MOTORCYCLE
LiFePO4 BATTERY

FOR MOTORCYCLES OR OTHER SPECIAL VEHICLES

PowerTex
BATTERIES

PRODUCT MANUAL

www.powertexbatteries.com

PowerTex
BATTERIES

In order to make you have a better use of **PowerTex** motorcycle LiFePO4 batteries that produced by our company, please read this manual carefully before use.

This manual is applicable to **PowerTex** batteries: waterproof touch digital screen lithium batteries and motorcycle LiFePO4 batteries

OPEN-BOX INSPECTION

Each battery box is equipped with an **PowerTex** motorcycle LiFePO4 battery and a manual.

APPLICATIONS

This product is fit for motorcycles and other special vehicles.

PRODUCT FEATURES

- 100% pre-delivery inspection, with stable, reliable and long-term quality assurance.
- Highly- waterproof designed and rated above IP66, this battery can be used normally under the rainy conditions in the wild and more.
- With the LiFePO4 cell through couple welding, safe and reliable;
- Longer service life, the normal life expectancy is about 3-5 years;
- Low self-discharge rate, a fully-charged lithium battery can still work normally after more than one-year storage without frequent recharging;
- Easy to use, flexible installation in any direction without leakage, maintenance free;
- Eco-friendly, no corrosive liquid and harmful heavy metals;
- The intelligent electronic chip can monitor the battery status in real time. When abnormal voltage and capacity are detected itself, the intelligent alarm will be given.
- The battery used days can be recorded automatically.

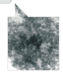
USAGE

The battery is usually in the power-saving mode.
- Press the key to enter the normal mode, and 5 seconds later after the LCD works, enter the power-saving mode.
- After the battery is installed firstly, get the motorcycle started, then the function of days-recording will be activated.
- The battery will end up at the power-saving mode. And once the voltage becomes abnormal, the alarm will sound and the screen will show "maintain".
- The battery has four modes: normal, power- saving, prompt and alarm.

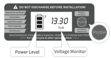
NORMAL MODE	When the LCD screen is on, press the key within 5 seconds to switch the display between voltage and days, otherwise, enter the power-saving mode.
POWER-SAVING MODE	No display on the LCD screen and no alarm.
PROMPT MODE	The LCD flashes in order to remind users of maintaining, press the key within 5 seconds to switch the display between voltage and days, otherwise, enter the power-saving mode.
ALARM MODE	When the battery becomes abnormal, the LCD will flash and the alarm will sound for 5 minutes to remind users of maintaining. After the end of the alarm mode (4 hours as an alarm cycle), the prompt mode will finally be put into operation if the maintenance is not carried out within 48 hours.
EXIT THE ALARM MODE	Under the alarm mode, press and hold the key 3S to exit.

INSTRUCTIONS

Rated above Ip66, motorcycle LiFePO4 battery is a type of high-waterproof intelligent lithium-ion battery with a touch LCD screen, which can real-time monitor the battery situation and used days. When abnormal voltage and capacity are detected itself, a timely reminder for maintenance for a longer battery life will be indicated.

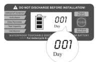


The battery with a lithium iron phosphate cell is of super performance:
- Longer service life, twice than that of a lead-acid battery;
- High safety and reliability, the LiFePO4 cell is by couple welding;
- Lighter weight, only one-half of a lead-acid battery;
- Low self-discharge rate, a fully-charged lithium battery can still work normally after more than one-year storage;
- Eco-friendly, no corrosive liquid and harmful heavy metals;
- Easy to use, flexible installation in any direction, maintenance free.

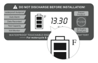


Highly-waterproof designed, if the battery is completely immersed in water for more than half an hour, it can still work normally.

Two interfaces for voltage display and days display are on the battery screen, and both can be switched by touching the PUSH button. The battery automa-tically records the battery used days when it is activated firstly.



The recording of the battery used days will be started automatically when the battery is activated initially.

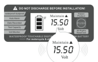


The battery has two states: activation or non-activation

a)Batteries are not activated when delivered from the factory. " 000" is displayed for the days recording, which is in the forbidden state. The display functions of the voltage, power, and the sound alarm are normal.

b)Generally, the battery can be activated when firstly used. However, batteries may have an activation delay due to different application situations. It is normal for this battery to have 2% deviation on the battery used days.

c)The recorded days begin to accumulate after the battery is activated, and when the battery is abnormal, the buzzer will give an alarm so as to prompt users to maintain the battery timely.



Intelligently set off the alarm when battery voltage is abnormal.

