

**Power
your brain**



POWER LINE

NEW



Oticon
BrainHearing™
Technology

SPEECH RESCUE™ AND SPEECH GUARD E
More speech details than ever before

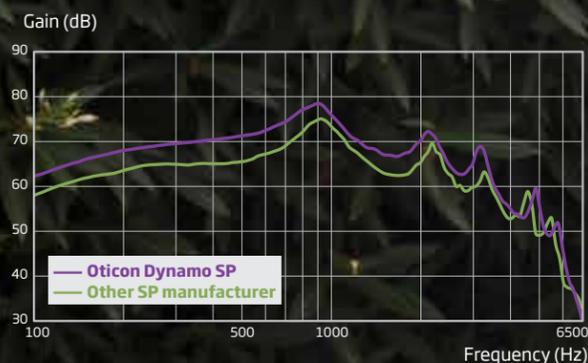
Introducing the next generation super power solution **powered by the Inium Sense platform**

Oticon Dynamo brings the benefits of proven BrainHearing™ technologies to people with severe to profound hearing loss. Dynamo is built on the powerful Inium Sense platform to provide the listener with a rich soundscape—including access to more speech details than ever before. Advanced signal processing delivers the clearest possible signal across the full range of sound, providing a more complete picture for the brain to decode for improved speech understanding.

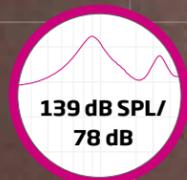
The Dynamo family of super power solutions features:

- ▶ Innovative frequency-lowering technology
- ▶ Super power gain and output without feedback
- ▶ Personalization options to ease the transition to new technology

Leading the Super Power category with Oticon BrainHearing™ technology



Full-On Gain measurements performed in technical settings according to ANSI S3.22-2003 (2cc coupler). Oticon Dynamo SP (purple) and other manufacturer (green). Both super power devices use size 13 battery.



Super power. Strikingly small.
The BTE 13 Super Power features a maximum power output of 139 dB SPL, 78 dB of full-on gain, and a fitting range up to 110 dB HL.

BrainHearing™

Hearing is a cognitive process—it happens in the brain. The fewer details of sound the brain receives, the harder it has to work to decode it. Oticon delivers better hearing with less effort by supporting how the brain makes sense of sound.

We call this approach BrainHearing™.

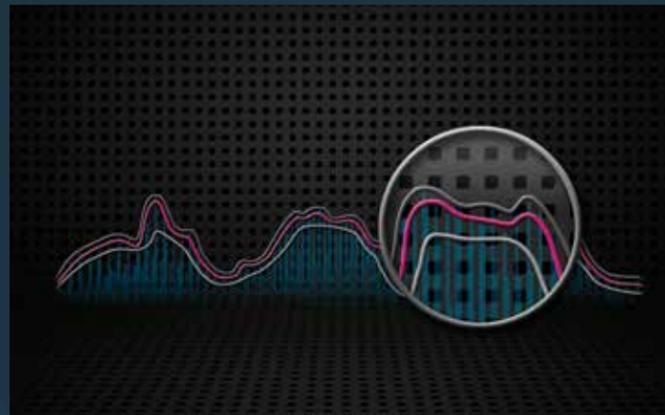
David Smith
US Olympic Team volleyball player
and Oticon Dynamo wearer

Capturing the nuances of speech

For people with severe to profound hearing loss, every speech cue counts. Oticon's proven BrainHearing™ technology Speech Guard E gives every patient the opportunity to perceive speech in a more direct and natural way to support the brain in making sense of sound. Now, Speech Rescue™ provides extra support for those who need it with more speech details than ever before.

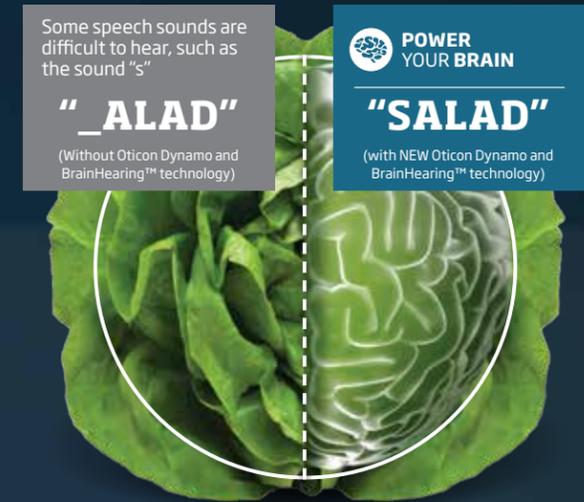
Speech Guard E is the preferred compression strategy

Speech Guard E uses superior adaptive compression to deliver high quality sound while preserving the intensity contrasts and temporal cues of the speech signal that are so important for patients with severe to profound hearing loss. In Dynamo, Speech Guard E is combined with the DSE rationale which uses very subtle compression, developed specifically for individuals with severe to profound hearing loss.



