

# FAQs – ZPower Rechargeable System for Hearing Aids

- z How long do ZPower batteries last between charges?

ZPower batteries provide all-day continuous power, even in advanced hearing aids with moderate streaming.

- z I understand the ZPower Silver-Zinc Rechargeable battery has a higher voltage than zinc-air batteries. Does the higher voltage have an effect and impact on the performance of the hearing aid?

The ZPower Rechargeable System regulates the silver-zinc battery voltage to operate in the same range as zinc-air and the rechargeable Nickel-Metal Hydride (NiMH) batteries used by some manufacturers. Therefore, there is no change in the behavior of hearing aid processors. Independent lab testing of hearing aids from all six of the major hearing aid manufacturers was conducted by the hearing aid research labs at the University of Pittsburgh and James Madison University.

The electroacoustic testing confirmed electroacoustic performance is unaltered. ZPower verified this behavior during field trials with large independent clinics and hospitals and at the hearing aid research labs at Vanderbilt University Bill Wilkerson Center. Third-Party testing Lab Delta, located in Copenhagen Denmark, was the final testing phase which also showed that the ZPower system yielded the same results when using the two different types of batteries.

- z How is the ZPower Rechargeable System used with existing hearing aids?

Attaching ZPower's door is as simple as replacing a broken door and can be performed by hearing care professionals at their office. Our door opens and closes the same as the original door and retains compatibility with zinc-air batteries, should you forget to charge your hearing aids. Watch our videos to see how quick and easy it is to make hearing aids rechargeable.

- z How long do ZPower batteries last before they need to be exchanged?

ZPower batteries will last for about a year. Your Hearing Care Provider will provide a new battery to you when it is time.

z How long does it take to fully charge a ZPower battery?

The ZPower Rechargeable System has a smart charger that knows how much the patient discharged their batteries. Based on how long the patient wears their hearing aids and the type of streaming they utilize, it will take up to 7 hours on average for a fully recharged battery.

z Can disposable batteries be used with the ZPower System?

Yes, they can! Should you forget to charge your hearing aids or take your charger during travel, you can remove the ZPower batteries and replace them with zinc-air batteries. Just remember to store your ZPower batteries in a safe place and not throw them away!

z Do ZPower batteries change the way hearing aids operate?

No, there will be no negative impact on the hearing aid. The battery, door and charger have been thoroughly tested by ZPower and highly respected testing laboratories to verify compatibility with your hearing aid.

z Will the patient still have a low battery warning signal if the ZPower silver-zinc battery needs to be charged?

ZPower's Rechargeable System is designed to make the silver-zinc battery appear to be a zinc-air battery to the hearing aid, thus the low battery warning works as intended.

z What is the ZPower Rechargeable System?

The ZPower Rechargeable System allows for many of today's hearing aids to be made into rechargeable hearing aids by simply swapping out the battery door. The System consists of two battery doors containing electronics, two rechargeable batteries and a charger.

z Why do I need to change the battery door?

The battery door contains electronics that enable recharging of the battery. They also regulate the voltage of ZPower silver-zinc (AgZn) batteries to operate in the same range as zinc-air and nickel metal hydride (NiMH) batteries.

z What happens if I forget to charge my hearing aids?

Hearing aid wearers will still be able to use traditional disposable zinc-air batteries with the ZPower Rechargeable System. Patients can simply replace the batteries by opening the battery door as they normally would.

z Is there a cost savings to our patients if they use the ZPower Rechargeable System as compared to disposable zinc-air batteries?

The patient will need to make the initial purchase of the ZPower System, which includes battery doors, charger and the rechargeable batteries. After this purchase, the patient will replace the battery once per year. The cost of the annual battery is less than the annual cost of disposable batteries. When comparing a single ZPower rechargeable silver-zinc battery to a single disposable zinc-air battery, there are significant savings to the patient and the clinical practice. A single rechargeable battery will last for one year and will be equivalent to an estimated 100 disposable zinc-air batteries.

z Since patients will be able to store their hearing aids in the ZPower charger when they are not in use and the battery door will rarely be opened and closed, is there risk of corrosion that could cause damage to hearing aids?

TÜV Rheinland is an independent testing company widely used by the hearing aid manufacturing industry to evaluate product performance. ZPower batteries have passed U.S. and International battery safety standards UL2054 (UL Standard for Safety for Household and Commercial Batteries) and IEC62133 (International Safety Test Standard for Batteries).

In addition, ZPower has conducted extensive corrosion testing with hearing aid manufacturers and the results confirmed that corrosion and moisture will not be a problem for patients. Similarly, with regard to swelling, the ZPower batteries always remain below the IEC mandated levels during operation (charging and discharging). When the hearing aids were tested for IP ratings, the ZPower Rechargeable System met each of the claimed ratings from all hearing aids tested.

z Is there an environmental advantage to the silver-zinc battery?

A single ZPower silver-zinc rechargeable battery will take the place of an estimated 100 zinc-air disposable batteries, will last an entire year and is recyclable. This is a positive contribution to the environment by professionals and their patients. Currently, it is estimated that 800 million to 1 billion disposable zinc-air hearing aid batteries are used in the U.S. annually and 1.5 billion globally. These disposable zinc-air hearing aid batteries are sent to the landfill every year.

z Can I use an active drying system for hearing aids with ZPower batteries?

Active drying systems may have temperature ranges that exceed the recommended rechargeable battery operating temperature, which can reduce the life of the battery. Therefore, when using an active drying system, the batteries need to be removed from the hearing aids prior to drying. For this reason, a ZPower compatible dryer system will be released to the market in late 2018. The dryer system will work with any ZPower charger and the system will provide charging, active drying and a UV light for a complete all in one system.