

J13 Axent Digital Signal Processor

Adaptive digital signal processing algorithms designed to greatly enhance performance and fitting flexibility.



*J13 Axent BTE
with PDI MM*

*J13 Axent BTE
MultiMemory*

Feature Summary:

4 WDRC Channels with 3 adjustable crossover frequencies and 8 Bands to optimize fine-tuning of the response for the most unique hearing loss configurations.

Dynamic Precision Directional Imaging (PDI) automatically activates advanced directional microphone technology to enhance speech understanding in noisy environments, available on the J13 Axent PDI MM.

Adaptive Feedback Cancellation eliminates feedback without degrading incoming speech signals or compromising gain. More gain is provided prior to the onset of feedback.

Feedback Frequency Detector indicates the primary frequency of feedback to permit manual reduction of gain in a specific band with minimal effect on channel gain.

Adaptive Noise Management reduces gain of steady-state noise only in channels where noise is detected.

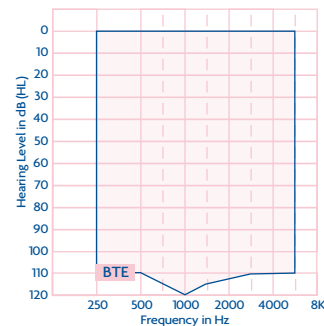
MultiChannel Expansion technology reduces circuit and low-level environmental noise typically associated with WDRC hearing aids.

In Situ Audiometry and Loudness Verification administers pure tones through the hearing aid to establish threshold, UCL, or to verify soft and loud inputs.

Programmable Indicator Tones for low battery, MultiMemory and optimal user volume control setting.

Programmable Power-On Delay sets the length of time it takes for the hearing instrument to power up once it is turned on.

MultiMemory with up to three fully adjustable memories accessed via push button.



Programmable Telecoil accessed via push button allows for fully adjustable frequency response of telecoil within a memory. Enable M/T mode allows for combined microphone and telecoil inputs.

Wireless FM and Direct Audio Input (DAI) capable with adjustability of the environmental microphone below the level of the DAI signal.

Volume Control with optional disable VC and optimal setting indicator tone features within PFS.

M-O switch.

Tamper Resistant Battery Door.

Size I3 Battery.

Options:

Case colors available in beige, brown, black and gray.

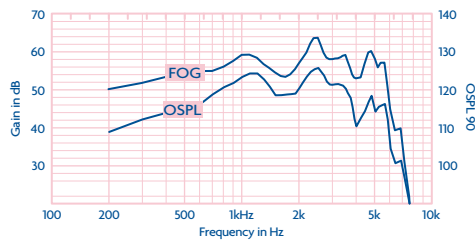
DAI accessories.

Pediatric and filtered earhooks.

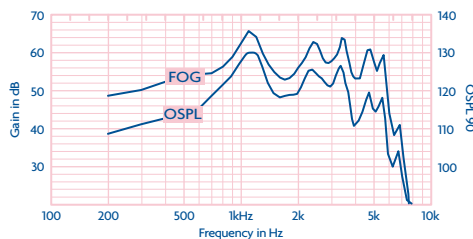


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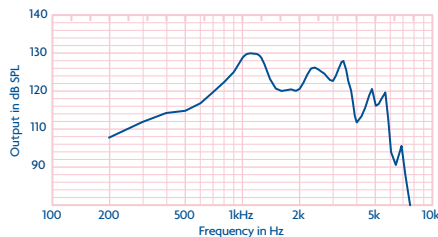
Peak OSPL90 (dB SPL)	ANSI 130	IEC 134
HFA OSPL90 (dB SPL)	124	NA
RTF OSPL90 (dB SPL)	NA	124
Peak Gain (dB SPL)	65	70
HFA Full On Gain (dB SPL)	60	NA
RTF Full On Gain (dB SPL)	NA	58
Frequency Range (kHz)	0.2-6.0	NA
Ref. Test Frequency (kHz)	1.0, 1.6, 2.5	1.6
Ref. Test Gain (dB SPL) (ansi-hfa; iec-rtf)	45	51
Harmonic Distortion		
500 Hz % max	<5%	<5%
800 Hz % max	<5%	<5%
1600 Hz % max	<3%	<3%
Equivalent Input Noise (dB SPL)	<28	<30
(55-90 ANSI) (55-80 IEC) - test mode		
Attack Time (MS)	5	5
Release Time 0.1-s (MS)	125	125
Release Time 2.0-s (MS)	300	300
Induction Coil Sensitivity		
HFA SPLITS (ANSI 96) dB SPL	107	NA
MASL (IEC 118-1) dB SPL	NA	90
Battery Current (mA)	1.14	1.15
Idle (mA)	.94	.94
Estimated Battery Life for 16 hour day 13 Zinc Air Battery	16	16



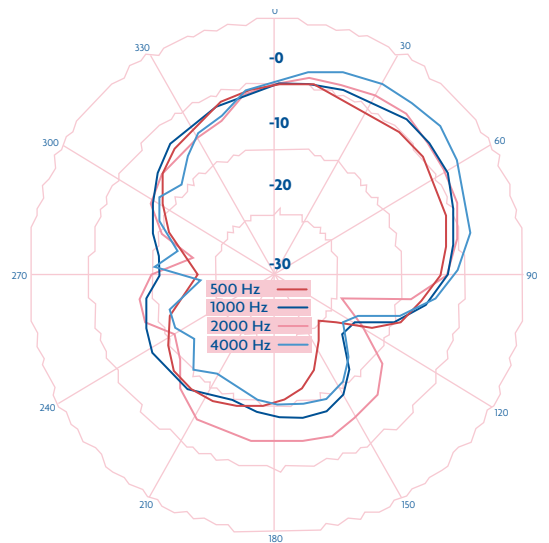
OSPL90 and Full On Gain curves for the Axent J13 BTE with the default filtered (white 680 ohm damper) earhook.



OSPL90 and Full On Gain curves for the Axent J13 BTE with an unfiltered earhook.



TELECOIL: Induction Coil sensitivity at Full On Gain. Data obtained in RMS magnetic field strength of 31.6 mA/meter.



KEMAR POLAR PLOTS

	500 Hz	1000 Hz	2000 Hz	4000 Hz
KEMAR DI Values	5.3	4.1	4.0	1.1
Freefield DI Values	5.6	5.7	5.4	4.9

Measurement Conditions and Recommendations

The data for Axent J13 BTE are obtained and performance is expressed according to ANSI S3.22 (1996) and IEC 60118-0 (1983), 60118-1 (1999), and 60118-2 (1997). Electro-acoustic data are measured on a Starkey proprietary Real Time Analyzer. 2D polar plots and DI data are measured on a B&K PULSE 3560C in an anechoic chamber. Data may be subject to change with product refinement.

Axent J13 BTE hearing instruments may be set to Test Mode within PFS by reading the hearing aid and choosing Set to Full On Gain (Test Mode) from the Activity drop down menu. Test data results may vary from these specifications due to adaptive signal processing effects and available measurement equipment.

