

Oticon ♦ Tego



PRODUCT INFORMATION
FITTING INFORMATION
TECHNICAL INFORMATION



Oticon Tego

Oticon Tego is a mid-market hearing instrument, with many advanced digital features. With Tego however, the benefits of these technologies are more fully realised through DecisionMaker, which uses Artificial Intelligence (AI) to ensure that the features are used at the right time and in the right combination for each situation. The user does not need to adjust anything, or be concerned whether their instrument is correctly set. DecisionMaker simply takes care of it for them – intelligently and automatically.

DecisionMaker™

DecisionMaker orchestrates the directionality and noise management systems in Tego. Using AI processing techniques, DecisionMaker ensures the instrument is always correctly set, providing the best comfort and speech understanding in noise. Furthermore, DecisionMaker interleaves Wide Dynamic Range Compression and Dynamic Feedback Cancellation to present the wearer with a correct sound picture - each and every second.

Artificial Intelligence allows multiple scenarios (instrument setting options) to be evaluated instantaneously and simultaneously through parallel-processing. Then, outcome-based decisions are made that give the greatest user benefit. This is a fundamentally different approach from conventional prediction-based systems. For example – an AI-based decision is made about whether the clearest speech would be provided in VoiceDirect or Surround mode. Then, using Automatic Directionality, DecisionMaker switches seamlessly from one mode to another, based on the outcome that will provide the clearest speech in a particular situation.

VoiceDirect™

VoiceDirect is a new directionality system that extracts speech from noise. It applies directionality where speech information is most present – i.e. in the high frequencies. In these frequencies Noise Management is carefully applied to further reduce noise. Lower frequencies remain omni-directional to maintain the loudness of speech, whilst allowing strong noise reduction to be used. This does not unduly affect speech understanding. Thus a superior speech understanding AND a comfortable listening experience is produced. In this way VoiceDirect eliminates many of the drawbacks associated with conventional directional systems.

Directionality

All Tego styles (except CIC/MIC) feature advanced directionality capabilities. In addition to VoiceDirect (see above), Tego features Automatic Directionality which intelligently switches between VoiceDirect and Surround modes. Also, Full Directionality can be set as a separate program.

Noise Management (Directional Dependant)

Tego deploys multi-band, modulation based noise reduction. By working together with VoiceDirect, under control of DecisionMaker, Noise Management is applied differently in the various instrument modes. Hereby the comfort and the perception of speech by the wearer is greatly improved.

Identities

Tego uses the concept of Identities to make the fitting process fast and accurate. An Active, Gradual or Dynamic Identity can be selected, which personalises the settings of the DecisionMaker for the client.

OpenEar Acoustics™

OpenEar Acoustics combines substantially larger vents with Dynamic Feedback Cancellation to provide clear, natural sound quality, and virtually eliminates occlusion and feedback.

User Benefits

- Intelligent and automatic in all listening situations, yet with manual override if required
- Excellent sound clarity, minimum noise
- Minimum occlusion
- Minimum feedback
- Cosmetically attractive solutions

Standard Features

- DecisionMaker™ - general program enabled by Artificial Intelligence
- Identities
- Directionality (except CIC/MIC)
- Automatic Directionality
- VoiceDirect™ – Speech focused directionality
- Surround Mode
- Noise Management
- OpenEar Acoustics™
- Dynamic Feedback Cancellation
- Many options and programs for phone use
- Up to three customizable programs
- Program sound indicators (beeps)
- Standby function
- On-set delay

Custom Instruments

- Design optimised for size and cosmetics
- Colours: beige, light brown, medium brown, dark brown
- Selection of three wax protection systems:
 - NoWax
 - MicroWaxBuster
 - WaxBuster

Options and accessories include:

- Auto Phone - automatic shift to one of two types of dedicated program:
 - Phone Programs
 - Telecoil Telephone Program
- Fully programmable telecoil
- Volume Control with audible indication

BTE Instruments

- Direct Audio Input
- Fully programmable telecoil
- FM compatible
- Adjustable sound hook
- Hair-tone colours: beige, light brown, dark brown, light grey and dark grey
- Cool colours: black, transparent, yellow, orange, pink, purple, blue and green

Options and accessories include:

- Volume Control with audible indication
- 9 dB, 5 dB and undamped sound hooks
- Pediatric sound hooks
- Thin tubes (Oticon Corda)
- Tamper-resistant battery drawer
- DAI and FM shoes
- Eyeglasses adaptor
- CROS and BI-CROS

Right and Left Identification

Right and left marking for easier identification is standard with Tego. Open the battery drawer. Insert the marker and twist off the top part.



Cables and Fitting Systems

Tego instruments are programmed using the Genie Fitting Software 6.0 or higher compatible with NOAH 2.0 & 3.0. Tego instruments use Oticon cable # 3 and FlexConnect for custom instruments and Oticon cable # 3 and shoe for the BTE instruments.

Connect Custom Instruments

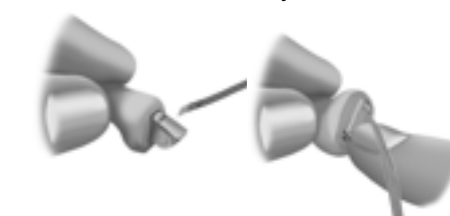
Connect the small plug to the black connector on the FlexConnect, taking care to align the red dots. Insert a new battery in the instrument. With the battery door slightly open, insert the gold end of the FlexConnect into the space between the battery

door and hinge. Make sure that the connecting side of the FlexConnect is facing away from the door and the FlexConnect is pushed all the way in. Close the battery door.



