Phonak Wireless Fact Sheet

Phonak Belong™ wireless hearing aids

This fact sheet summarizes some helpful information and is directed to wearers of wireless-enabled Phonak Belong* hearing aids and their related accessories. These hearing aids have a built-in 10.6 MHz wireless chip. If you are not sure whether your hearing aid is based on a wireless chip technology, please contact your hearing care professional.

*Does not include Audéo B-Direct hearing aids

Wireless Capabilities

Phonak is able to offer a host of revolutionary hearing aids that respond intuitively to your surroundings and give you complete control and access to communication and multimedia devices. Wireless hearing aids have the ability to not only function as separate hearing aids, but can also function as a system. This means that your hearing aids can wirelessly transmit data to each other and receive signals from common electronic devices such as cell phones or MP3 players and Phonak wireless accessories.
The wireless connectivity has been designed specifically for communication purposes, particularly taking into account all-day use. The chosen technology for the data transfer between hearing aids is a coded digital electromagnetic field. Low-level electromagnetic fields are common to everyday equipment such as televisions, telephones, computer monitors and other consumer electronics such as mobile phones.
In every country where wireless hearing aids and accessories are sold, they must meet local regulations based on certified measurements. For example, in the United States they meet Federal Communication Commission regulations and in Canada, they meet the ISED Canada applicable regulations. In Europe, Phonak wireless hearing aids and wireless accessories are in conformity with the European regulations.

Technical data for a wireless hearing system

The transmission frequency is 10.6 MHz with a bandwidth of approximately 500 kHz. This frequency was chosen to be able to support the transfer of complex broadband data with virtually no interference. The magnetic field intensity needed for hearing aid wireless communication purposes is low as they are placed on the ears in close proximity to each other. The magnetic field strength of the hearing aids is < 4 dB A/m at 1 m. This magnetic field strength is far below the international maximum values and less than the field strengths of other everyday equipment such as computer monitors, dishwashers and halogen lamps.
Specific Absorption Rate (SAR) is the widely accepted, scientific measure used to characterize the amount of radiofrequency energy absorbed by the body. For example, in the Unites States, the limit adopted by FCC for mobile phones is that their SAR levels may not exceed 1.6 Watt per kilogram (W/kg).
In Europe, the European Union Council has set a SAR limit of 2.0 W/kg. The typical SAR rating emission of a mobile telephone ranges from 0.3 to 1.5 W/kg. Tests and the calculated maximal power showed that the wireless hearing aids are exempted from the Specific Absorption Rate (SAR) evaluation which also shows that the hearing aids fall significantly below the recommendations from both the European Commission and the United States.

Commonly asked questions

Is the wireless link always stable, or will it be interrupted in certain environments?
As the wireless technology works with a specially coded inductive signal and a dedicated frequency, the risk of interference is small. Due to the fact that all radio transmissions can be disturbed by other electromagnetic fields, you may experience interference in areas with strong electromagnetic fields (around high-power electronic equipment, larger electronic installations).

Are the wireless hearing aids and wireless accessories compatible with implantable devices?
The field strengths with wireless hearing aids are very low and nearly immeasurable. For comparison, hearing aids operate with much lower field strengths than some other everyday electronic devices such as mobile phones. However, for persons with implantable devices, such as a pacemaker or cardioverter defibrillators, the following is applicable:

• Keep the hearing aids and wireless accessories at least 15 cm (6 inches) away from the active implant.

• If you experience any interference, do not use the wireless hearing aids and the wireless accessories.

• Do not use the device in explosive areas (mines or industrial area with danger of explosions, oxygen-rich environments or areas where flammable anesthetics are handled) or where electronic equipment is prohibited.

• Tests that Phonak conducted showed that no interferences with the implantable devices (e.g. pacemakers, defibrillators, etc.) were caused that would impact the safe and effective use of the Implantable devices. Users of implantable devices should contact their doctor and/or the manufacturer of the implantable device before they start using a Phonak device. Stop using the Phonak device if any influence of the Phonak device on the implantable device is experienced and contact the manufacturer of the implantable device for advice.

Are there any risks from using wireless hearing aids all day, every day?
The amount of radio frequency energy to which the body is exposed is so little, that there are no foreseen risks in the continual use of wireless hearing aids for a full day.

Can I use my wireless hearing aids on an airplane?
Yes, if not explicitly requested from the cabin personnel to turn off electronic devices like hearing aids. The magnetic field strength of wireless hearing aids is so minimal that they will not disrupt or have any effect on airplane controls or navigation.

Can I use my wireless accessories on an airplane?
No, wireless accessories such as the Roger Pen, Phonak ComPilot and Phonak RemoteMic, should not be used on an airplane.