TECHNICAL DATA

Entra B 20 | 10
ITC, ITE HS, ITE FS

Bernafon Entra B ITC, ITE HS and ITE FS are Bernafon's most flexible in-the-ear hearing instruments, suitable for slight to severe hearing losses. These instruments offer the revolutionary Hybrid Technology™ included in other Bernafon hearing instrument styles. Featuring NFMI and optional Bluetooth® Low Energy technology, they can be used to stream audio directly to the hearing instruments.

Speaker 75 | 90 | 100	Speaker 75 | 90 | 100	Speaker 75 | 90 | 100
		
ITC (In-The-Canal)	ITE HS (Half Shell)	ITE FS (Full Shell)

Technical features

- Hands-free communication[1,2]
- Direct audio streaming[1,3]
- Directional microphones
- NFMI (Near-Field Magnetic Induction)
- Bluetooth Low Energy technology (optional)
- Push-button (optional)
- Volume control (optional)
- Telecoil (optional)

Accessories[1]

- Bernafon App
- RC-A (remote control)
- TV-A (TV adapter)
- SoundClip-A

For information on compatibility, please visit www.bernafon.com/compatibility

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Operating and charging conditions
Temperature: +1°C to +40°C (34°F to 104°F)
Humidity: 5% to 93% relative humidity, non-condensing
Atmospheric pressure: 700 hPa to 1060 hPa

Transportation and storage conditions
Temperature and humidity shall not exceed the mentioned limits for extended periods during transportation and storage:

Transport
Temperature: -25°C to + 60°C (-13°F to 140°F)
Humidity: 5% to 93% relative humidity, non-condensing
Atmospheric pressure: 700 hPa to 1060 hPa

Storage
Temperature: -25°C to + 60°C (-13°F to 140°F)
Humidity: 5% to 93% relative humidity, non-condensing
Atmospheric pressure: 700 hPa to 1060 hPa

1) Only available for hearing aids with Bluetooth Low Energy technology
2) Hands-free communication is available on select devices
3) From iPhone, iPad, Mac and select Android devices

Made for iPhone | iPad · Mac · Works with android · IP68

Bernafon

Fitting ranges

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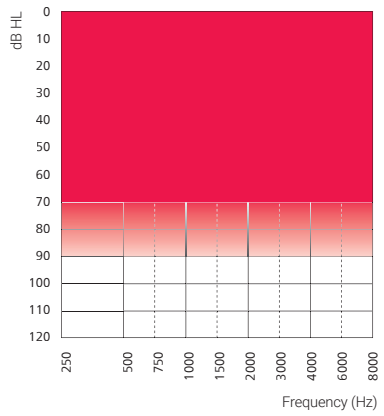
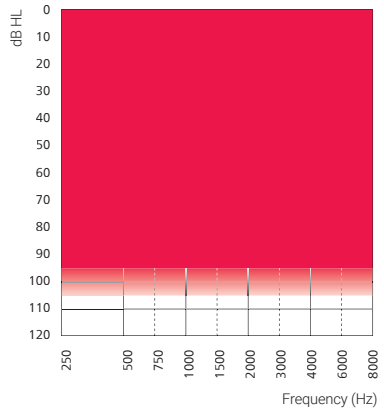
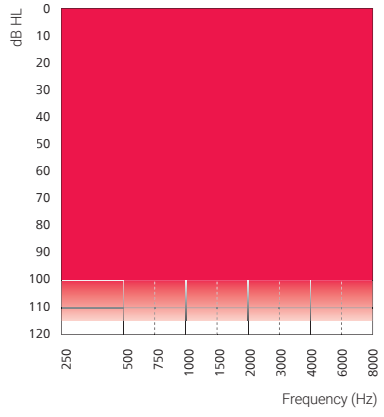
75



90



100



Feature overview

	Entra B 20	Entra B 10
Hybrid Technology™		
Hybrid Sound Processing™	•	•
Frequency bandwidth	8 kHz	8 kHz
Speech Balancer	•	•
Hybrid Noise Management™	•	•
Smart Noise Reduction	3 options	2 options
Smart Directionality	4 options	3 options
Hybrid Feedback Canceller™	•	•
Speech		
Low Frequency Enhancer[1]	•	•
Frequency Composition[nxt]	•	•
Comfort		
Transient Noise Reduction	2 options	–
Wind Noise Manager	•	•
Soft Noise Manager	•	•
Directionality controls		
Dynamic	•	–
Adaptive Full Directionality	•	•
Fixed Directionality	•	•
Fixed Omni	•	•
Individualisation		
Personalisation	•	•
Fitting bands	14	12
Program options[2] / memories[3]	10/4	8/4
Music Experience	•	–
Binaural coordination: VC, program change[3]	•	•
Automatic Adaptation Manager	•	•
Transition	•	•
Data Logging	•	•
Tinnitus SoundSupport[4]	•	•

1) Requires Bluetooth Low Energy technology
2) Can vary if no telecoil present
3) Requires either Bluetooth Low Energy technology or push-button
4) Requires push-button

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Ear Simulator

Measured according to IEC 60118-0 /A1:1994, IEC 60118-1 /A1:1998, IEC 60118-0:2015 and IEC 60318-4:2010.

