

OTICON | **Opn Play** 

Product Guide 2019



## Welcome to the Oticon Opn Play™ product guide

Oticon Opn Play™ redefines child-friendly hearing care by introducing the open sound experience for children.

With the new Oticon Opn Play, we break with conventional omni directional and directional technologies that can either overload or limit young minds. Powered by the new revolutionary Velox S™ platform and OpenSound Navigator™, Oticon Opn Play gives children full access to a rich and balanced 360° soundscape, to improve speech understanding in noise and maximize incidental learning by allowing access to multiple speakers.

Beyond opening up the world of sound for children with hearing loss, Oticon Opn Play allows children to receive prescribed gain without the risk of feedback\* - taking speech understanding to an even higher level.

Groundbreaking OpenSound Optimizer™ detects and prevents feedback proactively, even before it occurs. Whether a child needs a closed fitting or the comfort of an open fitting, OpenSound Optimizer provides full fitting flexibility for optimal gain and audibility. With this proactive feedback prevention system, Oticon Opn Play optimizes children's audibility for better language development by providing up to 6 dB more gain to give children up to 25% more speech cues.\*\*

Independent studies show that Oticon Opn Play delivers the optimal speech signal to support the brain. OpenSound Navigator is proven to provide up to 30% improved speech understanding and to preserve competing speech, supporting incidental learning.\*\*\* In addition, the open sound experience reduces listening effort – enhancing learning opportunities for children.

With a broad range of connectivity options for enhanced learning and communication, Oticon Opn Play connects seamlessly with smartphones and tablets and is a Made for iPhone® hearing aid. With the optional ConnectClip, Oticon Opn Play turns into a high-quality headset with access to wireless streaming for music, movies, phone calls and more from smartphones, tablets and laptops.

Oticon Opn Play comes in four styles and 12 colors to meet the needs of most children. All are available at two price points. Highlights include the new miniRITE R, which offers superior connectivity and a state-of-the-art rechargeable lithium-ion solution in an elegant and discreet design. With a super fast 3-hour charging time for a full day of power, the miniRITE R is an attractive addition to the popular miniRITE, miniRITE T and BTE PP styles.



<sup>\*</sup> For prescribed fittings, according to best practice.

<sup>\*\*</sup> Speech intelligibility index. ANSI S3.5.

<sup>\*\*\*</sup> Ng 2017, Oticon Whitepaper.

## The highlights of **Oticon Opn Play**

Powered by the new, revolutionary Velox S™ platform, Oticon Opn Play unleashes the full potential of the open sound paradigm:

- Velox S a new level of processing power.
   50 times faster data processing\*, outstanding resolution with 64 frequency channels, new highly sensitive detectors, and increased memory make the Velox S platform the most powerful from Oticon ever, enabling us to analyze sound 56,000 additional times per second\*\*.
- **OpenSound Navigator** provides children with more accurate information about their 360° soundscape, even in difficult listening environments. This open sound experience gives access to multiple speakers, supporting incidental learning, and allows the child to decide what to focus on.
- ment to feedback prevention.
  With optimal gain, in an open or closed fitting and no feedback, OpenSound Optimizer delivers up to 6 dB more stable gain, thus preserving audibility and quality of sound\*\*\*.

• OpenSound Optimizer - from feedback manage-

- Powered by the OpenSound Navigator, Oticon
   Opn Play is proven to provide up to 30%
   improved speech understanding and allows better
   opportunities for incidental learning. Evidence shows
   that the open sound experience reduces listening
   effort enhancing learning opportunities.
- An extensive range of wireless connectivity
   possibilities including hands-free streaming from
   all modern smartphones with ConnectClip.
- The new miniRITE R a unique combination of the open sound experience, superior connectivity and a state-of-the-art rechargeable lithium-ion solution in an elegant and discreet design.
- Oticon ON App designed to empower children and parents with a wide range of features and functionalities that add to the outstanding audiology of Oticon Opn Play.
- Empowering teens with the new OpenSound Booster offering even more help in everyday noisy situations to those who need it most, whenever they need it the most.



<sup>\*</sup> Compared to the Inium Sense platform.

<sup>\*\*</sup> Compared to the Velox platform.

<sup>\*\*\*</sup> Callaway 2019, Oticon Whitepaper.

## Oticon Opn Play at a glance

A high performing product family delivering an outstanding range of open sound opportunities for all situations.

