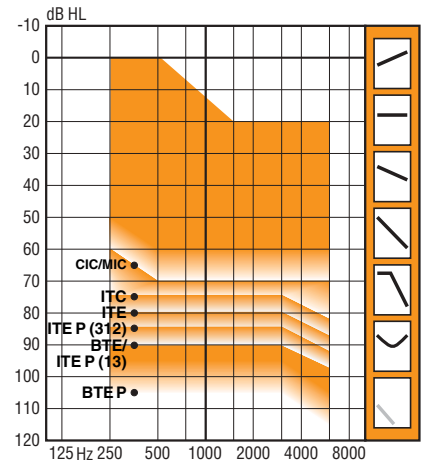




Fitting range



Product Concept

Atlas is a complete range of high quality digital hearing instruments.

Designed to meet the expectations from the majority of users, Atlas sets a new standard with an affordable digital solution to more people.

Atlas is easy everyday use, quick customer acceptance and great fitting flexibility.

The instruments are fully automatic with a comfortable sound picture.

Fine tuning is straightforward offering a high degree of fitting flexibility with four frequency bands and automatic feedback manager.

User Benefits

- Fully automatic operation
- Clear, comfortable digital sound
- Low noise, low distortion
- Comfortable compression (fast attack and slow release)
- Cosmetically attractive
- Easy everyday operation
- Excellent ergonomics
- High reliability

Dispenser Benefits

- Quick user acceptance
- Intuitive and easy software
- Four frequency shaping bands and two channels
- Adaptation Manager
- High reliability
- Automatic feedback manager
- Comprehensive fine tuning guide with sounds and pictures

Instrument Styles:

- CIC (10A battery)
- MIC (10A battery)
- ITC (312 battery)
- ITE (312 battery)
- ITE Direct (312 or 10A battery)
- ITE Power (13 or 312 battery)
- BTE (13 battery)
- BTE Power (13 battery)

Standard Features:

- Fully digital
- Selection of non-linear NAL-NL1 and DSL i/o fitting algorithms.
- Power instruments also offer linear NAL-RP and DSL i/o (Lin) fitting algorithms
- Four frequency bands, two channels
- Adaptation Manager
- Automatic Feedback Manager
- Optional Volume Control
- Optional Programmable Telecoil
- Directional ITE instruments





BTE Concept

The BTEs are highly reliable and easy to operate with:

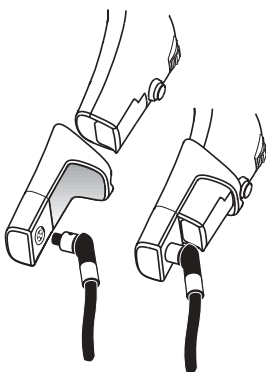
- On/off in battery drawer
- Push-button telecoil
- Swing hook
- Slim and light design

Options and accessories include:

- Volume Control
- Swing hooks:
 - Non damped
 - 5 dB damped
 - 9 dB damped
 - Small size for children
- Spectacles adaptor
- Tamper resistant battery door
- 6 hair tone colours and 7 kids colours
- Cros and Bicros input via DAI
- Compatible with DAI and wireless FM systems via DAI and FM adaptors

Cables and Fitting Systems

Atlas Instruments are programmed using the Genie fitting software compatible with NOAH 2.0 and 3.0 or EasyFit II. Atlas instruments use an Oticon #3 cable. The custom products use a FlexConnect strip and the BTEs use an adaptor.



Connection to the programming interface

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.

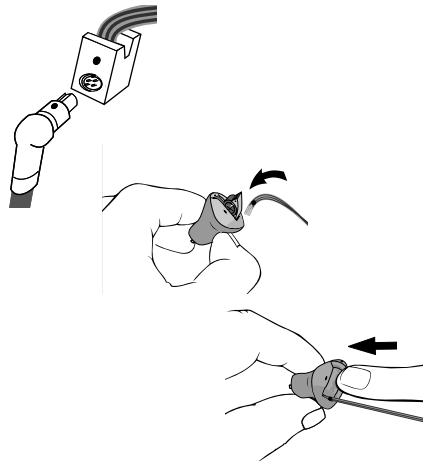
Custom Concept

Custom styles offer cosmetically attractive solutions with:

- Very small fully automatic solutions
- Low battery consumption
- On/off in battery drawer
- Selection of three wax protection systems:
 - NoWax
 - MicroWaxBuster
 - WaxBuster

Options and accessories include:

- Volume Control in ITE styles
- Programmable push-button telecoil in ITE styles
- Selection of four faceplates colours

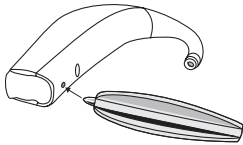


Connection to the programming interface

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 the dot is facing away from the door and the FlexConnect is pushed all the way in. Close the battery door.

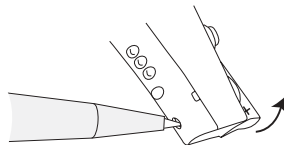
Adaptor tool

Before connecting the FM or DAI shoe, use the Adaptor tool to make a hole in the base of the instrument. Press the tool into the recess, make a hole and turn the tool.



Optional tamper-resistant battery drawer

This is strongly recommended for infants, small children, and people with learning difficulties.



DAI and FM operation

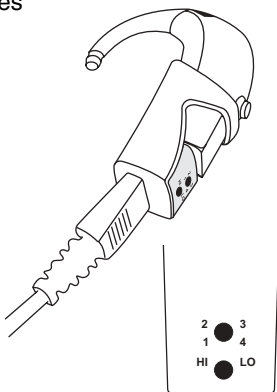
The DAI and FM adaptor shoes are easily clicked onto the instrument. To release the adaptor shoe press the grey button, and pull off.

Universal DAI shoe

The universal DAI shoe for Atlas provides access to a variety of external sound sources such as:

- Radio, TV, Walkman, MP3 and PC equipment (Hi setting)
- Body worn FM equipment (Lo setting)

The one shoe can be used for all DAI purposes

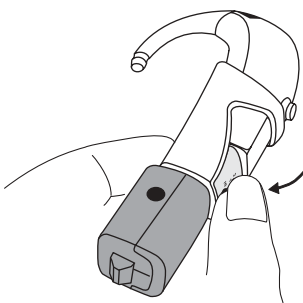


Instructions:

- 1 Set the sensitivity to High (Hi) or Low (Lo).
- 2 Adjust the output level control to a comfortable level (1-4).