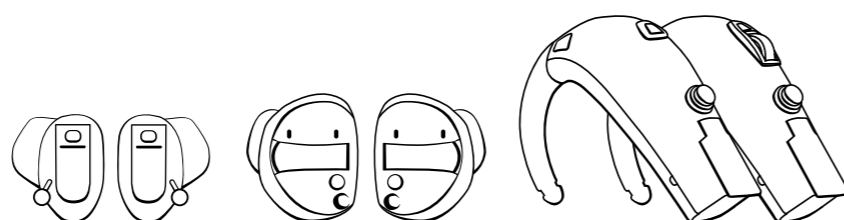
Connect Custom CIC

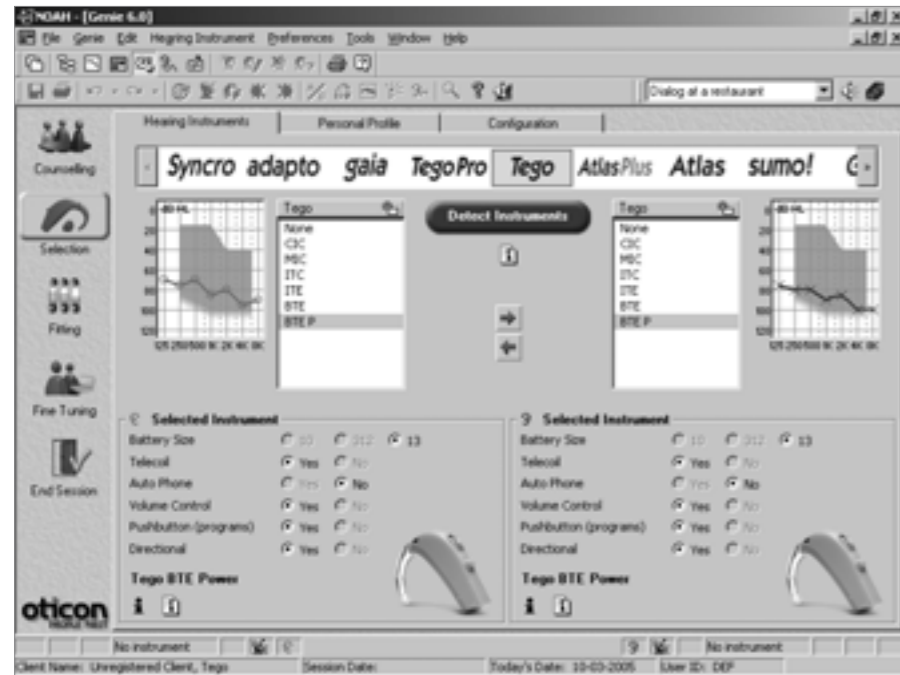
With the battery door slightly open, insert the gold end of the FlexConnect into the small slot on the battery door. Make sure that the connecting side of the FlexConnect is facing the push button. Close the battery door.



Connect BTE Instruments

Connect the Oticon #3 cable to the programming shoe (make sure the red dot on the plug and the shoe are aligned) and push the instrument into the adaptor. Do not twist the plug!





SELECTION STEP

The Selection step includes three sub-panels:

- Hearing Instruments
 - Select the physical instrument.
- Personal Profile
 - Enhance the individual prescribed setting.
- Configuration
 - Configure the hearing instrument with program content and acoustics (e.g. vent).

The instruments will automatically be connected when you enter the fitting step after having used Detect Instruments.

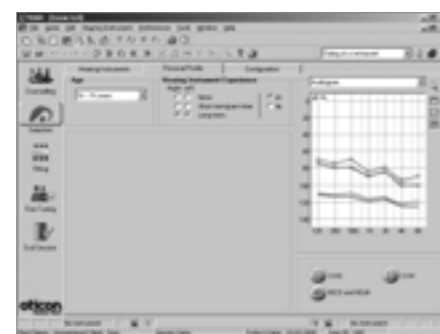
Selection of Aid(s)

The selection of hearing instruments involves 3 steps:

1. Choose Tego
2. Select style (BTE, ITE, etc.)
3. Select features (battery size, telecoil, etc.)

Personal Profile

Personal Profile provides the opportunity to set a more personalized fitting for your client.



In Personal Profile you can set the age and experience level of your client. When a new instrument is selected, Genie automatically reads the client age from NOAH and sets the appropriate age group in the Personal Profile panel.



Configuration

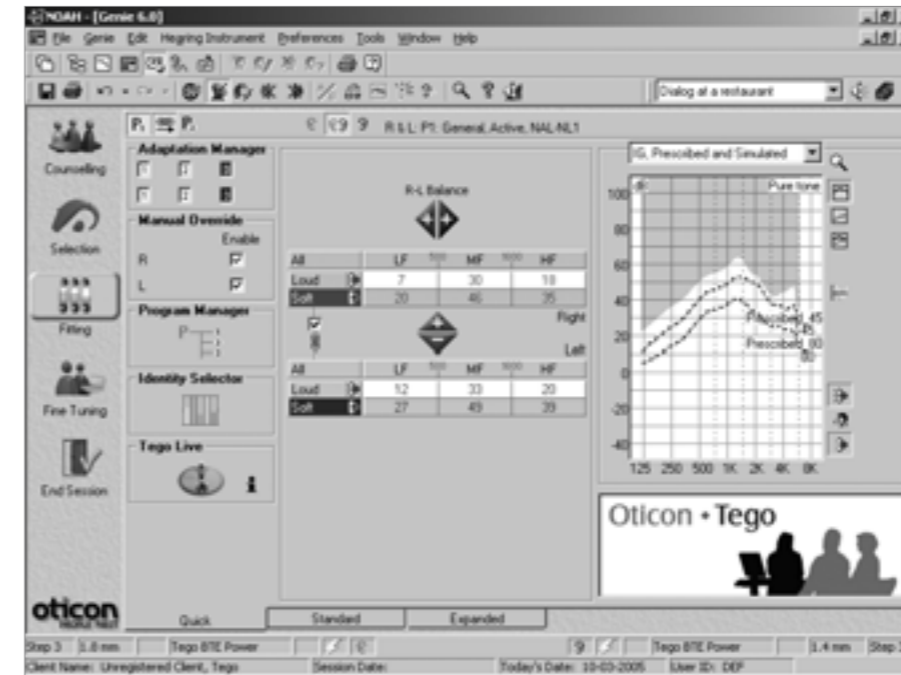
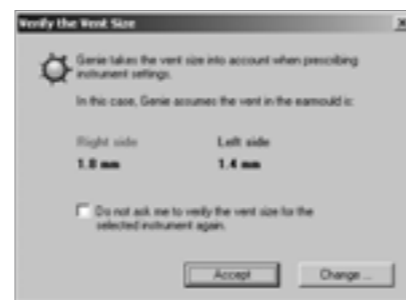
In this panel you can select the contents of programs and set up acoustics for the aid (e.g. vent). When ordering an earmould for BTE instruments, you may want to enter the Configuration to see what ventilation Genie prescribes.



Vent Check

It is very important that Genie knows which vent is present either in custom instruments or in the earmould for BTE instruments. If Genie does not know the actual vent size of the instrument, then your client may get either too much or too little LF amplification.

- Custom instruments: when you detect the instrument, the vent will automatically be read into Genie. If you decrease the vent size you must manually change the vent in the Configuration tab.
- BTE instruments: A dialog will prompt you to make sure that the vent in Genie is also the one that is present in your client's earmould.



FITTING STEP

The Fitting step displays the controls on the selected instrument(s), and contains the tools needed for fitting. The Fitting step consists of three panels that offer progressively greater access to adjustment parameters. The Quick panel is the simplest of the options, increasing in complexity to the Standard and the Expanded panel.

