

ProTek R/C NiMH Battery User Manual

Warning: You must read this instruction manual and understand it before starting to use this product! Improper use or improper charging may cause explosion or fire.

Thank you for purchasing a **ProTek R/C** Nickel Metal Hydride (NiMH) battery! NiMH batteries are robust batteries that are difficult to damage, and will produce hours of fun and enjoyment.

Care and Handling

- **NEVER** short the NiMH battery connectors! Handle all NiMH batteries with care. NiMH batteries can deliver extremely high currents if shorted and subsequently can cause fire or injury.
- Always store NiMH batteries in a secure location where children cannot reach them.
- Store your batteries in a cool, dry place. Do not leave your battery exposed to direct sunlight or temperatures below 32 degrees Fahrenheit (0 degrees Celsius), or above 122 degrees Fahrenheit (50 degrees Celsius).
- For long-term storage, NiMH batteries are best stored at 50% charge. Although for maximum performance, storing the batteries with a ZERO charge from one race weekend to another can produce higher voltages and performance.

Charging

- **DO NOT** charge the battery in your radio controlled model, as the batteries can get very hot during charging.
- Only charge NiMH batteries with a charger designed specifically for charging NiMH batteries. It is recommend that you NEVER use a timer based charger, but to always use a peak detection charger. Overnight trickle chargers are OK.
- Always charge NiMH batteries at or below 2C (or one times the rated capacity of the battery). If the battery is a 3000mAh battery, only charge the battery at current rates up to 6A! If you charge the batteries over 2C, you risk damaging the battery and shortening the life span.
- With NiMH batteries, a higher charge rate will produce more voltage, at the expense of capacity. For maximum capacity and life, especially for NiMH receiver and transmitter batteries, try to charge the batteries at no more than ½C, or half the rated capacity. You will get longer runtime from the batteries in this case.
- For race batteries, charging at a lower rate will get you longer runtimes, but at the expense of 'punch' off the line. We recommend charging race pack batteries at least 1.5C to 2C charge rates for best performance.
- Modern NiMH batteries may false peak on the first couple of charges, especially with entry level peak detection chargers. Usually you will want to set the peak detection to around 5mv for most modern NiMH batteries. If the batteries false peak constantly, try reducing the peak detection threshold.
- NiMH batteries do not have a memory effect, however it is recommend that you discharge the batteries completely before you recharge to 'cycle' the batteries, especially for race pack batteries. You do not need to fully discharge the battery completely before you recharge it, but you will get better performance and capacity from the batteries if you do.

Disclaimer and Warranty

All ProTek RC batteries are covered by manufacturer warranty against defects in materials and workmanship for three (3) months after original purchase date. Warranty will not cover batteries that have been modified, disassembled, or otherwise misused according to the included 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.