Four attractive styles and a wealth of features and accessories.



#### BTE PP: Powerful and compact

With an output of 138 dB SPL, the BTE PP is an all-round pediatric instrument that will accommodate the needs of most children, covering hearing losses from mild to severe. It is a perfect balance of size, ease of use and power. A tactile double push button lets children easily control volume and programs and the LED indicator gives caregivers visual confirmation that the battery is functioning properly.

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#### Rechargeable miniRITE R: A full day's power. Every day.

The new miniRITE R offers a stateof-the-art rechargeable lithium-ion solution in an elegant and discreet design, eliminating the hassle of handling and replacing batteries. It comes with a super-fast 3-hour charging time for a full day of power and a quick recharge function, which in 30 minutes gives an additional 6 hours of power.\*

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Lithium-ion battery performance varies depending on

An extensive range of connectivity options

Oticon Opn Play connects seamlessly with smartphones and tablets and is a Made for iPhone® hearing aid. With the optional ConnectClip, it turns into a

high-quality headset, giving access to wireless streaming for music, movies, phone calls and more from smartphones, tablets and laptops.



#### miniRITE: The smallest member of the family

Stylish and discreet, the miniRITE sits snugly behind the ear, and will be the first choice for many selfconscious teenagers. Connectivity and remote microphone access are available through integrated 2.4 GHz



technology

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## miniRITE T: Sleek and discreet

Sleek and stylish, with a telecoil that ensures access at public venues and an FM option through a neckloop receiver, this style will accommodate the needs of many older children.

Best practice in pediatric hearing care

across varying listening environments.

Oticon Opn Play featuring OpenSound Navigator accommodates best practice

quidelines in pediatric amplification by providing the optimal signal-to-noise ratio

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#### Oticon ON App: Empowering parents and children

Oticon ON App works as a remote control and offers the OpenSound Booster, HearingFitness™, an education guide, low battery notification and a "find my hearing aid" feature. The App links to hearing aid instructions, connects to the Internet of Things and much more.

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## Technology & Features



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FITTING 46

Please note: The effect and availability of features varies with hearing aid style and prescription, see details in Technical Data sheets.

1,200 MOPS

24 bit DSP

11 Cores
High processing power

64 processing channels

Analyzing sound environment more than

100 times/second

New acoustic measures 56,000 per second

113 dB SPL

## Introducing the Velox S<sup>™</sup> platform

#### The best just got better

Oticon

BrainHearing<sup>T</sup>

Technology

The Velox S, our fastest, most advanced platform ever, brings great computation capabilities to create a life-changing difference for children with hearing loss.

Velox S provides extremely fast processing capabilities, with an 11-core processor, 8 cores for sound processing and 3 cores to manage wireless communication. The high-speed Network on Chip (NoC) architecture features finer engraving (65 nM) in 9 layers to deliver impressive performance with the capacity to execute 500 million instructions per second (MIPS) and 1,200 million operations per second (MOPS). When all processes and streaming capabilities are in use, Velox S runs at a maximum of 3.3 mA. With the high-speed platform, a tiny hearing aid powered by a 1.4V battery can deliver 50 times more processing power than the Inium Sense platform.

The digital signal processing uses 24-bit block-floating point representation across 64 processing channels to deliver the higher signal and frequency resolution, fundamental to superior sound fidelity.

The Velox S platform offers extended linear processing of sounds levels to an upper input limit of 113 dB SPL thanks to 24-bit A/D converters on each microphone and the auxiliary input. New detectors monitor changes in the acoustic environment with 56,000 measurements per second to enable OpenSound Optimizer.

Fully programmable with updatable firmware, the Velox S platform is ready for the future.

## TwinLink™

## Wireless connectivity and binaural processing in a small, energy-efficient solution

TwinLink technology uses two dedicated radio systems to meet distinct communication needs.

TwinLink technology supports seamless, energy-efficient communication between two hearing aids and streamer-free connectivity with external electronic and digital devices.

Near-Field Magnetic Induction (NFMI) enables a continuous exchange of data and audio between

two hearing aids to provide advanced binaural processing with minimal power consumption.

With NFMI, data and audio information is exchanged 21 times per second between the two hearing aids, 4 times more compared to previous generations without TwinLink.

Stereo Bluetooth low energy 2.4 GHz connects Oticon Opn Play directly to smartphones and other digital devices for easy, seamless wireless connectivity. This technology also allows for true wireless fitting.





