Bernafon Alpha XT
Inspired by the **best**

Now with extended technology

hybrid technology™

Rechargeable miniBTE T R
and miniRITE T R

Product brochure

bernafon
Your hearing · Our passion

Inspired by exceptional hearing within the animal kingdom, Bernafon introduced Alpha with Hybrid Technology™. As we never stand still and continuously strive for improvement, **we now take Hybrid Technology™ to the next level with Bernafon Alpha XT.**

Bernafon Alpha XT originates from our strong belief in the advantages of a hybrid system to process sound optimally. With this in mind, we extend Hybrid Technology™ with **Hybrid Sound Care™.** This additional hybrid feature solves a well-known problem in the industry – that of noise created at the hearing aid microphones through wind or direct contact. These noises can cause annoyance for the user, lead to reduced wearing times, and can even hinder them during certain activities.

But that's not all. Bernafon Alpha XT is available in Bernafon's popular miniRITE T R and miniBTE T R hearing aid styles, comes with the latest connectivity offering, a new all-in-one app, and improved personalization in Oasis^{nxt}.

Go hybrid and find out more about Bernafon Alpha XT – inspired by the best.

Your Bernafon team

Bernafon Alpha XT hearing aids with extended Hybrid Technology™ offer your clients the latest technological advancements for best sound without compromise.

Extended technology with Bernafon Alpha XT

hybrid technology™

Next level **Hybrid Technology™** now works even more efficiently. Thanks to the addition of the new Hybrid Sound Care™ feature, which removes noise at the start of the signal processing.

Hybrid Sound Care™ takes care of the hearing aid sound. This hybrid feature protects from disturbing wind and contact noise. It is designed to improve listening comfort and increases speech clarity.

Bernafon Alpha XT is available in the popular miniRITE T R and the practical miniBTE T R styles. The easy-to-use rechargeable hearing aids provide power for a full day and conveniently recharge with one of **two charger options.**

The new Bernafon App offers your clients intuitive hearing aid control and remote support, now all available in one app. Combined with the extensive connectivity offering of Bernafon Alpha XT, your clients can benefit from easy direct sound streaming, hearing aid control, and remote support at their fingertips.

OASISnxt

The Bernafon Oasisnxt fitting software offers additional flexibility for a personalized fit. Transient Noise Reduction comes with additional strengths. And new Conversation Data tracks your clients' surrounding sound environment and conversations over time, providing you with valuable counseling input to discuss the hearing journey with your clients.

Hybrid Technology™ – for best sound without compromise

Hybrid Technology™ joins two processing approaches to deliver one optimized and natural sound experience. It accurately analyzes and processes the entire sound scene for best sound without compromise in countless listening situations.

hybrid
technology™

Trade-off between speech understanding and listening comfort

A camera pre-sets its focus on either the fast-moving owl or the fixed background. The signal processing of a traditional hearing aid takes the same approach. It either focuses on improving speech understanding or on avoiding amplifying disturbing noise for better listening comfort.

Simultaneously augmented speech understanding and listening comfort

Hybrid Technology™ joins two processing approaches into one hybrid system to address various listening environments. It always chooses the most optimal processing approach based on a precise analysis of the listening situation. The effect is similar to the clear depiction of both the owl and the background in the image.

Next level Hybrid Technology™

With Bernafon Alpha XT, Hybrid Technology™ gains an additional hybrid feature to extend the high-performance technology. Each of the five features follows the hybrid concept of combining two smoothly interacting counterparts. Together they perform effectively in countless listening situations.

Hybrid Sound Care™

New in Alpha XT

This high-precision feature effectively protects from wind and contact noise with 500 adjustments per second, across 24 frequency bands.

Hybrid Noise Management™

High-resolution noise management with precision in 24 frequency bands performs up to 36,000 signal estimations per second.

Hybrid Balancing™

Personalized speech and noise balancing is based on the client's situational sound preferences.

Hybrid Feedback Canceller™

Feedback is eliminated super-fast and accurately in both static and dynamic conditions with up to 126,000 measurements per second.

Hybrid Sound Processing™

Two parallel sound processing strategies work in real-time and with high precision across the entire frequency range based on up to 48,000 signal estimations per second.
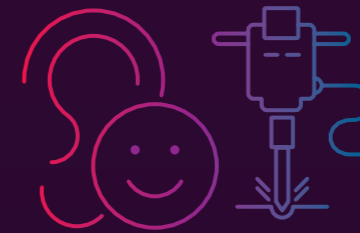
Hybrid Sound Care™

The feature helps preserve the sound and protects from disturbing wind and contact noise.

The Wind Noise Protector reduces signal disturbance in windy situations.

