

User's manual - TRENDPOWER Lithium Ion Battery

- ※ Please read all users' manual before use the TRENDPOWER battery and charger for safety.
- ※ Be sure to observe the following in order to avoid burns or other injury from fluid leakage, overheating, fire or explosions.
- ※ Contact the place of purchase or a bicycle dealer for information on installation and adjustment of the products which are not found in the user's manual.
- ※ The following instructions must be observed at all times in order to prevent personal injury and physical damage to equipment and surroundings.

1. Battery safety instructions and warning.



- Only use the designated charger and follow the specified charging conditions when charging the battery. Otherwise it may cause overheating, bursting, or ignition of the battery.
- Do not leave the battery near sources of heat such as heaters, vehicle or any dangerous place.
- Do not heat the battery or throw it into a fire.
- Do not deform, modify, disassemble or apply solder directly to the battery.
- Do not connect the (+) and (-) terminals and other terminals with metallic objects. Do not carry or store the battery together with metallic objects such as necklaces or hairpins. Because it could cause short-circuits, overheating, burns or other injury.
- Do not place the battery into the water, and do not allow the battery terminals to get wet. Otherwise it may cause overheating, bursting, or ignition of the battery.
- Do not puncture, crush or will damage the battery.
- If any liquid leaking from the battery gets into your eyes, skin or clothes, immediately wash the affected area thoroughly with clean water, and seek medical advice immediately. The battery liquid would damage your eyes and body.
- If the battery does not become fully charged even 4 hours after the designated charging time 5hrs, please unplug the battery from the charger and contact the place of purchase immediately.
- Do not use the battery if it has any external damage.
- Do not use the battery if leakages, discoloration, deformation or any other abnormalities occur.
- Do not recharge the battery in wet or very humid places, or outdoors.
- Do not insert or remove the plug while it is wet. Otherwise it may cause electric shocks. If there is water leaking out of the plug, dry it thoroughly before inserting it.
- Do not store in direct sunlight or in places (such as inside cars) where the heat can become excessive. Keep away from heat and open flames. This may result in battery leakage.
- Use both hands when handling the product to avoid the dangerous and injury.
- If an error occurs during discharge or charging, stop using the battery immediately and refer to the user's manual. If you are not sure, consult the place of purchase or a bicycle dealer.

- Do not clean the battery with high pressure water spray.
- Do not use alcohol, solvents or abrasive cleaner to clean the battery or charger. Please use a dry or slightly damp cloth.

2. Pack storage condition.

- Store the battery in a safe place away from reach of infants and pets.
- If the battery is stored in temperatures which are outside these ranges, then it may cause fire, injury.
- Storage Temperature range: 0°C ~ 60°C
- If the bicycle will not be ridden for a long period of time, store it away with approximately 70% battery capacity remaining. In addition, take care it and not to let the battery become completely empty by charging it every 3 months.
- Store the battery or bicycles with the battery installed in cool indoor places (approx. 10°C ~ 25°C) where they do not become exposed to direct sunlight or rain. If the storage temperature is low or high, the performance of the battery is reduced, and its available time will be shorter. When you use the battery after a long storage period, be sure to charge it before use.

3. Pack operation condition.

- The operating temperature ranges for the battery are given below. Do not use the battery in temperatures outside these ranges.

If the battery is used in temperatures which are outside these ranges, then it may cause fire, injury.

Only use the battery during discharge temperature range: -10°C ~ 40°C

Only charge the battery it during charging temperature range: 0°C ~ 40°C

- If the battery has been charged in a low temperature environment (0 °C or below), the maximum riding distance per full charge becomes shorter. This is due to a characteristic of the battery. If the battery is charged at room temperature, the battery becomes normal again.

4. Assembly battery condition.

- Please do not use the battery immediately after shipment. The battery can be used after charging it with the designated charger. Be sure to charge it before use. The battery can be used when the LED on it turns on.
- Please always switch off the battery and the E-bike system when you insert or remove the battery from E-bike.

5. Charging condition and safety instructions.



- The battery is not fully charged at the time you purchase. Before riding, be sure to charge the battery until it is fully charged.
- Please only use Trend power charger to charge the battery pack.
- Please always turn the bicycle and battery off before connecting or disconnecting from the charge port.
- Be sure the on bike charge port and plugs are always clean and dry before connecting the charger.
- Never use the charger which you suspect is damaged or know to be broken.
- Do not disassemble or modify the battery charger.
- On bike charge connector / plug must equipped with dust-cover. Please always keep the cover closed, while not using the charging port.
- Do not use any non-approval male connector insert the battery connector and charger, especially with metal or conductive materials.
- Do not allow the battery charger to get wet, and using it while it is wet, don't touch or hold it with wet hand to avoid an electric shock.
- Do not use the charger when it is covered with a cloth or other material.
- Do not touch the metallic parts of the device or the power plug on the AC adapter or other parts if there is a lightning storm.

- Do not use the charger to charge the battery outdoor or in the environments with high humidity, and please avoid exposure to rain or wind.
- In order to prevent the cable from being damaged, please do not hold the charger cable only when carrying it and avoid wrapping cable around the main body during storage.
- Do not pedal or perform any kinds of battery discharging operation when charging the battery thru on-bike charging port.
- Please always remove the battery from vehicle before washing the vehicle with water or any kinds of liquid material.
- Please wait for an hour if you would like to charge the battery after riding, due to the battery temperature might be too high.
- Recommend to charge the battery in an area with a smoke detector.
- If the battery does not become fully charged even 2 hours after designated charging time, immediately unplug the battery from the outlet and contact the place of purchase.
- It is not recommended to have the battery pack connected permanently to the charger.

