Max™ E SPm

BTE hearing instrument series

Performance profile

6 channels

Super power specific features

Power Adaptation Manager

Allows the gradual decrease of amplification over time. Starting from the frequency response clients expect, which can sometimes be excessive and above prescribed target, this feature will automatically, slowly and steadily reduce gain and MPO to a safer level to maximize speech intelligibility and long-term hearing health

Frequency compression

By shifting sounds away from areas where hearing is most damaged and compressing them into the audible range, clients experience a fuller range of sounds for improved awareness and speech intelligibility

SmartFocus SP

The performance of directional microphones, speech enhancement, noise reduction and gain have been purposely optimized and work synergistically in relation to one another to provide the best speech understanding or comfort for those with severe to profound hearing losses, without compromising awareness

Bass enhancer

Provides additional low frequency gain boost in one easy software control

Signature features

Program options

4 manual programs

Feedback manager

Feedback manager offers maximum usable gain by suppressing feedback transients before they become audible

Wireless technology

DuoLink – program and volume adjustments conducted on one hearing instrument are automatically transferred to the other ear

Additional features

- Adaptive directional
- AntiShock™
- · Wind noise manager
- DAI
- · Easy-t and telecoil
- MvMusic™
- Speech enhancement LD
- Noise reduction
- Data logging
- Optional remote controls
- Optional Smart Alert™ System
- Optional wireless programming with iCube
- IntelliVent technology available on custom ear pieces

Fitting guide



Max E SPm is suitable for fitting severe to profound hearing losses and can fit audiogram configurations ranging from reverse to precipitously sloping.