The Contact Noise Protector helps prevent the amplification of contact noise.

Hybrid Noise Management™

Directionality and noise reduction interact smoothly. They reduce noise when necessary, to optimize the signal-to-noise ratio (SNR).

Smart Directionality independently adjusts its directional pattern in 24 bands.

Smart Noise Reduction, optimized through machine learning, attenuates high-level noise and noise near to speech.

Hybrid all the way

Hybrid Balancing™

Sound amplification is personalized to the user's preferences for various listening environments.

The Speech Balancer boosts speech sounds in noisy situations.

The Noise Balancer reduces amplification in noise-only situations.

Hybrid Feedback Canceller™

Two feedback management strategies join forces to eliminate feedback within milliseconds.

Feedback in static conditions is eliminated with a masking counter-phase signal.

Feedback in dynamic conditions is counteracted with an additional high-speed estimator.

Hybrid Sound Processing™

Sound is processed simultaneously in the time and frequency domains with high speed and precision.

Phonemic broadband compression in real time accurately amplifies speech signals.

Slower compression in 24 frequency bands precisely detects the spectral content of sound with low modulation.

Caring about the sound

Hybrid Sound Care™ efficiently protects from both wind and contact noise. Located at the start of the sound processing, it reduces unwanted noises carefully over 24 frequency bands to feed a cleaner signal into the other features of Hybrid Technology™. The SNR is improved, which has been shown to reduce listening effort.

👍 **Better processing efficiency due to cleaner input signal**

👍 **Improved speech clarity due to frequency-specific attenuation**

👍 **Reduced contact noise**

👍 **Designed to improve listening comfort in windy situations**

Wind Noise Protector

Strong wind can saturate the hearing aid microphones and overpower the target signal. This irregular and fast-changing noise, caused by movement across the microphones, is hard to remove through traditional noise management. The Wind Noise Protector analyzes the varying signals from the front and rear microphones. Wind noise is detected and reduced across the 24 frequency bands. This helps preserve the speech signal for improved speech clarity and aims to provide additional listening comfort in windy outdoor situations.

Contact Noise Protector

Users may face contact noise problems regularly, especially when wearing glasses or while brushing hair away from their face. Traditional hearing aids often amplify these types of noises along with the desired signal. The Contact Noise Protector detects these noises and helps prevent their amplification.

Smart and precise

Two features interact smoothly to obtain the best possible SNR to improve speech understanding. **Hybrid Noise Management**™ carefully detects noise sources and only acts where necessary. Otherwise, the natural environmental sounds are preserved.

Improved resolution in 24 frequency bands

High precision noise management based on up to 36,000 signal estimations per second

Cleaner speech signal thanks to machine learning of the Smart Noise Reduction algorithm

Smart Directionality

It's smart because it only activates when speech is present in noise. Smart Directionality keeps attenuation to a minimum to preserve the user's environmental awareness. It works simultaneously in 24 frequency bands. Multiple directionality patterns set their null points with up to 24 SNR estimators to reduce noise with high precision from different angles.
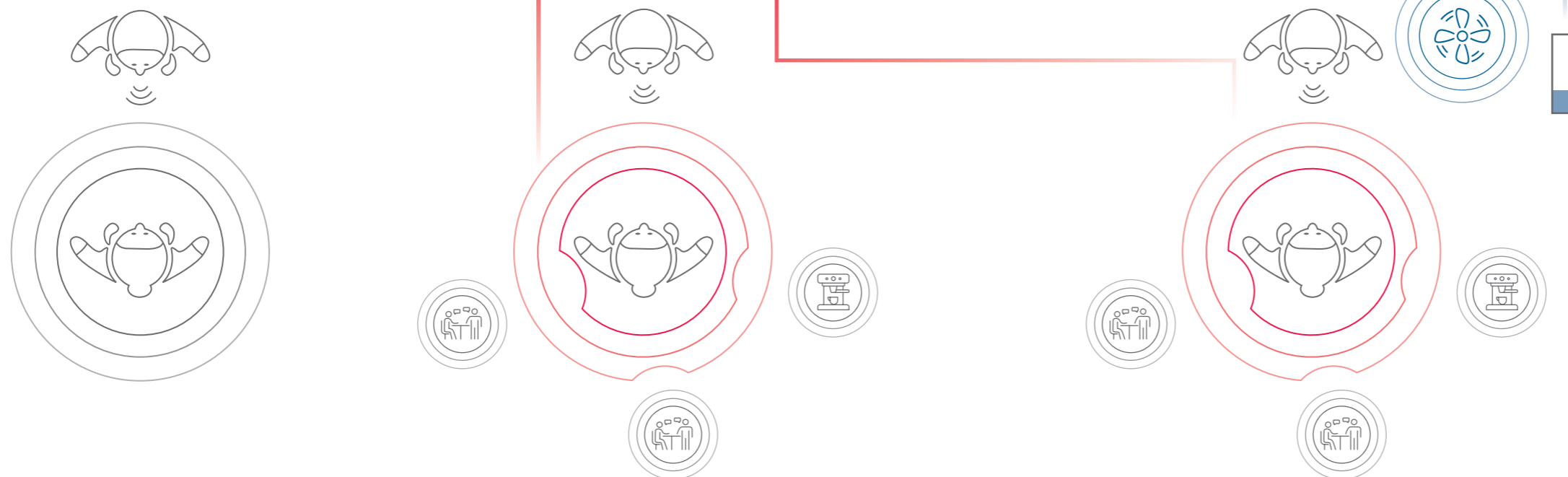
Smart Directionality uses **True Directionality Plus** as a new reference Omni State for simple listening situations. It is modelled to create a natural pinna effect.

