

# Rechargeable Hearing Aids

No more changing batteries

By Pat Fournier

There are several companies now producing hearing aids with rechargeable batteries, and each has their strengths and weaknesses. Of the "Big 6" manufacturers, Signia (formerly Siemens) has been doing it the longest, with three levels of technology available in their Primax product line. Prior to November, 2016, their rechargeable battery was based on nickel metal hydride, and has been around for several years. The technology was adequate for most people, but for some the charge wouldn't last through the end of the day, which is a weakness in this system. The batteries themselves were guaranteed for a year, but we also found that they didn't quite last a full year. Signia would replace them if they failed prior to twelve months. One advantage of this system is that the batteries are "field changeable", and if a battery failed you could use a traditional zinc air battery if you were in a pinch or went on a trip and forgot your charger.

In November, Signia introduced a new rechargeable system called "Cellion", based on Lithium Ion. The advantage of Lithium Ion is that the batteries last significantly longer (easily more than 24 hours on a charge, and overall life of 3-4 years). One disadvantage is that the battery is built into the hearing aid, so if for some reason it does fail or truly hits the 4-year mark and needs to be replaced, the hearing aid must be sent back to the factory for battery replacement. This would be considered a repair resulting in an expense up to 300.00. Indeed, it's the policy of the manufacturer to always replace the battery if the aid is sent in for repair, whether it is battery-related or not. A good rule of thumb for Lithium Ion hearing aids, therefore, is get a long warranty. Additionally, the battery is built in if you forget your charger you can't substitute traditional zinc air batteries.

Phonak also introduced this type of rechargeable in August of 2016 in their "Audeo B-R" product line, making them the first to the market with it. The design parallels Signia, with the battery lasting up to 30 hours on a charge, overall lifespan of 3-4 years, and the aids must be sent to the factory should a battery fail or become exhausted. One innovation that Phonak introduced was an additional "Power Pack" that can be attached to your charger for when an electrical outlet isn't available (like when you're camping). This power pack can provide up to seven additional charges, or essentially a week's worth of back-up, and can be re-used. Initially only available for Phonak's line of receiver-in-the-ear products (Audeo), at the end of February they launched a traditional behind-the-ear model (Bolero) with the same rechargeable system.



The most recent introductions for rechargeable hearing aids, however, come from Unitron, GN Resound and Oticon, and hold some high promise of combining the best of both worlds. Partnering with a company named "Z-Power", they both utilize an updated version of the nickel-metal hydride system but with improved overall battery charge and lifespan. The promise is for at least 24 hours of use and longer than a year for overall lifespan. Time will tell if they've really accomplished this, but it does allow for the use of traditional zinc-air batteries as well.

One innovation specifically from Unitron is that patients who had been previously fit with their line of "Moxi Fit" instruments can actually be retro-fit with the rechargeable system, making it available to those who have previously purchased and aren't ready to replace their hearing aids. The estimated cost to retro-fit the instruments would be in the \$300 - \$500 range. Since this system is based on the Z-Power design, Starkey could also offer such a solution but I am unaware if they are offering this at this time.

Returning to the original question of "which company makes the best rechargeable hearing aids", the question is actually much bigger than just the battery system. Once you've decided which approach is more important to you--Lithium Ion or nickel-metal hydride--then other factors still come into play as to **what is the best hearing aid for you**. Your choice shouldn't be based solely on the rechargeable aspect, but which product performs best in background noise, which one has the most reliable Bluetooth interface, which one has the best sound quality for music, etc. At our office we have definitely noticed a difference in these areas, which influences our overall recommendation--including some brands or models that do not include a rechargeable option. Take everything into consideration when making your choice for better hearing.

If I had to choose, I'd pick the Unitron/ZPower solution because I'd be likely to forget to charge my aids overnight. That said, remember, when you're looking for a hearing aid, keep your eye on the ball. Spend your money on the solution that allows you to understand your spouse's voice at the restaurant. The payoff from better hearing will always be more significant than saving the 30 seconds and \$0.50 / week it takes to change your batteries.