family
Hear Your World

Whether you or your child is a cochlear implant candidate, Advanced Bionics knows that you have hopes and dreams for the future. You want to reconnect with loved ones, contribute your talents at your workplace, and understand conversations at a restaurant. You want your child to attend mainstream schools, laugh with their grandparents at the park, and make new friends at the playground.

The miracle of hearing with a cochlear implant connects you or your child with the joys of life—now and in the future.

When Advanced Bionics entered the cochlear implant industry, recipients could understand environmental sounds, could read lips better, and a lucky few could understand some voices. Today, many adult recipients talk on the telephone with ease and many children implanted at an early age enter typical classrooms with their normal-hearing peers by the time they reach kindergarten. We're proud to bring the vibrant world of hearing to thousands of families across the globe.

When you choose AB to hear your world, you choose...

- The most advanced hearing technology available today
- Future access to the industry’s top hearing technology with upgrades
- To be part of the largest hearing healthcare solutions company
- Committed customer service when you need it
- A support network dedicated to your family for life
What is a Cochlear Implant?

A cochlear implant is an electronic device that allows many people who have experienced hearing loss to hear better. And for many who have never heard before, they experience hearing for the very first time. It is different than a hearing aid, which 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, which is why many physicians refer to cochlear implants as “technology miracles.”

What is a Cochlear Implant System?

A cochlear implant system consists of two main components. The external component, the sound processor, which can be worn on the outer ear or on the body, and the internal component, the implant, which delivers sound to the hearing nerve.
How Hearing Works

A. With a Normal Ear
1. The outer ear collects sound waves that pass through the air.
2. The sound waves vibrate the eardrum and the three tiny bones in the middle ear.
3. The vibrations move the tiny hairs of the sensory cells in the inner ear.
4. Sensory cells convert the vibrations into electrical signals that are sent to the hearing nerve.
5. The signals travel up the nerve and into the brain, where they are interpreted as sound.

B. With a Bionic Ear
1. The sound processor microphone captures sound waves that pass through the air.
2. The sound waves are converted into detailed digital information by the sound processor.
3. The magnetic headpiece sends the digital signals to the implant’s electrode array in the inner ear.
4. The electrode array in the implant sends electrical signals to the hearing nerve.
5. The hearing nerve sends impulses to the brain, where they are interpreted as sound.

Life in Surround Sound
If you are considering cochlear implants, think about the measurable benefits of getting two:1,2 better hearing in noisy environments, better localization of sound, greater ease of listening, situational hearing advantages, improved sound quality, and uninterrupted hearing.

To learn more about going bilateral, contact the Bionic Ear Association for an informative brochure.

Call 866.844.HEAR (4327)
Email hear@AdvancedBionics.com
Visit AdvancedBionics.com
The HARMONY Advantage

Only the Harmony™ HiResolution™ Bionic Ear System (Harmony) uses the most sophisticated technology to deliver the highest-resolution sound. With Harmony, you or your loved one may hear the details that make the world of sound so rich—the whisperings of nature, the nuances of conversation, the complexities and layers of music, and so much more.

Harmony is designed to work effectively in virtually any location, including environments where hearing well—even with two healthy ears—can be a challenge. Only AB delivers the Harmony Advantage with technology that optimizes hearing no matter where you are.

In fact, five independent studies performed by leading research scientists show that you or your child will hear your best with AB’s Harmony Advantage in quiet, noise, on the phone, and for learning to listen and talk.3-7 And a multicenter study sponsored by AB proved that Harmony recipients have the best experience listening to music.8,9

Here’s how the Harmony Advantage helps you hear your world anytime, anywhere:

• **T-Mic™ Microphone — Hear More of Your World Naturally**
  The only microphone placed naturally at the opening of the ear for highly focused hearing while providing wireless connectivity to cell phones, MP3 players, and more.

• **AutoSound™ — Set It and Forget It**
  Automatically adapts to your surroundings, just like a normal-hearing ear, so there’s no fumbling with dials, switches, or remote controls to continually make adjustments to suit your changing environment.