Smart Noise Reduction

If Smart Directionality is unable to sufficiently improve the SNR, then Smart Noise Reduction activates. It operates with high frequency resolution in 24 bands. Information from adjacent bands is considered as well to reduce sound artifacts.

Smart Noise Reduction was developed by applying **machine learning.** Training on a large audio set of real-life sound environments optimizes attenuation. Parameters were adjusted to closely match the hearing aids' output signal to a clean speech signal.

Naturally selective

Smart Directionality reduces disturbing noise from various angles to set the user's focus on the conversation at hand. It works with high precision to minimally affect the speech signal and preserve environmental sounds.

Whenever noise is in close vicinity of the conversation, **Smart Noise Reduction** reduces it effectively.

Improved 360° environmental awareness

Reduced listening effort and fatigue

Augmented speech understanding and listening comfort in noisy environments

Striking the right balance

Hybrid Balancing™ joins two personalization features: Speech Balancer and Noise Balancer. They can be tuned to match the user's individual perception of the sound environment. In the presence or absence of speech, either speech is boosted, or noise diminished. In this way, both speech audibility and listening comfort are correctly balanced.

Speech Balancer

In situations with speech and noise sources, speech intelligibility is most important. Boosting the speech level increases the contrast between speech and noise. Customize the Speech Balancer with a chosen setting.

Noise Balancer

In noise-only situations, listening comfort is key. As the sensitivity to noise varies from user to user, the preferred amplification of noise can be selected.

👍 **Better speech clarity due to personalized speech boost**

👍 **Higher listening comfort in noise-only situations**

👍 **Increased flexibility and control to personalize the hearing aid performance in a multitude of dynamic listening situations**

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The best of two worlds

Traditional hearing aids process sound either in the time or frequency domain. To optimize speech intelligibility and to avoid amplification of unwanted noise, **Hybrid Sound Processing™** merges two signal processing strategies in one hybrid system. Phonemic broadband compression in the time domain works in parallel with slower compression in the frequency domain.

Speech processing at phonemic speed

**Targeted detection of intruding high-level narrowband noise**

No compromise in sound quality or speech intelligibility

Analyzes the sound environment with up to 48,000 level estimations per second.

