



ProTek R/C Lithium Iron Phosphate (LiFeP04) Battery User Manual

Warning: You must read and understand this instruction manual before using this product!

Thank you for purchasing a **ProTek R/C** Lithium Iron Phosphate (LiFeP04) battery. With the ability to deliver 1,000+ usable cycles, and a lifespan up to 4 times longer than Li-Poly batteries (when cycled under the same discharge conditions), these batteries offer the user an excellent balance of performance and value. LiFe batteries are more durable than Li-Poly and are able to handle a higher level of abuse when compared to a LiPo without the risk of premature failure. Unlike LiPo, LiFe cells can be stored in a fully charged state with little to no loss in stored power, and can be discharged deeper with less risk of damage to the cells. Most important, LiFe batteries are **SAFE!** There is no risk of combustion! LiFe cells will not catch fire or explode when overcharged, or after a deep discharge.

Care & Handling

- **NEVER** short the battery connectors, and always handle the battery with care.
- Always store the battery in a secure location, out of the reach of children.
- Always store your battery in a cool, dry location. Do not leave your battery exposed to direct sunlight or in temperatures below 32°F (0°C) or above 122°F (50°C).
- Always unplug the battery and REMOVE the pack from your equipment to avoid accidental over discharge.

Charging

- **DO NOT** charge the battery in your radio controlled model.
- **DO NOT** charge the battery inside a motor vehicle or in a vehicles engine compartment.
- Always use a LiFe specific charger to charge the pack (NiMH, NiCD or Li-Poly only chargers WILL NOT WORK!).
- Always insure the correct charging current and cell count for the batteries. The battery may be damaged if the correct charging parameters are not used.
- Brand new LiFeP04 batteries have been found to fail prematurely if they are deep discharged below 33% capacity too early.
- A break-in period of 20 cycles is currently recommended. Additionally, LiFe batteries should not be discharged below 2.5V per cell after break-in to avoid pre-mature failure and maximize batter life span.
- While testing has shown that lower capacity (2000mAh and lower) LiFe receiver and transmitter batteries can be charged at up to 3C rates, it is recommended that they not be charged at rates higher than 1C. Additionally, higher capacity batteries (2000mAh and higher) can be charged at up to 5C rates, but it is recommended that they not be charged at rates higher than 2C. These charge rates are recommended to maximize the lifespan of your battery.
- It is not recommended that you charge lower capacity (2000mAh and lower) LiFe batteries at amp rates higher than 1C.
- It is not recommended that you charge higher capacity (2000mAh and higher) LiFe batteries at amp rates higher than 2C.

Disposal Procedure

- 1 If any LiFe cell in the battery pack has been physically damaged, resulting in a swollen cell or a split or tear in a cells foil covering, do NOT discharge the battery – immediately jump to Step 4!
- 2 Place the LiFe battery in a fireproof container or bucket of sand.
- 3 Now the battery must be discharged. Connect the battery to a LiFe specific charger and set the charger to “Discharge” mode. Set the discharge cutoff voltage to the lowest possible value and discharge the battery until it has finished its discharge cycle.
- 4 Submerge the battery into a bucket or tub of salt water. This container should have a lid, but it does not need to be air-tight. Prepare a plastic container (do not use metal) of cold water, and mix in ½ cup of salt per gallon of water. Drop the battery into the salt water. Allow the battery to remain in the tub of salt water for at least 2 weeks. This salt bath will

neutralize any remaining power in the battery.

- 5 Remove the LiFe battery from the salt water and please recycle it at your local battery recycling center.
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Disclaimer & Warranty

All **ProTek R/C** batteries are covered by manufacturer warranty against defects in materials and workmanship for 90 days after original purchase date. Warranty will not cover batteries that have been modified, disassembled, or otherwise misused according to the item's instructions. **ProTek R/C** is not responsible for bodily injury and/or property damage that may occur from the use of, or caused by, this battery.

Warning! Discontinue use of any battery that is physically damaged in any way.