Fitting controls:

Adaptation Manager

The Adaptation Manager provides easy access to a gradual acclimatisation process. Changing the trimmer value affects gain, compression and frequency response.

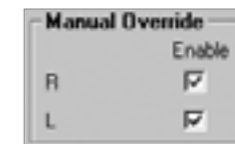


The 3 steps are based on the client's experience:

- Step 1: Reduced settings optimised for helping first-time users through acclimatisation.
- Step 2: Slightly reduced settings for short-term or part-time users.
- Step 3: Fully prescribed settings for the experienced user.

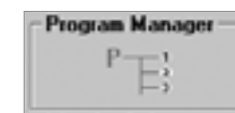
Manual Override

Instruments with volume control offer a Manual Override to let you control how much the client can increase the gain. You can also disable or enable the volume control by clicking the "Disable" button. In instruments with more than one program, the volume control can be disabled in P1. However, this will influence all programs.



Programs

Tego instruments provide high flexibility and easy handling of programs in the Program Manager. Up to 3 programs can be activated.



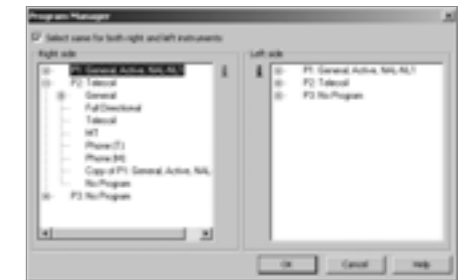
Managing Programs

The programs are handled in the Program Manager. Here you can activate, configure or delete a program. You can also change the order of the programs.

To activate a program:

1. Select "No Program"
2. Expand the program content structure (click the "+")
3. Select content

When a program is activated, a new one becomes available until all three programs are activated.



If you want to delete a program, select No Program. The remaining programs will move upward. Thus, if the client has 3 programs and P2 is deleted, then P3 will become P2.

Quick Fitting Panel

In most cases the Quick Fitting panel is sufficient to provide a good fitting. In this panel the underlying 4 frequency channels in Tego are gathered in 3 channels: LF, MF and HF channels for low (0-500 Hz), medium (500-1600 Hz) and high (1600-5900 Hz) frequencies.

For both left and right ear instrument Soft (45 dB SPL) and Loud (80 dB SPL) input levels can be selected. Likewise, you can select all three LF, MF or HF controls by clicking the LF, MF or HF button in the table. By selecting "All", all gain controls will be selected.

The colours of the control values are blue (left) and red (right) until adjustments are made, if any. To indicate that the control value is no longer prescribed, the value turns black.

Link Icon: By checking this box you can make left and right adjustments for each parameter at the same time.



+/- Button: These controls adjust the gain controls in 1dB steps in the selected aids.



R-L Balance: Adjusts the right-left balance; thus increasing the overall gain in the right instrument, while decreasing the overall gain in the left.



Fitting Controls set limits for one another

When changing a gain control, you may find its movement stopping before it reaches the visible limit (displayed as a shaded area on the Prescribed and Simulated Insertion Gain graph). This situation occurs when the setting of another control prevents further movement. The control which is causing the limitation flashes a coloured arrow showing the direction in which this control must be moved before the first control can be moved further.

Identity Selector

The Tego Identity Selector is the simple intuitive tool for the selection of Identities. It is available from the fitting step in Genie in any General program. With this tool, Tego Identities can be compared and changed.



Any of the Identities can be chosen. If any fine tuning has been done in the current Genie session, it is also possible to change between fine tuned and prescribed Identities.

Note: When you change the Identity in a General program it takes up to 20 seconds before automatics such as the VoiceDirect and Noise Management will be fully adapted to the environment.

Therefore care should be taken when comparing two Identities using the Identity Selector.

Tego Live

Tego Live will allow you to explore and explain the inner workings of Tego – live!

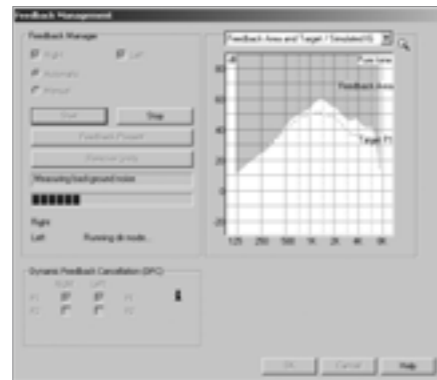


Tego Live is accessed from the Tego Fitting Panel, and enables you to see the benefits of the DecisionMaker and VoiceDirect.



Feedback Management

The Feedback Manager is accessible from the toolbar in the Fitting and Fine Tuning steps. The Feedback Manager is a fast and effective way to set the instrument's feedback limits to ensure that no static feedback is present.



Dynamic Feedback Cancellation

All Tego instruments have a Dynamic Feedback Cancellation system that contributes to the instruments' superb sound quality. Unlike static feedback management and other dynamic feedback reduction methods, the DFC

system does not reduce gain. So audibility and speech understanding are never compromised.

DFC is present and default on in all microphone programs. The DFC system is active in the instrument during the fitting sequence in Genie.

When to run the Feedback Manager?

If there is feedback then run the FBM, otherwise there is no reason to run the Feedback Manager and set the feedback limits.

End Session

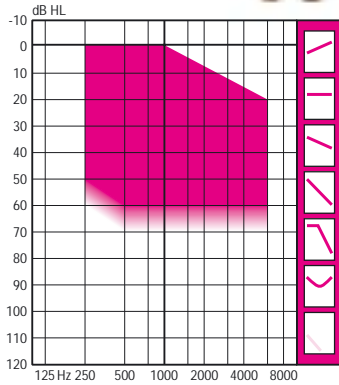
To end the fitting session, go to End Session.



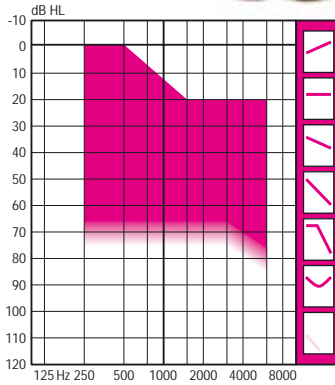
To exit Genie, click the Save, Program and Exit button.