Sound processing with high resolution in the time domain enables real-time compression at phonemic level. High-speed broadband level estimation precisely follows the high modulation of speech signals. It even amplifies soft phonemes optimally.
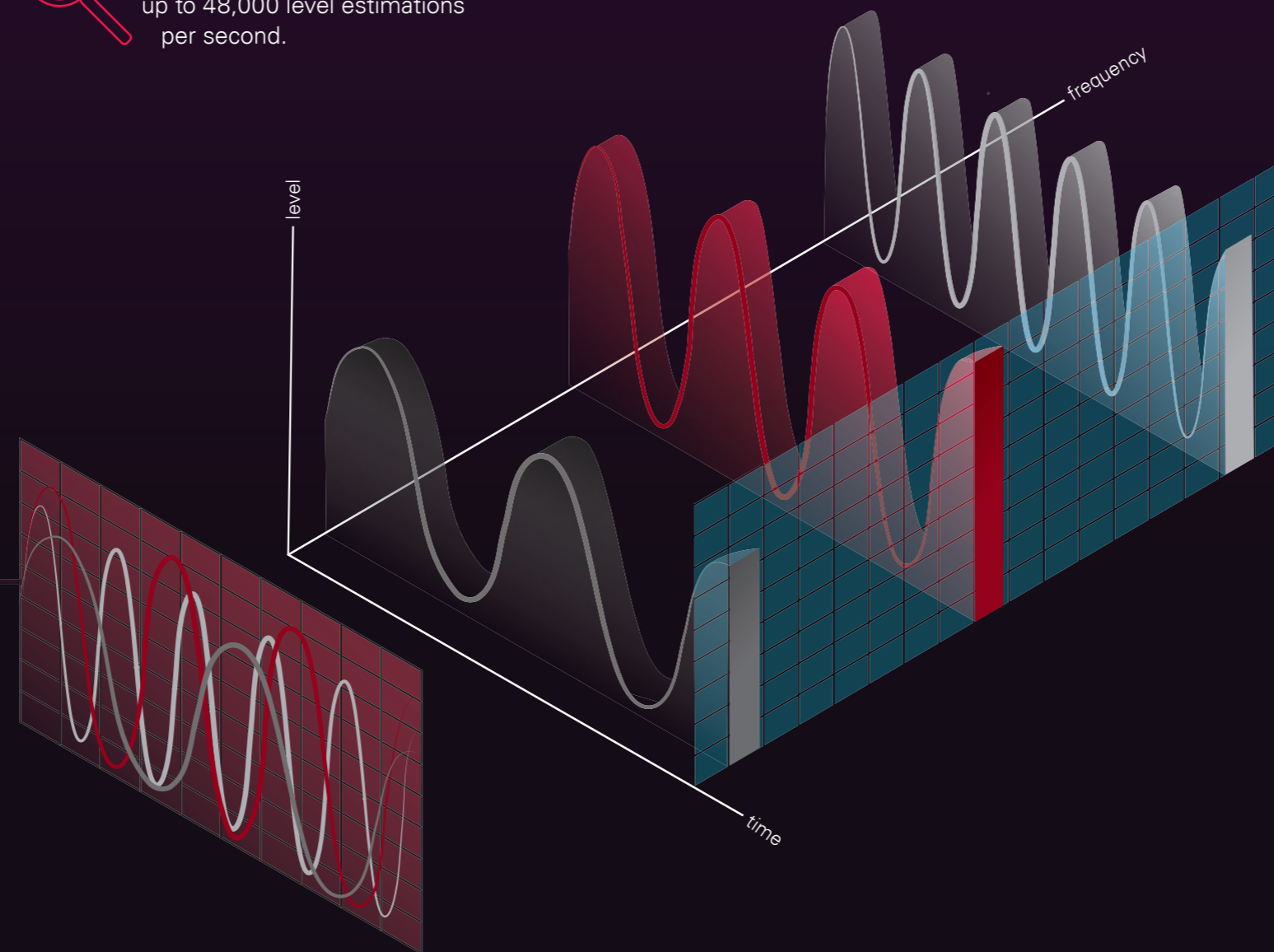
**Sound processing with high resolution in the frequency domain** exactly targets low modulation sounds, typically noise. High-level narrowband noise signals, in particular, can interfere with the correct amplification of speech. Such signals are estimated with 24 level estimators. The frequency content is tracked with a high resolution in 24 bands over the entire frequency range.

level

frequency

time

Great audibility and comfort

👍 **Uninterrupted speech audibility**

👍 **Natural sound in real-time**

👍 **Improved sound quality**

Processing in the time domain on its own may mistake the coffee machine for a high-level speech signal, thus incorrectly amplifying the conversation at the counter. Processing in the frequency domain easily identifies the narrowband noise but lacks speed, indispensable for accurate amplification of the softest speech signals.