FM adaptor shoe

The FM adaptor shoe is used with ear level FM systems.



Instructions:

To open the battery drawer, have the hearing instrument in the off position. Insert the end of a ball-point pen or the like into the small recess, press while gently opening the battery drawer with the other hand.

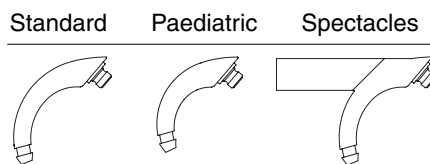
Important:

Do not force the battery drawer beyond its fully open position. Insert the battery correctly. Excessive strain can deform the battery drawer, which will reduce its tamper-resistant effectiveness.

Sound hooks

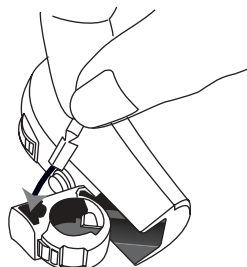
Atlas can be used with a number of different hooks. Swing hooks are available non-damped, 5 dB and 9 dB damped.

Moreover, a paediatric and spectacle adaptor-hook is available.



Right and Left identification

Atlas comes standard with a red and blue marker for easy identification of right and left instruments.



Instructions:

Open the battery drawer. Insert the marker and twist off the top part.

Select Oticon in the Noah Manufacturer Selection screen. A sub-screen will appear. Choose Genie. Use the Selection menu to select instruments. When an Atlas instrument is selected, click Fitting to program the instrument.

Standard Fitting Panel

Use the trimmers to adjust:

LF Loud - low frequency gain for loud inputs (shown value is average insertion gain at 80 dB SPL)

LF Soft - low frequency gain for soft inputs (shown value is average insertion gain at 50 dB SPL)

HF Loud - high frequency gain for loud inputs

HF Soft - high frequency gain for soft inputs

Link loud and soft control to make overall gain changes in the HF or LF channels.

Manual Override

Sets the reserve gain in the digital volume control.

Frequency Response

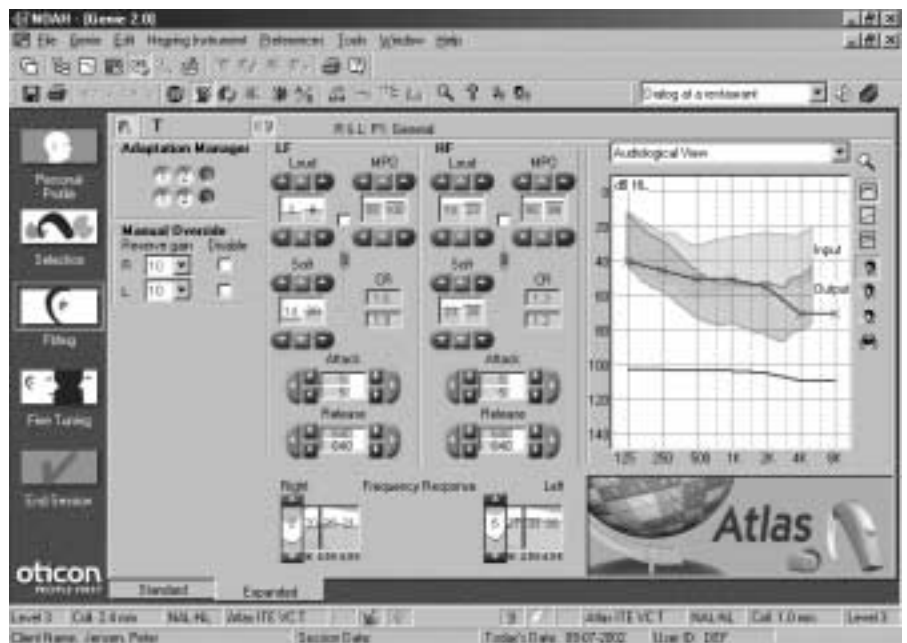
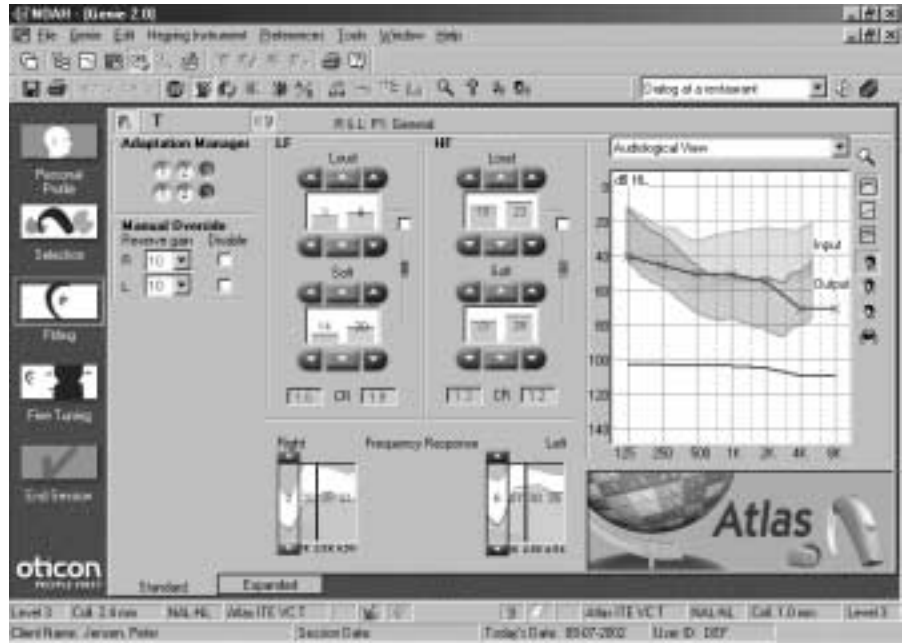
Allows individual adjustments in the four frequency bands.

Expanded Fitting Panel

The expanded panel has the following two controls that are not available in the standard panel:

MPO - Sets the Maximum Power Output. Can be adjusted for low and high frequencies separately.

Attack and Release Time Controls - Decreasing the attack times causes a faster reaction in the compression circuits. Increasing the release time makes the instrument move more slowly out of compression.