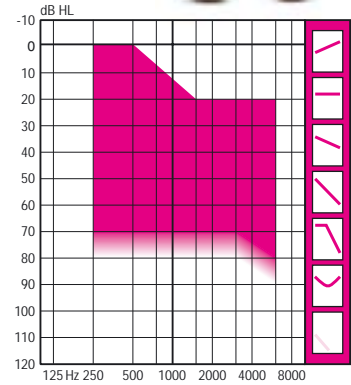
CIC / MIC



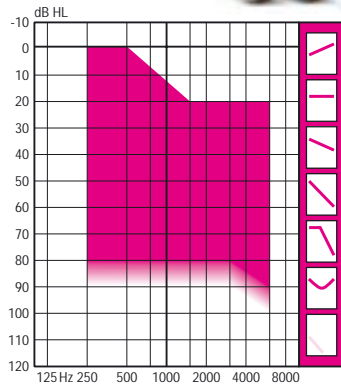
ITC



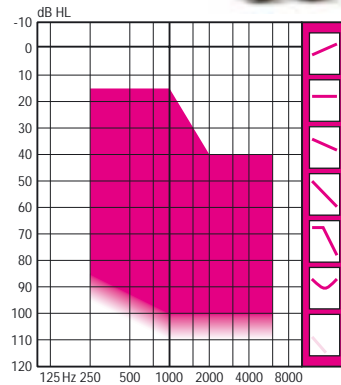
ITE



BTE



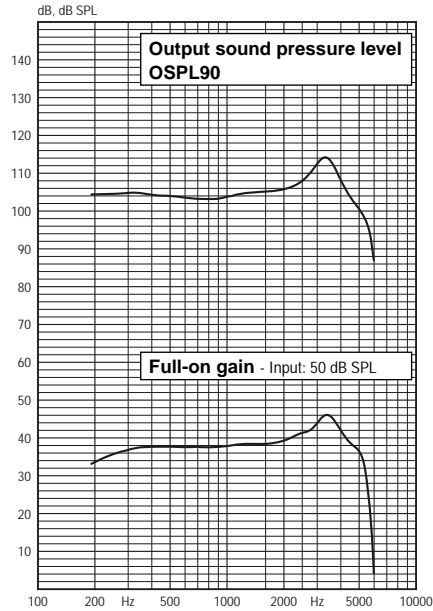
BTE Power



	CIC / MIC	ITC (10)	ITC (312)	ITE (312)	ITE (13)	BTE	BTE Power
Peak Gain, dB (711/2cc)	46/36	46/36	51/40	55/46	61/51	61/53	68/62
Peak Output, dB SPL (711/2cc)	114/103	115/104	120/110	122/112	123/113	122/112	134/126
Programs	1-3	-	1-3	1-3	1-3	1-3	1-3
Directionality	-	Yes	Yes	Yes	Yes	Yes	Yes
Telecoil	-	-	-	Optional	Optional	Yes	Yes
Auto Phone	-	Optional	Optional	Optional	Optional	-	-
Volume Control	-	-	-	Optional	Yes	Optional	Yes
Battery size	10	10	312	312	13	13	13
Battery life, typical (hrs)	100	70	120	120	220	220	170

Ear simulator

Measured according to IEC publications 118-0, -1, -2, -6, -13 (incl. amendments) and 711.



Data at a glance

General measuring conditions

All measurements are made on instruments without wax protection.

Note: Measurement data obtained through standard pure tone measurements on advanced adaptive digital hearing aids may be misleading with regard to characteristics in normal use. For technical measurements, special technical settings that disables all the adaptive features are used.

Unless otherwise stated all measurements are in the Omnidirectional mode.

Ear simulator		2cc coupler
OSPL90	Output, dB SPL	OSPL90
114	Peak	103
104	1000 Hz	98
105	1600 Hz	97
105	Average (DIN)	98
	HF Average (ANSI)	98
Full-on gain, dB		
Input: 50 dB SPL		
46	Peak	36
38	1000 Hz	34
38	1600 Hz	32
39	Average (DIN)	34
	HF Average (ANSI)	33
Frequency range, Hz		
115-5800	DIN/ANSI	100-5800

Total harmonic distortion, %

Reference setting. Input: 70 dB SPL

IEC	Hz	ANSI
1.0	500, typical	1.0
1.0	800, typical	0.5
1.5	1600, typical	1.0

Equivalent input noise level, dB SPL (A)

20	Typical/maximum	(ANSI) 20/24
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Battery consumption, mA

0.7	Quiescent, typical/maximum	0.7/0.9
0.7	IEC	0.7
	ANSI	0.7

Battery

Size 10 (IEC PR70)

Estimated life in hours, Typ/Min

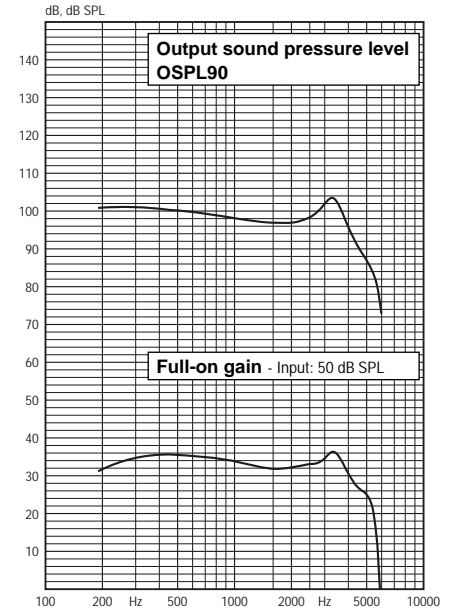
1.4 V Zinc air	100/80
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EMC Immunity (IEC 118-13), GSM/DECT

IRIL, dB SPL	Field strength, (V/m)
-38/-27	Microphone (Omni) 3/2

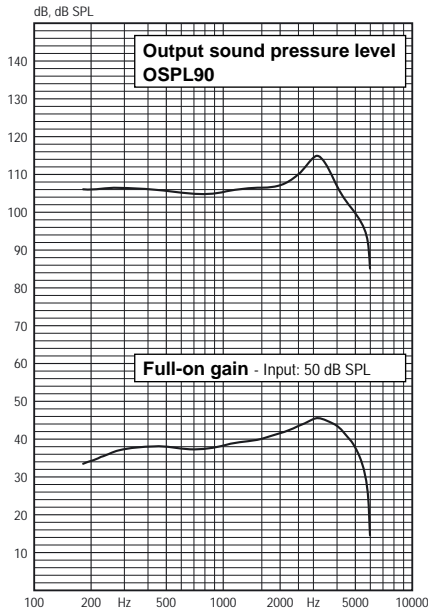
2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (2003) and S3.7 (1995).



Ear simulator

Measured according to IEC publications 118-0, -1, -2, -6, -13 (incl. amendments) and 711.



Data at a glance

General measuring conditions

All measurements are made on instruments without wax protection.

