

J13 Mesa Digital Signal Processor

Adaptive digital signal processing algorithms incorporated in a multichannel device with versatile compression and dynamic directionality to greatly enhance performance and fitting flexibility.



*J13 Mesa BTE
with PDI MM*

*J13 Mesa BTE
MultiMemory*

Feature Summary:

Precision Frequency Resolution to optimize fine-tuning of the response for the most unique hearing loss configurations.

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

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

Adaptive Feedback Cancellation.

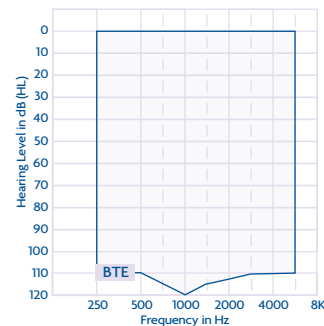
MultiChannel Expansion technology reduces microphone and low-level environmental noise.

Programmable Indicator Tones for low battery, volume control and multimemory.

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 feature within PFS.

M-O Switch.

Tamper Resistant Battery Door.

Size I3 Battery.

Options:

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

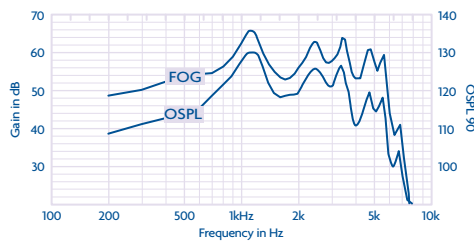
DAI Accessories.

Pediatric and Filtered Earhooks.

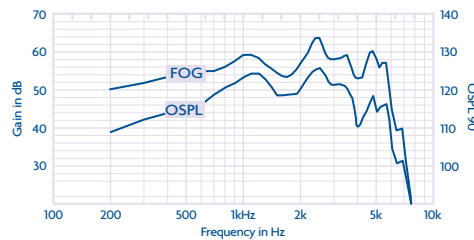


J13 Mesa Digital BTE

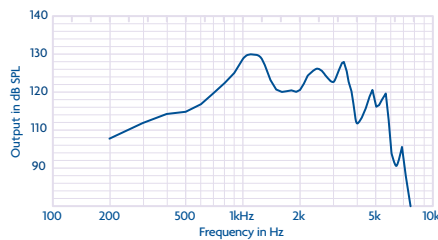
Peak OSPL90 (dB SPL)	ANSI 130	IEC 134
HFA OSPL90 (dB SPL)	124	NA
RTF OSPL90 (dB SPL)	NA	124
Peak Gain (dB)	65	70
HFA Full On Gain (dB)	60	NA
RTF Full On Gain (dB)	NA	58
Frequency Range (kHz)	0.2-6.0	NA
Ref. Test Frequency (kHz)	1.0, 1.6, 2.5	1.6
Ref. Test Gain (dB SPL) (ANSI-HFA; IEC-RTF)	45	51
Harmonic Distortion		
500 Hz	<5%	<5%
800 Hz	<5%	<5%
1600 Hz	<3%	<3%
Equivalent Input Noise (dB SPL)	<28	<30
(55-90 ANSI) (55-80 IEC) – Test Mode		
Attack Time	5 ms	5 ms
Release Time 0.1-s	125 ms	125 ms
Release Time 2.0-s	300 ms	300 ms
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)	0.94	0.94
Estimated Battery Life for 16 hour day 13 Zinc Air (days)	16	16



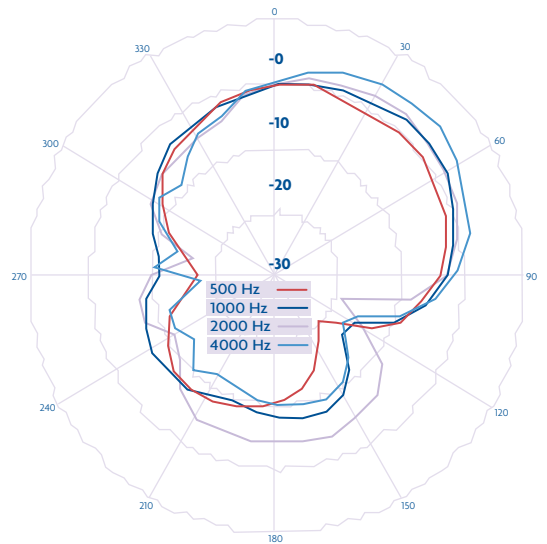
BTE UNDAMPED: OSPL90 and Full On Gain curves with an unfiltered earhook.



BTE DAMPED: OSPL90 and Full On Gain curves with the default filtered (white 680 ohm damper) 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 Mesa 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. Where applicable, 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.

Mesa 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.

