



THE SCIENCE & TECH BEHIND REDUX PRODUCTS

From artificial intelligence to lithium-ion rechargeables, hearing aids have evolved tremendously over the past decade. However, there is still one thing that can stop all hearing aids from functioning – moisture.

Hearing aid manufacturers have certainly tried their best. Nano coating, better case sealing, and other manufacturing innovations have led to significant progress in reducing moisture, and reliability rates have increased. But as of now, it seems like electronic devices continue to be vulnerable to humidity and moisture.

Hence, moisture issues continue to be a common complaint among hearing aid users:

98% of hearing aids right now have moisture in them.

Over 60% of out-of-warranty repairs are related to water.

Moisture results in hearing aid issues. They may not turn on, or the sound might be distorted. This leads to 67% of hearing aids having to be returned multiple times after the warranty has expired, at an average repair cost of \$250 per repair.

Fortunately, there is another option.

REDUX DRYERS

With the push of a button, our Redux drying machine provides a complete moisture removal for your hearing aids. Our recent study of hearing care professionals reported moisture was removed from 98% of treated hearing aids, with functionality improving by 77%; this data was based on thousands of dries.

WE'VE GOT DRYING DOWN TO A SCIENCE

Redux makes use of a patented technique to maximize the removal of moisture from treated devices. It combines vacuum drying to vaporize liquid at a low temperature, quickly and safely.

As any science teacher will happily tell you, water boils and evaporates at 212 degrees at sea level. But as atmospheric pressure reduces, the boiling point of water will be lowered too.

The Redux vacuum system works by removing air pressure from the chamber. This reduces the atmospheric pressure to below body temperature, allowing any moisture to boil and evaporate at a lower temperature.

HOW REDUX DRIES YOUR HEARING AID

1. Your hearing aids are put inside a chamber made of the moisture-resistant aluminum casing. Rubber silicone straps keep your hearing devices secure.
2. Once the lid is closed, the Redux hardware creates a vacuum, lowering the evaporation point of any moisture inside your device to room temperature.
3. Once the right pressure is achieved, a heating pad distributes heat to facilitate moisture evaporation. Redux safely applies controlled heat to your hearing instrument to speed up the evaporation process without any danger of damaging your devices. Moisture evaporates from the sensitive internal components of your hearing aids!
4. Redux's internal humidity sensor measures the amount of moisture removed. If more moisture needs to be removed, Redux will begin the process again.
5. The process is repeated until the sensor measures that the hearing aid in the chamber is completely dry.
6. Lastly, Redux verifies the amount of moisture visually removed and produces a printout for your reference.

For most hearing aids, this process of extraction of moisture takes about 8 minutes with the simple push of a button.

Nationwide, more than 2 million customers have subscribed to Redux's drying services to dry a wide range of electronic devices, from smartphones to cameras and tablets. Now, this technology is set to improve the lives of the millions of people who rely on hearing aids every day.

If you're interested in trying Redux for your hearing aids, ask your hearing care professional about whether they offer Redux.