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Unless otherwise stated all measurements are in the Omnidirectional mode.

Ear simulator		2cc coupler
OSPL90	Output, dB SPL	OSPL90
115	Peak	104
105	1000 Hz	99
106	1600 Hz	98
106	Average (DIN)	100
	HF Average (ANSI)	99
Full-on gain, dB		
Input: 50 dB SPL		
46	Peak	36
38	1000 Hz	32
40	1600 Hz	31
39	Average (DIN)	32
	HF Average (ANSI)	32
Frequency range, Hz		
100-5800	DIN/ANSI	100-5900

Total harmonic distortion, %

Reference setting. Input: 70 dB SPL		
IEC	Hz	ANSI
0.5	500, typical	0.5
0.5	800, typical	0.5
0.5	1600, typical	0.5

Equivalent input noise level, dB SPL (A)

18	Typical/maximum, Omni (ANSI) 18/22
32	Typical/maximum, Dir (ANSI) 33/37

Battery consumption, mA

1.0	Quiescent, typical/maximum	1.0/1.2
1.0	IEC	1.0
	ANSI	1.1

Battery

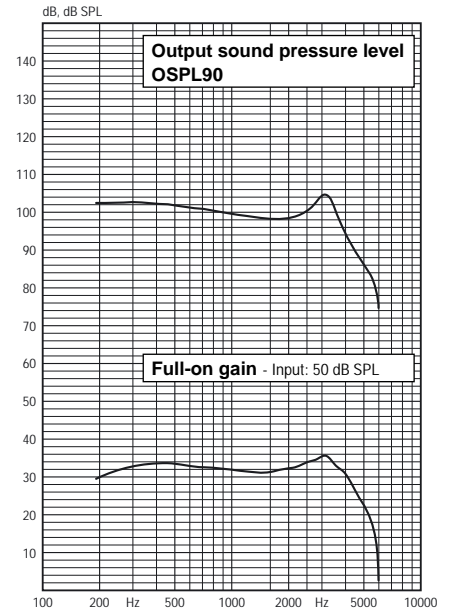
Size 10 (IEC PR70)	
Estimated life in hours, Typ/Min	
1.4 V Zinc air	70/60

EMC Immunity (IEC 118-13), GSM/DECT

IRIL, dB SPL		Field strength, (V/m)
-44/-8	Microphone (Omni)	3/2
-29/-5	Microphone (Dir)	3/2

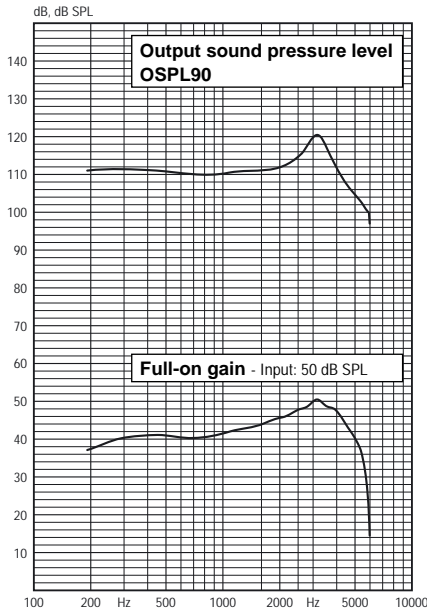
2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (2003) and S3.7 (1995).



Ear simulator

Measured according to IEC publications 118-0, -1, -2, -6, -13 (incl. amendments) and 711.



Data at a glance

General measuring conditions

All measurements are made on instruments without wax protection.

Note: Measurement data obtained through standard pure tone measurements on advanced adaptive digital hearing aids may be misleading with regard to characteristics in normal use. For technical measurements, special technical settings that disables all the adaptive features are used.

Unless otherwise stated all measurements are in the Omnidirectional mode.

Ear simulator		2cc coupler
OSPL90	Output, dB SPL	OSPL90
120	Peak	110
110	1000 Hz	105
111	1600 Hz	103
111	Average (DIN)	105
	HF Average (ANSI)	105
Full-on gain, dB		
Input: 50 dB SPL		
51	Peak	40
41	1000 Hz	36
44	1600 Hz	36
43	Average (DIN)	37
	HF Average (ANSI)	37
Frequency range, Hz		
100-5900	DIN/ANSI	100-5800

Total harmonic distortion, %

Reference setting. Input: 70 dB SPL

IEC	Hz	ANSI
0.5	500, typical	0.5
0.5	800, typical	0.5
1.0	1600, typical	1.0

Equivalent input noise level, dB SPL (A)

19	Typical/maximum, Omni (ANSI) 20/24
32	Typical/maximum, Dir (ANSI) 29/33

Battery consumption, mA

1.1	Quiescent, typical/maximum	1.1/1.3
1.1	IEC	1.1
	ANSI	1.2

Battery

Size 312 (IEC PR41)

Estimated life in hours, Typ/Min

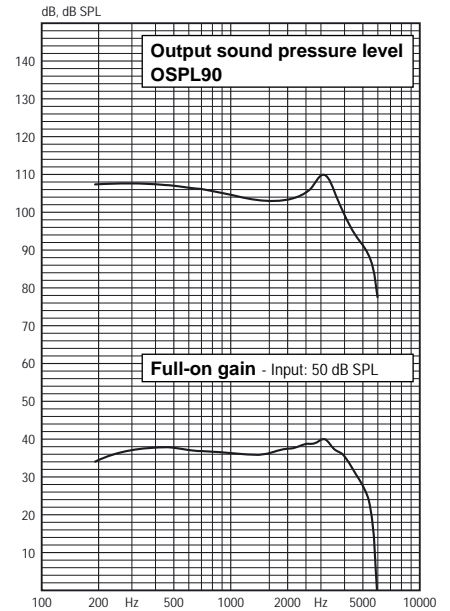
1.4 V Zinc air	120/100
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EMC Immunity (IEC 118-13), GSM/DECT

IRIL, dB SPL		Field strength, (V/m)
-21/-14	Microphone (Omni)	3/2
-17/-4	Microphone (Dir)	3/2

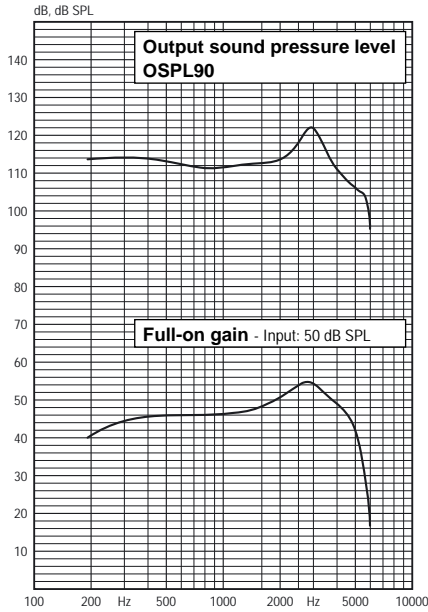
2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (2003) and S3.7 (1995).