• **HiResolution™ (HiRes) Sound — The World of Sound—in Detail**
  The clearest, most accurate sound with five times more resolution than any other cochlear implant system—so you hear details like waves crashing on the beach, the inflections of a child’s voice, or boots crunching in the snow.
The Natural Choice for More Natural Hearing

AB’s Harmony System features the patented T-Mic™ Microphone, which places the microphone at the opening of the ear canal for more natural hearing. With this prime location, the T-Mic takes advantage of the outer ear’s ability to gather life’s vivid sounds so that you have the opportunity to experience focused, effortless listening.
Hear More of Your World

Help for Hearing in Noise
Imagine being able to hear better in common noisy settings, such as classrooms, restaurants, and sporting events. Studies have shown that the T-Mic is the only in-the-ear microphone that provides improved hearing in noisy environments and better localization of sound so that you may hear more of your world, more naturally.\textsuperscript{6,10–12}

Phone Calls are Easier than Ever
Many AB recipients are excited to use cell phones once again or for the first time after choosing Harmony to hear their world. The T-Mic’s natural placement and wireless connectivity allow you to hold a phone up to your ear just like everyone else. Ideal for today’s on-the-go lifestyle, talking on the phone with a T-Mic requires no special cables, wires, or adapters. You can even use popular hands-free headsets.

Tune In to Hassle-Free Hearing
The wireless connectivity of the T-Mic makes it easy to use earbuds, headphones, and other audio devices. Enjoy in-flight movies or listen to the latest chart-topping tunes the way people with normal hearing do.
AutoSound

comfort
Focused, Effortless Listening
As a busy adult or the parent of an active child, you want the incredible world of sound to be heard easily, instantly, and automatically. You don’t want to fumble with dials, switches, or confusing remote controls every time you move from quiet to loud listening environments. That’s why AB developed the unique AutoSound™ feature for the Harmony™ System, which adapts automatically to your surroundings like a normal-hearing ear—without the need to change settings or controls on your sound processor.

Convenient, Comfortable, and Complete Hearing
From airports to offices, parties to playgrounds, AutoSound is designed to optimize your hearing for every listening environment. AutoSound captures the widest range of sound of any cochlear implant system and adjusts the volume automatically, so that you may hear more of your world, more effortlessly.

Make the Most of Music
In addition to enhancing your hearing in real-world settings, AutoSound has been developed to improve your ability to hear and enjoy music. This unparalleled technology adapts dynamically to deliver the softest and loudest sounds, so you don’t miss a note of your favorite songs.

Best in Class
AutoSound is also designed to help children focus in the classroom without the distraction of making continual adjustments to their processor. Only AB’s Harmony System optimizes the volume and sound quality to help your child develop language skills alongside their normal-hearing classmates, even in noisy mainstream school settings.
The Harmony System features HiResolution™ (HiRes) Sound, delivering five times more resolution than any other cochlear implant system. Designed to provide hearing that closely resembles how a normal ear hears, HiRes picks up more of the details that make sounds richer and your hearing more complete. That means you’ll have the best opportunity to hear the joyful sounds of the world around you—your child whispering a secret, your best friend’s laughter on the phone, or your favorite symphony at a concert hall.

Accurate, Everyday Listening
HiRes Sound is designed to deliver the pitch and timing of sound with the greatest possible precision to help you hear your best in virtually every environment, from lively school plays and musical recitals to quiet museums and yoga classes. With HiRes, you may hear more of your world, more accurately.

Music to Your Ears
Only HiRes delivers 120 spectral bands for unsurpassed resolution. The higher the resolution, the more complete the sound picture. That means you or your child may hear more of the details that are needed for hearing and enjoying music.*

Excellence in Academics
HiRes Sound captures and delivers the most important dimensions of sound with greater fidelity than any other cochlear implant system. With HiRes, your child has the opportunity to hear all the details necessary to understand speech and develop strong language skills.

*This feature is not approved for pediatric patients in the United States.
From a solo performance to the first dance on your wedding day to all the birthday songs along the way, music is an integral part of celebrating life’s most memorable milestones. Music also plays an important role in many daily activities, whether you want to jog to an up-tempo tune or sing along to the latest single on the car radio. In order to give you or your child a full musical experience, Harmony is designed to deliver all the details and layers that make music so textured and rich.

How the HARMONY Advantage Helps You Hear the Music

• The T-Mic™ captures sound like a natural ear and is fully compatible with earbuds like those that come with MP3 players.

• HiRes Fidelity 120™* delivers 120 spectral bands so that you or your child can hear more of the details that are needed for hearing music.

• AutoSound™ continually adjusts the volume as you listen, ensuring you don’t miss a single note.