Traditional sound processing

Hybrid Sound Processing™
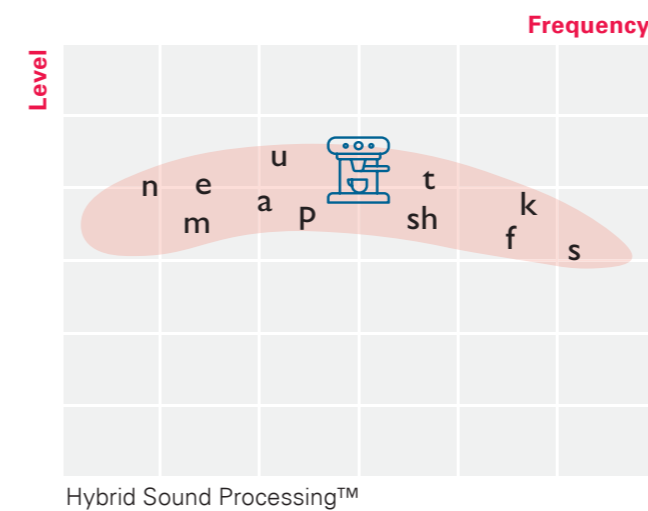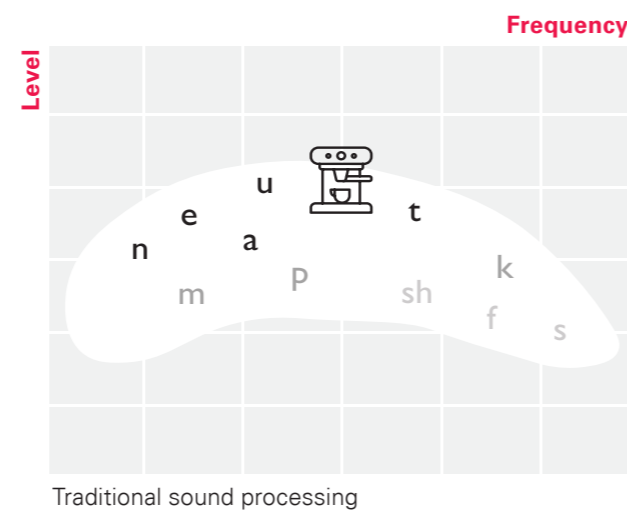
Hybrid Sound Processing™ isolates the narrowband noise and preserves the correct amplification of the conversation. Neither speech audibility nor listening comfort are compromised.

Effective feedback protection

Bernafon's **Hybrid Feedback Canceller™** combines two feedback algorithms working simultaneously. It analyzes changes in the feedback path with up to 126,000 measurements per second to eliminate feedback within milliseconds before it becomes audible to the user.

In static conditions, changes to the feedback path are gradual. The high-precision feedback algorithm eliminates any acoustical leakage between the hearing aid receiver and microphone by applying a masking counter-phase signal.

In dynamic conditions, changes in the feedback path are sudden. Abrupt movements in the proximity of the hearing aid, such as picking up a phone or putting on a hat, can cause sudden changes. Here an additional high-speed estimator counteracts these rapid changes in the feedback path.

Extended fitting range with the full gain the instrument offers

Better target match due to higher feedback thresholds

Maximized listening comfort in feedback-prone conditions

Increased wearing comfort when fitted more openly

Versatile and rechargeable

The rechargeable Bernafon Alpha XT hearing aids are easy to use, comfortable to wear, and attractive in design. Their long-lasting lithium-ion batteries provide power for the entire day, including streaming.

Recharging at home is easy with the **stable desk charger.** Its free-standing and compact design with inductive contactless charging is reliable and practical to use.

The **portable Charger Plus** brings more freedom to your client's active lifestyle. Conveniently equipped with a power bank and a lid, it's a must-have accessory for any weekend trip.

×3 Power bank provides 3 full charging cycles of two Bernafon Alpha XT hearing aids

Lid securely stores the hearing aids during charging or transport

4h Power bank fully recharges in 4 hours

Convenient streaming, control, and support

Bernafon Alpha XT hearing aids stream sound directly from iPhone, iPad, and Android™ devices* with 2.4 GHz Bluetooth® Low Energy wireless technology. They function as high-quality stereo headphones with environmental noise reduction to enjoy music or phone calls.

Your clients using an iPhone* or iPad* can benefit from **hands-free communication.** The hearing aids will pick up their voice and stream sound both ways, leaving their hands free for other tasks.

Made for
 iPhone | iPad | iPod

Works with
android

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Control and remote fitting – all in one app

Intuitive hearing aid control and professional remote support are now joined in the new **Bernafon App**. During remote fitting sessions, the Bernafon App will allow remote hearing aid fine-tuning in real time. Interactions with your clients can happen via video, audio, or chat. A new interface with improved usability and guided onboarding allows your clients to use functionalities more easily.

- Change hearing aid volume or program and check battery levels
- Independently adjust the intensity of bass, mid, and high tones for streamed sounds with the **streaming equalizer**
- Use the **"Find my hearing aid"** function
- Connect to multiple TV adapters
- Receive proactive troubleshooting proposals for improved connectivity

