

Batteries Used by E-Collar Technologies, Inc.

Lithium Polymer Technology is utilized in the 300TS, 302TS, 300TS-L, 302TS-L and BL-100 models.

Nickel Metal Hydrides are utilized in the 400TS, 402TS, 500A, 502A, 700A, 702A, 800A, 802A, 800TS, 802TS, 1200A, 1202A, 1200TS and 1202TS models.

300TS, 302TS and BL-100 Models

Lithium Polymer Technology:

A Lithium polymer battery is technically a lithium-ion polymer battery. It is very similar to the lithium ion battery but without some of the shortcomings. It can sustain a significant amount of abuse. For example a fully charged Lithium Polymer battery can be punctured with a nail without explosion or fire.

Lithium Polymer Storage Guidelines:

When storing for an extended period, store between 50° to 80°. Store at 40% of capacity, it is recommended not to store Lithium Polymer batteries fully charged. When bringing your unit out the first time after long-term storage it may take several cycles to achieve original performance.

Lithium Polymer Precautions:

Do not expose the battery to extreme heat.
Do not puncture or modify the battery or pack.
Charge only with chargers specified by E-Collar Technologies, Inc.

Einstein E-Collar™ Specifics:

The battery charge circuitry used by E-Collar Technologies, Inc. is optimized for Lithium Polymer batteries, no risk of overcharge, no risk of degradation if charged before fully discharged. We make our own battery packs and test each battery pack to strict performance requirements; we typically see a 20% failure rate during our test procedure. The bottom line is you can charge as often as you deem necessary without risk of damage or loss of battery life. It is important to discharge the battery to approximately half its capacity if you want to long term store your e-collar, do not store fully charged. You should get over 2500 hours of operation from the collar receiver and 3500 hours of operation from the transmitter before replacement of the batteries is needed. You can expect to get in excess of 500 charges before noticing degradation, at reduced capacity another 500 charges are expected. We provide a 5 Volt 1000 mA charger specific to our circuitry, please do not charge with any other charger. Both the receiver and transmitter batteries can be replaced by the user.

**400TS, 402TS, 500A, 502A, 700A, 702A, 800A, 802A,
800TS, 802TS, 1200A, 1202A, 1200TS and 1202TS Models**

Nickel Metal Hydride (NiMH) Technology:

The principles in which NiMH cells operate are based on their ability to absorb, release, and transport (move) hydrogen between the electrodes within the cell. The success of the NiMH battery technology comes from the rare earth, hydrogen-absorbing alloys used in the negative electrode. These metal alloys contribute to the high energy density of the NiMH negative electrode that results in an increase in the volume available for the positive electrode. This is the primary reason for the higher capacity and longer service life of NiMH batteries over competing batteries.

Nickel Metal Hydride Storage Guidelines:

Over time capacity and voltage of NiMH rechargeable batteries will decrease when stored or left unused. This is caused by a chemical reaction that takes place within the cells, commonly referred as self-discharge. The effects of self-discharge will be minimized if unused batteries are properly stored. Proper storage of NiMH batteries requires both temperature control and periodic charging at least once every 2 months. Temperatures between 40° and 70° degrees are best when storing NiMH batteries. The energy storage capability of a battery will be decreased if the battery is allowed to completely self-discharge. The effects of self-discharge can be corrected if the batteries are subjected to cycles of charging and discharging. On the initial charge/discharge cycle, the battery will achieve approximately 90% of rated capacity. Full capacity will be achieved on the second and third cycles.

Nickel Metal Hydride Precautions:

- Do not allow the battery to be fully discharged.
- Do not expose the battery to extreme heat.
- Do not charge in a location above 80° degrees.
- Do not puncture or modify the battery or pack.
- Charge only with the charger specified by E-Collar Technologies, Inc.

Einstein E-Collar™ Specifics:

The most important fact to know about Nickel Metal Hydride batteries is they do not like to be fully discharged, permanent damage may occur. It is best to charge them before the indicator light gets to yellow, every night is acceptable. Every 6 months it is good practice to let them run down to red and immediately charge them up. You should get over 2500 hours of operation from the collar receiver and 3500 hours of operation from the transmitter before replacement of the batteries is needed. We provide a 10 Volt 500 mA charger specific to our circuitry, please do not charge with any other charger. Both the receiver and transmitter batteries can be replaced by the user.

More Questions 1-855-326-5527
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