

How long does a hearing aid battery last?

The size of the battery

Hearing aid batteries come in different sizes; the bigger the battery, the more fuel available. We can describe their capacity in milliamp hours "mAh".

The approximate capacity of hearing aid batteries is:

675	(blue)	560 mAh
13	(orange)	270 mAh
312	(brown)	170 mAh
10	(yellow)	95 mAh

How much energy the battery draws

Hearing aid manufacturers can advise how much energy (current) they draw from a battery. An aid of moderate power may draw a current of 1 - 1.5 milliamps.

So, if your aid draws 1 mA and your size 13 battery has a capacity of 270 mAh, in theory you could get close to 270 hours of use.

Powerful aids take larger batteries because they may make greater demands on the power supply. Powerful aids may draw currents of 2-4 mA from a battery.

With the advent of digital amplifiers, hearing aids have become more efficient. Their current use does not vary as much as some analogue amplifiers did. If your hearing aid is performing extra functions eg: you are streaming Bluetooth signals or you are driving an FM receiver with the hearing aid battery, then less life can be expected from the battery.

A build-up of moisture in the hearing aid's speaker can lead to a drop in impedance of the speaker, and as a result, it may draw more current from the battery, reducing battery life.

For most hearing aids, you will not "save your batteries" by turning the aid down. Current consumption is relatively independent of volume setting in modern aids.

Hearing aid batteries are of the "Zinc-Air" type. They have a tab on their +ve pole which seals the cell until it is needed. A sealed battery may lose up to 10% of its capacity each year.

Once the seal is removed, oxygen is allowed into the battery to activate it and to keep the electro-chemical reaction going. Once the tab is removed, the battery has only a limited shelf-life of a few months. As a consequence, a person who uses their hearing aid for many hours a week may get better value from their batteries than someone who uses it less.

Users of "Dry Kits" for their hearing aids are aware that it is advised to remove the batteries from the aids when putting them in the drying container. This is not for reasons of safety, rather, to prevent the electrolyte in the battery from "drying out", increasing the internal resistance, thereby reducing the power available. Some brands may be more susceptible to drying effects than others.

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