Let your clients download the new Bernafon App and show it is easy to use

Download on the
 App Store

GET IT ON
Google Play
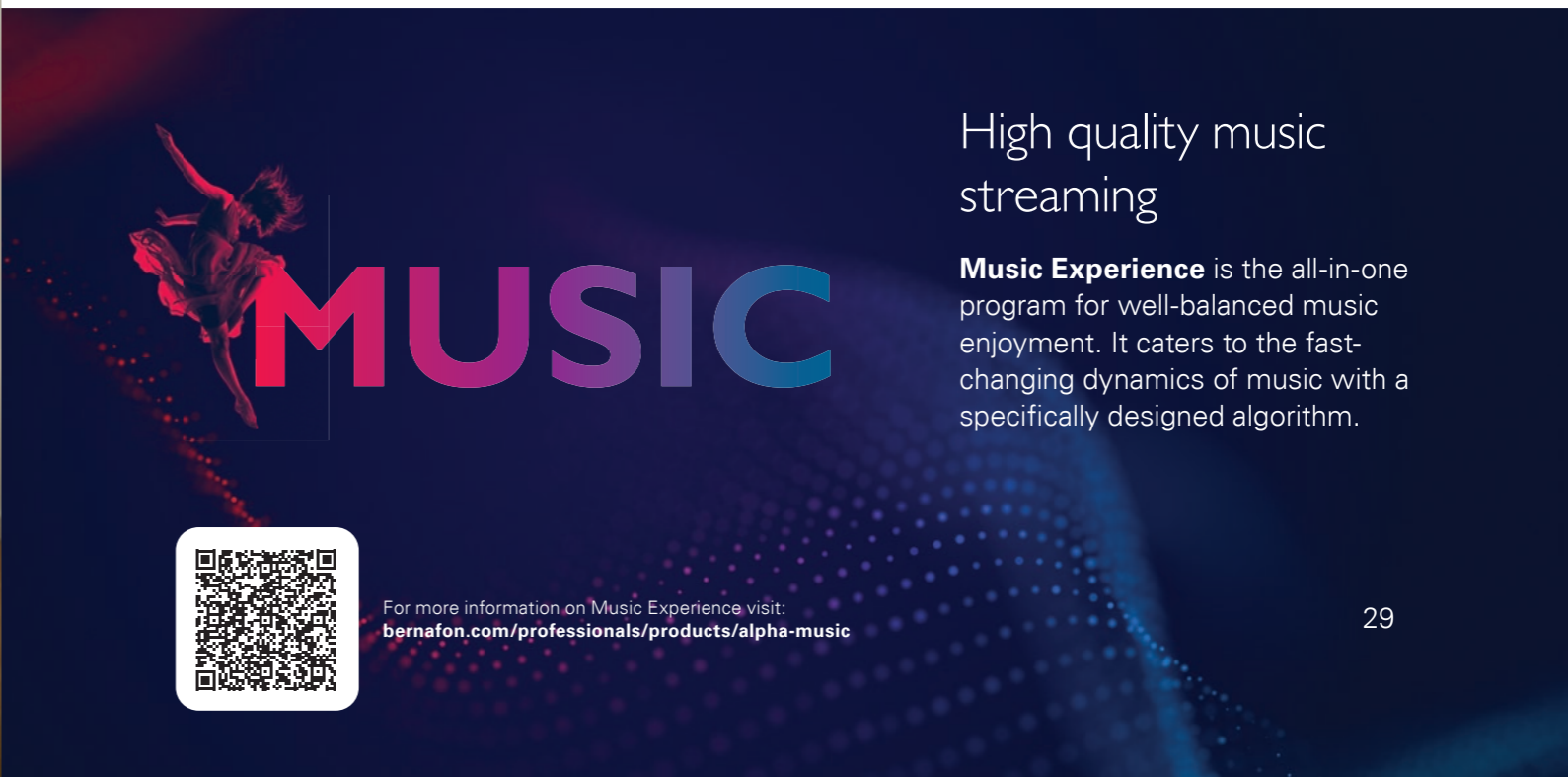
High quality music streaming

Music Experience is the all-in-one program for well-balanced music enjoyment. It caters to the fast-changing dynamics of music with a specifically designed algorithm.

For more information on Music Experience visit:
bernafon.com/professionals/products/alpha-music

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All the tools for an easy fit

The new Bernafon Oasis^nxt 2023.1 fitting software equips you with many tools from the first fit, over fine-tuning to follow-up sessions.

Use the **Personalization tool** for an optimal first fit and higher user acceptance. The tool assesses the different sound perceptions and preferences of your clients. Answers to key questions trigger direct actions on various controls in the fitting software. More personalized fittings encourage the user to wear their hearing aids more often and for longer periods of time.

The **Fitting Assistant** guides the conversation with your clients to assess their needs in a majority of listening situations. Fine-tuning suggestions are prompted and can be implemented immediately. Also, hybrid feature adjustments are recommended to unfold the full potential of Hybrid Technology™.
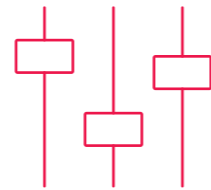
Conversation Data tracks your clients' surrounding sound environment and level of participation in conversations over time. The results are indications on exposure to low, medium, and high complexity sound environments and the level of conversation activity. Consulting the data in each follow-up session gives you valuable counseling input to discuss the hearing journey with your clients.

