

TECHNICAL DATA

Encanta 400 | 300 | 200 | 100

IIC / CIC

Bernafon Encanta IIC and CIC are our smallest in-the-ear styles. IIC and CIC are discreet hearing aids with the IIC being invisible in most ears. The hearing aids are designed for users with slight to severe hearing loss and come in four technology levels and include Smart Amplification and Smart Noise Reduction. Both styles use disposable batteries.

Speaker 75	Speaker 90	Speaker 75	Speaker 90
			
IIC	IIC	CIC	CIC

Technical Features

- Hydrophobic coating
- NFMI (Near-Field Magnetic Induction)¹
- Push-button¹
- Battery size: 10

Operating 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.

Transportation
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) Optional for CIC only

WARNING: No modification of this equipment is allowed.

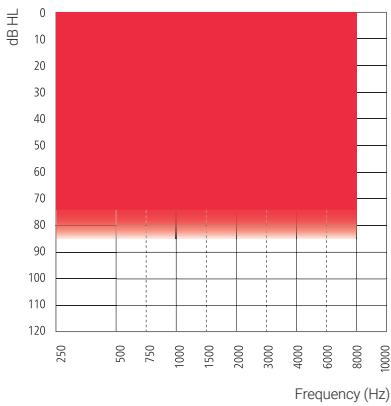
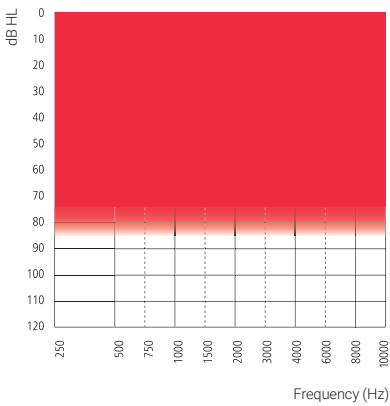
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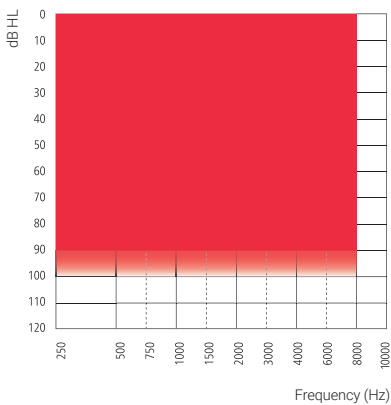
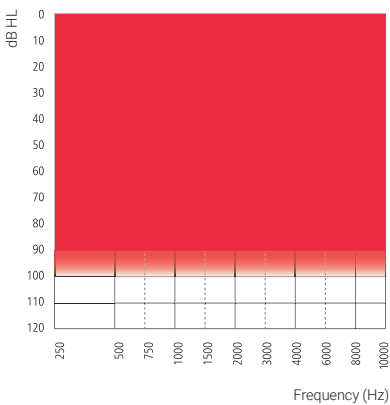
Fitting ranges

Bernafon Encanta 400

Bernafon Encanta 300 | 200 | 100



75



90

Feature overview

	Encanta 400	Encanta 300	Encanta 200	Encanta 100
Smart sound processing				
Smart Amplification	•	•	•	•
Frequency bandwidth	10 kHz	8 kHz	8 kHz	8 kHz
Smart Noise Management	•	•	•	•
Smart Noise Reduction	5 options	4 options	3 options	2 options
Speech and Noise Balancer	•	•	—	—
Speech Balancer	3 options	2 options	•	•
Noise Balancer	4 options	2 options	—	—
Smart Feedback Cancellor	•	•	•	•
Audibility and comfort				
Frequency Composition	•	•	•	•
Binaural Noise Manager ¹	○	○	○	—
Transient Noise Reduction	6 options	5 options	4 options	2 options
Dynamic Range Extender	•	•	—	—
Soft Noise Manager	•	•	•	•
Individualisation				
Personalisation	•	•	•	•
Fitting bands	24	20	18	14
Program options (optional for CIC) ²	9/4	7/4	7/4	5/4
Music Experience ²	○	○	○	○
Binaural coordination: VC, program changes ³	○	○	○	○
Automatic Adaptation Manager	•	•	•	•
Transition	4 options	3 options	2 options	1 option
Data Logging	•	•	•	•
Spoken indicators	•	•	•	•
Tinnitus SoundSupport ³	○	○	○	○