Adaptation Manager

Set the Adaptation Manager to reflect the hearing aid experience of the client. Step 1 is for new users. Step 2 is for experienced non-linear users. Step 3 is for experienced linear users. Use the Adaptation Manager to get high immediate acceptance by reducing or increasing the selected setting.

Link

When adjusting controls in styles with a directional program, click the link icon to link the programs; any changes to Program 1 will then also apply to Program 2. To access and adjust Program 2 separately, click the P2 icon.

Directional LF Roll Off

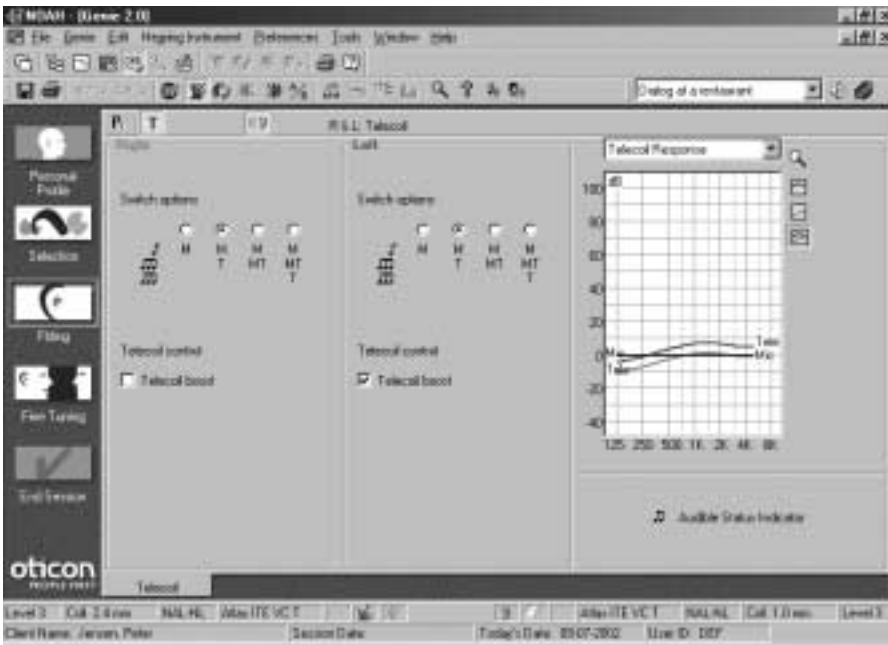
Adjusts the degree of LF gain roll off. A grayed icon indicates a degree of roll off that is unavailable.

Select more roll off if:

- Wind, footsteps, etc. are too loud
- Speech in noise is unclear

Select less roll off if:

- Speech in noise is too soft



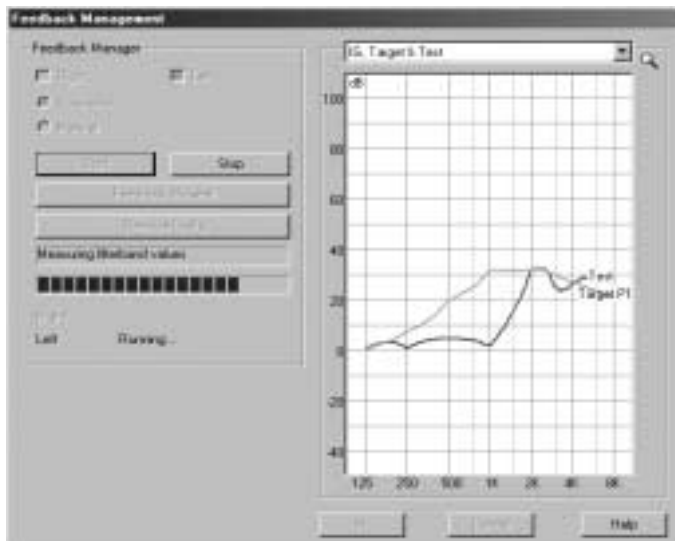
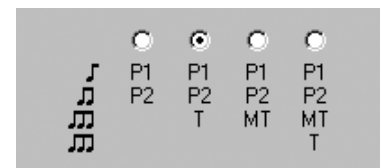
Telecoil

The Push button can be programmed to match the client's preferences. The choices available depend on the selected instruments.

- M = Microphone
- T = Telecoil
- MT = Microphone combined with telecoil

Directional:


- P1 = Microphone
- P2 = Directional Microphone











Telecoil Boost

Applies an additional 6 dB boost to the telecoil. Not available in power instruments.

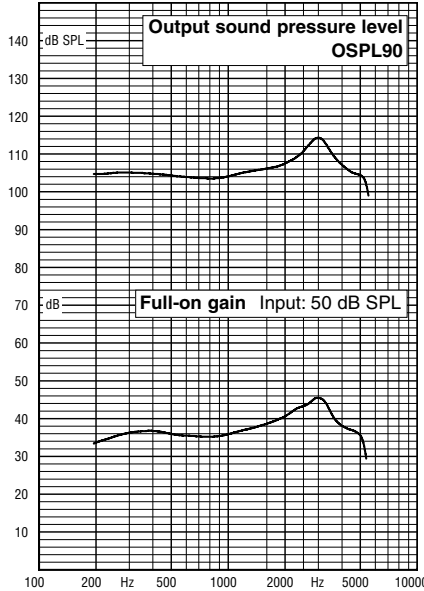
Automatic Feedback Manager

The automatic feedback manager will check for feedback in the high frequency range of the instrument and reduce gain in areas with feedback. The process is fully automatic. Select the feedback manager  in the toolbar.

	Peak Gain (dB)		Peak Output (dB SPL)		Battery Size	Battery Lifetime Typical (hours)	Options	
	Ear Simulator	2cc Coupler	Ear Simulator	2cc Coupler			Telecoil	Volume Control
CIC/MIC 	45	35	114	104	10	100		
ITC 	50	40	120	110	312	160		
ITE 	55	46	120	110	312	145	Yes	Yes
ITE Direct 	52	43	120	110	10 or 312	75 or 140	Yes	
ITE Power (312) 	60	49	127	117	312	120	Yes	Standard
ITE Power (13) 	65	55	133	124	13	170	Yes	Standard
BTE 	66	59	125	119	13	250	Standard	Yes
BTE Power 	77	71	138	133	13	170	Standard	Standard

Ear simulator

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



Data at a glance

Note: Measurements with pure tones on a digital hearing instrument can show a wavy HF-response due to the constant time delay that causes a series of full phase shifts in narrow frequency bands.