LCD SCREEN

POWER LEVEL	BATTERY STATES		BATTERY STATES
	SCREEN FLASH	WARNING SOUND	
■□□	-	-	12.70V-13.00V
■■□	-	-	13.00V-13.20V
■■■	-	-	13.20V~15.50V
□□□	Space Flash Shows Maintain	-	If the voltage is less than 12.70V, the battery must be charged or maintained
■■■	Full Flash Shows Maintain	"tick···tick···"	If the voltage is more than 15.50V, stop overcharging the battery and maintain it by the professional

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SPECIFICATIONS

Cylindrical CellModel	Dimensions (L*W*H) (±2mm)	Standard Voltage (V)	Capacity (Ah)	Power (Wh)	CA (25±5℃)	Recharge		Weight (Kg) (±2%)	Cu Terminal	Terminal Polarity	Replaceable Lead-acid Battery Model
						6 Months 0.5-1H	12 Months 1-2H				
PTX4L	113*70*85	12.8	5	60	60	1.25	1.25	1.0	LM1	- +	YB4L-BS(MF)UTX4L-BS(MF)
PTZ5S	113*70*85	12.8	5	60	60	1.25	1.25	1.0	LM1	- +	UTZ5S(MF)
PTX5L	113*70*105	12.8	5.5	70	66	1.38	1.38	1.1	LM1	- +	UTX5L-BS(MF)
PTX6.5L	138*68*100	12.8	5.5	70	65	1.38	1.38	1.1	LM1	- +	YB6.5L-BS(MF)
PTZ7S	113*70*105	12.8	6	76	72	1.50	1.50	1.2	LM1	- +	UTZ7S(MF)
PTX7L	113*70*130/T	12.8	6	76	72	1.50	1.50	1.2	LM1	- +	UTX7L-BS(MF)
PTX7A	150*87*93	12.8	6	76	72	1.50	1.50	1.2	LM2	+ -	UTX7A-BS(MF)
PTZ10S	150*87*93	12.8	10	128	120	2.50	2.50	1.6	LM2	+ -	UTZ10S(MF)
PTX9	150*87*105	12.8	10.6	136	130	2.65	2.65	1.8	LM2	+ -	UTX9-BS(MF)
PTX12A	150*87*105	12.8	12	150	140	3.00	3.00	1.8	LM2	+ -	YT12A-BS(MF)

Notes
1.CA refers to the startingcurrent measured by discharging at 25±5℃ for 5 seconds.
2.The ambient temperatures of charging vary from 0~45℃, and that of discharging vary from - 20 ~ 55℃. Battery life will beaffected if charging or discharging are beyond the range.

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						6 Months 0.5-1H	12 Months 1-2H				
PTZ14S	150*87*105	12.8	12	150	140	3.00	3.00	1.8	LM2	+ -	UTZ14S(MF)
PTX12	150*87*130	12.8	12	150	140	3.00	3.00	1.9	LM2	+ -	UTX12-BS(MF)
PTX14	150*87*145/T	12.8	12.2	155	145	3.05	3.05	2.0	LM2	+ -	UTX14-BS(MF)
PTX16	150*87*161/T	12.8	12.4	160	150	3.10	3.10	2.1	LM2	+ -	UTX16-BS(MF)
PTX5WL	119*60*129	12.8	5	60	60	1.25	1.25	1.1	LM3	- +	YB5L-BS(MF)
PTX7W	148*60*128	12.8	5.8	75	70	1.45	1.45	1.2	LM3	+ -	YB7B-BS(MF)
PTX7WL	148*60*128	12.8	5.8	75	70	1.45	1.45	1.2	LM3	- +	YB7BL-BS(MF)
PTX9L	137*76*133	12.8	10.6	136	130	2.65	2.65	1.9	LM4	- +	YB7L-BS(MF) YB9L-BS(MF)
PTX9Y	137*76*133	12.8	10.6	136	130	2.65	2.65	1.9	LM4	+ -	YB7-BS(MF) YB9-BS(MF)

The above models without (DS) have no digital display.

Notes
1. CA refers to the starting current measured by discharging at 25±5°C for 5 seconds.
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PTX6.5L(DS)	138*68*100	12.8	5.5	70	65	1.38	1.38	1.1	LM1	- +	YB6.5L-BS(DS)
PTX7A(DS)	150*87*93	12.8	6	76	72	1.50	1.50	1.2	LM2	+ -	UTX7A-BS(DS)
PTZ10S(DS)	150*87*93	12.8	10	128	120	2.50	2.50	1.6	LM2	+ -	UTZ10S(DS)
PTX9(DS)	150*87*105	12.8	10.6	136	130	2.65	2.65	1.8	LM2	+ -	UTX9-BS(DS)
PTX12A(DS)	150*87*105	12.8	12	150	140	3.00	3.00	1.8	LM2	+ -	YT12A-BS(DS)
PTZ14S(DS)	150*87*105	12.8	12	150	140	3.00	3.00	1.8	LM2	+ -	UTZ14S(DS)
PTX12(DS)	150*87*130	12.8	12	150	140	3.00	3.00	1.9	LM2	+ -	UTX12-BS(DS)
PTX14(DS)	150*87*145/T	12.8	12.2	155	145	3.05	3.05	2.0	LM2	+ -	UTX14-BS(DS)
PTX16(DS)	150*87*161/T	12.8	12.4	160	150	3.10	3.10	2.1	LM2	+ -	UTX16-BS(DS)
PTX5WL(DS)	119*60*129	12.8	5	60	60	1.25	1.25	1.1	LM3	- +	YB5L-BS(DS)

Notes
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Notes
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MATTERS NEEDING ATTENTION

