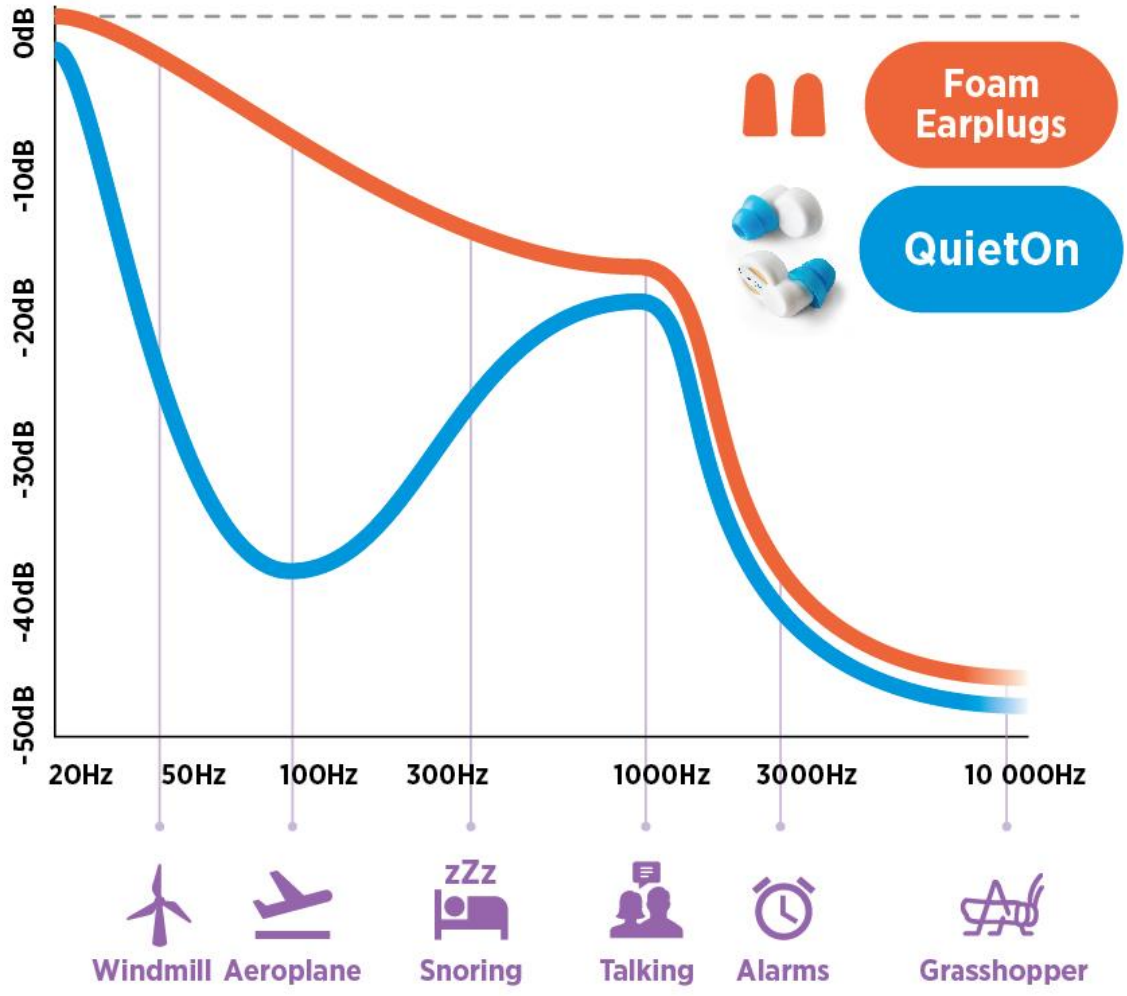
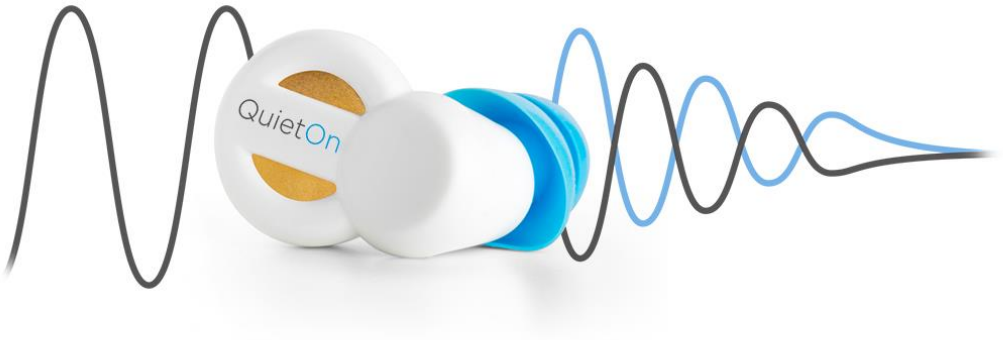
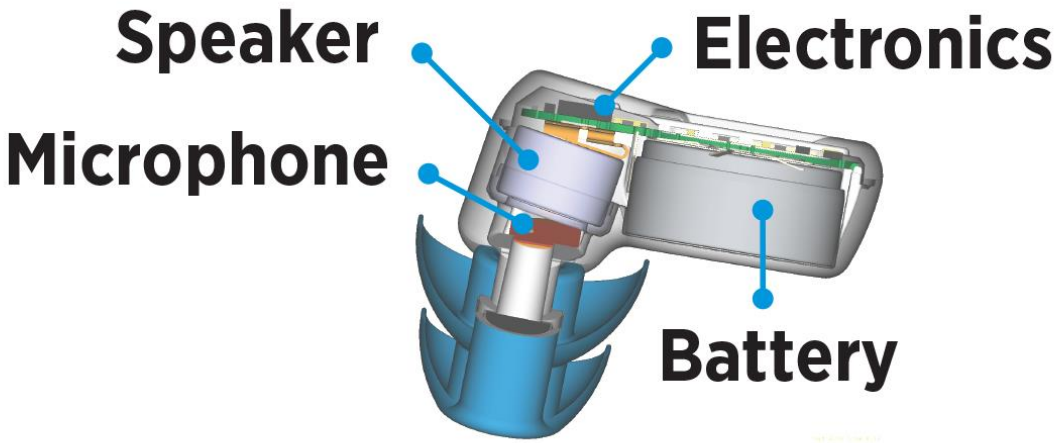
How QuietOn Works

