

TECHNICAL DATA

Alpha XT 9 | 7 | 5

miniRITE T

Bernafon Alpha XT takes Hybrid Technology™ to new levels. The miniRITE T is a receiver-in-the-ear hearing instrument designed for users with slight to profound hearing losses. It includes direct audio streaming, 2.4 GHz Bluetooth® Low

Energy and NFMI technology, a telecoil, and double push button for volume and program changes. The miniRITE T is available with the miniFit speaker system, which includes four power levels and a variety of domes and custom molds.



Technical features

- Direct audio streaming¹
- Hands-free communication²
- 2.4 GHz Bluetooth® Low Energy
- NFMI (near-field magnetic induction)
- Double push-button
- Telecoil
- miniFit speakers
- Hydrophobic coating
- IP68 rated
- LED visual indicator

Accessories

- Bernafon App
- RC-A (remote control)
- TV-A (TV adapter)
- SoundClip-A
- Noahlink Wireless (wireless programming interface)

For information on compatibility, please visit www.bernafon.us/support/compatibility-guide

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.

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) From iPhone®, iPad®, iPod touch®, and select Android™ devices with the Audio Streaming for Hearing Aids (ASHA) protocol

2) Available with select iPhone and iPad models

WARNING: No modification of this equipment is allowed.

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Feature overview

	Alpha XT 9	Alpha XT 7	Alpha XT 5
Hybrid Technology™			
Hybrid Sound Processing™	•	•	•
Frequency bandwidth	10 kHz	8 kHz	8 kHz
Hybrid Balancing™	•	•	—
Speech Balancer	3 options	2 options	•
Noise Balancer	4 options	2 options	—
Hybrid Noise Management™	•	•	•
Smart Noise Reduction	4 options	4 options	3 options
Smart Directionality	4 options	4 options	4 options
Dynamic States	3 options	2 options	—
Omni States	2 options	2 options	—
Hybrid Feedback Canceller™	•	•	•
Hybrid Sound Care™	•	•	•
Wind Contact Noise Protector	•	•	•
Speech			
Low Frequency Enhancer	•	•	•
Frequency Composition™ ^{EXT}	•	•	•
Comfort			
Binaural Noise Manager	•	•	—
Transient Noise Reduction	6 options	5 options	4 options
Dynamic Range Extender	•	•	—
Soft Noise Manager	•	•	•
Directionality controls			
Dynamic	•	•	•
Adaptive Full Directionality	•	•	•
Fixed Directionality	•	•	•
Fixed Omni	•	•	•
Omni Directional	•	•	—
True Directionality Plus	•	•	—
Individualization			
Personalization	•	•	•
Fitting bands	24	20	18
Program options/memories	13/4	12/4	12/4
Music Experience	•	•	•
Binaural coordination: VC, program changes	•	•	•
Automatic Adaptation Manager	•	•	•
Transition	4 options	3 options	2 options
Data Logging	•	•	•
Conversation Data	•	•	•
Spoken indicators	•	•	•
Tinnitus SoundSupport	•	•	•
CROS compatibility	•	•	•