1) Requires NFMI

2) Requires push-button

3) Requires NFMI and push-button

• Default

○ Optional features only available for CIC

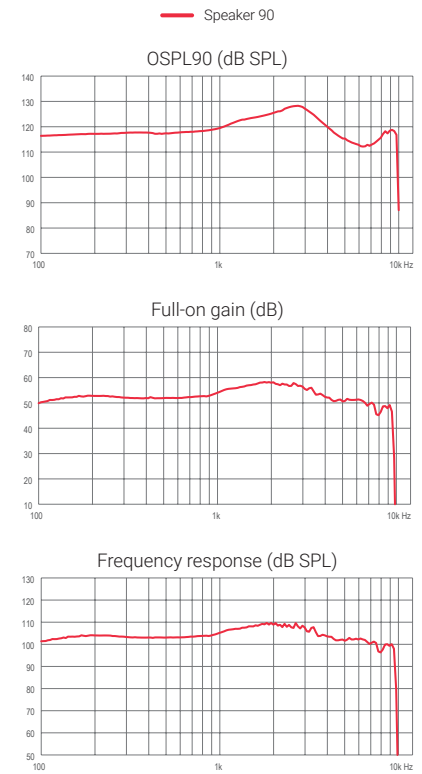
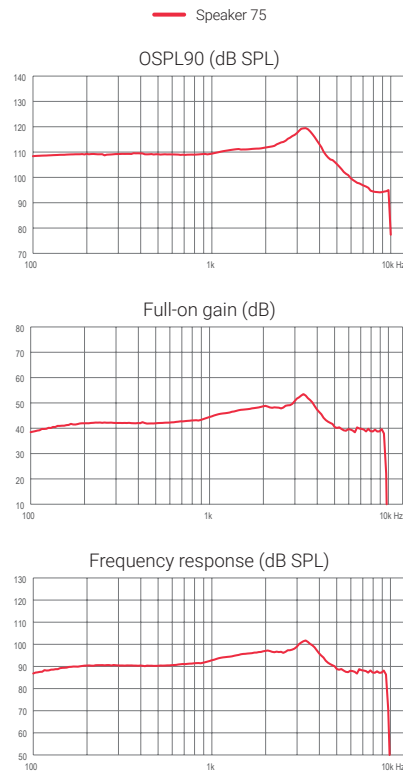
— Not included

Encanta 400 IIC

Measured according to IEC 60118-0:1983/AMD1:1994, IEC 60118-0:2015, IEC 60118-1:1995+AMD1:1998 CSV and IEC 60318-4:2010



Technical information
Omnidirectional mode is used unless otherwise stated.



OSPL90, Peak (dB SPL)	119	128
OSPL90, 1600 Hz (dB SPL)	111	124
OSPL90, HFA (dB SPL)	111	124
Full-on gain, Peak (dB) ¹	53	58
Full-on gain, 1600 Hz (dB) ¹	47	57
Full-on gain, HFA (dB) ¹	47	56
Reference test gain (dB)	36	49
Frequency range (Hz)	<100-9500	<100-9500
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<3	<3
Total harmonic distortion (Input 70 dB SPL), 1600 Hz (%)	<3	<2
Equivalent input noise level, Omni (dB SPL)	19	17
Battery consumption, Typical (mA) ²	1.8	1.9
Battery consumption, Quiescent (mA) ²	1.7	1.8
Battery life, artificial measurement, hours ³	55	50
Expected battery life, hours (battery size 10 – IEC PR70) ⁴	45-55	40-55

1) Measured with the gain control of the hearing aids set to their 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 60118-0:1983+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.