QuietOn earplugs combine the advantages of in-ear passive earplugs with active noise cancelling, providing optimal noise reduction across the whole audible spectrum, especially effective at these low frequencies. This makes QuietOn ideal for use in a variety of noisy environments. Traditional earplugs use passive attenuation to reduce the level of sound entering the ear. Whilst they are good at blocking high frequency sound, they are quite poor at reducing low frequency sound, especially below 200 Hz. Such low frequency sounds include airplane noise, traffic noise, snoring, music coming through the wall, environmental noise from industrial sites and engine noise from a motor vehicle.





Active noise cancelling uses a microphone to sample the sound, and a speaker to create a phase-shifted sound that cancels the original sound.



In full-size on-ear noise cancelling headphones the microphone element is located outside the ear. However, in QuietOn, the microphone that samples the sound is located right inside the ear canal! This means that QuietOn can more accurately produce anti-noise that results in good noise cancellation at the ear drum. By locating the microphone in the air volume of the ear canal, QuietOn is also able to reduce noise that is conducted by the skull into the ear.

Frequently Asked Questions

Q: What comes in the box?
A: You will get a pair of earplugs with two changeable silicone tips, which are designed for bigger and smaller ears. You will get a carrying case that works as a charging case. Charging can be performed with a normal micro USB cable connected to a charger or computer. A charger and USB cable are not included in the sales package.

Q: If you compare QuietOn earplugs to other similar kind of products, how competitive is the product's noise cancelling performance?
A: We have tested competitors' devices in our laboratory and also compared with results published on testing sites. We have not found any noise cancellation devices that have better performance than QuietOn.

Q: For what kind of noise situations is the product designed for?
A: The passive part of the noise cancellation works as an old fashioned passive earplug. In addition to that we have active noise cancellation, which is very effective at attenuating noise below 1 kHz in frequency. Some examples of this low frequency noise are music or traffic sound coming through the walls, engine sound or snoring.

Q: What are the QuietOn's earplug's benefits compared to normal earplugs?
A: Normal earplugs are comfortable, but unfortunately they are not able to block low frequency noise. QuietOn is the only device that can block low frequency noise and still be used whilst sleeping with the head on pillow.

Q: Can I listen to music with QuietOn earplugs?
A: No. The earplugs are intended for making silence, safely. There is no Bluetooth or any other radio connection and music playback is not supported.

Q: Is QuietOn able to minimize the effects of tinnitus (ringing inside the ears)?
A: Staying in a noisy environment might make tinnitus worse afterwards. Therefore, we think QuietOn with its good noise reducing capabilities can work as a preventive action. On the other hand, tinnitus becomes more noticeable in silence, so the earplugs might not help if your ears are already ringing. QuietOn isn't able to turn tinnitus off because according to our understanding it isn't real noise but an error signal inside the head.

Q: How do I insert and use the QuietOn earplugs correctly?
Click the image to see a bigger sized version.