#### DID YOU KNOW?

NFMI travels easily around the human body and head. Low energy 2.4GHz travels through the air and maintains strength over longer distances.

With Velox S, wireless connectivity is fully integrated into the chip for lower power consumption, smaller size and better performance.

#### TELL PARENTS OR CAREGIVERS

Gives your child 360° access to the world and helps your child differentiate between meaningful sound and irrelevant disturbing sound, without reducing environmental sounds important to incidental learning and safety.

## OpenSound Navigator™



#### Analyzes, balances and attenuates noise for better speech understanding.

OpenSound Navigator is sound processing that reduces noise while preserving distinct speech from all directions. This is enabled by the revolutionary Multiple Speaker Access Technology (MSAT) that ensures access to multiple speakers in a dynamic environment.

OpenSound Navigator employs an extremely fast three-step process:

- Scans the full 360° sound environment more than 100 times per second to identify noise and separate it from speech.
- Rapidly reduces the levels of loud noise coming from specific directions, while preserving speech.
- Rapidly attenuates remaining diffuse noise, even between individual words.

OpenSound Navigator gives children access to the full soundscape across simple and complex listening environments, constantly optimizing learning opportunities. It takes a giant step forward in improving speech understanding in complex listening environments and in maximizing incidental learning by allowing access to multiple speakers.

In Oticon ON App, OpenSound Booster activates a new very high setting for OpenSound Navigator that can provide even more help in noisy everyday situations when needed the most.

#### DID YOU KNOW?

Conventional technology switches slowly between a few fixed directionality modes. OpenSound Navigator operates fluidly and extremely fast between an infinite number of states which makes it suitable for all acoustical environments.

Rapid, continuous updates ensure that noise is even reduced between words.

## OpenSound Optimizer™

#### Optimal gain without feedback for better language development.

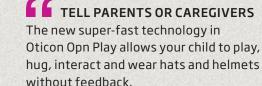
The extremely fast OpenSound Optimizer allows Oticon Opn Play to break the feedback loop by detecting and preventing feedback proactively, even before it occurs. You can now fit children with up to 6 dB more gain to allow more open fittings or more stable gain for closed fittings. This enables Oticon Opn Play to provide the brain with up to 25% more speech cues (Speech intelligibility index. ANSI S3.5) - without the risk of feedback\*.

OpenSound Optimizer ensures stable access to speech details to support better language development and allows children to play, hug, interact and wear hats and helmets without feedback.

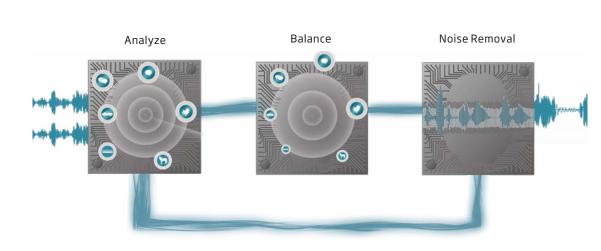
OpenSound Optimizer protects the sound quality by using ultra-fast signal processing:

- Predicts acoustic response by performing additional 56,000 measurements per second in 28 independent bands.
- Counters detected acoustic changes immediately using targeted breaker signals in one or more frequency bands.
- Stops breaker signal as soon as the acoustic response is stable again (or as soon as acoustic response is stabilized).

OpenSound Optimizer works with Feedback shield LX to avoid false detections. See section



on Feedback shield LX for details.



Illustrates OpenSound Navigator in Oticon Opn Play.

Feedback risk				
Feedback zone		~~~		Hearing aid without feedback management
Sound quality zone		Oticon Opn Play	Hearing aid with conventional technology	
		rm effect 0.1 sec.)	Long-term effect (sec.)	Time
(	,	,	(500.)	* F

#### \* For prescribed fittings, according to best practice.

#### DID YOU KNOW?

Traditional feedback management technology relies on feedback to build up to an audible level before it reacts to reduce the gain and stabilize the system.

OpenSound Optimizer applies preventive signal processing to eliminate the risk before it builds up to audible feedback.

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# TELL PARENTS OR CAREGIVERS Supports your child's safety by providing a richer, more realistic sound picture to help your child more easily perceive the location

and direction of sounds.

## Spatial Sound™ LX



Locate, follow and shift focus to the speakers you want to hear

Spatial Sound LX combines a number of advanced technologies to provide a more precise spatial awareness to help children identify where sound is coming from.

