## **Battery Care**

## Use your battery carefully!

Dear battery owner,

the following things should help you to reach an optimized life span for your newly purchased battery.

A Lithium-Ion-Battery fundamentally ages in cyclic use if it is:

- 1. Fully charged
- 2. Fully Discharge

Therefor it is known that a Light User/Driver only should charge the battery if it is discharged for more than 60 to 80 %. Means better charge every two, three or four days only instead charging it daily. Because Lithium-Ion-Batteries have no memory effect like NiCd-Batteries and NiMH-Batteries have.

Heavy User/Driver on the opposite should charge the battery every day.

Low Temperatures are slowing chemical processes in general. This means for the battery that the charge efficiency for lower temperatures is reduced. In addition the battery ages more. So it becomes evident that a charging at temperatures below  $0^{\circ}$  C should be avoided.

High temperatures (above  $35^{\circ}$  C) also increase the aging. So it is not recommended to charge the battery in direct sunshine.

Placing out of operation means the storage of the battery without use, i. e. for several weeks. To have furthermore a good battery you should charge the battery only 50 % full and take it then out of the equipment for storage. The state of charge of 50 % is reducing the aging during the storage tremendously and avoids aging and capacity loss. Dry and cool storage is recommended. Until the battery has no connection with controllers and charger it cannot be discharged parasitically.

Another point of interest is cleanliness. Batteries should always be clean. Dirt and Dust can enforce leakage currents which discharges slowly the battery. Please only use clean dry or humid cloth for cleaning only. Never use solvents which can damage plastic parts of the battery.

ATTENTION: These information are not replacing the operating instruction! Terms:

Battery: Accumulator (Collector), means a secondary (rechargeable) battery.

Cycle use: The permanent discharge and charge oft he battery for motion purpose.

NiCd: Nickel-Cadmium

NiMH: Nickel-Metallhydrid