Ear Simulator OSPL90	Output, dB SPL	2cc Coupler SSPL90
114	Peak	104
104	1000 Hz	99
106	1600 Hz	98
105	Average (DIN)	100
	HF Average (ANSI)	100

Full-on gain, dB		
Input: 50 dB SPL		
45	Peak	35
36	1000 Hz	30
39	1600 Hz	30
38	Average (DIN)	31
	HF Average (ANSI)	32

Frequency Range		
110-5400	DIN/ANSI	100-5400

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

Equivalent input noise level (ANSI), dB SPL		
22	Typical/maximum	19/23

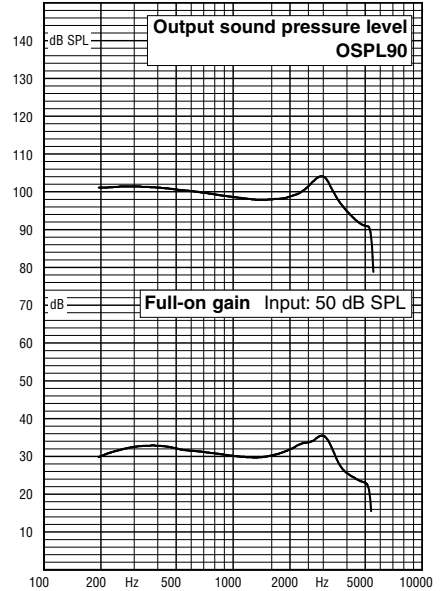
Battery consumption, mA		
0.7/0.9	Quiescent, typical/maximum	0.7/0.9
0.7	IEC	0.7
	ANSI	0.7

Battery		
Size 10 (IEC PR70)		
Estimated life in hours	Typ	Min
1.4 V Zinc air	100	80

EMC Immunity (IEC 118-13)		
Field strength, (V/m)	IRIL, dB SPL	
3/2	Microphone	-30/-25

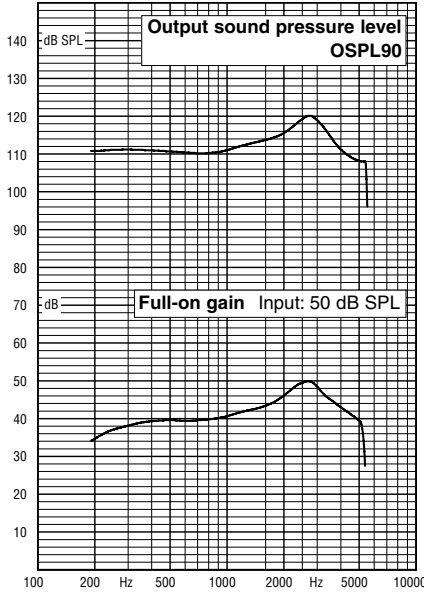
2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (1996) and S3.7 (1973).



Ear simulator

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



Data at a glance

Note: Measurements with pure tones on a digital hearing instrument can show a wavy HF-response due to the constant time delay that causes a series of full phase shifts in narrow frequency bands.

Ear Simulator OSPL90	Output, dB SPL	2cc Coupler SSPL90
120	Peak	110
111	1000 Hz	105
114	1600 Hz	105
113	Average (DIN)	106
	HF Average (ANSI)	107

Full-on gain, dB		
Input: 50 dB SPL		
50	Peak	40
41	1000 Hz	35
43	1600 Hz	35
43	Average (DIN)	35
	HF Average (ANSI)	37

Frequency Range		
130-5400	DIN/ANSI	100-5400

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

Equivalent input noise level (ANSI), dB SPL		
22	Typical/maximum	19/23

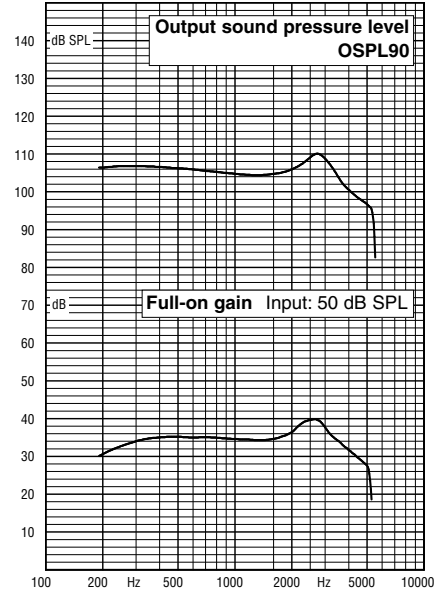
Battery consumption, mA		
0.8/1.0	Quiescent, typical/maximum	0.8/1.0
0.8	IEC	0.8
	ANSI	0.8

Battery		
Size 312 (IEC PR41)		
Estimated life in hours	Typ	Min
1.4 V Zinc air	160	130

EMC Immunity (IEC 118-13)		
Field strength, (V/m)	IRIL, dB SPL	
3/2	Microphone	-30/-25

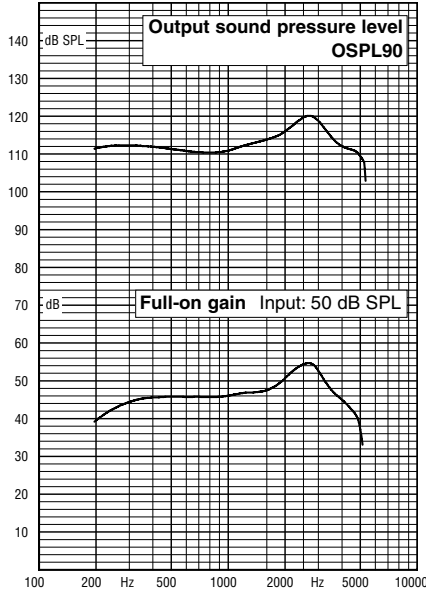
2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (1996) and S3.7 (1973).