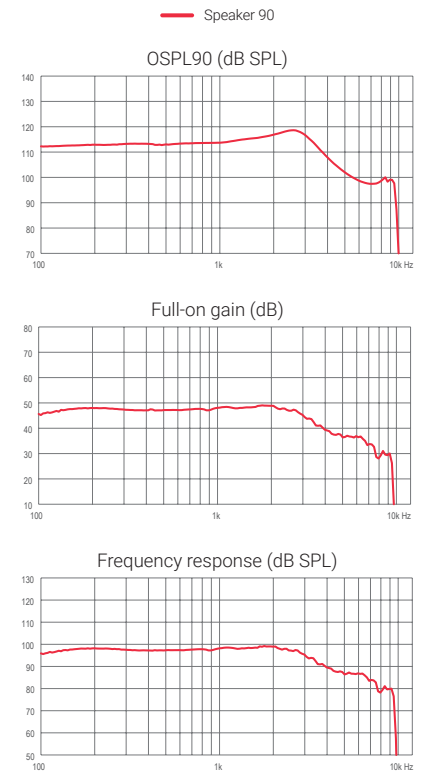
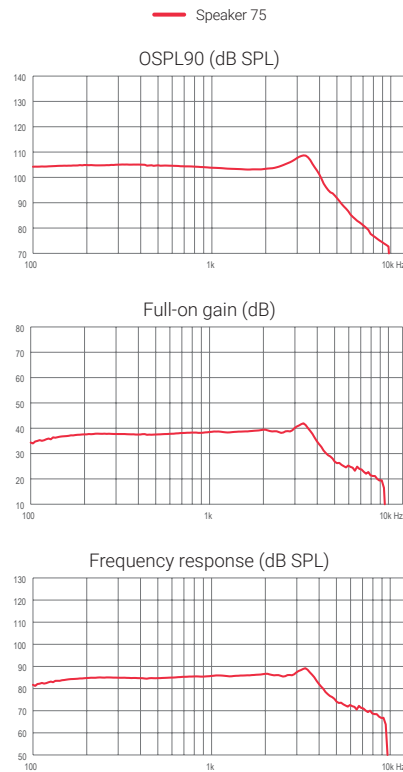
4) Real usage battery life is shown as an estimated interval based on mixed use cases with variable amplification settings and variable input levels.

Encanta 400 IIC

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



Technical information
Omnidirectional mode is used
unless otherwise stated.



OSPL90, Peak (dB SPL)	109	119
OSPL90, 1600 Hz (dB SPL)	103	116
OSPL90, HFA (dB SPL)	104	116
Full-on gain, Peak (dB) ¹	42	49
Full-on gain, 1600 Hz (dB) ¹	39	48
Full-on gain, HFA (dB) ¹	38	48
Reference test gain (dB)	26	38
Frequency range (Hz)	<100-8300	<100-7700
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<2	<2
Total harmonic distortion (Input 65 dB SPL), 1600 Hz (%)	<2	<2
Equivalent input noise level, Omni (dB SPL)	20	20
Battery consumption, Typical (mA) ²	1.8	2.4
Battery consumption, Quiescent (mA) ²	1.7	1.8
Battery life, artificial measurement, hours ³	55	40
Expected battery life, hours (battery size 10 – IEC PR70) ⁴	45-55	40-55

1) Measured with the gain control of the hearing aids set to their 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 60118-0:1983+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.

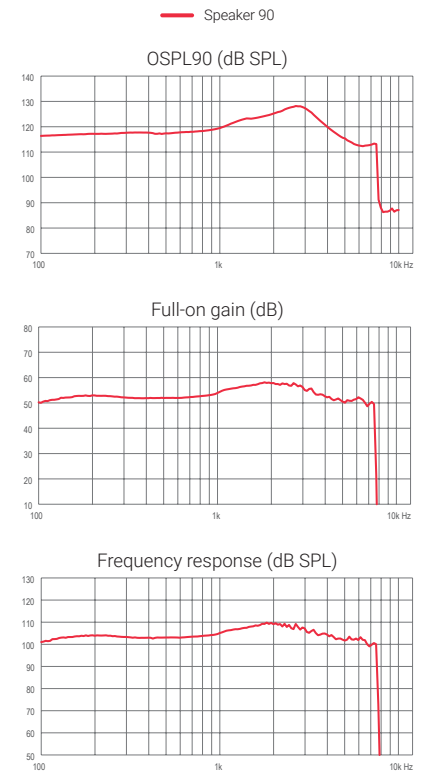
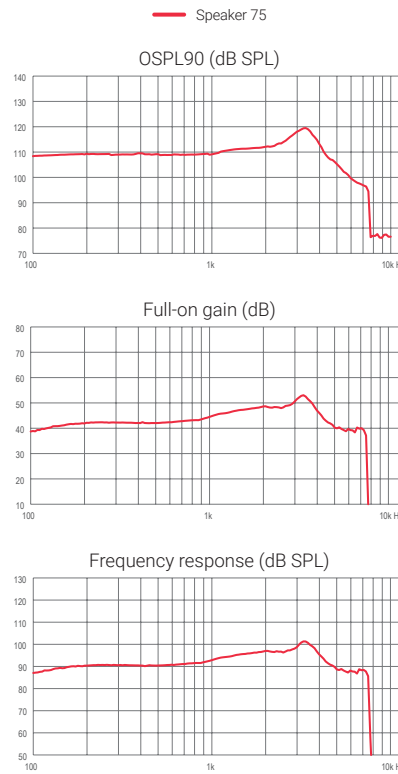
Encanta 300 | 200 | 100 IIC

Ear Simulator

Measured according to IEC 60118-0:1983/AMD1:1994, IEC 60118-0:2015, IEC 60118-1:1995+AMD1:1998 CSV and IEC 60318-4:2010



Technical information
Omnidirectional mode is used unless otherwise stated.