• Harmony’s wide Input Dynamic Range enables you to hear more sound with less distortion so that it’s easier to hear music and make out lyrics and individual instruments.

*HiRes Fidelity 120 is not approved for pediatric patients in the United States.
Hearing in noise is a common challenge for everyone, but especially for those affected by hearing loss. Instead of struggling, you want to communicate easily and clearly in difficult listening situations. Now imagine hearing better in the real-world settings where you want to connect with the people around you, such as busy offices, crowded cafés, active airports, and packed playgrounds. The Harmony System is designed to help you hear all of your world—quiet, noisy and everything in between. Only AB offers the top technology that optimizes your hearing in every setting.

How the HARMONY Advantage Helps You Hear in Noise

• The T-Mic™ takes advantage of the outer ear’s natural sound-collecting abilities for effortless, focused listening.
• HiRes™ Sound is designed to give you the details of sound you need to hear when the listening situation is difficult.
• AutoSound™ adapts automatically to every setting making it easier to hear well in any environment.
Most Reliable System

Reliability You Can Count On

- **Made to last**, AB cochlear implants implanted today demonstrate the industry’s leading reliability with a 99.6% two-year cumulative survival rate (CSR), a measure that defines the likelihood of a device continuing to function over time.

- **Made for the real world**, AB’s external processor has the lowest average three-month failure rate of less than 1%.

You can count on HARMONY to keep you hearing your world without interruption day after day.
All of the Harmony sound processor’s internal electronics feature two-fold advanced water protection so that you don’t have to worry around water— Guaranteed!

- A moisture-shedding case resists water penetration.
- A special coating provides a waterproof barrier.

We’re so confident this protection will keep these delicate electronics safe—in rain, sweat, dusty or sandy environments—that we back them with a three-year warranty.
The Best Choice Today

When selecting the right cochlear implant system for you or your child, it’s important to consider the technology available today and the company that will continue to bring you the best hearing tomorrow. AB offers you the most advanced technology now and a partnership with Phonak under the Sonova Group that plans to deliver the industry’s smallest, easiest-to-use sound processor without compromising performance. When you choose a cochlear implant system from AB, you or your child will benefit from today’s superior internal technology and external upgradeability for the future so that your hearing advances as the technology does—without the need for surgery.

HiRes 90K Implant

The Harmony System’s HiRes 90K™ implant from AB features the most advanced sound processing available and unsurpassed programming flexibility for the world’s best hearing performance.3-7
...for the Best Possible Tomorrow

Choosing AB and Phonak means you’ve chosen to be part of the largest hearing healthcare solutions provider—the global leader in high-performing, miniaturized hearing instruments, state-of-the-art FM systems, and wireless communication devices. Together, we are relied on by millions of people each day for the best possible hearing experience, unmatched customer service, and a community of lifelong support.

Making It Micro

You’re looking at the world’s smallest digital signal processor chip. Imagine the revolutionary new processor AB can develop with the availability of this super small, yet superior technology.

To learn more about the future of AB & Phonak, contact the Bionic Ear Association for an informative brochure.

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Email hear@AdvancedBionics.com
Visit AdvancedBionics.com
Flexible Wearing Options

With several options available, you can choose a style to fit your life.

Nothing-on-the-Ear (NOTE™)
- Discreet and durable body-worn option, ideal for little ones

Some-on-the-Ear*
- Behind-the-ear and collar-worn option combined

All-on-the-Ear
- Comfortable behind-the-ear (BTE) wearing option

*This off-the-ear power option configuration of the Harmony processor is pending regulatory approval in the United States.
SKINIT

With exciting Skinit® designs, you can customize your sound processor to match your mood or make a fashion statement. Dress your processor up with your favorite colors, sports teams, or works of art. You can choose from THOUSANDS of designs or even upload your own graphics for a completely unique look.

SHOW IT

Accent your style with caps and covers that express your mood with up to 20 different colors and designs.

CONCEAL IT

Make your processor disappear with colors that blend to match your hair color and skin tone.

To browse AB products, go to: AdvancedBionics.com/cms/products
AB delivers the ONLY SYSTEM with simple, wireless connectivity.

**T-Mic**—The naturally placed T-Mic™ Microphone is the option most ideal for everyday listening situations. There are no cumbersome cables or wires that get in the way.

**iConnect**—The iConnect™ provides a cable-free connection to the most commonly used FM systems in schools, such as Phonak Dynamic FM.