Using the energy efficient and fast binaural communication offered by NFMI, Spatial Sound LX preserves interaural level differences in four frequency bands. This maintains the sense of location and direction naturally provided by the head shadow effect.

The multi-band analysis prevents low frequencies from masking higher frequencies to preserve interaural differences across the entire frequency spectrum.

In asymmetrical noise situations, Spatial Noise Management, a part of Spatial Sound LX, emphasizes sound on the better ear.

#### DID YOU KNOW?

Interaural level differences (ILD) are acoustic cues that make speech and noise appear distinctly and separately (and not muddled together) and help improve speech understanding in noise.

Four estimators enable precise, frequencyspecific ILDs that remain intact across the frequency spectrum. This is important because the head shadow effect is greater at high frequencies.

## Speech Guard™ LX



## Improves speech understanding in noisy environments

Speech Guard LX preserves clear, transparent sound quality and speech details for better speech understanding even in complex environments compared to fast and slow compression. (Pittman, A. L. et al. (2014). J Am Acad Audiol, 25(9))

Speech Guard LX uses adaptive compression and is the only amplification technology that combines the benefit of linear amplification and fast compression. Linear amplification is applied in a 12dB dynamic range window to preserve amplitude modulation cues in speech signals.

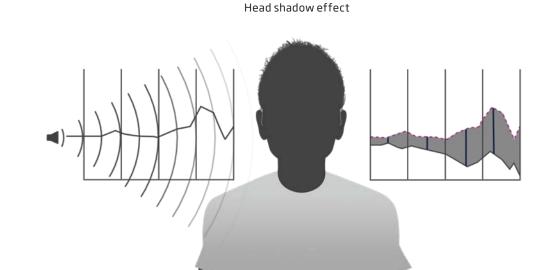
When large changes in level occur, Speech Guard LX quickly adapts gain to maintain audibility and fits all sound in the reduced dynamic range, specific to the hearing loss, as illustrated below.

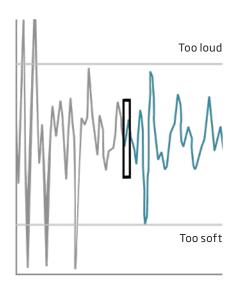
Speech Guard LX takes advantage of the new extended dynamic input range provided by Clear Dynamics to preserve the clear, transparent quality of loud sounds.

TELL PARENTS OR CAREGIVERS

Helps your child understand speech in no

Helps your child understand speech in noisy situations and is even proven to improve children's ability to complete complex listening tasks. Speech Guard LX makes sounds audible and comfortable across different listening situations and at the same time is able to preserve natural speech cues.





#### DID YOU KNOW?

The benefits of the adaptive compression in Speech Guard LX have been documented in a number of studies. Amongst those, a study by Pitmann et al. (2014) where Speech Guard LX proved superior to fast and slow compression strategies.

## TELL PARENTS OR CAREGIVERS Increases speech understanding by letting your child hear more speech sounds like 's' and

## Speech Rescue<sup>™</sup> LX

## S

## Making high frequency sounds more audible

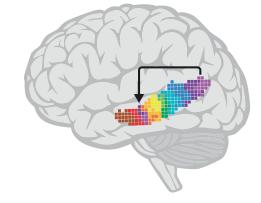
Speech Rescue LX is the unique frequency lowering approach that Oticon employs to help children hear high frequency sounds like 's' and 'th' that are important to speech development. Frequency composition, Oticon's frequency-lowering methodology, increases speech understanding by 'rescuing' speech cues that might otherwise be lost.

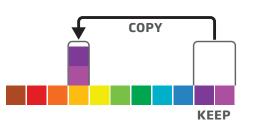
OpenSound Navigator's precise ability to improve SNR makes Speech Rescue LX more effective in two ways: high-frequency noise is reduced to clean the inaudible high-frequency speech, which is then copied into noise-cleaned mid-frequencies with minimal disturbance.

Speech Rescue LX combines with Speech Guard LX to give children with moderate to severe-to-profound hearing loss (in the high frequencies) access to inaudible high frequency sounds. The three step 'Clean, Rescue and Guard' methodology rescues cleaned high frequency sounds and places them on the edge of the maximum audible output frequency (MAOF). Maximum speech details are then guarded during compression. This methodology supports the child's brain in making sense of speech sounds to improve speech understanding.