Speech Rescue™ – provides access to high-frequency sounds

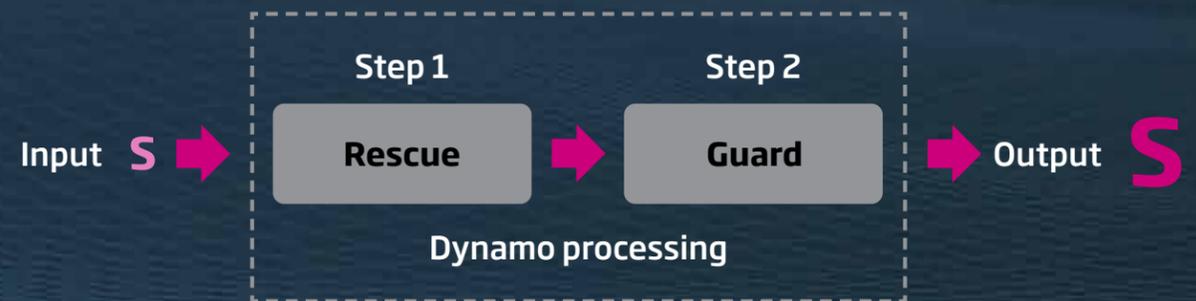
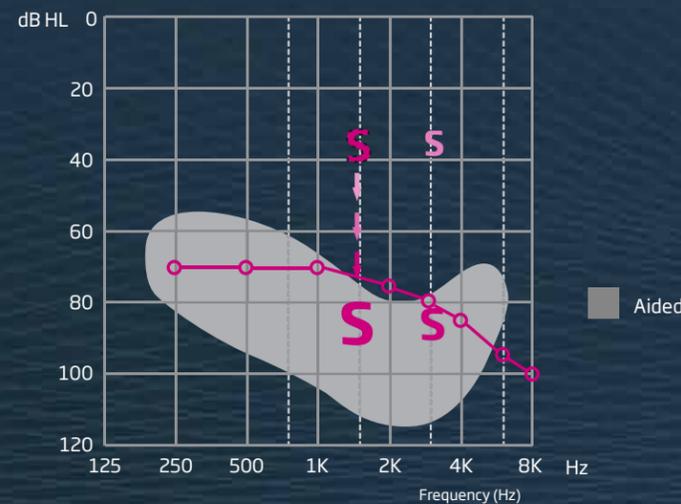
Dynamo's innovative approach to frequency lowering, called Speech Rescue™, provides more speech details by rescuing speech cues that would otherwise be lost. Speech Rescue™ uses a "copy and keep" strategy that preserves the high frequency speech information, but also replicates it in the better functioning mid frequencies. During this process, the high frequency sounds remain untouched at their natural location to keep a natural broad frequency response for one of the fullest sound experiences possible.



Missing high frequency sounds such as "s" or "th" can negatively impact the flow and understanding of conversation.

Every speech cue counts

Speech Rescue works in combination with Speech Guard E to provide a more complete sound picture for patients who are unable to make use of their hearing in the high frequencies. This approach effectively captures, remaps and amplifies the input signal to provide the patient with better access to vital cues that can increase speech understanding in complex listening environments.

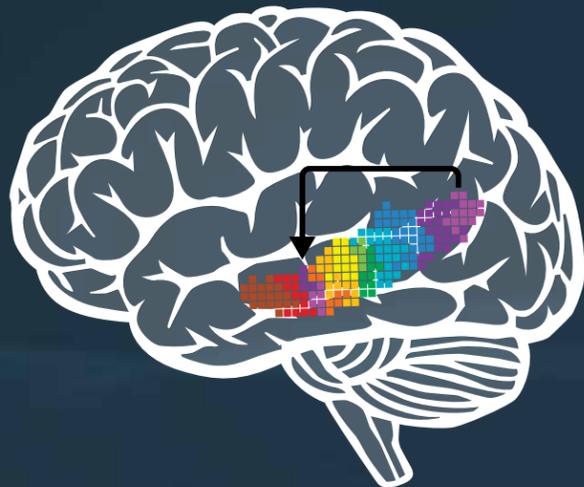


Step 1 "Rescue": In the signal path of the hearing instrument, high frequency components of the incoming sounds are first moved to lower frequencies through Speech Rescue.

