



Battery technologies

Basically, the following applies:

The better a battery is treated, the longer its lifespan. In newer LION batteries, this is optimized by electronic charging technologies to partially compensate for the significantly lower full charge cycles that are inherent to the technology.

With integrated deep discharge protection, LION batteries are protected from self-destruction due to deep discharge by means of a timely emergency shutdown. This is not technically possible with NiMH batteries.

NiMH batteries always need to be charged – a maintenance charge is also important during "overwintering". For professional applications, overnight charging is mandatory.

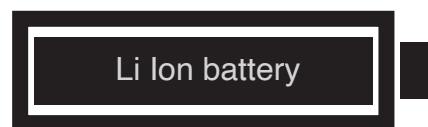
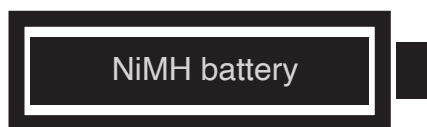
We know from practical experience that NiMH batteries are more resistant to aging, dropping, and other physical stressors.

Economically, NiMH batteries are useful when:

- high physical stress is expected
- a continuous charge is ensured

Economically, LION battery applications are worthwhile when:

- a continuous charge cannot be guaranteed (frequently changing employees/seasonal business)



PRO:

- + Charge cycles (7000)
- + Lifespan (60 months- high weight)
- + Robust
- + Mechanical insensitivity
- + Transport costs

CONTRA:

- low energy density
- no emergency shutdown during deep discharge

PRO:

- Energy density
- Weight
- Shutdown during deep discharge
- Electronically controllable

CONTRA:

- Charging cycles (1000)
- Aging, mechanical problems
Sensitivity (-> swollen battery)
- Lifespan (48 months)