Bluetooth and Hearing Aids

By Pat Fournier BC-HIS

These days more and more municipalities are passing ordinances requiring hands free telephone conversations while driving. If you wear modern hearing aids you have no problem.

Bluetooth hands free sound can be piped into your hearing aid with streamers supplied by all the major manufacturers' of hearing aids. Siemens, Phonak, Oticon, and Rexton all have direct Bluetooth connection systems available for their latest hearing aids. Starkey will have a system soon.

Starkey's NEW Surf link Mobile

These systems cost some where from $175 to $500. Though expensive, they are nonetheless very effective.

The devices come in two styles one is remote and the other is a remote known as a streamer with an antenna attached.

Because of the costs involved and because there are many older hearing aids on the market that can't receive direct Bluetooth input,

Phonak's S Link

we went looking for a universal system as well; one that wouldn't cost so much.

We found a system from Quattro which receives a Bluetooth signal and radiates a traditional analog induction loop signal. Analog induction loops send a signal to a "T-coil" in a hearing aid. T-coils have been used in hearing aids since the 1940's and were placed in all power hearing aids for years.

A "t-coil" is a magnetic input receiver that is used to pick up a telephone input from the magnetic diaphragm of the telephone. For telephone use, the t-coil input is preferable to microphone input so that the hearing aid doesn't whistle or feedback when someone talks on the phone. A loop system actuates a weak magnetic field with a vibration that is picked up by the t-coil in the hearing aid. These loop systems have been used extensively in Europe for 50 years in public places.

We have a loop system connected to our TV in our office to demonstrate how the loop system works for general transmission. Now we have a way to implement this traditional system for Bluetooth telephones, even for older hearing aids.
A problem with analog loop systems is that other sources of radiation like a CRT screen or florescent lights can cause a "buzz" in the signal heard. Because of this, the direct Bluetooth connection is more problem free and more desirable. For most applications though, analog systems work just fine.
So now, if you have hearing aids, you can talk hands free in the car any time you want to.

You could be like the gentle man above with the new hands free or you could McGiverize it as this gentleman has done.