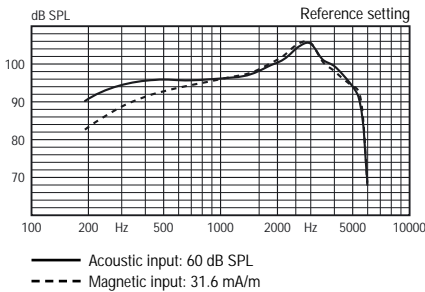


Ear simulator

Measured according to IEC publications 118-0, -1, -2, -6, -13 (incl. amendments) and 711.



Frequency response with magnetic and acoustic input



Data at a glance

General measuring conditions

All measurements are made on instruments without wax protection.

Note: Measurement data obtained through standard pure tone measurements on advanced adaptive digital hearing aids may be misleading with regard to characteristics in normal use. For technical measurements, special technical settings that disables all the adaptive features are used.

Unless otherwise stated all measurements are in the Omnidirectional mode.

Ear simulator		2cc coupler
OSPL90	Output, dB SPL	OSPL90
122	Peak	112
111	1000 Hz	106
113	1600 Hz	105
113	Average (DIN)	107
	HF Average (ANSI)	106
Full-on gain, dB		
Input: 50 dB SPL		
55	Peak	46
46	1000 Hz	42
48	1600 Hz	41
47	Average (DIN)	43
	HF Average (ANSI)	43
Frequency range, Hz		
135-5800	DIN/ANSI	100-5900

Telecoil output, dB SPL		
79	1 mA/m field, 1600 Hz	71
99	10 mA/m field, 1600 Hz	91
	SPLITS (ANSI)	87

Total harmonic distortion, %		
Reference setting. Input: 70 dB SPL		
IEC	Hz	ANSI
2.0	500, typical	1.5
1.5	800, typical	1.0
1.5	1600, typical	1.0

Equivalent input noise level, dB SPL (A)		
19	Typical/maximum, Omni (ANSI)	19/23
34	Typical/maximum, Dir (ANSI)	31/35

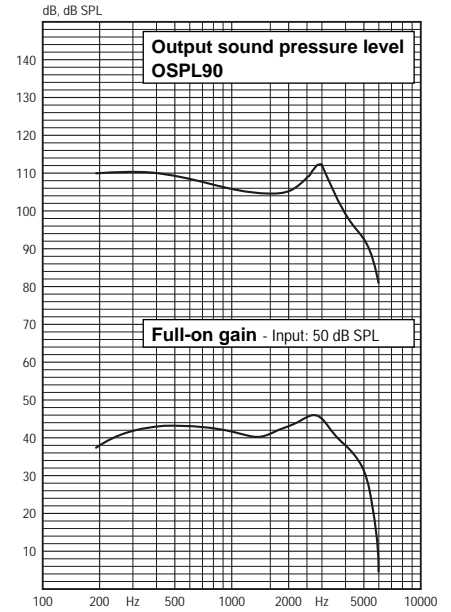
Battery consumption, mA		
1.1	Quiescent, typical/maximum	1.1/1.3
1.1	IEC	1.1
	ANSI	1.2

Battery	
Size 312 (IEC PR41)	
Estimated life in hours, Typ/Min	
1.4 V Zinc air	120/100

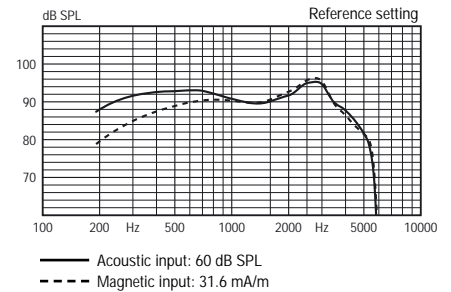
EMC Immunity (IEC 118-13), GSM/DECT		
IRIL, dB SPL	Field strength, (V/m)	
-31/-9	Microphone (Omni)	3/2
-27/-1	Microphone (Dir)	3/2
-34/-5	Telecoil	3/2

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (2003) and S3.7 (1995).

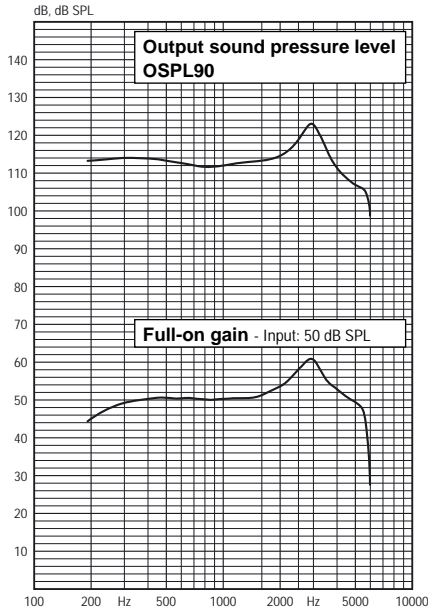


Frequency response with magnetic and acoustic input

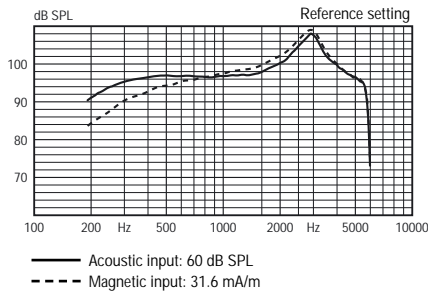


Ear simulator

Measured according to IEC publications 118-0, -1, -2, -6, -13 (incl. amendments) and 711.



Frequency response with magnetic and acoustic input



Data at a glance

General measuring conditions

All measurements are made on instruments without wax protection.

Note: Measurement data obtained through standard pure tone measurements on advanced adaptive digital hearing aids may be misleading with regard to characteristics in normal use. For technical measurements, special technical settings that disables all the adaptive features are used.

Unless otherwise stated all measurements are in the Omnidirectional mode.