Max E SPm B	TE series	Max E SPm power tube	Max E SPm filtered earhook	Max E SPm unfiltered earhook
ANSI 3.22 2003/IE	C 118-7 2CC COUPLER TECHNICAL DATA			
	Reference test frequency - IEC 118-7 (kHz)	1.6	1.6	1.6
Pout dBSPL 140	OSPL90			
130	Maximum (dB SPL)	140	133	140
110 100 90 100 200 500 1000 2000 5000 10000ec	Nominal (dB SPL)	137	132	137
	ANSI HFA (dB SPL)	122	127	130
	at RTF (dB SPL)	119	126	126
60	Full on gain (input 50 dB SPL)			
	Maximum (dB)	75	68	75
	ANSI HFA (dB)	60	64	67
	at RTF (dB)	57	63	64
130 120 100 90 100 200 590 1000 2000 5000 10000Hz	Basic frequency response (ANSI 2003)			
	Frequency range (Hz)	< 100-6300	< 100-5800	<100-5800
	Reference test gain (dB)	45	51	53
	Current drain at RTG (mA)	1.7	2.1	2.1
	Typical battery life (h)	180	150	150
	Equivalent input noise at RTG (dB SPL)	19	19	19
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	2/2/1	4/2/1	4/2/1
8027 130 130 130 130 130 100 100 100 100 100	Induction coil sensitivity (ANSI 2003, 31.6 mA/m)			
	HFA SPLITS/STS-RSETS (dB SPL/dB)	106/1	112/1	114/1
	Mic at 70 dB SPL vs induction coil at 100 mA - Mic - Mic - Induction coil	./m		
	Electromagnetic compatibility			
	FMC immunity by ANSI c62 10-2001 FMC omni/talacoil			
	EMC immunity by ANSI c63.19-2001 EMC, omni/telecoil	M2/T2	M2/T2	M2/T2
IEC 118-0 OES CO	UPLER TECHNICAL DATA	IVI2/12	M2/12	M2/T2
IEC 118-0 OES CO		1.6	M2/12	M2/T2 1.6
IEC 118-0 OES CO	UPLER TECHNICAL DATA			
	WPLER TECHNICAL DATA Reference test frequency - IEC 118-0 (kHz)			
	UPLER TECHNICAL DATA Reference test frequency - IEC 118-0 (kHz) OSPL90	1.6	1.6	1.6
	UPLER TECHNICAL DATA Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL)	1.6	1.6	1.6
	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL)	1.6	1.6	1.6
	PLER TECHNICAL DATA Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL)	1.6 141 128	1.6 138 131	1.6 141 133
	PLER TECHNICAL DATA Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB)	1.6 141 128	1.6 138 131	1.6 141 133
130 130 130 130 100 900 200 500 1000 200 500 1000 200 500 1000 500 500 500 500 500 500 500	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB)	1.6 141 128	1.6 138 131	1.6 141 133
120 120 120 120 120 120 120 120 120 120	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response	1.6 141 128 80 65	1.6 138 131 73 70	1.6 141 133 80 70
130 130 130 130 100 900 200 500 1000 200 500 1000 200 500 1000 500 500 500 500 500 500 500	PLER TECHNICAL DATA Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz)	1.6 141 128	1.6 138 131	1.6 141 133
130 130 130 130 100 900 200 500 1000 200 500 1000 200 500 1000 500 500 500 500 500 500 500	PLER TECHNICAL DATA Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz) Reference test gain (dB)	1.6 141 128 80 65	1.6 138 131 73 70 <100-6100	1.6 141 133 80 70
6527 140 130 130 130 130 130 130 130 130 130 13	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz) Reference test gain (dB) Current drain at RTG (mA)	1.6 141 128 80 65 <100-6500 53	1.6 138 131 73 70 <100-6100 57	1.6 141 133 80 70 <100-6200 58
650 140 120 110 9100 200 500 1000 2000 5000 1000000 660 80 90 90 90 90 90 90 90 90 90 90 90 90 90	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz) Reference test gain (dB) Current drain at RTG (mA) Typical battery life (h)	1.6 141 128 80 65 <100-6500 53 1.3	1.6 138 131 73 70 <100-6100 57 1.3	1.6 141 133 80 70 <100-6200 58 1.3 260
650 140 120 110 9100 200 500 1000 2000 5000 1000000 660 80 90 90 90 90 90 90 90 90 90 90 90 90 90	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz) Reference test gain (dB) Current drain at RTG (mA) Typical battery life (h) Equivalent input noise at RTG (dB SPL)	1.6 141 128 80 65 <100-6500 53 1.3 240 19	1.6 138 131 73 70 <100-6100 57 1.3 240 19	1.6 141 133 80 70 <100-6200 58 1.3 260 19
130 130 130 130 130 130 130 130 130 130	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz) Reference test gain (dB) Current drain at RTG (mA) Typical battery life (h) Equivalent input noise at RTG (dB SPL) Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	1.6 141 128 80 65 <100-6500 53 1.3 240	1.6 138 131 73 70 <100-6100 57 1.3 240	1.6 141 133 80 70 <100-6200 58 1.3 260
#300 100 100 1000 1000 10000 1000000 1000000	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz) Reference test gain (dB) Current drain at RTG (mA) Typical battery life (h) Equivalent input noise at RTG (dB SPL)	1.6 141 128 80 65 <100-6500 53 1.3 240 19	1.6 138 131 73 70 <100-6100 57 1.3 240 19	1.6 141 133 80 70 <100-6200 58 1.3 260 19
130 130 130 130 130 100 100 100 100 100	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz) Reference test gain (dB) Current drain at RTG (mA) Typical battery life (h) Equivalent input noise at RTG (dB SPL) Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%) Induction coil sensitivity	1.6 141 128 80 65 <100-6500 53 1.3 240 19 3/3/2	1.6 138 131 73 70 <100-6100 57 1.3 240 19 4/3/2	1.6 141 133 80 70 <100-6200 58 1.3 260 19 5/3/2
000 100 100 1000 1000 1000 10000 1000000	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz) Reference test gain (dB) Current drain at RTG (mA) Typical battery life (h) Equivalent input noise at RTG (dB SPL) Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%) Induction coil sensitivity at RTF (graph shown for 31.6 mA/m at RTG) (dB SPL)	1.6 141 128 80 65 <100-6500 53 1.3 240 19 3/3/2	1.6 138 131 73 70 <100-6100 57 1.3 240 19 4/3/2	1.6 141 133 80 70 <100-6200 58 1.3 260 19 5/3/2
130 130 130 130 130 100 100 100 100 100	Reference test frequency - IEC 118-0 (kHz) OSPL90 Maximum (dB SPL) at RTF (dB SPL) Full on gain (input 50 dB SPL) Maximum (dB) at RTF (dB) Basic frequency response Frequency range (DIN 45605) (Hz) Reference test gain (dB) Current drain at RTG (mA) Typical battery life (h) Equivalent input noise at RTG (dB SPL) Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%) Induction coil sensitivity at RTF (graph shown for 31.6 mA/m at RTG) (dB SPL) Electromagnetic compatibility EMC immunity by IEC 60118-13, field strength 75/50 V/m, omni IRIL	1.6 141 128 80 65 <100-6500 53 1.3 240 19 3/3/2 115	1.6 138 131 73 70 <100-6100 57 1.3 240 19 4/3/2 119	1.6 141 133 80 70 <100-6200 58 1.3 260 19 5/3/2 120

Max E SPm filtered earhookMax E SPm unfiltered earhook Battery size: 13; Source: voltage 1.3 V; Tubing: length 25 mm, inside diameter 1.93 mm; Power tube length: 1

Measurement data obtained with closed configuration using an HA-2 coupler (ANSI-3.7-1995) or occluded ear simulator (EN 60711, coupling arrangement according to fig.4 in the test standard), and set to linear, omni mode with all adaptive features disabled.

Sound pressure level of these hearing aids exceeds 132 dB SPL.

We reserve the right to change specification data without notice as improvements are introduced.