

## Recommendations for Maximizing the Lifespan of Lithium-ion Batteries

Lithium-ion batteries, like the ones used in all RTI rechargeable remotes, have a life expectancy dependent on several factors: temperature, state-of-charge, and the number and nature of charge/discharge cycles (typically 300 full to 500 partial). Based on your comments and questions, we have put together some guidelines to help both you and your customer maximize the lifespan of Lithium-ion batteries:

1. The simplest recommendation is that the customer put the remote back on the charging cradle at the end of each viewing/listening session. RTI incorporates smart technology in its chargers, which means the batteries only charge when the charge level drops to around 70%. Once the battery is fully charged, the light will either go off or turn blue, depending on the charger.
2. Lithium-ion batteries prefer several partial charges to one full/"deep" charge. If you have a cooperative client, you can extend battery life by instructing your client to only return the remote to the charge cradle when they receive a low battery indicator, available on all rechargeable products including the T1. To maximize efficiency, right click on the device in Integration Designer, select Properties, then adjust the low-battery indicator to High under the General tab.
3. Lithium-ion batteries should never be drained to empty. Once these batteries drop below a minimum (critical) level, they will not charge and cannot be recovered. If the battery will not be used for more than a month (e.g., vacation home), you should partially discharge the battery (40% charge level is ideal), turn off the internal power switch, and store the remote in a cool, dry place.

**Never store batteries empty or above room temperature.**

### **Additional information:**

As Lithium-ion batteries approach end-of-life, they begin to bloat. This is not dangerous, but should be taken as an indication that it is time to replace the battery.

A reminder that due to the usage-dependent lifespan of Lithium-ion batteries, RTI and Crestron both extend a three-month warranty on batteries.