**Direct Connect**—The plug-and-play Direct Connect™ accessory connects directly to electronic devices, including MP3 players, FM systems, and other audio devices via a 3.5-mm stereo jack.

**Standard Earhook**—All Harmony earhooks are available in standard and small sizes to comfortably fit your, or your child’s, ear. A standard earhook with no audio option is also available.

**Built-In T-Coil**—The T-Coil is a built-in feature of Harmony that provides easy wireless connectivity to inductive-loop systems and compatible telephones.
AB’s convenient power options are simple to operate and last for years. Ideal for all-day use, PowerCel batteries can be charged while you’re sleeping for an outstanding hearing experience from morning to evening.

**PowerCel™ Slim Battery**
Light and small, this sleek, discreet rechargeable battery provides up to 14 hours of continuous use for Harmony™ or 6 to 9 hours for Auria™ sound processors.

**PowerCel™ Plus Battery**
Provides more than a full day of operation and can be recharged hundreds of times before it needs to be replaced.
Narrowing the “Language Gap”

Children begin learning to speak from the day they’re born. By age 3, 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.\(^{14}\)

Without a cochlear implant, “the language gap” between children born deaf or with a hearing loss and their normal-hearing peers can continue to widen as they mature. This gap may be significantly narrowed or even closed entirely by choosing one or two bionic ears for your child. Harmony’s sophisticated technology gives children the opportunity to hear their best and benefit from learning alongside their peers in a mainstream school setting.
Helping Little Ears Hear Big

The Harmony Advantage for kids includes:

• **Flexible wearing options** that adapt to your child’s needs from infancy to adulthood
• **Advanced water protection** that’s guaranteed
• **Fully programmable childproof controls** that are easy to see and use
• **Environmentally friendly, “green” battery options** that are easy to change, rechargeable, cost effective, and available in two sizes
• **Intellilink™ safety feature** that sends information only to your child’s implants, preventing swapping between users and bilateral mismatches
• **Accessories like the Kinder Clip™ and Snuggie™** that are designed to allow more freedom of movement
• **FM compatibility** for easy use in classrooms

PLUS, the Harmony System features a fully upgradeable design so that your child can take advantage of sound processing and product innovations—without the need for additional surgery!
The Superior Choice for Seniors

“I take my grandchildren to the movies and enjoy laughing with them because I can hear the dialogue. There is nothing better than to tell your grandchildren you love them. I can do that now and hear them say they love me, too.”

—Evelyn Gardner, implanted at age 63, bilaterally implanted at age 64
Sound Solutions

Cochlear implants can bring the rich world of sound back to seniors for a more complete hearing experience and deeper connections with friends and family. At home and on the town, many seniors hear better with the Harmony System. **Only AB combines the highest-resolution sound with convenient wearing options** that are easy for older adults to use each and every day.

**EASY TO USE**
- Comfortable behind-the-ear (BTE) or discreet body-worn wearing options
- No adjustments needed with AB’s advanced AutoSound™ technology
- Easy-to-feel controls for changing programs
- Long-lasting, rechargeable batteries slide on and off with ease and are often covered by insurance

**AFFORDABLE**
While hearing aids can be a large out-of-pocket expense, cochlear implants are an affordable solution for seniors. More than 90% of healthcare plans, including Medicare and Medicaid, cover cochlear implants.
FREE Online Resources

The Listening Room—Resources for Developing Listening and Language Skills

Learning to listen with a hearing aid or a cochlear implant is a rewarding journey that takes patience, perseverance, and a positive attitude. The Listening Room™ is a one-of-a-kind website that gives you a foundation of interactive and uniquely designed practice activities to improve your listening skills so that communicating with others is a successful experience. FREE exercises can be done alone, with a listening coach, on paper, or with an iPod/MP3 player.

Activities for Infants and Toddlers:
• Revolve around a young child’s day, targeting important moments such as getting dressed, eating, playing, and bath time
• Incorporate songs and finger plays to engage your child in communicating and interacting

Activities for Preschool and School-Age Children:
• Strengthen vocabulary and concepts that they are learning in the classroom
• Include weekly activities, monthly murals
• Feature songs, auditory discrimination games, and much more

Activities for Teens and Adults:
• Maximize hearing performance with a variety of activities to help you practice listening
• Offer exercises to practice on the phone before talking with others

Tools for Schools — Everything You Need for a Child to Succeed

Supporting children with one or more cochlear implants requires a team approach. Designed to help students succeed in the classroom, Tools for Schools™ (TFS) provides educators with FREE practical tools and online materials to make your child’s educational journey easier.
Support for Success

“Our family is loving this journey to hearing with Cole and incredibly thankful for the technology Advanced Bionics has developed so that our son can hear our voices and even music since it is such an integral part of our family’s life.”