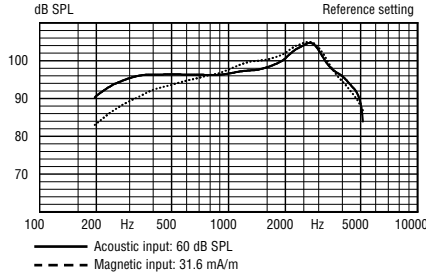


Ear simulator

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: Measurements with pure tones on a digital hearing instrument can show a wavy HF-response due to the constant time delay that causes a series of full phase shifts in narrow frequency bands.

Ear Simulator OSPL90	Output, dB SPL	2cc Coupler SSPL90
120	Peak	110
111	1000 Hz	105
114	1600 Hz	105
113	Average (DIN)	106
	HF Average (ANSI)	107

Full-on gain, dB		
Input: 50 dB SPL		
55	Peak	46
46	1000 Hz	41
48	1600 Hz	40
48	Average (DIN)	42
	HF Average (ANSI)	42

Frequency Range		
140-5100	DIN/ANSI	120-5000

Telecoil output, dB SPL		
78	1 mA/m field, 1600 Hz	70
100	10 mA/m field, 1600 Hz	92
	SPLITS (ANSI)	90

Total harmonic distortion, %		
Reference setting. Input: 70 dB SPL		
IEC	Hz	ANSI
3.0	500, typical	2.5
3.0	800, typical	2.5
3.0	1600, typical	2.5

Equivalent input noise level (ANSI), dB SPL		
16	Typical/maximum	16/20

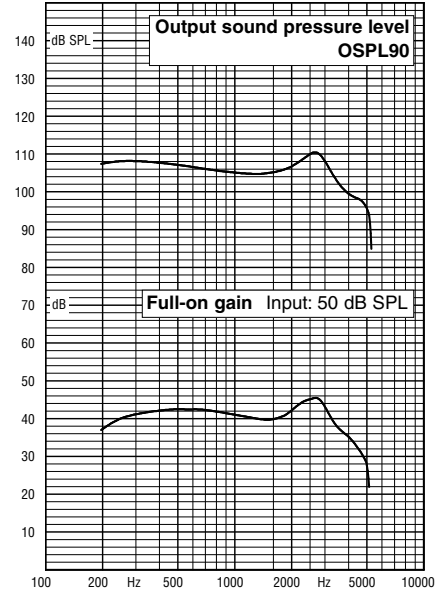
Battery consumption, mA		
0.9/1.1	Quiescent, typical/maximum	0.9/1.1
0.9	IEC	0.9
	ANSI	0.9

Battery		
Size 312 (IEC PR41)		
Estimated life in hours	Typ	Min
1.4 V Zinc air	145	120

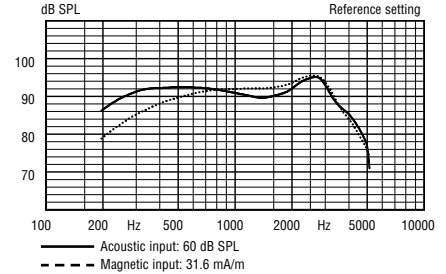
EMC Immunity (IEC 118-13)		
Field strength, (V/m)		IRIL, dB SPL
3/2	Microphone	-30/-10
3/2	Telecoil	-10/-5

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (1996) and S3.7 (1973).

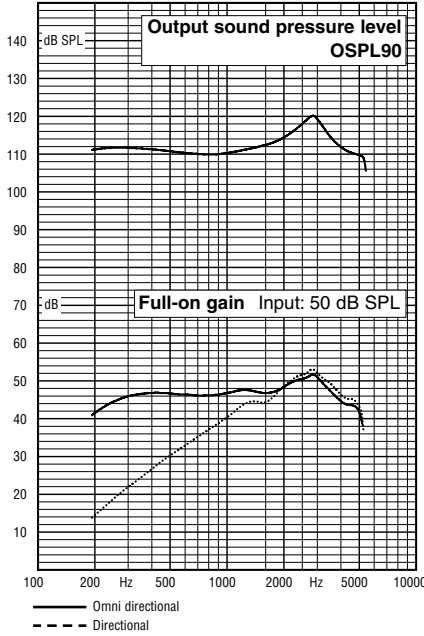


Frequency response with magnetic and acoustic input

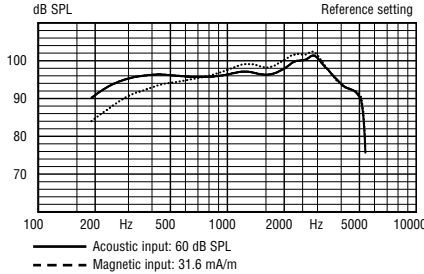


Ear simulator

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

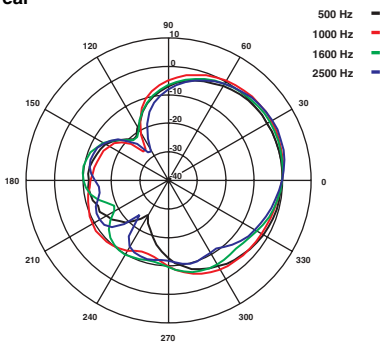


Frequency response with magnetic and acoustic input



Polar Plot

Left ear



Data at a glance

Note: Measurements with pure tones on a digital hearing instrument can show a wavy HF-response due to the constant time delay that causes a series of full phase shifts in narrow frequency bands.