Ear simulator		2cc coupler
OSPL90	Output, dB SPL	OSPL90
123	Peak	113
112	1000 Hz	107
113	1600 Hz	106
113	Average (DIN)	108
	HF Average (ANSI)	108
Full-on gain, dB		
Input: 50 dB SPL		
61	Peak	51
50	1000 Hz	45
52	1600 Hz	44
51	Average (DIN)	46
	HF Average (ANSI)	46
Frequency range, Hz		
115-5800	DIN/ANSI	100-5800

Telecoil output, dB SPL		
83	1 mA/m field, 1600 Hz	75
103	10 mA/m field, 1600 Hz	95
	SPLITS (ANSI)	91

Total harmonic distortion, %		
Reference setting. Input: 70 dB SPL		
IEC	Hz	ANSI
2.0	500, typical	1.5
1.0	800, typical	1.0
1.5	1600, typical	1.5

Equivalent input noise level, dB SPL (A)		
20	Typical/maximum, Omni (ANSI) 17/21	
33	Typical/maximum, Dir (ANSI) 33/37	

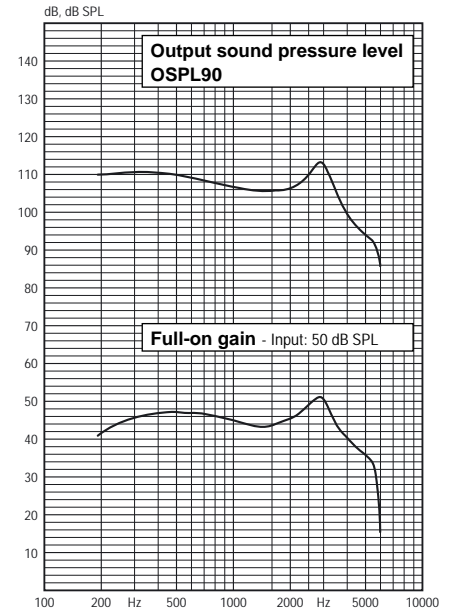
Battery consumption, mA		
1.1	Quiescent, typical/maximum	1.1/1.3
1.1	IEC	1.1
	ANSI	1.2

Battery	
Size 13 (IEC PR48)	
Estimated life in hours, Typ/Min	
1.4 V Zinc air	220/180

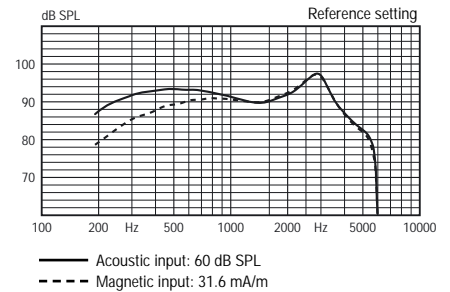
EMC Immunity (IEC 118-13), GSM/DECT		
IRIL, dB SPL	Field strength, (V/m)	
-36/-25	Microphone (Omni)	3/2
-30/-9	Microphone (Dir)	3/2
-36/-10	Telecoil	3/2

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (2003) and S3.7 (1995).

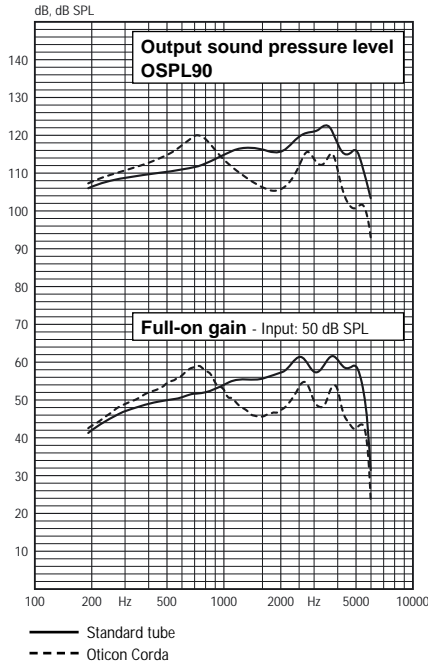


Frequency response with magnetic and acoustic input

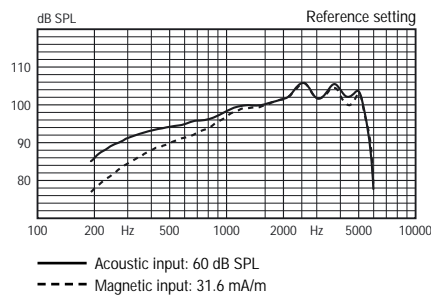


Ear simulator

Measured according to IEC publications 118-0, -1, -2, -6, -13 (incl. amendments) and 711.



Frequency response with magnetic and acoustic input



Data at a glance

Note: Measurement data obtained through standard pure tone measurements on advanced adaptive digital hearing aids may be misleading with regard to characteristics in normal use. For technical measurements, special technical settings that disables all the adaptive features are used.

Unless otherwise stated all measurements are in the Omnidirectional mode. Values in brackets were measured using Oticon Corda size 1B.

Ear simulator		2cc coupler
OSPL90	Output, dB SPL	OSPL90
122 (120)	Peak	(116) 112
115 (114)	1000 Hz	(108) 110
116 (106)	1600 Hz	(98) 109
114 (111)	Average (DIN)	(106) 108
	HF Average (ANSI)	(103) 110

Full-on gain, dB		
Input: 50 dB SPL		
61 (59)	Peak	(56) 53
54 (53)	1000 Hz	(47) 50
56 (46)	1600 Hz	(38) 49
54 (52)	Average (DIN)	(46) 49
	HF Average (ANSI)	(43) 51

Frequency range, Hz		
170-5900	DIN/ANSI	140-5800

Telecoil output, dB SPL		
87	1 mA/m field, 1600 Hz	80
107	10 mA/m field, 1600 Hz	100
	SPLITS (ANSI), right/left ear	94/93

Total harmonic distortion, %		
Reference setting. Input: 70 dB SPL		
IEC	Hz	ANSI
0.5	500, typical	0.5
0.5	800, typical	0.5
0.5	1600, typical	0.5

Equivalent input noise level, dB SPL (A)		
16	Typical/maximum, Omni (ANSI) 12/16	
23	Typical/maximum, Dir (ANSI) 20/24	

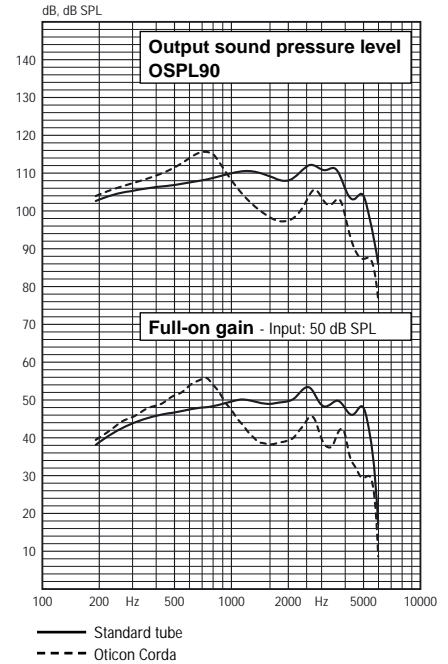
Battery consumption, mA		
1.1	Quiescent, typical/maximum	1.1/1.3
1.1	IEC	1.1
	ANSI	1.1