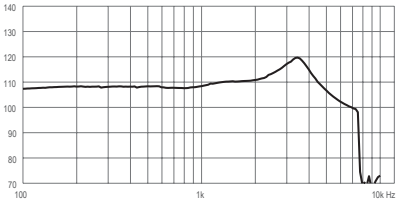
Technical information
Omnidirectional mode is used unless otherwise stated.

Speaker 75 / 90
Acoustic input: 60 dB SPL
Magnetic input: 31.6 mA/m

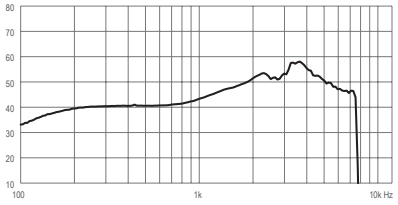
Speaker 100
Acoustic input: 60 dB SPL
Magnetic input: 31.6 mA/m

Speaker 75

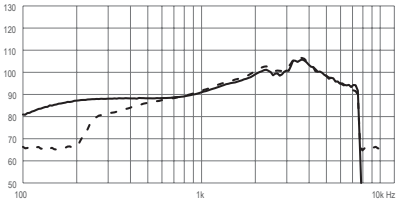
OSPL90 (dB SPL)



Full-on gain (dB)

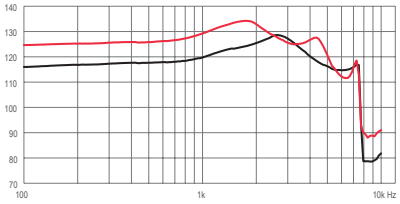


Frequency response (dB SPL)

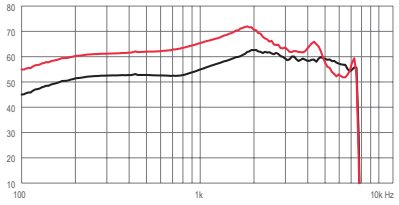


Speaker 90 Speaker 100

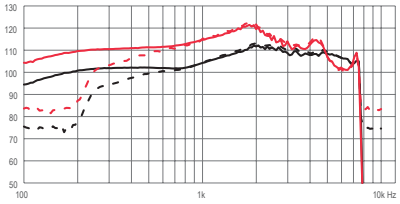
OSPL90 (dB SPL)



Full-on gain (dB)



Frequency response (dB SPL)



	Speaker 75	Speaker 90	Speaker 100
OSPL90, Peak (dB SPL)	120	129	134
OSPL90, 1600 Hz (dB SPL)	110	124	134
OSPL90, HFA (dB SPL)	111	124	131
Full-on gain, Peak (dB)[1]	58	63	72
Full-on gain, 1600 Hz (dB)[1]	48	60	70
Full-on gain, HFA (dB)[1]	48	59	67
Reference test gain (dB)	36	49	60
Frequency range (Hz)	100-7500	100-7500	100-7500
Telecoil output, 1 mA/m field (1600 Hz) (dB SPL)	79	90	101
Telecoil output, 10 mA/m field (1600 Hz) (dB SPL)	99	110	121
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<2	<3	<3
Total harmonic distortion (Input 70 dB SPL), 1600 Hz (%)	<3	<2	<3
Equivalent input noise level, Omni (dB SPL)	18	15	12
Equivalent input noise level, Dir (dB SPL)	26	24	23
Battery consumption, Typical (mA)[2]	1.9	2.1	2.0
Battery consumption, Quiescent (mA)[2]	1.9	1.9	1.9
Battery life, artificial measurement, hours[3]	95	85	90
Expected battery life, hours (battery size 312 – IEC PR41)[4]	55-60	40-60	50-60

1) Full-on gain is measured with the gain control of the hearing instruments set to its full-on position minus 20 dB and with an input SPL of 70 dB. This is to obtain a gain response equal to the full-on gain response from e.g. IEC 60118-0+A1:1994 but without influence of feedback.
2) Battery current is measured according to IEC 60118-0:1983/AMD1:1994 §7.11, IEC 60118-0:2015 §7.7 and ANSI S3.22:2014 §6.13 after a settling time of minimum 3 minutes.
3) Based on the standardised battery consumption measurement (e.g. IEC 60118-0:1983/AMD1:1994). The actual battery life depends on battery quality, use pattern, active feature set, hearing loss and sound environment.
4) Real usage battery life is shown as an estimated interval based on mixed use cases with variable amplification settings and variable input levels, incl. direct stereo streaming from a TV (25% of the time) and streaming from a mobile phone (6% of the time).