OSPL90, Peak (dB SPL)	119	128
OSPL90, 1600 Hz (dB SPL)	111	123
OSPL90, HFA (dB SPL)	111	124
Full-on gain, Peak (dB) ¹	53	58
Full-on gain, 1600 Hz (dB) ¹	47	57
Full-on gain, HFA (dB) ¹	47	56
Reference test gain (dB)	36	49
Frequency range (Hz)	<100-7500	<100-7500
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<3	<3
Total harmonic distortion (Input 70 dB SPL), 1600 Hz (%)	<3	<2
Equivalent input noise level, Omni (dB SPL)	19	17
Battery consumption, Typical (mA) ²	1.8	1.9
Battery consumption, Quiescent (mA) ²	1.7	1.8
Battery life, artificial measurement, hours ³	55	50
Expected battery life, hours (battery size 10 – IEC PR70) ⁴	45-55	40-55

1) Measured with the gain control of the hearing aids set to their 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 60118-0:1983+A1:1994 but without influence of feedback.

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4) Real usage battery life is shown as an estimated interval based on mixed use cases with variable amplification settings and variable input levels.

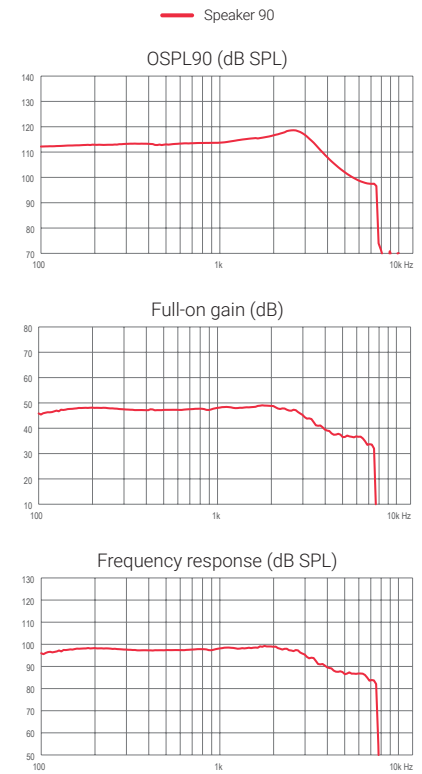
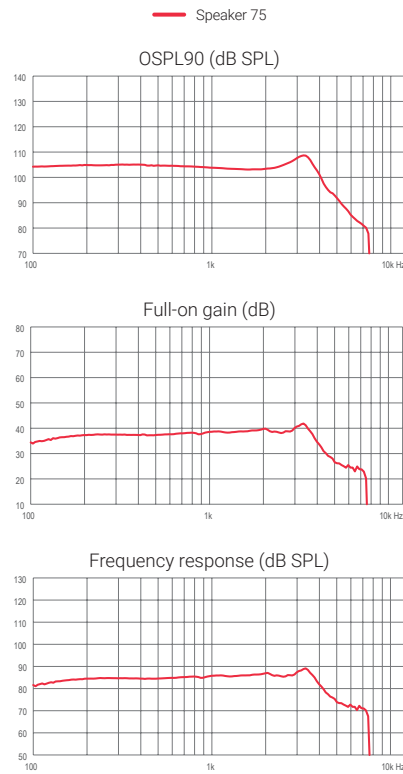
Encanta 300 | 200 | 100 IIC

2CC Coupler

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



Technical information
Omnidirectional mode is used
unless otherwise stated.