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Ear Simulator

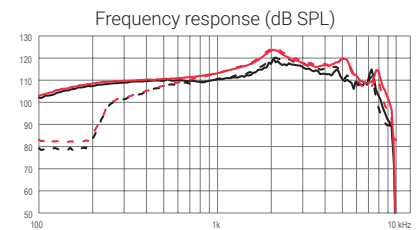
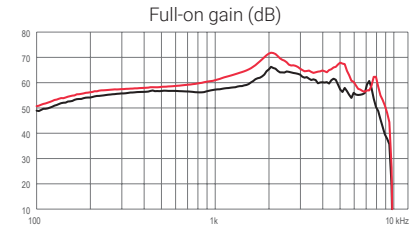
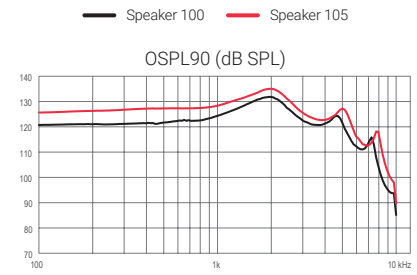
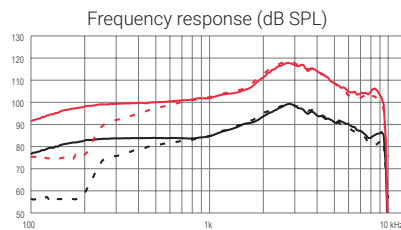
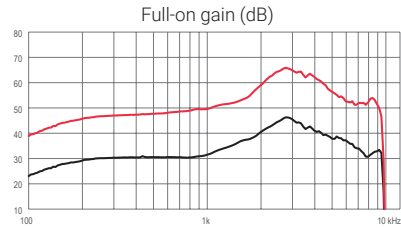
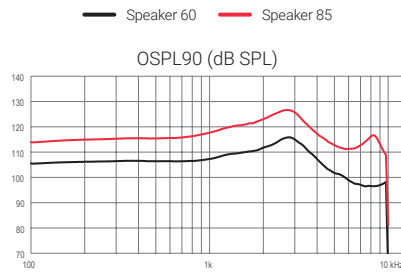
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Technical information
Omnidirectional mode is used unless otherwise stated.

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

Speaker 85 / 105
— Acoustic input: 60 dB SPL
- - - Magnetic input: 31.6 mA/m



	Speaker 60	Speaker 85	Speaker 100	Speaker 105
OSPL90, Peak (dB SPL)	116	127	132	135
OSPL90, 1600 Hz (dB SPL)	110	121	130	133
OSPL90, HFA (dB SPL)	111	122	127	131
Full-on gain, Peak (dB) ¹	46	66	66	72
Full-on gain, 1600 Hz (dB) ¹	37	53	60	66
Full-on gain, HFA (dB) ¹	38	56	61	65
Reference test gain (dB)	30	46	53	58
Frequency range (Hz)	100-9600	100-9500	100-8900	100-9100
Telecoil output, 1 mA/m field (1600 Hz) (dB SPL)	68	84	91	96
Telecoil output, 10 mA/m field (1600 Hz) (dB SPL)	88	104	111	116
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2	<9	<4
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<3	<4	<6	<4
Total harmonic distortion (Input 70 dB SPL), 1600 Hz (%)	<2	<5	<3	<4
Equivalent input noise level, Omni (dB SPL)	18	21	17	15
Equivalent input noise level, Dir (dB SPL)	26	29	25	24
Battery consumption, Typical (mA) ²	2.3	2.4	2.2	2.3
Battery consumption, Quiescent (mA) ²	2.2	2.2	2.2	2.2
Battery life, artificial measurement, hours ³	80	75	80	80
Expected battery life, hours (battery size 312 - IEC PR41) ⁴	55-60	50-60	50-60	50-60

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 standardized 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

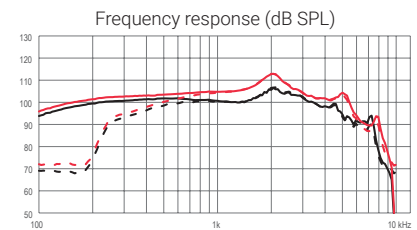
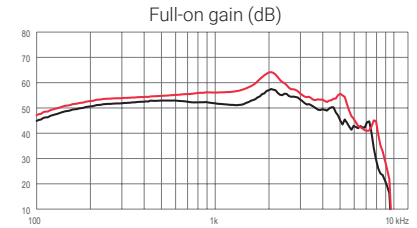
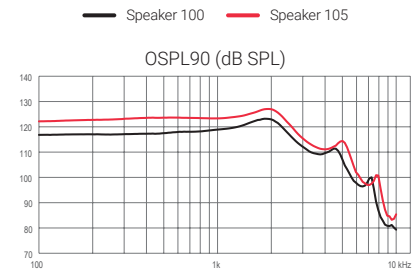
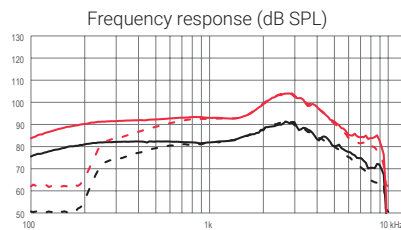
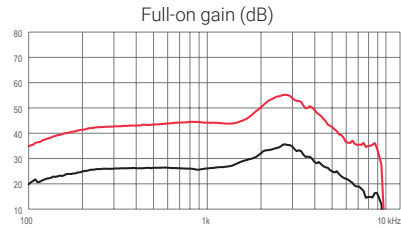
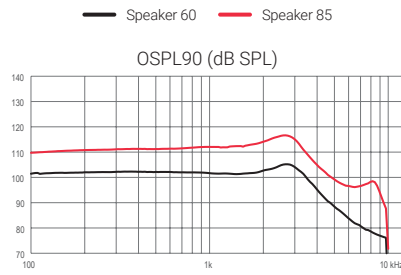
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Speaker 85 / 105
— Acoustic input: 60 dB SPL
- - - Magnetic input: 31.6 mA/m