—John and Danice Burdett, parents of Cole, bilaterally implanted at 15 months
The journey to better hearing is an exciting one, full of opportunity and possibility. Committed to improving connections with and between our recipients, Advanced Bionics has created the Bionic Ear Association (BEA), a valuable support network whose mission is to be there for you or your child every step of the way on your journey to hearing.

The BEA is comprised of caring professionals and a dedicated team of volunteers who offer assistance by providing you and your loved ones with information, education, and guidance in choosing, getting, and living with cochlear implants.
Join a Community, Find a Family

**Do you need answers to your cochlear implant questions?**
The BEA hotline is staffed by experienced audiologists who can answer questions, provide support, and connect you with the services you may need.
866.844.HEAR (4327)

**Do you want to talk with someone who has been in your shoes?**
Connect with a mentor and start an online discussion about cochlear implants. Our mentors, whether a recipient, parent or loved one of a recipient, live vital and varied lives, but have one thing in common: they want to lend their expertise, experience, and support to you.
AdvancedBionics.com/CTM

**Do you want to attend an event where you can talk to others in your situation and ask questions in person?**
The BEA often hosts regional events where you can meet others on the same journey to hearing with cochlear implants. Make new friends and keep up to date on the latest news by signing up for an event or seminar today.
AdvancedBionics.com/calendar

**Do you want to share your experiences in an online setting?**
With over 14,000 registered users, AB’s online community, HearingJourney, is an ideal place to chat, laugh and share stories with others across the globe as often as you’d like. Say hello and receive a warm welcome from this lively group, then take part in any of the dozens of conversations about the joys and challenges of hearing with cochlear implants.
HearingJourney.com
Lifetime Commitment

Advanced Bionics understands how essential your cochlear implant system is to your family’s life. Making sure your journey to hearing goes as smoothly as possible is at the heart of AB’s mission. From online resources available 24/7 to our caring and informed Customer Service Team, you can always count on AB.

AB believes in putting our patients first.

AB promises to field a qualified support team and set the gold standard in customer service.
AB’s highly trained staff are experts on cochlear implants and troubleshooting, and if they can’t help you, they’ll find someone who can.

AB promises to be accessible and responsive to your needs.
Access to AB’s call center is available by phone or online chat 12 hours per day (5 a.m. to 5 p.m. Pacific Time), Monday through Friday, with emergency paging access on the weekends and holidays.

AB promises to provide a rapid turnaround if you require a replacement part.
To reduce any downtime you may experience, AB will ship you the necessary parts within 48 hours (two business days).

AB promises to provide you and your family with a full range of services.
Virtually anything you need to make your journey to hearing easier for you and your family is available through Customer Service.
We’re Here So You Hear

“I value knowing that AB stands totally behind their product and offers customer service well beyond what is expected. The real-time technical support offered to my audiologist during mapping sessions proved extremely helpful.”

—Alan Brown, implanted at age 46, bilaterally implanted at age 51
When you choose the Harmony System from Advanced Bionics, you join a community of recipients, from professors to pilots, from engineers to English teachers, who chose to hear their best with AB.

**Only AB delivers:**
- Advanced technology with the T-Mic, AutoSound and HiResolution Sound
- Better hearing in noise and more music enjoyment
- High external and internal reliability
- Guaranteed water resistance
- More headroom for futureproof upgradeability
- Customizable looks and flexible wearing options
- Rechargeable power options
- Kid- and senior-friendly designs
- Compassionate support through the Bionic Ear Association
- Unparalleled customer service
- Opportunities for better hearing tomorrow that only a partnership with Phonak under the Sonova Group can offer

“Since the restoration of my hearing by AB, I am able to continue my active lifestyle, including cattle ranching, diving, and motorcycle riding.”

—Mike Radcliffe, implanted at age 62, bilaterally implanted at age 63
REFERENCES:


discover
a Whole New World

For more information on the miracle of hearing restoration with AB cochlear implants, contact the Bionic Ear Association.

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Email hear@AdvancedBionics.com
Visit AdvancedBionics.com