

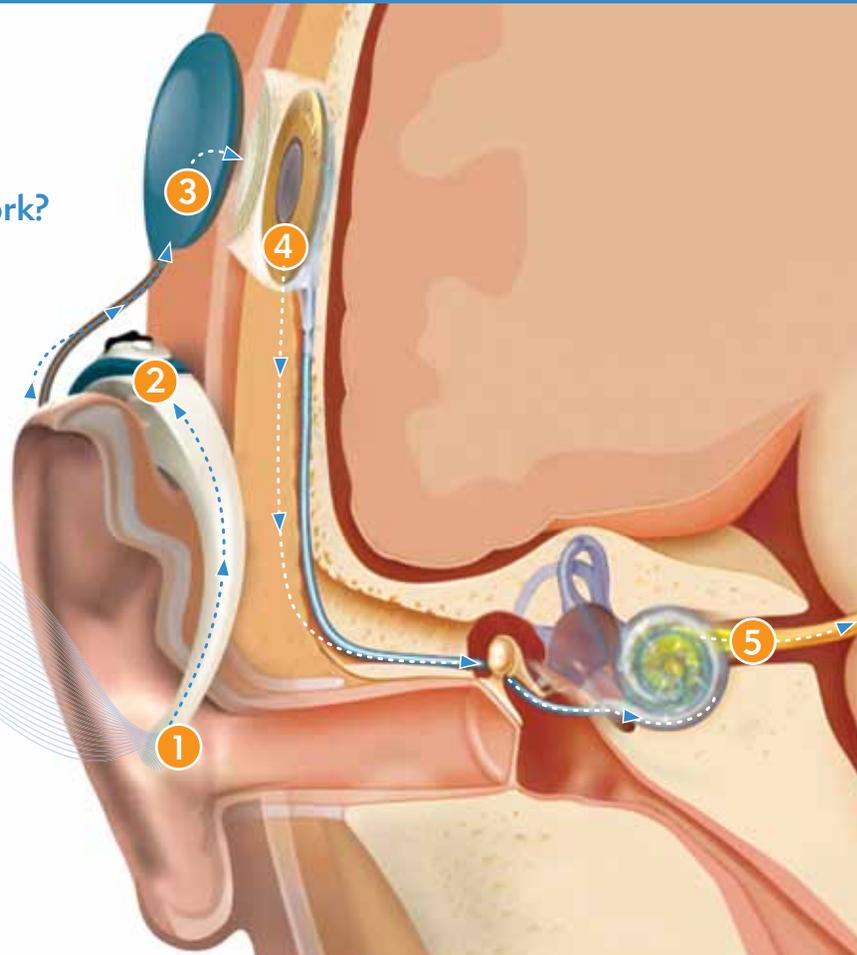


Hear Your World with Harmony®

Hear what you've been missing

How does the Harmony cochlear implant work?

- 1 Sound is captured by the **T-Mic® microphone** on the sound processor
- 2 The **Harmony sound processor** converts sound into detailed digital information
- 3 The magnetic **headpiece** sends the digital signals to the cochlear implant
- 4 The **cochlear implant** sends electrical signals to the hearing nerve
- 5 The **hearing nerve** sends impulses to the **brain**, where they are interpreted as sound



Behind-the-Ear Processor



Body-Worn Processor



Implant



Close-Up of Electrode Array



What Is a Cochlear Implant?

A cochlear implant is an electronic device that allows many people who've experienced hearing loss to hear better. For those who've never heard before, they experience hearing for the very first time. It's different and better than a hearing aid, which merely amplifies incoming sound to make it loud enough for an impaired ear to hear.

Using state-of-the-art technology, a cochlear implant bypasses the damaged part of an ear and sends electrical signals directly to the brain via the hearing nerve. Cochlear implants are currently the only medical technology able to functionally restore one of the five senses, causing many physicians to refer to cochlear implants as "technological miracles."

Color Covers and Headpiece Caps



Choosing Cochlear Implants



For many people with mild to moderate hearing loss, hearing aids are a viable, less-intrusive solution for improved hearing. But if you or your loved one has a severe to profound hearing loss, cochlear implants may be a much more effective alternative. That's because, if your inner ear is not functioning correctly or has suffered extensive damage, it doesn't matter how much conventional hearing aids amplify sound—you simply won't hear it.

Many recipients of Advanced Bionics' Harmony® HiResolution® Bionic Ear System report **being able to hear clearly even in noisy environments** like restaurants or sporting event venues. They also state that they can **clearly hear music and conversations** over electronic devices like MP3 players, mobile phones, and airline headsets.

Children Have Special Hearing Needs

Children begin learning to speak from the day they're born. By age three, they need to hear approximately 30,000 words a day to develop the language skills necessary to succeed in school. This need to hear language strongly reinforces the importance of early implantation in children with deafness or hearing loss who would benefit from cochlear implants.¹

For children one year of age or older who are not receiving enough benefit from conventional hearing aids, cochlear implants are an excellent choice. They need to hear the words, inflections, and patterns essential for developing strong speech skills. Because cochlear implants allow children to hear better in the classroom, implanted children get the same opportunity for academic success as their fellow students with normal hearing.

1. Hart B, Risley TR. (1995) *Meaningful Differences in the Everyday Experience of Young American Children*. Brooks Publishing Co, Inc., Baltimore, MD.

Are You a Candidate for Cochlear Implants?

- I have difficulty following conversations without lip reading. Yes No
- I hear pretty well in quiet environments, but struggle in noisy environments or when in a group. Yes No
- I cannot follow most telephone conversations, especially if I don't know the person calling. Yes No
- I feel isolated and limited, both socially and occupationally, because of my hearing loss. Yes No

If you answered "Yes" to any of these statements, you may benefit from cochlear implants.

Is Your Child a Candidate for Cochlear Implants?

- Does your child have delayed speech and language development as a result of his or her hearing loss? Yes No
- Does your child rarely respond to his or her name? Yes No
- Does your child avoid social interaction or lack the appropriate skills to interact with other children or adults? Yes No
- Do you have concerns about your child's ability to hear speech in noisy environments? Yes No
- Do you have concerns about your child's ability to participate and succeed in school with normal-hearing peers? Yes No

If you answered "Yes" to any of these statements, your child may benefit from cochlear implants.



To find out if you or your loved one is a candidate for cochlear implants, contact the Bionic Ear Association at **866.844.HEAR (4327)** or visit their website at **www.BionicEar.com**