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2CC Coupler

Measured according ANSI S3.22: 2014,
IEC 60118-0:2015 and IEC 60318-5:2006.

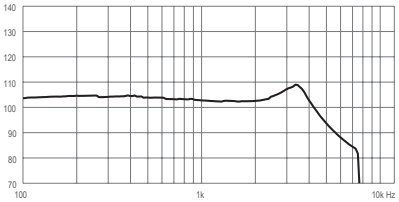
Technical information
Omnidirectional mode is used unless otherwise stated.

Speaker 75 / 90
Acoustic input: 60 dB SPL
Magnetic input: 31.6 mA/m

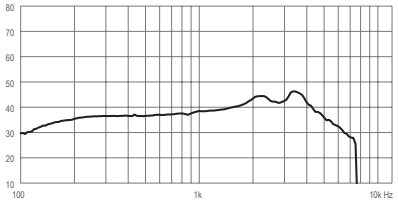
Speaker 100
Acoustic input: 60 dB SPL
Magnetic input: 31.6 mA/m

Speaker 75

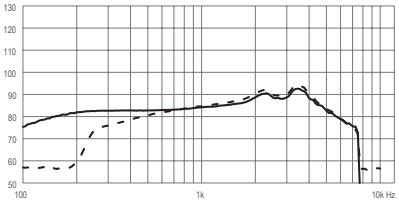
OSPL90 (dB SPL)



Full-on gain (dB)

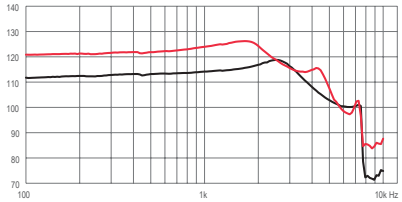


Frequency response (dB SPL)

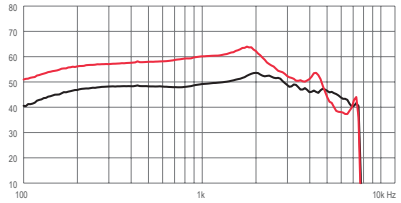


Speaker 90 Speaker 100

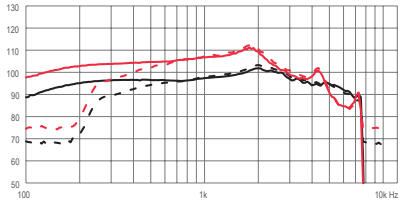
OSPL90 (dB SPL)



Full-on gain (dB)



Frequency response (dB SPL)



	Speaker 75	Speaker 90	Speaker 100
OSPL90, Peak (dB SPL)	109	119	126
OSPL90, 1600 Hz (dB SPL)	102	115	126
OSPL90, HFA (dB SPL)	103	116	123
Full-on gain, Peak (dB)[1]	46	54	64
Full-on gain, 1600 Hz (dB)[1]	40	51	63
Full-on gain, HFA (dB)[1]	40	51	60
Reference test gain (dB)	26	39	46
Frequency range (Hz)	100-7500	100-7500	100-5400
Telecoil output, 1 mA/m field (1000 Hz) (dB SPL)	69	80	91
Telecoil output, HFA SPLITS L/R (dB SPL)	85	98	105
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<2	<2	<2
Total harmonic distortion (Input 65 dB SPL), 1600 Hz (%)	<2	<2	<2
Equivalent input noise level, Omni (dB SPL)	17	15	15
Equivalent input noise level, Dir (dB SPL)	27	27	30
Battery consumption, Typical (mA)[2]	2.0	2.4	2.1
Battery consumption, Quiescent (mA)[2]	1.9	1.9	1.9
Battery life, artificial measurement, hours[3]	90	75	85
Expected battery life, hours (battery size 312 – IEC PR41)[4]	55-60	40-60	50-60

1) Full-on gain is measured with the gain control of the hearing instruments set to its full-on position minus 20 dB and with an input SPL of 70 dB. This is to obtain a gain response equal to the full-on gain response from e.g. IEC 60118-0+A1:1994 but without influence of feedback.
2) Battery current is measured according to IEC 60118-0:1983/AMD1:1994 §7.11, IEC 60118-0:2015 §7.7 and ANSI S3.22:2014 §6.13 after a settling time of minimum 3 minutes.
3) Based on the standardised battery consumption measurement (e.g. IEC 60118-0:1983/AMD1:1994). The actual battery life depends on battery quality, use pattern, active feature set, hearing loss and sound environment.
4) Real usage battery life is shown as an estimated interval based on mixed use cases with variable amplification settings and variable input levels, incl. direct stereo streaming from a TV (25% of the time) and streaming from a mobile phone (6% of the time).

Notes

Notes

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Bernafon is part of the Demant Group.

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