6. Recycle

- Battery packs, accessories and packaging should be sorted for environmental-friendly recycling.
- Lithium ion batteries are recyclable, valuable resources. For information on used batteries, follow the rules in your area. If you are not sure, consult the place of purchase or a bicycle dealer.
- The battery may not be disposed of as household waste. It would be accepted at the point of sale and duly disposed of.

7. Warranty void condition.

- Charge the battery at least every 3 months to approximately 70% capacity, even when the bicycle is not in use.
- For replacement information, please contact the place of purchase or a bicycle dealer.
- Products are not guaranteed against natural wear and deterioration from normal use and aging.
- The life of the battery will vary depending on factors such as the storage method, the usage conditions, the surrounding environment and the characteristics of the individual battery pack.
- If the battery has become completely empty, charge it as soon as possible. If the battery is left uncharged, it may cause the battery to deteriorate and become unusable.
- Please do not disassemble the battery or other relates part, including label, or improper human operation, it may cause the battery lost warranty.

8. Battery SOC LED explanation.

- When not using the battery, the battery will automatically shut down after two hours.
- If there are 4 LED lights under the SOC label, please refer to below table to check capacity status.

Battery capacity indication	SOC status	4 LEDs
1. During discharge mode or pack is alone (The LED light up when users press the SOC button, then the LED will go out after 5 seconds.)	75% ~ 100%	● ● ● ●
	50% ~ 74%	● ● ● ○
	25% ~ 49%	● ● ○ ○
	5% ~ 24%	● ○ ○ ○
	0% ~ 4%	○ ○ ○ ○
2. During charging mode (After the battery is fully charged, and the LED will go out after 5 seconds.)	100%	● ● ● ●
	75% ~ 99%	● ● ● ●
	50% ~ 74%	● ● ● ○
	25% ~ 49%	● ● ○ ○
	0% ~ 24%	● ○ ○ ○

● LED Continue On ○ Flashing LED 2Hz ● Flashing LED 1Hz ○ LED Off

- If there are 5 LED lights under the SOC label, please refer to below table to check capacity status.

Battery capacity indication	SOC status	5 LEDs
1. During discharge mode or pack is alone (The LED light up when users press the SOC button, then the LED will go out after 5 seconds.)	80% ~ 100%	● ● ● ● ●
	60% ~ 79%	● ● ● ● ○
	40% ~ 59%	● ● ● ○ ○
	20% ~ 39%	● ● ○ ○ ○
	5% ~ 19%	● ○ ○ ○ ○
	0% ~ 4%	○ ○ ○ ○ ○
2. During charging mode (After the battery is fully charged, and the LED will go out after 5 seconds.)	100%	● ● ● ● ●
	80% ~ 99%	● ● ● ● ●
	60% ~ 79%	● ● ● ● ○
	40% ~ 59%	● ● ● ○ ○
	20% ~ 39%	● ● ○ ○ ○
	0% ~ 19%	● ○ ○ ○ ○

● LED Continue On ○ Flashing LED 2Hz ● Flashing LED 1Hz ○ LED Off

9. Event showing LED explanation & Recommend action for event release.

- If pressing the battery power button does not turn on the LED display, the protection circuit is operating. To release the protection circuit, please charge the battery by connecting the original TRENDPOWER series charger.
- If the LED starts flashing as below table when press SOC button or during battery is charging, please observe the recommend actions to release the protection functions or conduct some necessary check actions accordingly.

General abnormal LED indication	4 LEDs	5 LEDs	Recommend action
Battery run out capacity and trigger the lowest voltage protection			Start to charge the battery
Battery trigger high temperature or low temperature protection			Put battery during 5°C ~ 40°C
Battery trigger short circuit protection			Remove external short circuit object from battery for 30 sec
Battery trigger permanent failure protections or further safety protections			Stop charging and contact the place of purchase or a bicycle dealer.
After very long term used period of battery, it may only be displayed when the battery is charging, and the LED will flash 10 seconds.			Contact the place of purchase or a bicycle dealer to check the health status of battery.

● LED Continue On ○ Flashing LED 2Hz ● Flashing LED 1Hz ○ LED Off

10. Range Extender Battery operation condition.

- Range extender only could compatible with TRENDPOWER main battery, cannot use Range extender separately.
- Please do not use the battery immediately after shipment, be sure to charge it before use. The battery can be used when the LED it turns on.
- RE battery SOC LED explanation is same as sec 9.
- RE battery event showing LED explanation & Recommend action for event release is same as sec 10.
- If range extender cannot work on bike, please remove it and try to re-start the bike.
- If pressing the battery power button does not turn on the LED display, the protection circuit is operating. To release the protection circuit, please remove the range extender and charge it before use, or the main battery will either cannot use when the Range extender protection circuit is operating.

TRENDPOWER

Trend Power Technology (Changshu) INC

NO.868 Dong Nan Avenue, Changshu, Jiangsu, China

TREND POWER TECHNOLOGY PRIVATE LIMITED TAIWAN BRANCH

5F, No.656,Sec.2,Pa Teh Rd., Hu Kou 30348,

Hsin Chu Hsien, Taiwan

Sales@trendpower.com.tw

TRENDPOWER