OSPL90, Peak (dB SPL)	109	119
OSPL90, 1600 Hz (dB SPL)	103	116
OSPL90, HFA (dB SPL)	104	116
Full-on gain, Peak (dB) ¹	42	49
Full-on gain, 1600 Hz (dB) ¹	39	48
Full-on gain, HFA (dB) ¹	38	48
Reference test gain (dB)	26	38
Frequency range (Hz)	<100-7500	<100-7500
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<2	<2
Total harmonic distortion (Input 65 dB SPL), 1600 Hz (%)	<2	<2
Equivalent input noise level, Omni (dB SPL)	20	20
Battery consumption, Typical (mA) ²	1.8	2.4
Battery consumption, Quiescent (mA) ²	1.7	1.8
Battery life, artificial measurement, hours ³	55	40
Expected battery life, hours (battery size 10 – IEC PR70) ⁴	45-55	40-55

1) Measured with the gain control of the hearing aids set to their 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 60118-0:1983+A1:1994 but without influence of feedback.

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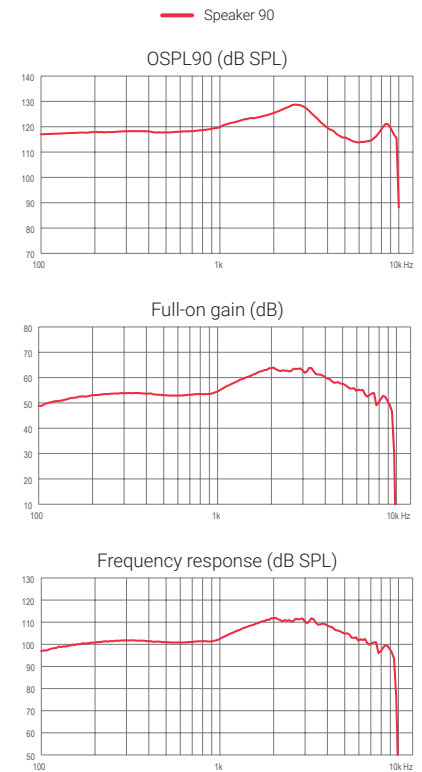
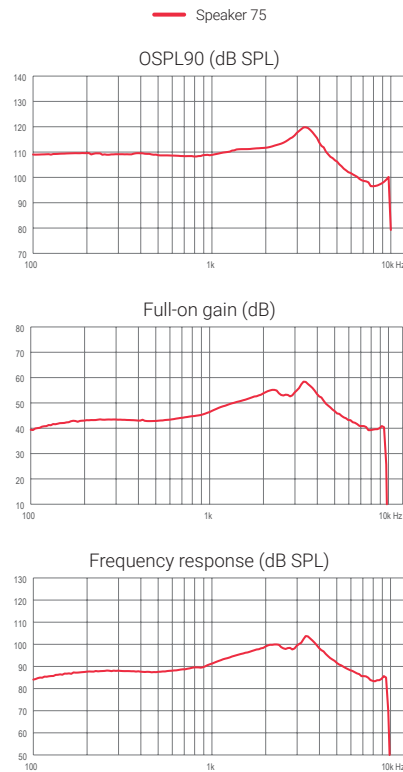
4) Real usage battery life is shown as an estimated interval based on mixed use cases with variable amplification settings and variable input levels.

Encanta 400 CIC

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Technical information
Omnidirectional mode is used unless otherwise stated.



OSPL90, Peak (dB SPL)	120	129
OSPL90, 1600 Hz (dB SPL)	111	124
OSPL90, HFA (dB SPL)	111	124
Full-on gain, Peak (dB) ¹	58	64
Full-on gain, 1600 Hz (dB) ¹	51	61
Full-on gain, HFA (dB) ¹	50	59
Reference test gain (dB)	36	49
Frequency range (Hz)	<100-9500	<100-9500
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 1600 Hz (%)	<3	<2
Equivalent input noise level, Omni (dB SPL)	19	17
Battery consumption, Typical (mA) ²	1.6	1.8
Battery consumption, Quiescent (mA) ²	1.6	1.6
Battery life, artificial measurement, hours ³	65	55
Expected battery life, hours (battery size 10 – IEC PR70) ⁴	50-55	30-55

1) Measured with the gain control of the hearing aids set to their 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 60118-0:1983+A1:1994 but without influence of feedback.