Ear Simulator OSPL90	Output, dB SPL	2cc Coupler SSPL90
120	Peak	110
110	1000 Hz	105
113	1600 Hz	105
112	Average (DIN)	106
	HF Average (ANSI)	106

Full-on gain, dB

Input: 50 dB SPL

52	Peak	43
47	1000 Hz	41
47	1600 Hz	39
47	Average (DIN)	41
	HF Average (ANSI)	41

Frequency Range

120-5400	DIN/ANSI	100-5400
----------	----------	----------

Telecoil output, dB SPL

76	1 mA/m field, 1600 Hz	69
98	10 mA/m field, 1600 Hz	91
	SPLITS (ANSI)	88

Total harmonic distortion, %

Reference setting. Input: 70 dB SPL

IEC	Hz	ANSI
2.5	500, typical	2.0
2.5	800, typical	2.0
2.5	1600, typical	2.0

Equivalent input noise level (ANSI), dB SPL

16	Typical/maximum, Omni	16/20
16	Typical/maximum, Dir	25/29

Battery consumption, mA

0.95	Quiescent, typical/maximum	0.95/1.15
0.95	IEC	0.95
	ANSI	0.95

Battery

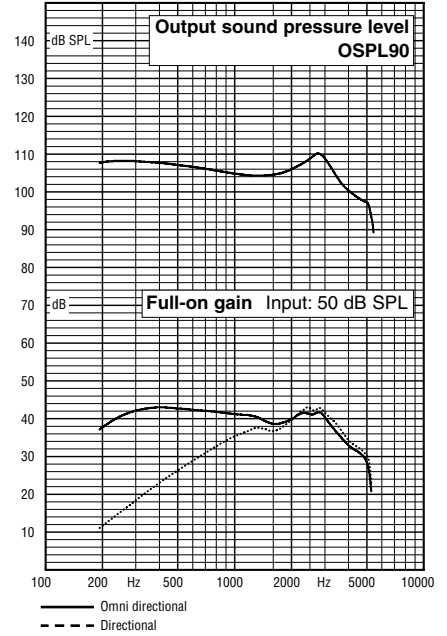
Size 312 (IEC PR41) / Size 10 (IEC PR70)		
Estimated life in hours	Typ	Min
Size 312, 1.4 V Zinc air	140	115
Size 10, 1.4 V Zinc air	75	60

EMC Immunity (IEC 118-13)

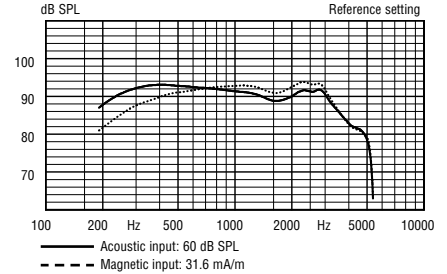
Field strength, (V/m)		IRIL, dB SPL
3/2	Microphone (Omni)	-25/0
3/2	Microphone (Dir)	-15/15
3/2	Telecoil	-5/0

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (1996) and S3.7 (1973).

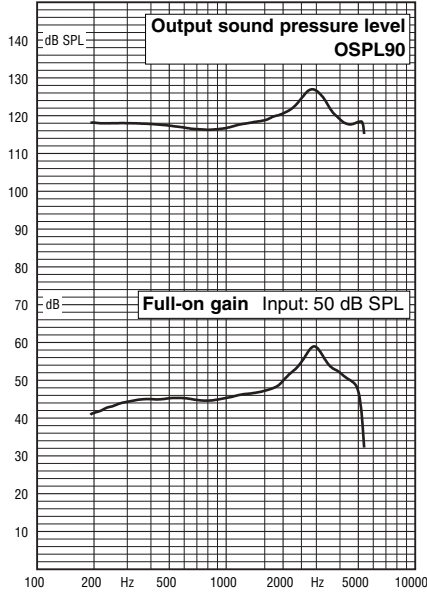


Frequency response with magnetic and acoustic input

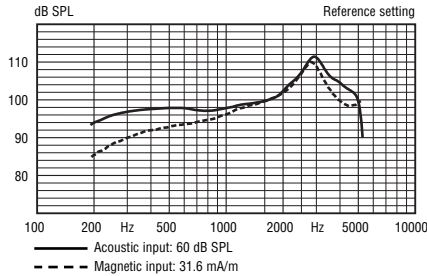


Ear simulator

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: Measurements with pure tones on a digital hearing instrument can show a wavy HF-response due to the constant time delay that causes a series of full phase shifts in narrow frequency bands.

Ear Simulator		2cc Coupler
OSPL90	Output, dB SPL	SSPL90
127	Peak	117
117	1000 Hz	111
119	1600 Hz	110
118	Average (DIN)	112
	HF Average (ANSI)	112

Full-on gain, dB		
Input: 50 dB SPL		
60	Peak	49
46	1000 Hz	40
47	1600 Hz	39
47	Average (DIN)	41
	HF Average (ANSI)	42

Frequency Range		
120-5100	DIN/ANSI	100-5200

Telecoil output, dB SPL		
78	1 mA/m field, 1600 Hz	71
98	10 mA/m field, 1600 Hz	91
	SPLITS (ANSI)	95

Total harmonic distortion, %		
Reference setting. Input: 70 dB SPL		
IEC	Hz	ANSI
0.2	500, typical	0.2
0.5	800, typical	0.3
0.5	1600, typical	0.3

Equivalent input noise level (ANSI), dB SPL		
22	Typical/maximum	21/25

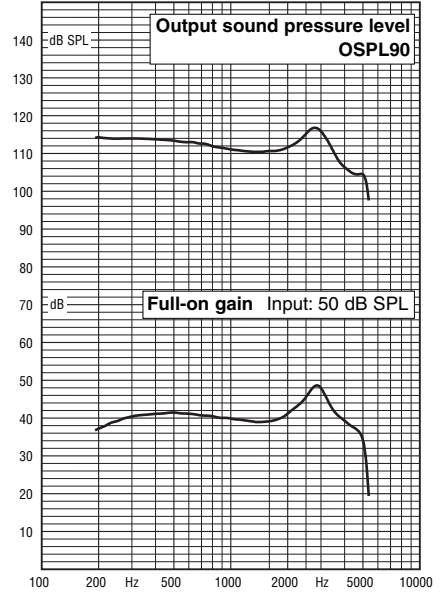
Battery consumption, mA		
1.1	Quiescent, typical	1.2
1.1	IEC	1.1
	ANSI	1.2

Battery		
Size 312 (IEC PR41)		
Estimated life in hours	Typ	Min
1.4 V Zinc air	120	110

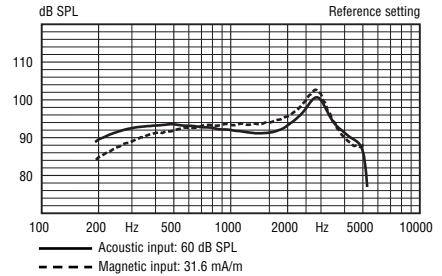
EMC Immunity (IEC 118-13)		
Field strength, (V/m)	IRIL, dB SPL	
3/2	Microphone	-27/-12
3/2	Telecoil	-3/2

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (1996) and S3.7 (1973).

