# Users report a brilliant sound experience with ReSound LiNX Quattro

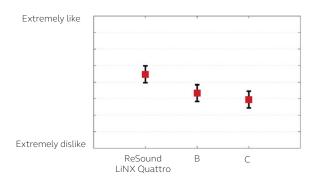
ReSound has worked closely with Delta Senselab, an independent laboratory that specializes in performing listening tests, to develop a structured methodology for perceptual evaluation of hearing aid sound quality. Important characteristics of this method are that common biases are eliminated, and that it helps overcome limitations in auditory memory. Using this design, it is possible to supplement informal, subjective reports of sound quality to ensure that goals of excellent sound quality are met.

Three experiments were carried out to examine different ways in which ReSound LiNX Quattro

different ways in which ReSound LiNX Quattro provides superior sound quality. Participants were adults with moderate hearing loss who were specially trained in the assessment methodology. Premium hearing aids from other manufacturers were included to provide an industry benchmark.

# **EXPERIMENT 1: GENERAL SOUND QUALITY**

Participants ranked the sound quality for a variety of different sound scenarios from "Extremely like" to "Extremely dislike". The rankings for all sound scenarios were the most consistent for ReSound LiNX Quattro, indicating that sound quality has little dependency on the type of sound. When three very different sound scenarios were considered (speech, traffic noise, and percussive music), ReSound LiNX Quattro was ranked significantly higher than the two other premium hearing aids that were tested.



## **EXPERIMENT 2: SOUND QUALITY FOR MUSIC**

Music is a challenging type of sound for hearing aids to amplify greater signal dynamics, because of the frequency range and the tendency to listen to music at higher volumes than other sounds. As such, music can serve as a proof point for sound quality. Participants in this experiment performed paired comparisons of pop music amplified by ReSound LiNX Quattro and two other premium hearing aids. Nine out of ten preferred ReSound LiNX Quattro over hearing aid B.

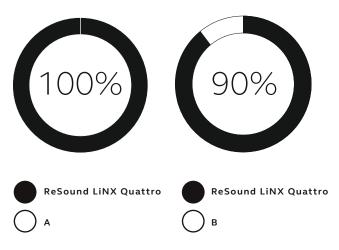


Figure 2. All of the test participants preferred Resound LiNX Quattro over hearing aid A for music listening. Nine out of 10 preferred Resound LiNX Quattro over hearing aid B.



# **EXPERIMENT 3: SOUND QUALITY FOR STREAMING**

Participants in this experiment listened to streaming of various sounds from an iPhone to ReSound LiNX Quattro and other made for Apple (MFi) hearing aids, as well as sounds streamed via proprietary TV streamers. Similar to Experiment 2, paired comparisons were made.

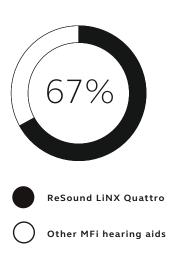


Figure 3. Overall, participants preferred the sound quality of streaming from the iPhone with ReSound LiNX Quattro over other MFi capable hearing aids.

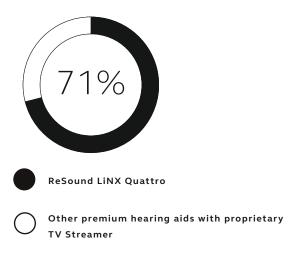


Figure 4. Participants preferred sound quality streamed sound with ReSound LiNX Quattro and the TV Streamer 2 over other premium hearing aids and their proprietary TV streamers.

### CONCLUSIONS

Participants in field trials with ReSound LiNX Quattro have praised this advanced hearing aid for its excellent sound quality. These reports were corroborated via an unbiased, structured method for evaluating sound quality using trained, hearing impaired participants. Compared to other premium hearing aids, ReSound LiNX Quattro was assessed as better than others for a variety of sound stimuli, and was significantly preferred when music was the test sound. For streaming, ReSound LiNX Quattro was significantly preferred compared to the industry average for both streaming from an iPhone and from the manufacturer's proprietary TV streamer.