#### DID YOU KNOW?

Speech Rescue LX uses a multilayered lowering technique. The inaudible HF source sounds are copied and placed on the border of the child's usable hearing. The destination is never below 1600 Hz, as a primary aim of Speech Rescue LX is to both protect the information carried by low frequencies and provide high frequency audibility.





## Feedback shield LX



## Dual-microphone feedback system for reducing and suppressing feedback

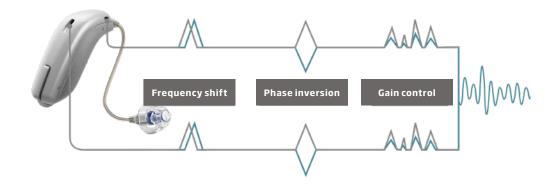
The Oticon Opn Play platform enables Feedback shield LX to support OpenSound Optimizer's ultra-fast reaction and preventive abilities to take feedback management to the next level. Working together, the two technologies combine the strengths of rapid, pro-active feedback elimination with a stable adaptive system to avoid false detections and activation of Feedback Shield LX.

The well-known Feedback shield LX operates in two separate paths – one for each microphone. In each path, three distinct technologies work together to suppress feedback and ensure stable amplification. Frequency shift optimizes phase inversion, and gain control may be applied if needed. Thanks to the OpenSound Optimizer, the gain control is now used far less.

With the new system, OpenSound Optimizer's new ultra-fast detection engages pro-active modulation to instantly stabilize the system when a feedback risk emerges. If the risk is only momentary, OpenSound Optimizer disengages the modulation when the risk has passed. If the feedback risk persists, the modulation ensures that the Feedback Shield LX system can adapt and stabilize. As Feedback shield LX engages, OpenSound Optimizer's modulation is tapered off gradually.

Combining Feedback shield LX and OpenSound Optimizer in Oticon Opn Play allows you to add more gain to reach target. This gives you greater flexibility in the fitting process.

TELL PARENTS OR CAREGIVERS
Let your child enjoy a clear, stable
sound without worry about annoying
whistling sounds.



#### DID YOU KNOW?

Feedback management consists of two functions: to ensure a stable instrument at any given time and to handle dynamic changes.

In Oticon Opn Play, Feedback shield LX and OpenSound Optimizer work together to manage both functions.

## TELL PARENTS OR CAREGIVERS Let your child experience superior sound

quality especially when enjoying music or joining in conversations in noisy environments.

## Clear Dynamics

Loud input

Without Clear Dynamics



## Better sound quality in the full dynamic range of life

Clear Dynamics expands the input dynamic range, processing input sounds up to 113 dB SPL, to provide better sound quality without distortion and artifacts at loud input levels - all while keeping the sound quality of soft input levels intact. Clear Dynamics has an operating range from 5 to 113 dB SPL.

With speech cues preserved at high input levels, children enjoy a better listening experience without distortion even in loud environments. Clear Dynamics is especially valuable for children when listening to music or in conversations in busy, dynamic environments, where peaks can often be louder than the available input dynamic range.

Clear Dynamics

#### **DID YOU KNOW?**

Peaks of speech are usually around 12 dB above and 18 dB below the average speech level. In contrast, music is much more dynamic with peaks of up to 30 dB.

Total Harmonic Distortion is a measure of the distortion within the hearing aid. Clear Dynamics ensures less than 5% distortion up to 113 dB SPL.

## Wind Noise Management



## Better access to speech in situations with wind noise

With the powerful Velox S platform,
Wind Noise Management offers innovative

and highly efficient wind noise suppression.

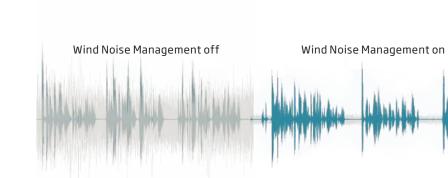
High speed estimators analyze the presence of wind noise 500 times per second in 16 frequency channels for fast and precise application of up to 30 dB wind noise reduction. Wind Noise Management attenuates wind bursts in less than 50ms, making it fast enough to precisely attenuate wind between words.

Wind Noise Management attenuates wind noise and quickly ensures a stable and comfortable loudness level, so children can focus on speech that's important to them.

When speech is present, the signal-to-noise ratio is optimized because wind noise is suppressed when it is louder than speech. When no speech is present, the system will aggressively suppress wind noise to ensure comfort in windy situations.