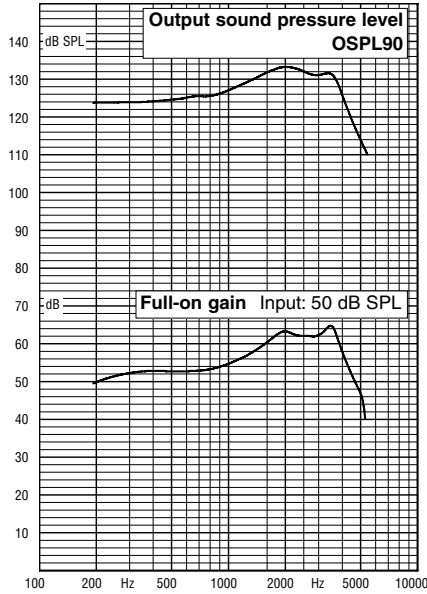


Frequency response with magnetic and acoustic input



Ear simulator

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



Data at a glance

Note: Measurements with pure tones on a digital hearing instrument can show a wavy HF-response due to the constant time delay that causes a series of full phase shifts in narrow frequency bands.

Ear Simulator	2cc Coupler
OSPL90	SSPL90
133 Peak	124
126 1000 Hz	121
131 1600 Hz	123
128 Average (DIN)	122
HF Average (ANSI)	122

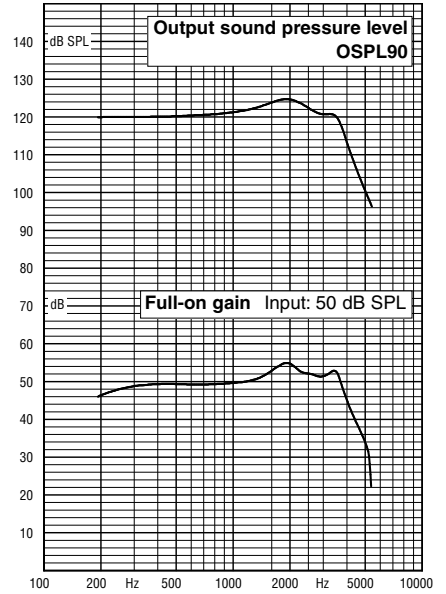
Full-on gain, dB	
Input: 50 dB SPL	
65 Peak	55
54 1000 Hz	49
59 1600 Hz	52
56 Average (DIN)	52
HF Average (ANSI)	51

Frequency Range	
115-5200	DIN/ANSI
100-5200	

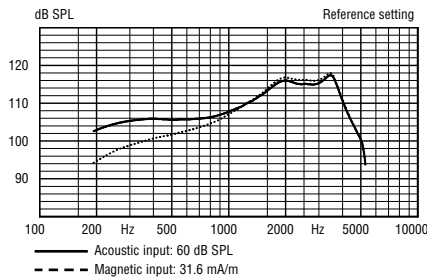
Telecoil output, dB SPL	
88	1 mA/m field, 1600 Hz
80	
108	10 mA/m field, 1600 Hz
100	
	SPLITS (ANSI)
	103

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (1996) and S3.7 (1973).



Frequency response with magnetic and acoustic input



Total harmonic distortion, %		
Reference setting. Input: 70 dB SPL		
IEC	Hz	ANSI
4.0	500, typical	3.5
4.0	800, typical	3.5
1.0	1600, typical	1.0

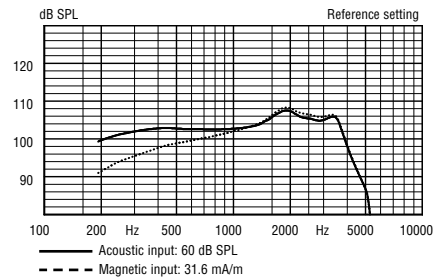
Equivalent input noise level (ANSI), dB SPL	
21	Typical/maximum
21/25	

Battery consumption, mA		
1.4/1.6	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	150

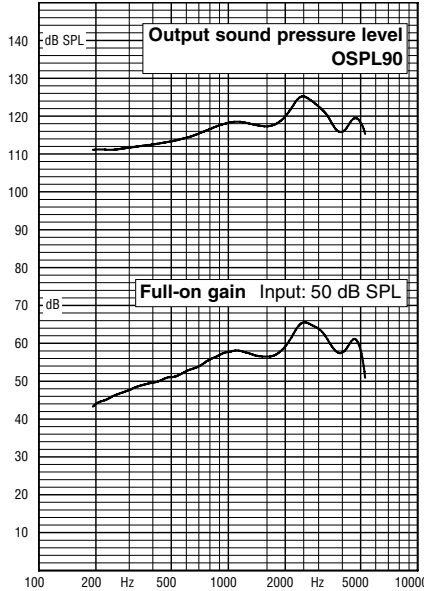
EMC Immunity (IEC 118-13)		
Field strength, (V/m)	IRIL, dB SPL	
3/2	Microphone	-30/-15
3/2	Telecoil	-10/0

Frequency response with magnetic and acoustic input

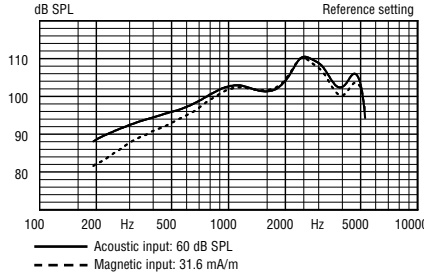


Ear simulator

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: Measurements with pure tones on a digital hearing instrument can show a wavy HF-response due to the constant time delay that causes a series of full phase shifts in narrow frequency bands.

