

SONIC | cheer

# cheer

Everybody,  
on your feet!

Introducing the Cheer family of products



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
## Cheer for the excitement

Patients are rallying around Cheer, a well-balanced lineup of Sonic products featuring impressive sound quality stats.

# cheer



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**Sound: Now this is a winning performance**

Natural sound begins with a processor that's engineered for premium quality.



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Industry-Acclaimed System

**Sound that's natural**

- Speech Variable Processing
- Adaptive Feedback Canceller
- Best Fit Fast SE
- Frequency Transfer

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Speech Variable Processing

- **Speech**
  - Is complex and dynamic
- **Speed**
  - Amplification must be applied appropriately to be correct
- **Preserve**
  - Frequency contrast to maintain clarity

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### A Word About Speech

- **Speech constantly varies**
  - Individual sounds are long or short
  - Amplitude changes quickly and dramatically
- A healthy cochlea processes speech naturally
- Processing systems require sophisticated technology to replicate speech accurately

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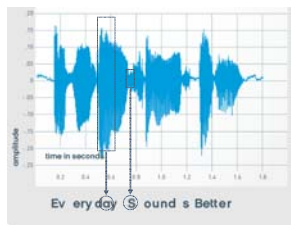
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### Speech Is Complex and Dynamic



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### Speech Variable Processing (SVP)

- **Phoneme Focus**  
Quickly and accurately measures the incoming signal and applies gain appropriately, especially for very soft speech sounds
- **Benefit**  
Makes sound clear and natural in a variety of listening situations

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### Speech Variable Processing (SVP)

- **New! Envelope Focus**  
Designed for certain populations considering
  - Age (>75 years old)
  - High frequency hearing thresholds (>70 dBHL @ 2kHz+)
  - Air-bone gap information (> 20dB @ 3 consecutive frequencies)
- Enhances slower envelope components in the speech signal
- Contrast between loud and soft phonemes is greater and has a more linear behavior
- **Benefit**  
Makes sound clear and natural in a variety of listening situations for some populations

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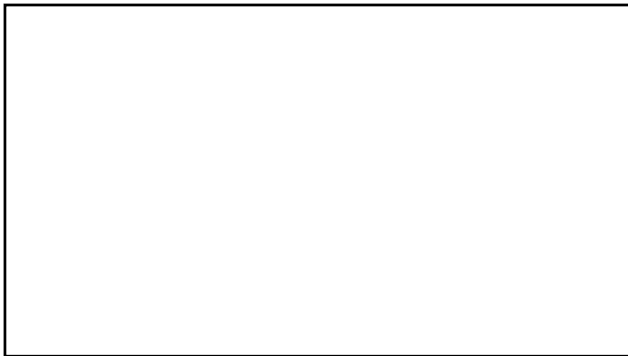
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### The Importance of Contrast

- A healthy cochlea preserves the natural level differences across frequencies for each phoneme
- This difference across frequencies is called Frequency Contrast
- **Critical for speech clarity**
  - Must be able to maintain frequency differences between similar phonemes to be able to tell those phonemes apart

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### Noise Management

- **Adaptive Feedback Canceller**  
Uses phase cancellation and a feedback monitor to remove feedback signals before they are noticeable
- **Benefit**  
Squeal-free easy listening

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### New! Fitting Rationale

- **Best Fit Fast SE (Speech Enhancement)**
  - Emphasizes speech intelligibility
  - Great for patients who prefer fittings with more gain

**Fitting Rationale**

NAL-NL2  
 NAL-NL2  
 DSL (v0)  
 DSL S Adult  
 DSL S Child  
 Best Fit Fast  
 Best Fit Fast SE

A proprietary non-linear rationale designed to quickly achieve a good fitting result. This rationale emphasizes speech intelligibility making it a good choice for patients who prefer fittings with more gain.

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### Don't Fret Over Frequency

- **Frequency Transfer\***  
Copies and compresses high frequency input and transfers it to a lower frequency region that has better residual hearing
- **Benefit**  
Improves access and therefore audibility of speech cues and keeps the full bandwidth intact for a seamless, natural sound

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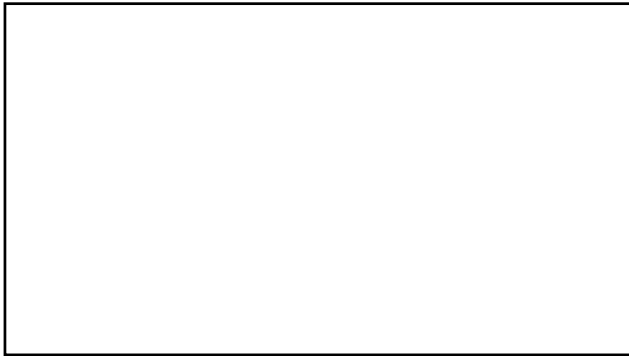
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
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Something to shout about: speech understanding in noise

When it comes to better hearing, all sounds are not created equal.