TELL PARENTS OR CAREGIVERS

Effectively suppresses annoying wind noise, even between the words in a conversation.



DID YOU KNOW?

Wind fluctuates and is highly modulated, and may result in a very harsh and uncomfortable sound in hearing aids. As a result, many children reject using hearing aids even at moderate wind speed.

Wind Noise Management also suppresses the noise created when brushing against the hearing aid.

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## Feature overview

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App & Remote Control	Discreetly adjusts volume, switches between programs or controls connectivity sources with Remote Control or Oticon ON App	Page 40 Page 44
Bass Boost	Controls compensation for bass leakage in open fittings when streaming audio	
Binaural Coordination	Coordinates program and volume settings between the two hearing aids	
Binaural Processing	Continuous data exchange between two hearing aids about the sound level in each ear to maintain the difference in input between the ears	Page 14
Clear Dynamics	Expands the dynamic input range, processing sounds up to 113 dBSPL, to preserve sound quality even at loud input levels	Page 18
Data Logging	Logs volume control usage, program usage and total use time	Page 53
DSL Fitting Range	Guides hearing aid selection according to the DSL pediatric prescriptive rationale. Available in this Product Guide and in Technical Data sheets	
Feedback Analyzer	Analyzes the risk of feedback with the prescribed gain and chosen acoustics in Genie 2	Page 48
Feedback shield LX	Employs a proven and effective feedback management system to reduce the risk of feedback and suppress feedback if it occurs.	Page 17
Fitting Bands	16 fitting bands for a precise fit and more fine-tuning options for client fittings	
Fitting Formulas	Include VAC+, NAL-NL1, NAL-NL2 , and DSL v5.0	
Made for iPhone®	Indicates compatibility. 'Made for iPhone' means that the hearing aid and accessories have been designed to connect to iPhone, and have been certified by the developer to meet Apple™ performance standards	Page 40
Multiple Directionality Options	Enables conventional directionality settings in addition to OpenSound Navigator transition settings	Page 52
NFMI	Near-Field Magnetic Induction - Improves speed of communication and bandwidth between two hearing aids with very low power consumption	Page 11
OpenSound Booster	Provides even more help in noisy everyday situations and can be activated in Oticon ON App	Page 40
OpenSound Navigator	Provides listening support by continuously analyzing the environment, balancing sound sources so focus sound is clear and competing sounds are not too disturbing. Finally, it attenuates remaining noise to provide a more accessible sound environment	Page 12

OpenSound Optimizer	Improves listening performance and comfort with ultra-fast proactive feedback detection and prevention. Enables optimal gain and open fittings without compromising sound quality or audibility.	Page 13
Oticon Firmware Updater	Enables you to update Velox S-based hearing aids and connectivity solutions, adding new and improved features with just one click	Page 48
Pediatric Fitting Mode	Supports the pediatric fitting process with guidance, information and relevant tools	Page 50
Processing Channels	Data is analysed and processed in 64 channels, more than 100 times per second	Page 10
REM AutoFit	Integrates with real ear verification systems to individualize the fitting to the child's ear acoustics ensuring consistent audibility and optimal outcomes	Page 51
Spatial Noise Management	Optimizes listening in asymmetrical, noisy situations	Page 14
Spatial Sound LX	Uses binaural compression to provide precise spatial awareness that helps users identify where sounds are coming from	Page 14
Speech Guard LX	Preserves the dynamics of speech by combining the benefits of linear and non-linear compression	Page 15
Speech Rescue LX	Makes high frequency speech sounds like /s/ and /th/ more audible using frequency composition	Page 16
Stereo Streaming	Streams audio input in stereo	Page 40
Transient Noise Management	Protects against sudden loud sounds with fast recovery to preserve audibility. Offers four different levels for fine tuning, including 'off'	
TwinLink	Combines two distinct radio technologies in an innovative wireless communication system. Features one technology to support seamless, energy-efficient binaural communication between two hearing aids (NFMI) and one to support communication with external electronic and digital devices (2.4 GHz)	Page 11
Visual Indicator	Provides status indications and warnings to give parents confidence in daily use of hearing aid, e.g., start-up, program, and low battery warning	Page 54
Wind Noise Management	Protects against the discomfort of wind noise	Page 19
YouMatic LX	Accommodates personal listening preferences and sound perceptions in the fitting of OpenSound Navigator	Page 52

Note: The feature overview relates to Oticon Opn Play 1.