	Speaker 60	Speaker 85	Speaker 100	Speaker 105
OSPL90, Peak (dB SPL)	105	117	123	127
OSPL90, 1600 Hz (dB SPL)	102	113	122	126
OSPL90, HFA (dB SPL)	103	114	119	123
Full-on gain, Peak (dB) ¹	36	55	57	64
Full-on gain, 1600 Hz (dB) ¹	29	45	53	59
Full-on gain, HFA (dB) ¹	30	48	53	58
Reference test gain (dB)	26	37	42	47
Frequency range (Hz)	100-9400	100-8900	100-7500	100-7900
Telecoil output, 1 mA/m field (1000 Hz) (dB SPL)	58	76	85	87
Telecoil output, HFA SPLITS L/R (dB SPL)	85	96	101	106
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2	<2	<2
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<2	<2	<2	<2
Total harmonic distortion (Input 65 dB SPL), 1600 Hz (%)	<2	<2	<2	<2
Equivalent input noise level, Omni (dB SPL)	16	17	16	16
Equivalent input noise level, Dir (dB SPL)	27	27	28	27
Battery consumption, Typical (mA) ²	2.2	2.4	2.4	2.4
Battery consumption, Quiescent (mA) ²	2.2	2.2	2.2	2.2
Battery life, artificial measurement, hours ³	80	75	75	75
Expected battery life, hours (battery size 312 - IEC PR41) ⁴	55-60	50-60	50-60	50-60

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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3) Based on the standardized 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).