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
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Multiple Systems in Play

**Speech understanding in noise**

- Adaptive Directionality
- Wind Noise Reduction
- Soft Noise Reduction
- Speech Priority Noise Reduction

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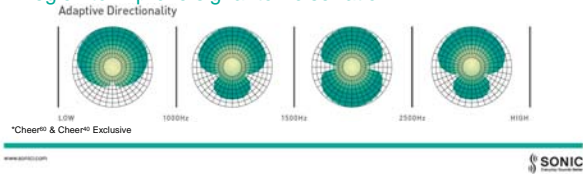
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### Adaptive Directionality

- Quickly analyzes the incoming signal to determine the location of the loudest sound in each region
- The best polar response is applied independently in each region to improve signal-to-noise ratio



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### Noise Management

- **Wind Noise Reduction**  
Monitors for uncorrelated noise (wind) between the directional microphones
- **Benefit**  
Relief from loud, distracting wind noise

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### Noise Management

- **Soft Noise Reduction**  
Uses expansion to manage the gain for low-level sounds while maintaining the gain for speech
- **Benefit**  
Reduces distracting, low-level noise in the environment

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### Something to Shout About

- **Speech Priority Noise Reduction (SPNR)**
  - Monitors the input and determines the modulation "fingerprint" of the signal
  - Highly modulated signals are preserved where steady-state noise is attenuated
- **Benefit**
  - Provides comfort and preserves intelligibility of speech signals

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### Score one for Simplicity

Life is full of excitement. Cheer is ready for the adventure.



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### Simple, Accurate & Hands-Free Operation

**Simplicity in everything we do**

- Universal Environment
- Data Learning
- Binaural Coordination
- Wireless Connectivity

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### Universal Environment

- Constantly monitors the listening environment for specific characteristics
  - Sound level
  - Presence of speech
  - Frequency content
  - Harmonics
- Specifically tuned to optimize speech-related cues maximizing speech intelligibility in noisy situations

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### Data Learning – Simple & Smart

- Adapts default amplification settings over time to match user preferences
- Benefit
  - Less hands-on needed with devices
- Tracks adjustments to instrument's volume control via
  - Device itself
  - SoundGate
  - Remote Control

\*Cheer<sup>®</sup> Exclusive  
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### Cheer the Balance of Binaural

- Binaural Synchronization  
Ensures changes made using local controls are made simultaneously to both ears
  - Program changes
  - Volume control changes
- Non-Telephone Ear Control\*  
Automatically recognizes the non-telephone ear and reduces gain or mutes that side
  - Reduces environmental noise distractions
  - Increases the perception of volume from the telephone

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### Cheer for Everyday Connectivity

- The convenience of wireless connectivity – at a great value



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### SoundGate 3\*

- The hub of connectivity accessories
- Connects to virtually any Bluetooth® enabled products
- Excellent battery life
- Program and volume control changes
- Works with SoundLink App



\*Cheer™ and Cheer™ wireless models only

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### SoundGate Mic

- **SoundGate Mic**
  - Personal and private connection with SoundGate 3
  - Clipped onto a conversational partner or placed in the middle of meeting room table
  - Lightweight and discreet



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### TV Adapter 2\*



- Connect to a television & the SoundGate 3 streams the audio directly to Cheer

- Crystal clear movies and shows!

\*Cheer® and Cheer® wireless models only

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### Phone Adapter 2\*



- Landline phones still exist!
- Phone adapter 2 provides binaural wireless link making non-mobile phone calls vibrant and clear

\*Cheer® and Cheer® wireless models only

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### SoundLink App – Something to Cheer For!

- For iPhone® and Android™ Smartphones

#### • Features

- View Bluetooth® sources in range
- View SoundGate 3 battery status
- Change volume and program
- Change listening source



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### RC-N

- **New! Remote Control**
  - Increase/decrease volume
  - Program change
  - Larger, more visible buttons
  - Smaller and lightweight
- **Basic functionality for patients not interested in Bluetooth® connectivity**



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### Hassle-Free Fittings

- **FittingLINK**
  - Minimize HCP effort and increase patient comfort during fitting sessions
- **Real Ear Fit**
  - EXPRESSfit incorporates real ear verification into the fitting system
  - Achieve accurate fittings and improve patient satisfaction from the start



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
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### Cheer for the starting lineup: Sonic Style

With so many styles and technology levels, Cheer can really attract a crowd. You'll find features to meet a variety of hearing needs.