No harmful heavy metals	No fireworks	Caution	No children come near	The reference manual

- Please read the manual carefully before using the battery. The company will not be responsible for any problems caused by not following the instructions.
- Do not overwhelm the battery LCD screen and keep the LCD screen clean and dry. Pay attention to whether there is an alarm, if there is, please timely maintain the battery as required.
- Please do not use or store the battery near high temperatures or open fires.
- Please do not short-circuit the battery. For example, do not connect the metal objects directly to the battery positive or negative.
- Please do not damage the battery by knocking, throwing, trampling, etc.
- Please do not disassemble, refit, or connect batteries in series or in parallel.
- In case of any battery abnormality, such as unusual odor or deformation, please stop using the battery immediately and to isolate it timely before contacting our professional technician in time.
- When the voltage is lower than 12.80V, the battery should be charged as soon as possible rather than discharging again.
- The charging voltage should be lower than 15.00V during charging the battery.
- After driving a long distance, the battery used should be left standing for more than 10 minutes before the battery can be tested or disassembled.
- Keep children and pets away from batteries.
- Please discharge the battery up before recycling (disposal).

Warning
* Please be in strict accordance with the manual, and do not short-circuit, over-charge or over-discharge the battery. Otherwise, the battery may smoke, fire, or even endanger security!
* The electrolyte in the battery is harmful to the eyes and skin. If the electrolyte leaks and gets on your skin, please rinse immediately with soap and water. If it gets in your eyes, please rinse with water and see a doctor immediately.

INSTALLATION AND MAINTENANCE

- Select the matching battery model according to your vehicle type. Check the voltage before installation, and please charge the battery if the voltage is lower than 12.80V.
- It is better to use a normal 12V lead-acid battery charger without a pulse charging function or a lithium iron phosphate special battery charger to charge the battery. Meanwhile, the charging voltage shall be limited to 14.40 ~ 15.00V, and the charging current shall be lower than its maximum charging current, and the ambient temperature shall be 0 ~ 45 °C.
- When charging with an individual charger, please take the battery out of the car. Do not charge the battery directly on the vehicle.
- The dead battery should be charged for 2 hours with its standard current and half an hour with its maximum current, and do not charge for a long time.
- Please follow the instructions from vehicle manufacturers before installation.
- Professional testing devices are supposed to be used to check the charging voltage and the leaking current of the vehicle. And only the former is between 14.40~ 15.00 V and the latter is less than 5 mA, the battery can be used.
- The terminals marking the "+" and "- " should be connected to the positive and negative linking lines of the vehicle respectively, and please connect the positive one first. Reverse connection is strictly banned, otherwise it will damage the electric equipment!
- Due to different vehicle situations, it is normal that the day-recording function may not be activated firstly even though the battery has already worked, but indeed it will get started after 2-3 times of use.
- Some of batteries are equipped with the separate EVA foam and twin adhesive, which can be cut, pasted, and filled to facilitate the battery installation.
- Do not start the vehicle for more than 5 seconds, and the interval should not be less than 5 seconds. If the vehicle cannot be started for 5 consecutive times, please check the vehicle and battery. Please avoid a long power consumption (over 5 minutes) after the car engines cut out, for even turning on a vehicle headlight may cause the battery to over-discharge. When starting the vehicle below 0 °C, turn on the headlight for 1 ~ 2 minutes and turn it off again, which make it easy to start a vehicle.
- Please check the battery regularly and make sure that the terminals are clean and firmly connected during the use, If the battery voltage becomes lower than 12.80V, please recharge the battery in time.
- If the vehicle is not used for more than 15 days, please take out the battery to prevent it from being damaged due to over discharge.

STORAGE AND TRANSPORTATION

- It should be ensured that the battery has 60% ~ 90% power (from two to three levels) during storage.
- The battery should be stored in a dry and open environment at 0 ~ 40 °C with the humidity of less than 70%. If the battery will be stored for a long time, it is better to place it at the temperatures of 0 ~ 25 °C and the humidity below 50%. Avoid contacting with the corrosive substances, and keep away from high temperatures and open fire.
- It is recommended that the battery should be fully charged every half a year if it is expected to be stored for a long time.
- It should be ensured that the battery has 60% ~ 90% power (from two to three levels) during transportation.
- When the battery is transported, the outer packing materials should be insulated and shockproof.
- In the process of battery transportation, please avoid severe collisions. During loading and unloading, please handle with care to avoid throwing and colliding the battery.
- Please do not transport batteries with inflammable, explosive and sharp articles.

WARRANTY TERMS

The batteries used in accordance with the instructions are subject to a 2-year limited warranty, which is not guaranteed under the following circumstances:
- The package is damaged after purchase, or the stickers on the battery is torn.
- The battery is damaged due to over-charge or over-discharge.
- The battery is damaged owing to improper reasons, such as the short circuit, an impact, a fall, immersing for a long time, and using a mismatched charger, etc.
- The battery is damaged because of natural or man-made disasters, such as earthquakes, rainstorms, traffic accidents and a fire, etc.
- The battery is damaged out of a broken-down vehicle or a mismatched battery model.
- The battery is damaged due to other unspecified operations.

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