Lithium-ion FAQs

What is a lithium-ion battery?

- A Lithium Ion (LiIon) battery is the most popular rechargeable battery technology used in consumer electronics.
  It creates energy by moving Lithium ions within the battery cell from a negative to positive electrode. It has achieved high use in consumer products because it is light-weight, low maintenance and has a high battery capacity allowing for long use after a short charge cycle. It is already used in many electronics like cellular phones, headphones, and tablets.

Why was it selected for a hearing aid system?

- Lithium-ion is an ideal battery for a hearing aid system because it allows for a full day of use even when streaming from accessories. There is no memory effect within the battery so it can be charged daily and there is no need to fully discharge the battery before placing it back in the charger. Additionally, it will last the lifetime of the hearing aid with several years of repeated charging.

Are there any special considerations for use and care?

- There are certain considerations for rechargeable batteries, but they are not considered exceptional as people are more familiar with rechargeable technology because it is widely used. Electronics with lithium-ion batteries should be placed in the correct charger with the correct voltage. Devices should not be charged at extreme temperatures. Charging should be done at temperatures between 0 and +40 degree Celsius (33-104 degrees Fahrenheit). The device can be worn if temperatures are outside of these limits.

Are there any special considerations for long-term storage if the hearing aids will not be used?

- Yes. If you will not be wearing your hearing aids for several weeks, it is important to take them out of the charging ports, press the rocker switch for three seconds so that they turn off and place them in the chargers' reservoir (where your earbud usually rests).

Is it safe to travel on an airplane with a lithium-ion rechargeable hearing aid?

- Yes, it is safe to wear these lithium-ion rechargeable hearing aids on a plane and to bring the charger on board. It is also safe to check the hearing aids and/or charger in your luggage. They have passed safety and quality tests and their size is below the allowed maximum.

- The limitations to having lithium-ion batteries in checked bags revolve around "uninstalled" lithium-ion batteries. Because both the charger and hearing aids have "installed" lithium-ion batteries the restriction does not apply.

- There is a watt hour limitation (100 watt hours) to check a lithium-ion battery as well. The Synergy rechargeable system is within these limitations making them safe to carry-on or check on an airplane.

Can I ship my lithium-ion rechargeable hearing aids?

- Shipping regulations can change so the best action would be to check with the post office on the current requirements for your exact shipment.

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What if my battery doesn't last all day?

- If your charger indicated a fully charged hearing aid in the morning when you inserted your hearing aids and it did not make it through your day on more than one occasion, you should consult your professional. This hearing aid should last a full day with streaming and should be evaluated if it does not.

Will my lithium-ion battery last longer if I don't charge it every night?

- Unlike NiCad batteries, lithium-ion batteries do not have a charge memory. That means deep-discharge cycles are not required. So the best practice is to charge your hearing aids every night and unplug your charger when not charging.

Will the battery deteriorate after a year?

- No, the performance has been calculated to ensure that your battery will last at a minimum three years.

How do I dispose of my lithium-ion rechargeable hearing aid?

- Your local community laws may require that your hearing devices and charger be disposed of via your local electronics recycling/disposal process.

Reference

- www.batteryuniversity.com