Ear Simulator OSPL90	2cc Coupler OSPL90
125	Peak
118	1000 Hz
117	1600 Hz
117	Average (DIN)
	HF Average (ANSI)

Full-on gain, dB	
Input: 50 dB SPL	
66	Peak
58	1000 Hz
56	1600 Hz
56	Average (DIN)
	HF Average (ANSI)

Frequency Range	
150-5500	DIN/ANSI
	120-5400

Telecoil output, dB SPL	
86	1 mA/m field, 1600 Hz
106	10 mA/m field, 1600 Hz
	SPLITS (ANSI) Right ear
	SPLITS (ANSI) Left ear

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

Equivalent input noise level (ANSI), dB SPL	
21	Typical/maximum
	17/21

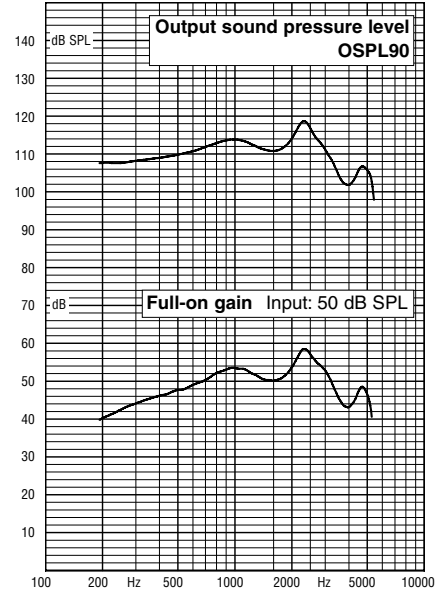
Battery consumption, mA	
0.9	Quiescent, typical/maximum
0.9	IEC
0.9	ANSI

Battery		
Size 13 (IEC PR48)		
Estimated life in hours	Typ	Min
1.4 V Zinc air	250	210

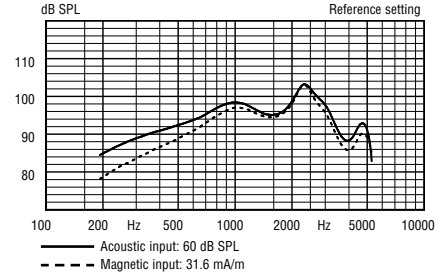
EMC Immunity (IEC 118-13)	
Field strength, (V/m)	IRIL, dB SPL
3/2	Microphone
3/2	Telecoil

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (1996) and S3.7 (1973).

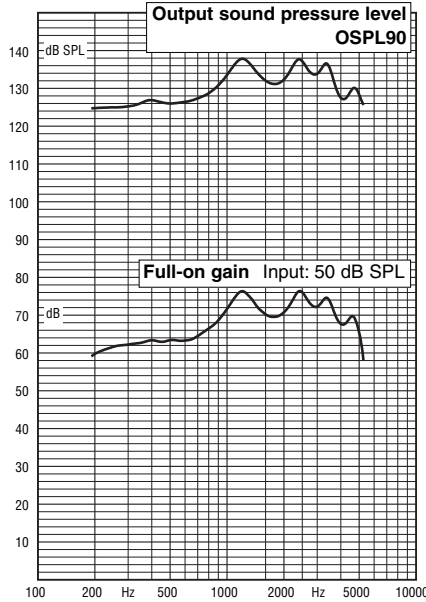


Frequency response with magnetic and acoustic input

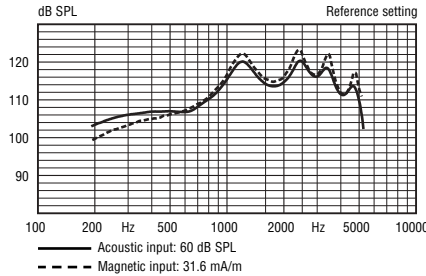


Ear simulator

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: Measurements with pure tones on a digital hearing instrument can show a wavy HF-response due to the constant time delay that causes a series of full phase shifts in narrow frequency bands.

Ear Simulator OSPL90	2cc Coupler Output, dB SPL	SSPL90
138	Peak	133
134	1000 Hz	129
132	1600 Hz	124
131	Average (DIN)	125
	HF Average (ANSI)	127

Full-on gain, dB		
Input: 50 dB SPL		
77	Peak	71
71	1000 Hz	67
70	1600 Hz	61
68	Average (DIN)	62
	HF Average (ANSI)	65

Frequency Range		
120-5400	DIN/ANSI	100-5300

Telecoil output, dB SPL		
100	1 mA/m field, 1600 Hz	92
120	10 mA/m field, 1600 Hz	112
	SPLITS (ANSI)	110

Total harmonic distortion, %		
Reference setting. Input: 70 dB SPL		
IEC	Hz	ANSI
3.0	500, typical	2.5
2.0	800, typical	1.5
1.0	1600, typical	1.5

Equivalent input noise level (ANSI), dB SPL		
18	Typical/maximum	17/21

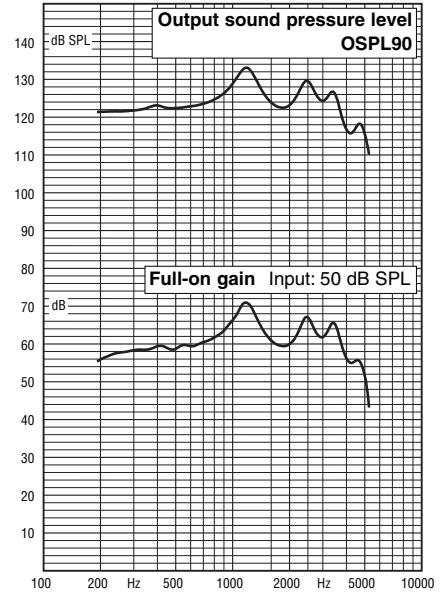
Battery consumption, mA		
1.6	Quiescent, typical	1.4
1.6	IEC	1.3
	ANSI	1.4

Battery		
Size 13 (IEC PR48)		
Estimated life in hours	Typ	Min
1.4 V Zinc air	170	150

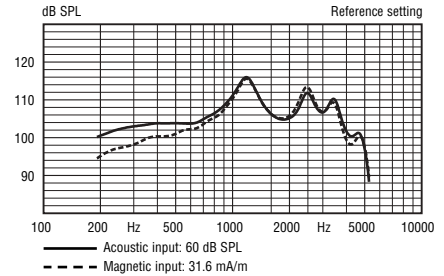
EMC Immunity (IEC 118-13)		
Field strength, (V/m)	IRIL, dB SPL	
3/2	Microphone	-12/12
3/2	Telecoil	-8/23

2cc coupler

Measured according to IEC publications 118-7 (incl. amendments) and 126 and to ANSI S3.22 (1996) and S3.7 (1973).



Frequency response with magnetic and acoustic input



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 hearing impaired people first in our development of new hearing care solutions.