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### Cheer Can Really Attract a Crowd

**Style  
that stands out**

- miniRITE
- Nano BTE
- Power BTE
- Compact Power Plus BTE
- Full Custom offering

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### Style That Stands Out: BTEs

- 4 behind-the-ear models
- Contemporary designs
- Slim miniRITE and Nano BTE offer discreet options
- New! Power BTE & Compact Power Plus for more severe needs



\*\*Cheer<sup>®</sup> and Cheer<sup>®</sup> only

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### New! miniFIT System

- Fitting BTEs has never been easier with miniFIT
- Complete system with updated thin tubes, speakers, and domes offering peak performance and convenience
- Compact kit to keep all Cheer acoustic accessories together

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### Introducing the miniRITE

- Sleek, attractive design
- 312 battery
- miniFit design
  - 3 new receiver options
  - New domes
  - Custom molds
- 6 color options



\*Cheer® & Cheer® Exclusive

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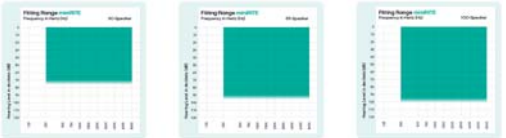
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### miniRITE Acoustic Performance

2cc Coupler	60 Speaker	85 Speaker	100 Speaker
OSPL 90, peak	109 dB SPL	116 dB SPL	123 dB SPL
Full-On Gain, peak	48 dB	55 dB	65 dB



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
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### Nano BTE

2cc Coupler	Nano BTE
OSPL 90, peak	122 dB SPL
Full-On Gain, peak	49 dB

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### New! Power BTE



- miniFIT system for thin tube fittings
- Sleek design with 13 battery
- Power patients require
- Excellent tactile controls

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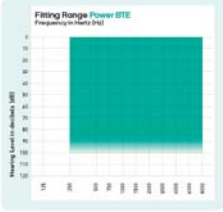
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### Power BTE Acoustic Performance

2cc Coupler	P
OSPL 90, peak	134***
Full-On Gain, peak	68



\*\*\*Special care should be taken when fitting and using a hearing instrument with maximum sound pressure capability in excess of 132 dB SPL (IEC 60318-4) since there may be a risk of impairing the remaining hearing of the hearing instrument user.

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### Compact Power Plus Acoustic Performance

2cc Coupler	CPx
OSPL 90, peak	132***
Full-On Gain, peak	71

\*\*\*Special care should be taken when fitting and using a hearing instrument with maximum sound pressure capability in excess of 132 dB SPL (IEC 60318-4) since there may be a risk of impairing the remaining hearing of the hearing instrument user.

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### Style That Stands Out: ITEs

- Nearly invisible IIC to powerful ITE models
- Continued excellence in custom arena
- Fully customized to your needs
- Microphone and receiver protection

\*\*\*Cheer® only

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### Custom Acoustic Performance

Zcc Coupler	IIC	CIC CICW	CICPW	ITC ITCD ITCW	ITCPDW	ITED	ITEPDW
OSPL 90, peak (dB SPL)	109	109	117	118	127	120	127
Full-On Gain, peak (dB)	35	42	48	50	63	51	63

★ denotes new model ↑ indicates increase in power over previous models

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### Take Home Message

Cheer offers a well-rounded lineup with features and options to make your patients fast fans.

Better hearing every day. Now that's worth a cheer.

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### Feature Overview

Sound Processing	Cheer <sup>60</sup>	Cheer <sup>40</sup>	Cheer <sup>20</sup>	Noise Management	Cheer <sup>60</sup>	Cheer <sup>40</sup>	Cheer <sup>20</sup>
Signal Processing	Speech Variable			Adaptive Feedback Canceller	■	■	■
Phoneme Focus	■	■	■	Wind Noise Reduction	■	■	
Envelope Focus	■	■	■	Soft Noise Reduction	■	■	■
Frequency Bandwidth	8 kHz	8 kHz	8 kHz	Speech Priority Noise Reduction	4 Options	3 Options	3 Options
Frequency Transfer	■						

■ Standard ● Optional

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### Feature Overview, Continued

Directionality	Cheer <sup>60</sup>	Cheer <sup>40</sup>	Cheer <sup>20</sup>	Binaural Coordination	Cheer <sup>60</sup>	Cheer <sup>40</sup>	Cheer <sup>20</sup>
Omni Directional	■	■	■	Volume & Program Change	■	■	■
Fixed Directional	■	■	■	Non-Telephone Ear Control (Auto-T)	■		
Adaptive Directional	■	■		Non-Telephone Ear Control (Manual)	■	■	■

■ Standard ● Optional

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
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### Feature Overview, Final

Programming Options	Cheer <sup>60</sup>	Cheer <sup>40</sup>	Cheer <sup>20</sup>	Patient Conveniences	Cheer <sup>60</sup>	Cheer <sup>40</sup>	Cheer <sup>20</sup>
Universal Program	■	■	■	Wireless Capability	■	■	■
Manual Listening Program	4	4	4	Push Button Mute	■	■	
Environments	13	11	5	Audible Performance Indicators	■	■	■
Data Logging	■	■	■	Start-Up Delay	■	■	■
Data Learning	■			Auto Telephone Detection	■		
FittingLINK Wireless Programming	●	●	●				
Real Ear Fit	■	■	■				

■ Standard ● Optional

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