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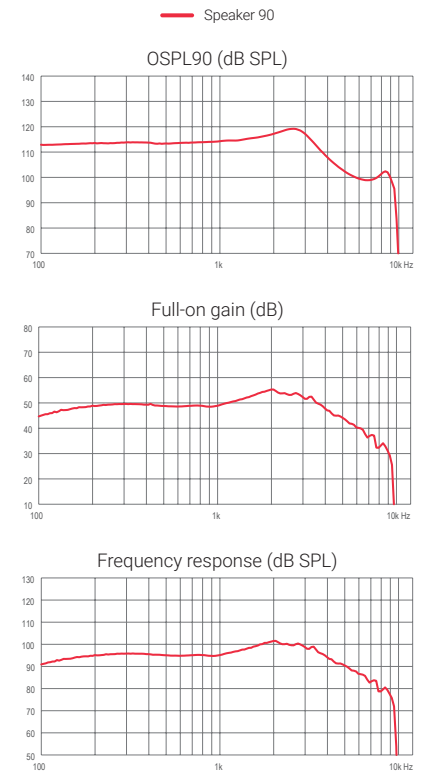
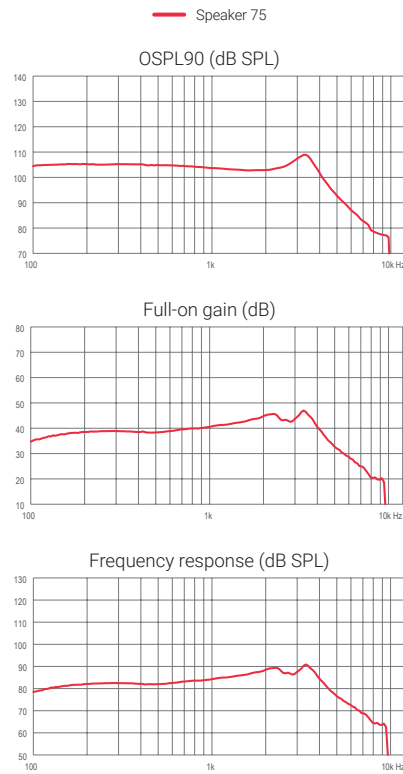
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OSPL90, Peak (dB SPL)	109	119
OSPL90, 1600 Hz (dB SPL)	103	116
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Full-on gain, Peak (dB) ¹	47	55
Full-on gain, 1600 Hz (dB) ¹	43	53
Full-on gain, HFA (dB) ¹	42	52
Reference test gain (dB)	26	38
Frequency range (Hz)	<100-6900	<100-7500
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<2	<2
Total harmonic distortion (Input 65 dB SPL), 1600 Hz (%)	<2	<2
Equivalent input noise level, Omni (dB SPL)	19	19
Battery consumption, Typical (mA) ²	1.7	1.9
Battery consumption, Quiescent (mA) ²	1.6	1.6
Battery life, artificial measurement, hours ³	60	50
Expected battery life, hours (battery size 10 – IEC PR70) ⁴	50-55	30-55

1) Measured with the gain control of the hearing aids set to their 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 60118-0:1983+A1:1994 but without influence of feedback.

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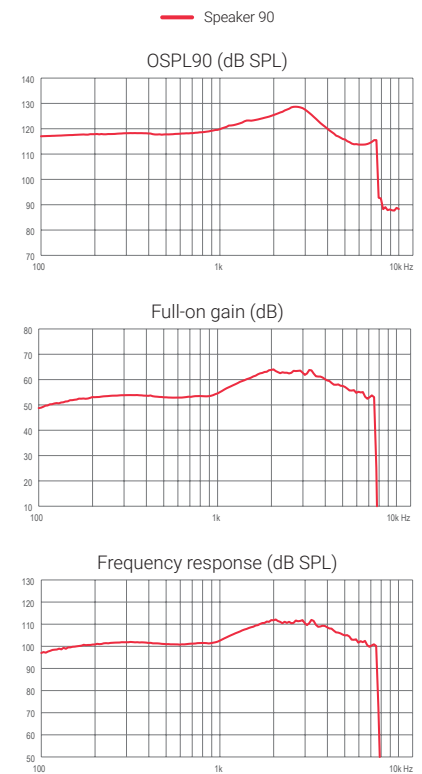
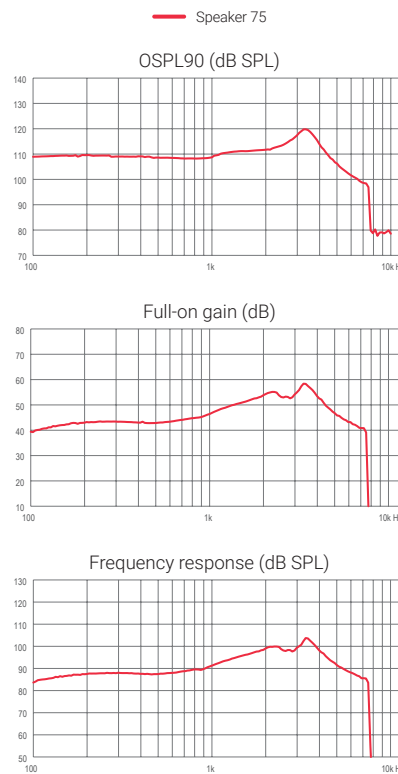
Encanta 300 | 200 | 100 CIC

