen ID	3	Next Page
2	Connected Device	4	Connectable Devices



Voltage Of Each Cell

6. Warning

- High Voltage. DO NOT install or service this battery unless you are properly trained.
- Use only with components that have the same voltage and current rating as the battery.
- If the battery is damaged, contact the place you purchased it
- DO NOT touch or connect to the terminals unless the battery is manually turned off.
- DO NOT open or attempt to service the battery, there are no user serviceable parts inside.
- DO NOT expose cable outside.
- DO NOT connect batteries in series.
- DO NOT connect the battery with AC power directly.
- DO NOT connect the battery with different type of battery.
- DO NOT short-circuit the battery, use it near heat or water sources, or allow it to become wet.
- DO NOT insert nails or other objects into the battery, strike it, or weld directly on the battery.
- DO NOT operate the battery with damaged cables or charging adapters.
- DO NOT operate this product in explosive atmospheres (i.e. flammable liquids, gases, or dust) or set the unit on flammable materials (i.e. carpeting, upholstery, paper, cardboard).
- DO NOT permit the battery to freeze. Never charge a frozen battery.
- DO NOT pressure wash, submerge, or use chemical agents to clean your battery.
- DO NOT keep using this product if it is damaged, waterlogged, distorted, or broke.
- In case of skin or eye contact, rinse immediately with clean water and seek medical attention.
- This product contains lithium ion batteries. When it is worn out dispose it properly using local laws and regulations.
- Any warranty claims are excluded for direct or indirect damagedue to items above.

7. Storage

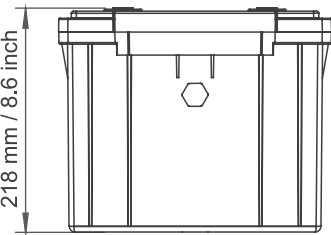
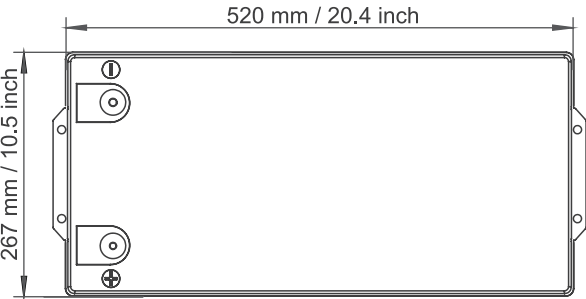
- The battery should be stored in a dry and ventilated room, away from fire or water, and the storage temperature is 10–45°C (50–113°F).
- For long term storage, recommended to charge the battery to 30%-50%, unplug the charger and turn off the power button.
The battery must be charged at least once every 3 months. Failure to charge for 6 months may permanently damage the lithium cells, and is not covered under warranty.
- After long term storage, it is advised to fully charge the battery before use, regardless of SOC displayed.
During long term storage, the calibrated SOC may drift, and must be fully charged to re-calibrate.

8. Recommended Usage

- Please read the battery instructions and the label on its surface before use.
- When in use, the battery shall be kept out of heat, high voltage and avoided children's touching. Do not drop the battery.
- Use the compatible charger. Do not put the battery into the charger over 24hours.
- Do not touch contacts together. Do not demolish or assembly the battery by yourself. Do not put the battery in the damp place to avoid danger.
- Do not wrap it with conduct material to avoid the damage caused by the direct contact between the metal and battery. Keep the battery in dry places.
- Well disposed the disused battery. Do not put it into fire or water.

9. Technical Specifications

Datasheet	Parameter
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Communication Mode	RS485
Cycle Life	>6000 Cycles (80%DOD),at 25°C
Charge Voltage	58.4V
Continuous Charge Current	100A
Discharge Cut-off Voltage	40.8V
Max. Continuous Discharge Current	200A
Peak Discharging Current	400A 30s
Dimensions	520*267*218 mm / 20.4*10.5*8.6 inch





Lithium **Golf Cart** Battery



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keepknowbattery.com