Battery	
Size 13 (IEC PR48)	
Estimated life in hours, Typ/Min	
1.4 V Zinc air	220/180

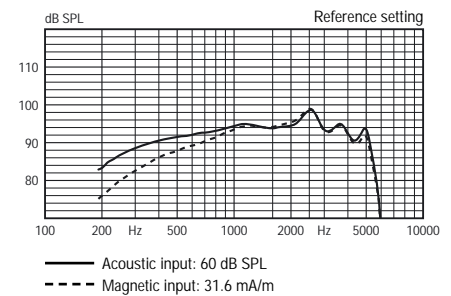
EMC Immunity (IEC 118-13), GSM/DECT		
IRIL, dB SPL	Field strength, (V/m)	
-36/-14	Microphone (Omni)	3/2
-26/-7	Microphone (Dir)	3/2
-32/-11	Telecoil	3/2

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (2003) and S3.7 (1995).

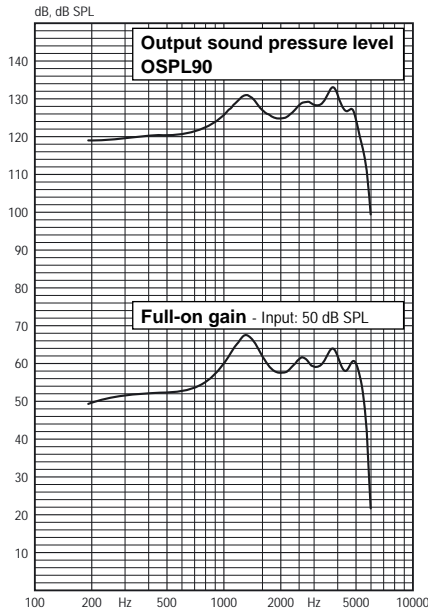


Frequency response with magnetic and acoustic input

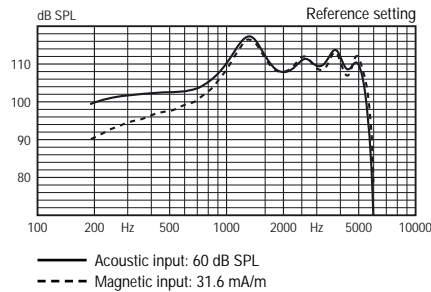


Ear simulator

Measured according to IEC publications 118-0, -1, -2, -6, -13 (incl. amendments) and 711.



Frequency response with magnetic and acoustic input



Data at a glance

Note: Measurement data obtained through standard pure tone measurements on advanced adaptive digital hearing aids may be misleading with regard to characteristics in normal use. For technical measurements, special technical settings that disables all the adaptive features are used.

Unless otherwise stated all measurements are in the Omnidirectional mode.

Ear simulator OSPL90	Output, dB SPL	2cc coupler OSPL90
134	Peak	126
126	1000 Hz	122
127	1600 Hz	120
124	Average (DIN)	118
	HF Average (ANSI)	121

Full-on gain, dB		
Input: 50 dB SPL		
68	Peak	62
60	1000 Hz	56
62	1600 Hz	55
57	Average (DIN)	52
	HF Average (ANSI)	55

Frequency range, Hz		
100-5900	DIN/ANSI	100-5700

Telecoil output, dB SPL		
92	1 mA/m field, 1600 Hz	85
112	10 mA/m field, 1600 Hz	105
	SPLITS (ANSI), right/left ear	99/100

Total harmonic distortion, %		
Reference setting. Input: 70 dB SPL		
IEC	Hz	ANSI
2.0	500, typical	2.0
1.5	800, typical	2.0
1.0	1600, typical	2.0

Equivalent input noise level, dB SPL (A)		
13	Typical/maximum, Omni (ANSI)	16/20
23	Typical/maximum, Dir (ANSI)	26/30

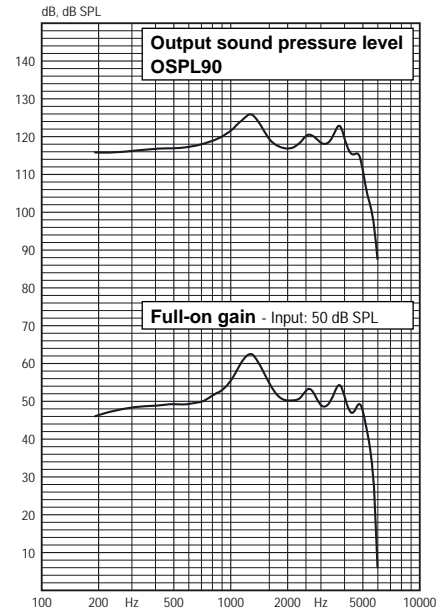
Battery consumption, mA		
1.4	Quiescent, typical/maximum	1.4/1.6
1.4	IEC	1.4
	ANSI	1.4

Battery		
Size 13 (IEC PR48)		
Estimated life in hours, Typ/Min		
1.4 V Zinc air		
		170/130

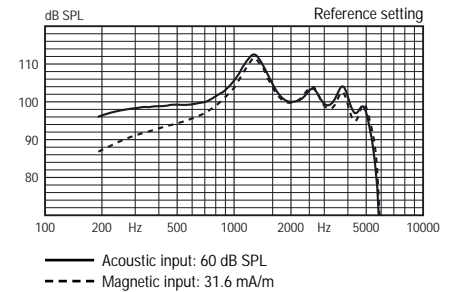
EMC Immunity (IEC 118-13), GSM/DECT		
IRIL, dB SPL	Field strength, (V/m)	
-31/-19	Microphone (Omni)	3/2
-26/-7	Microphone (Dir)	3/2
-16/2	Telecoil	3/2

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (2003) and S3.7 (1995).



Frequency response with magnetic and acoustic input



Warning to the hearing instrument dispenser
The maximum output capability of the hearing instrument may exceed 132 dB SPL (IEC 711). Special care should be exercised in selecting and fitting the instrument as there may be risk of impairing the remaining hearing of the hearing instrument user.

People first



We believe that it takes more than technology and audiology to create the best hearing instruments. That's why we put the individual needs and wishes of people with hearing loss first in our development of new hearing care solutions.