Schedule real-time follow-up sessions with your clients at a mutually convenient time and place with **Bernafon Remote Fitting.** Contact your sales representative for access and additional information.

Personalized first fit

Easy, guided fine-tuning
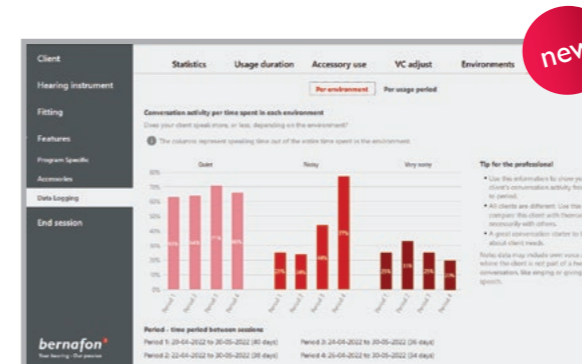
Monitoring client's progress

Remote client support

Fitting flexibility with stronger Transient Noise Reduction

The Transient Noise Reduction feature offers additional strengths for your clients who are especially sensitive to sudden, loud noises. It detects noises (e.g., slamming doors or cutlery hitting the plate) faster and reduces it by up to 30 dB. Transient noise is reduced specifically by frequency band to better preserve the speech signal.

A strong hearing aid family with Hybrid Technology™

Bernafon Alpha and Alpha XT together create a full style portfolio across all performance categories.

Accessories for individual needs

- **RC-A** remote control for changes with excellent tactility
- **SoundClip-A** as a remote microphone and for hands-free phone calls and online meetings
- **TV-A** for stereo sound quality TV entertainment streamed to the hearing aids

Model overview

	miniBTE T	miniBTE T R	miniRTE T	miniRITE T R	IIC	CIC	ITC / ITE HS / ITE FS
Alpha XT 9|7|5	●	●	●	●			
Alpha 9|7|5|3|1	●	●	●	●	●	●	●
Fitting levels	85	85			75, 90	75, 90	75, 90, 100
miniFit speakers			60, 85, 100, 105	60, 85, 100, 105			
miniFit thin tubes	0.9 mm, 1.3 mm	0.9 mm, 1.3 mm					
Earhook	●	●					
Battery	Zinc-air 312	Li-ion 13	Zinc-air 312	Li-ion 312+	Zinc-air 10	Zinc-air 10	Zinc-air 312
Rechargeable (charger & Charger Plus)[1]		●		●			
2.4 GHz Bluetooth®	●	●	●	●			○[2]
Hands-free communication	●	●	●	●			○
Telecoil	●	●	●	●			○[2]
NFMI technology	●	●	●	●		○	●
Push button(s)	Single	Single	Double	Double		○	○
Volume wheel							○
Microphones	Directional	Directional	Directional	Directional	Single	Single	Directional
Hydrophobic coating	IP68	IP68	IP68	IP68	IP68	IP68	IP68

○ Optional ● Standard

[1] Charger models are style dependent
[2] Telecoil and Bluetooth® cannot both be included in a hearing aid

Complete style range

Versatile and elegant behind-the-ear hearing aids

Wide range of domes and custom molds ensure a secure and comfortable fit

LED light indicates power status

Versatile and practical with earhook and custom mold or instant fit thin tube option

in 3 hours
in 60 minutes
in 30 minutes

100%
50%
25%

in 3.5 hours

100%
40%
20%

in 60 minutes
in 30 minutes

Push button(s) change program and volume

Ergonomic design for high wearing comfort and a secure positioning behind the ear

Available with rechargeable lithium-ion or non-rechargeable zinc-air battery

Dust and water-resistant coating extends durability (IP68 rated)

Bluetooth® connectivity streams sound from external audio devices

Telecoil connects to available induction loop systems in public places

New in Alpha XT

Easier handling with "low battery" **spoken indicator**

sand beige[1]	midnight blue[2]	metallic silver[3]	metallic anthracite	sand beige[3]	antique bronze
sand beige[1]	midnight blue[2]	metallic anthracite	metallic anthracite	metallic anthracite	metallic anthracite

metallic silver	metallic anthracite	sand beige	cocoa brown[3]	jet black[3]
metallic silver	metallic silver	metallic silver	metallic silver	metallic silver

Discreet and customizable Alpha in-the-ear hearing aids

Custom build to fit comfortably in the ear

Dust and water-resistant coating extends durability (IP68 rated)