Alpha XT 7 | 5 miniRITE T

Ear Simulator

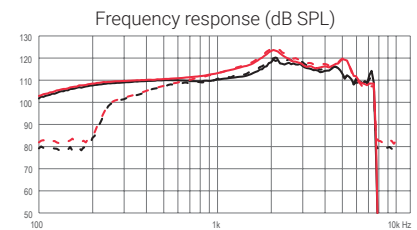
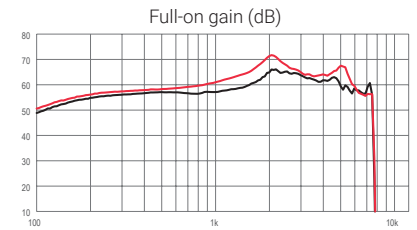
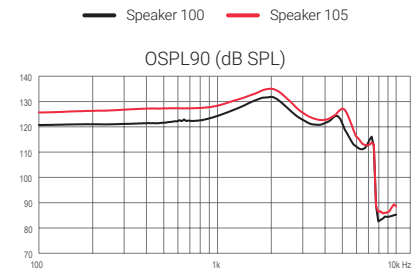
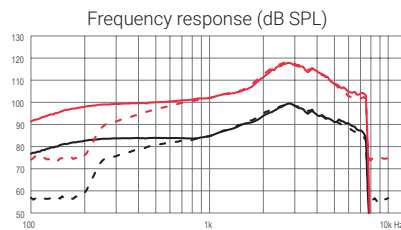
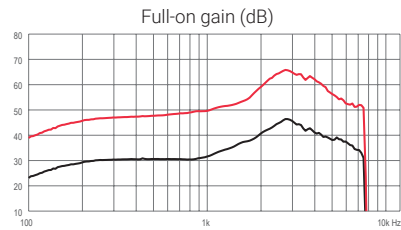
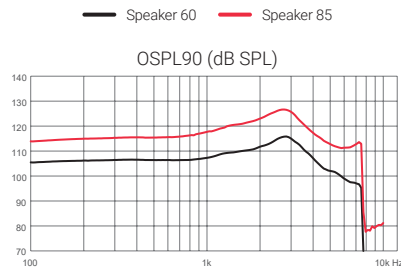
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Full-on gain, HFA (dB) ¹	38	56	61	65
Reference test gain (dB)	30	46	53	58
Frequency range (Hz)	100-7500	100-7500	100-7500	100-7500
Telecoil output, 1 mA/m field (1600 Hz) (dB SPL)	68	84	91	96
Telecoil output, 10 mA/m field (1600 Hz) (dB SPL)	88	104	111	116
Total harmonic distortion (Input 70 dB SPL), 500 Hz (%)	<2	<2	<9	<4
Total harmonic distortion (Input 70 dB SPL), 800 Hz (%)	<3	<4	<6	<4
Total harmonic distortion (Input 70 dB SPL), 1600 Hz (%)	<2	<5	<3	<4
Equivalent input noise level, Omni (dB SPL)	19	21	16	15
Equivalent input noise level, Dir (dB SPL)	26	28	25	24
Battery consumption, Typical (mA) ²	2.2	2.3	2.2	2.3
Battery consumption, Quiescent (mA) ²	2.2	2.2	2.2	2.2
Battery life, artificial measurement, hours ³	80	75	80	80
Expected battery life, hours (battery size 312 - IEC PR41) ⁴	55-60	50-60	50-60	50-60

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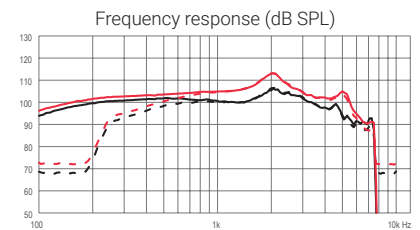
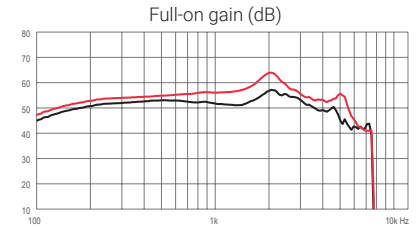
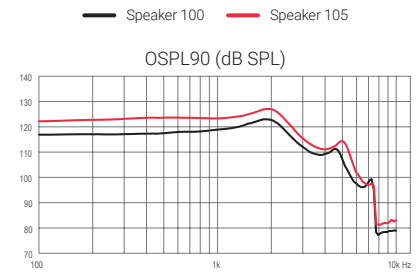
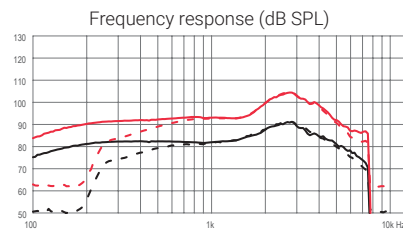
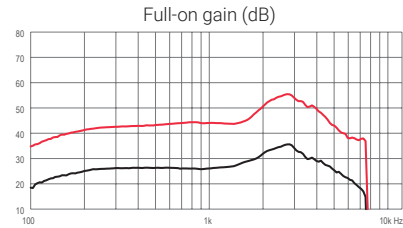
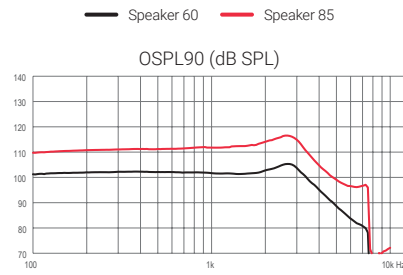
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 SBO Hearing A/S
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Bernafon is part of the Demant Group.

