Radius™ 12 BTE

TECHNICAL SPECIFICATIONS

The Radius 12 is ideal for active wearers who frequently switch between the broadest range of sound environments. Radius 12 is designed to virtually eliminate feedback and make even the most subtle sounds audible.

Features

Active Feedback Intercept

- Virtually eliminates annoying feedback and prevents whistling
- Works in concert with Directional Speech Detector and Acoustic Signature to produce better sound quality

Integrated Real Ear

- Real ear measurement system built directly into the hearing instrument provides the stimulus and measures the response
- Incorporates data immediately throughout Inspire® OS

Touchless Telephone Response

Instantaneously and automatically adjusts for optimum telephone communication

Adaptive Indicator Tones

- Unique tones for memory, low battery, volume, etc.
- Automatically adjusts in noisy environments

Acoustic Signature

- A state-of-the-art system that identifies unique sound environments and adjusts to them instantly
- Automatically detects Quiet, Mechanical, Wind, and Other Sounds

Directional Speech Detector

- Automatically adjusts to provide the optimal setting in quiet or noisy environments
- Improves speech intelligibility in challenging environments, such as a noisy restaurant

Data Logging

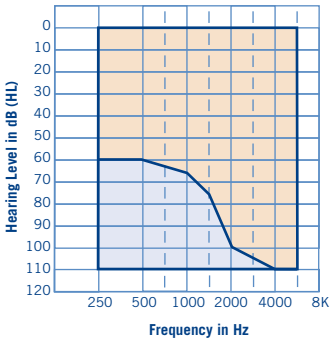
- Links with Acoustic Signature to identify and log individual sound environments
- Enables the highest level of personalization in adjustments

Fine-Tuning

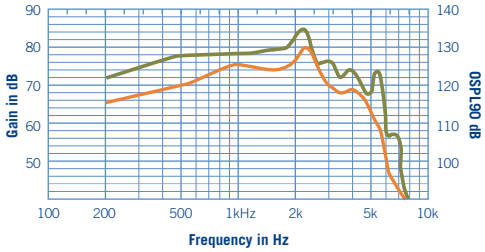
Offers the flexibility of 8 independent channels as well as 12 bands for precise levels of gain adjustment

Radius 12 BTE ANSI/IEC Data and Fitting Ranges

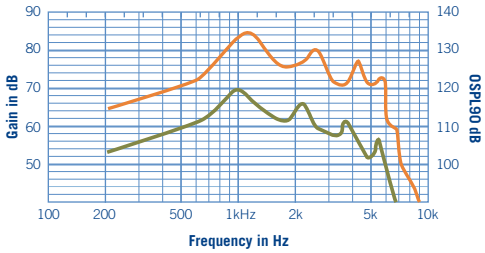
	BTE (Behind-The-Ear)	
Measurement	ANSI	IEC
Peak OSPL90 (dB SPL)	135	139
HFA OSP 90 (dB SPL)	128	NA
RTF OSPL90 (dB SPL)	NA	134
Peak Gain (dB)	70	74
HFA Full-On Gain (dB)	64	NA
RTF Full-On Gain (dB)	NA	69
Frequency Range (Hz)	200 - 6400	NA
Reference Test Frequency (kHz)	1.0, 1.6, 2.5	1.6
Reference Test Gain (dB)	52	59
Harmonic Distortion		
500 Hz	3%	4%
800 Hz	1%	1%
1600 Hz	1%	1%
Equivalent Input Noise (dB SPL)	24	25
(55 – 90 ANSI) (55 – 80 IEC) – Test Mode		
Attack Time (ms)	5	5
Release Time 0.1 - s (ms)	25	55
Release Time 2.0 - s (ms)	25	55
Induction Coil Sensitivity		
HFA SPLITS (ANSI - 96) (dB SPL)	111	NA
MASL (IEC 118 - 1) (dB SPL)	NA	99
Battery Current (mA)	1.6	1.6
Idle (mA)	1.2	1.2
Estimated Battery Life for 16-Hour Day		
13 Zinc Air (days)	11	11



Radius 12 BTE standard configuration (orange) and BTE open configuration (blue) fitting ranges.



OSPL90 (green) and Full-On Gain (green) curves for the Radius 12 BTE with the default filtered adult earhook (orange).



OSPL90 (orange) and Full-On Gain (green) curves for the Radius 12 BTE with the unfiltered adult earhook.

Measurement Conditions and Recommendations

The data for Radius 12 are obtained and performance is expressed according to ANSI S3.22 (1996), Specifications of Hearing Aid Characteristics and IEC 118-0 (1983), Hearing aids, Part 0: Measurement of electroacoustical characteristics and Amendment 1 (1994-01). The Micro-Tech proprietary Real Time Analyzer comprises the basic test equipment. Data may be subject to change with product refinement.

Radius 12 hearing instruments may be set to test settings within Inspire OS by reading the hearing aid and choosing Hearing Aid Test on the left navigation bar. Click the Full On Gain or User Gain buttons on this screen to set the device with adaptive features off. Because of the adaptive signal processing capabilities of Radius hearing instruments, you must be in Full On Gain or User Gain mode to compare the actual performance of the hearing instrument with these specifications.

RF IMMUNITY LEVEL. Radius 12 BTE hearing aids have a cell phone immunity rating of M4/T4. A hearing aid compatible cell phone must carry a rating of M1/T1 or higher to work with these hearing instruments. Please consult your cell phone specification for the cell phone immunity rating.