ITC

CIC

ITE HS

IIC

ITE FS

Optional push button and volume control for easy program and volume changes with good tactility

Invisible for maximal discreetness

Optional Bluetooth® connectivity to stream sound from external audio devices

Offers various programs with optional push button

Optional telecoil connects to available induction loop systems in public places

beige	light brown	medium brown	dark brown	black

[1] Only available for Alpha XT
[2] Only available for Alpha 9 in the styles: miniRITE T R, miniBTE T, miniBTE T R
[3] Not available for Alpha 3|1

Feature overview

	Alpha XT 9	Alpha XT 7	Alpha XT 5	Alpha 9	Alpha 7	Alpha 5	Alpha 3	Alpha 1
Hybrid Technology™								
Hybrid Sound Processing™	●	●	●	●	●	●	●	●
Frequency bandwith	10 kHz	8 kHz	8 kHz	10 kHz	8 kHz	8 kHz	8 kHz	8 kHz
Hybrid Balancing™	●	●	–	●	●	–	–	–
Speech Balancer	3 options	2 options	●	3 options	2 options	●	●	●
Noise Balancer	4 options	2 options	–	4 options	2 options	–	–	–
Hybrid Noise Management™	●	●	●	●	●	●	●	●
Smart Noise Reduction	4 options	4 options	3 options	4 options	4 options	3 options	3 options	2 options
Smart Directionality[1]	4 options	4 options	4 options	4 options	4 options	4 options	4 options	3 options
Dynamic States	3 options	2 options	–	3 options	2 options	–	–	–
Omni States	2 options	2 options	–	2 options	2 options	–	–	–
Hybrid Feedback Canceller™	●	●	●	●	●	●	●	●
Hybrid Sound Care™	●	●	●	–	–	–	–	–
Wind|Contact Noise Protector	●	●	●	–	–	–	–	–
Speech								
Low Frequency Enhancer[2]	●	●	●	●	●	●	●	●
Frequency Composition[nx1]	●	●	●	●	●	●	●	●
Comfort								
Binaural Noise Manager[3]	●	●	–	●	●	–	–	–
Transient Noise Reduction	6 options	5 options	4 options	4 options	3 options	3 options	2 options	–
Wind Noise Manager[1]	–	–	–	●	●	●	●	●
Dynamic Range Extender	●	●	–	●	●	–	–	–
Soft Noise Manager	●	●	●	●	●	●	●	●
Directionality controls[1]								
Dynamic	●	●	●	●	●	●	●	–
Adaptive Full Directionality	●	●	●	●	●	●	●	●
Fixed Directionality	●	●	●	●	●	●	●	●
Fixed Omni	●	●	●	●	●	●	●	●
Omni Directional	●	●	–	●	●	–	–	–
True Directionality Plus	●	●	–	●	●	–	–	–
Individualization								
Personalization	●	●	●	●	●	●	●	●
Fitting bands	24	20	18	24	20	18	14	12
Program options[4] / memories[5]	13/4	12/4	12/4	13/4	12/4	12/4	10/4	8/4
Music Experience[5]	●	●	●	●	●	●	●	–
Binaural coordination: VC, program changes[3,5]	●	●	●	●	●	●	●	●
Automatic Adaptation Manager	●	●	●	●	●	●	●	●
Transition	4 options	3 options	2 options	4 options	3 options	2 options	●	●
Data Logging	●	●	●	●	●	●	●	●
Conversation Data	●	●	●	–	–	–	–	–
Spoken indicators	●	●	●	–	–	–	–	–
Tinnitus SoundSupport[3,6]	●	●	●	●	●	●	●	●
CROS compatibility[7]	●	●	●	●	●	●	●	●

The following footnotes apply only to Alpha custom instruments. Consult the model overview for style specific differences:

[1] Requires directional microphones (except "Fixed Omni")
[2] Requires Bluetooth®
[3] Requires NFMI
[4] Can vary if no telecoil present
[5] Requires control function (push button or Bluetooth®)
[6] Requires push button
[7] Not available for custom instruments

For more information on Bernafon Alpha XT, contact your local sales representative or visit our website.

Established in 1946, Bernafon representatives and employees in over 70 countries have worked ever since in the spirit and tradition of our founders to develop and market solutions that help people with hearing difficulties. With leading technology, high performance products, and outstanding support, we strive to deliver beyond expectations. Our Swiss values, together with technological competence, passion, and true partnerships, help us fulfill our goal:

Together we empower people to hear and communicate better.

For more information on our hearing instruments, visit our Bernafon website.

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SOUND ✚
OF SWITZERLAND

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Your hearing · Our passion