Ear Simulator

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Full-on gain, 1600 Hz (dB) ¹	51	61
Full-on gain, HFA (dB) ¹	50	59
Reference test gain (dB)	36	49
Frequency range (Hz)	<100-7500	<100-7500
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 1600 Hz (%)	<3	<2
Equivalent input noise level, Omni (dB SPL)	19	17
Battery consumption, Typical (mA) ²	1.6	1.8
Battery consumption, Quiescent (mA) ²	1.6	1.6
Battery life, artificial measurement, hours ³	65	55
Expected battery life, hours (battery size 10 – IEC PR70) ⁴	50-55	30-55

1) Measured with the gain control of the hearing aids set to their 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 60118-0:1983+A1:1994 but without influence of feedback.

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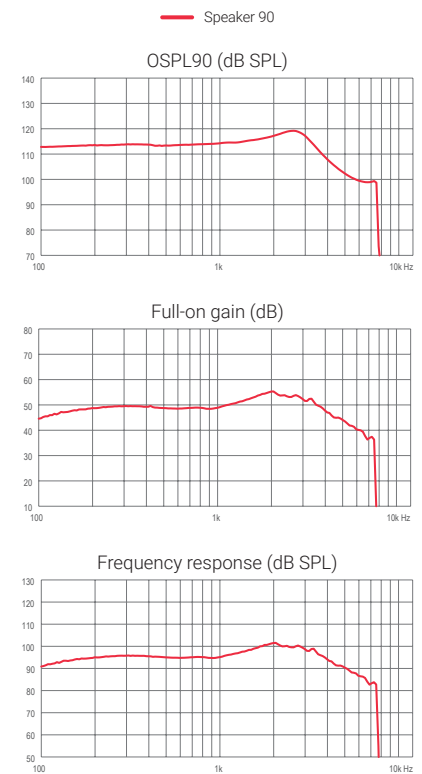
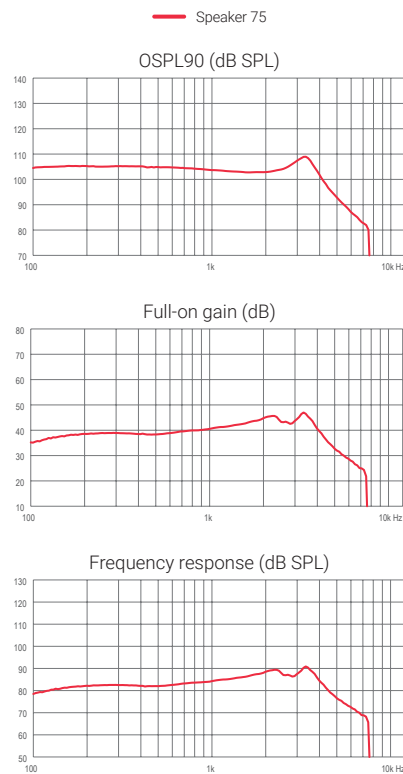
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Full-on gain, Peak (dB) ¹	47	55
Full-on gain, 1600 Hz (dB) ¹	43	53
Full-on gain, HFA (dB) ¹	42	52
Reference test gain (dB)	26	38
Frequency range (Hz)	<100-6900	<100-7500
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<2	<2
Total harmonic distortion (Input 65 dB SPL), 1600 Hz (%)	<2	<2
Equivalent input noise level, Omni (dB SPL)	19	19
Battery consumption, Typical (mA) ²	1.7	1.9
Battery consumption, Quiescent (mA) ²	1.6	1.6
Battery life, artificial measurement, hours ³	60	50
Expected battery life, hours (battery size 10 – IEC PR70) ⁴	50-55	30-55

1) Measured with the gain control of the hearing aids set to their 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 60118-0:1983+A1:1994 but without influence of feedback.

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