Step 2 "Guard": The high frequency sounds are then amplified with Speech Guard E. This compression system guards the dynamic contrast of the entire signal to let the rescued speech sounds appear more clearly.

New insights into frequency lowering inspire an innovative approach

Sounds of different frequencies activate different regions of the brain in an organized manner. Through Speech Rescue™ technology, high frequency sounds (shown in purple) are replicated in the lower frequency regions, which allows the brain to respond to the copied sounds (shown in purple) in a different area. This approach increases speech understanding by rescuing speech cues that would otherwise be lost.



Low frequency High frequency



The natural signal



Speech Rescue™ frequency composition

Oticon's precise approach to frequency composition **KEEPS** the high frequencies and **COPIES** them to the mid frequency regions.



Traditional frequency lowering

Some hearing solutions can press sound together along the frequency axis, compiling a lot of information into a small area while leaving the high frequency region unstimulated.

Inium Sense feedback shield^{SP} preserves important speech details

The Inium Sense platform and its ultra-fast processor deliver a highly efficient feedback management system that is specifically adapted to super power output levels. Inium Sense feedback shield^{SP} is capable of detecting feedback much faster, preventing it more effectively, and eliminating it more efficiently when it occurs.

To manage whistling and system instability close to the feedback limit, the system draws on three proven technologies: phase inversion, frequency shift and gain control. These are carefully applied based on both feedback detection and detection of speech to ensure

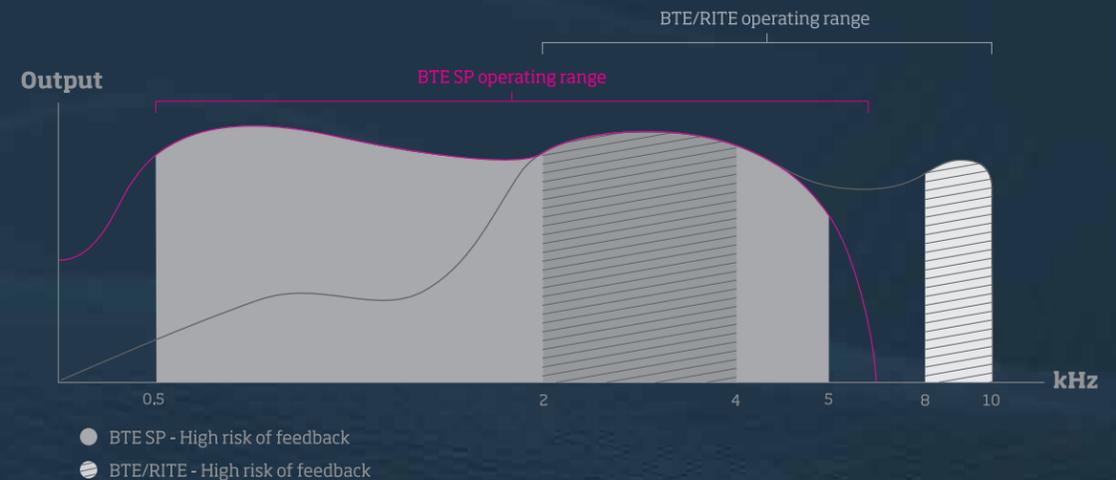
feedback is managed at lower frequencies without compromising sound quality.

To ensure feedback is managed effectively for super power fittings, the operating range has been expanded and shifted to the lower frequency regions where output is higher and the risk of feedback is increased for super power patients.

In addition, the frequency shift has been reduced to 10 Hz to reduce the potential effect of artifacts and signal disruption of speech cues.

Inium Sense feedback shield^{SP}

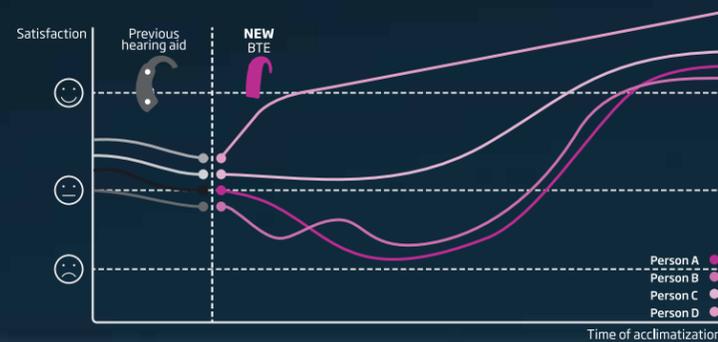
Extended operating range of anti-feedback management



Personalization helps ease transition to new technology

For people with severe to profound hearing loss, any new or upgraded technology introduces a period of adjustment. Whatever the change, the brain must work harder to adjust from something known and familiar to something new.

Oticon's easy-to-use personalization tools and fitting process provide a tailor-made starting point to meet individual preferences, easing the transition into new technology and increasing patient satisfaction.



New fitting protocol brings Bimodal benefits to all patients

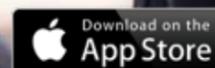
Oticon's new Bimodal fitting protocol combines the very latest research with a practical clinical approach. It makes it easier to provide a balanced, optimized sound experience for patients with a unilateral implant—and to program Dynamo to work in a complementary manner with any brand of cochlear implant (CI).

Developed by experts at the Boys Town National Research Hospital, the short and simple flowchart in our Genie fitting software guides you in balancing loudness and shaping the frequency response. The purpose is to provide your patient with the best possible acoustic settings to balance with the CI mapping when fitting an implanted patient with a Dynamo hearing aid.

Enhanced connections—more engagement

ConnectLine™ offers newfound freedom for your patients to use their cell phone, watch TV with friends and family, or listen to music by wirelessly sending the signal to the user's instruments. Many patients have found the ConnectLine Microphone helps them more easily participate in conversations. Worn by the conversation partner, the Microphone sends the wearer's voice to the Dynamo instruments. The system is controlled with Oticon's sleek and intuitive Streamer Pro.

David Smith
US Olympic Team volleyball player
and Oticon Dynamo wearer



A legacy of powerful solutions

Oticon has developed technology dedicated to severe to profound hearing loss for decades. This experience, combined with valuable insights from hearing care professionals and our extensive research, has helped us gain a deep understanding of this diverse patient population.

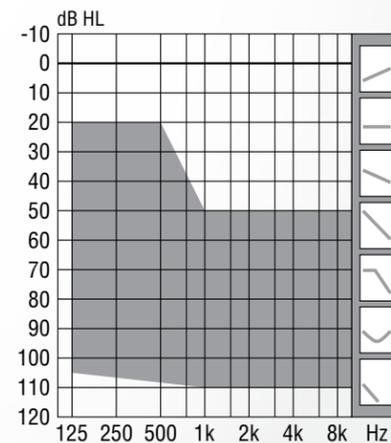


Leading the super power category with BrainHearing™ technology

Oticon Dynamo is our most powerful BTE 13 Super Power yet. It features the latest advances in hearing instrument technology to provide patients with severe to profound hearing loss access to more speech details.

Dynamo is part of a diverse portfolio of powerful instruments. Meet your other power fitting needs using a wide range of styles, from ITE Power, RITE Power and Plus Power in the Performance Line, to Sensei SP, a dedicated pediatric Super Power instrument.

Dynamo Fitting Range



Dynamo Product Offering

	SP10 Premium	SP8 Advanced	SP6 Essential	SP4 Basic
Accessing speech details				
Speech Guard E	•	•	•	•
Speech Rescue™	•	•	•	•
Inium Sense feedback shield ^{SP}	•	•	•	•
Personalizing to individual preferences				
Maximal fine tuning options	•	•	•	•
Steady	•	•	•	•
Lively	•	•	•	•
Gentle	•	•	•	•
Exact	•	•	•	•
Balanced	•	•	•	•
Comfort in noisy situations				
Binaural Noise Management	•	•	•	•
Transient Noise Management	•	•	•	•
TriState Noise Management	•	•	•	•
Binaural Synchronization	•	•	•	•
Binaural Coordination	•	•	•	•
Basic Noise Management	•	•	•	•
Focus on speech understanding in noise				
Speech Omni mode	•	•	•	•
Multiband adaptive dir	•	•	•	•
Tri mode	•	•	•	•
Back dir	•	•	•	•
Dual mode	•	•	•	•
Omni/split/full dir	•	•	•	•
Connecting to the world				
Power bass	•	•	•	•
Music widening	•	•	•	•
Special purpose programs	•	•	•	•
Voice Priority <i>i</i> ™	•	•	•	•
Wireless connectivity	•	•	•	•
Optimizing fitting				
EasyRECD™	•	•	•	•
Fitting bands	9	8	6	4
In-Situ audiometry	•	•	•	•
Overall loudness trimmer	•	•	•	•
Data logging	•	•	•	•

Dynamo instrument colors



To learn more

For more information about Oticon's complete line of next generation BrainHearing™ solutions, call your inside sales representative at 1-800-526-3921 or visit us online at pro.oticonusa.com.

People First

People First is our promise
to empower people
to communicate freely,
interact naturally and
participate actively



www.pro.oticonusa.com

oticon
PEOPLE FIRST