# Instruments INTRODUCING • 4 TECHNOLOGY & FEATURES 0 8 INSTRUMENTS 22 CONNECTIVITY & ACCESSORIES 🍥 38 FITTING 🌢 46



# The audiological difference between Oticon Opn Play 1 and Oticon Opn Play 2

Hearing loss limits the amount of acoustic detail the brain receives. The fewer details, the harder the brain has to work to decode sound. Oticon Opn Play 1 and Oticon Opn Play 2 both provide access to a 360° listening environment, but they differ in the way they support and help the brain making sense of sound.

#### Three features are key in supporting the brain in making sense of sound:



**OpenSound Navigator** opens the sound by preserving distinct speech and removing the noise that makes speech unclear. The level of noise that can be removed in different listening environments ranges from 9 dB to 3 dB and results in different levels of BrainHearing support.



**Spatial Sound LX** makes sure that important information about the location of sound is preserved. With 4 level estimators Oticon Opn Play 1 offers the best spatial information of the two performance levels.



**Speech Guard LX** amplifies and preserves clean speech information and makes it easier for the brain to separate speech from noise. The difference between Oticon Opn Play 1 and Oticon Opn Play 2 lies in the input range (Clear Dynamics) combined with the linear window that ranges from 12 to 9 dB, resulting in different levels of speech cue preservation.

In addition, Oticon Opn Play contains a number of other features that will also influence the support the brain receives in different listening situations e.g. OpenSound Optimizer, Spatial Noise Management, bandwidth, and number of processing channels.

Oticon Opn Play 1 provides the maximum support across hearing losses and different listening environments to fit children's needs at every stage of their development.

#### Oticon Opn Play product comparison

		Oticon Opn Play 1	Oticon Opn Play 2
Speech	OpenSound Navigator™	Level 1	Level 3
Understanding	- Balancing power effect	100%	50%
	- Max. noise removal	9 dB	3 dB
	OpenSound Optimizer™	•	•
	Speech Guard™ LX	Level 1	Level 3
	Spatial Sound™ LX	4 estimators	2 estimators
	Speech Rescue™ LX	•	•
Sound Quality	Clear Dynamics	•	-
	Spatial Noise Management	•	-
	Fitting Bandwidth*	10 KHz	8 KHz
	Processing Channels	64	48
	Bass Boost (streaming)	•	•
<b>Listening Comfort</b>	Transient Noise Management	4 configurations	On/Off
	Feedback shield LX	•	•
	Wind Noise Management	•	•
Optimizing Fitting	YouMatic™ LX	3 configurations	1 configuration
	Fitting Bands	16	12
	REM AutoFit	Verifit® LINK, IMC 2**	Verifit® LINK, IMC 2**
	Pediatric Fitting Mode	•	•
	DSL Fitting Range ***	•	•
	Fitting Formulas	DSL v5.0, NAL-NL1 + 2, VAC+	DSL v5.0, NAL-NL1 + 2, VAC+
Designed for children	LED	•	•
	Tamper Resistant Battery Drawer	•	•
	Hypo Allergenic	•	•
	IP Rating	IP68	IP68
	Nano Coating	•	•
	Color Options	12	12
	Integrated 2.4 GHz Receiver	•	•
	DAI/FM Compatibility	•	•

<sup>\*</sup> Bandwidth accessible for gain adjustments during fitting.

Oticon Opn Play always opens up the soundscape to embrace multiple speakers in difficult listening environments. It's just a

matter of choosing the right version.

#### DID YOU KNOW?

Whatever the child's age or the settings they're in, Oticon recommends Oticon Opn Play 1 for maximum support across different listening environments, simple as well as complex.

<sup>\*\*</sup> Inter Module Communication 2.

<sup>\*\*\*</sup> Available in this product guide and the Oticon Opn Play Technical Data sheets.

## Oticon Opn Play delivers the optimal speech signal to support the brain

In difficult listening environments, the limitations of traditional hearing aid technology have led to the use of narrow directionality to make speech coming from the front clear. All other sounds - speech and noise alike - are suppressed, which limits opportunities to overhear and to pick up new words through incidental learning. Omni-directional technology, on the other hand, gives equal access to speech and noise. However, it does not attenuate noise, hence does not provide good speech understanding in noise.

With the speed and precision of Multiple Speaker Access Technology (MSAT), OpenSound Navigator is designed to support listening and learning in challenging environments. A research study has shown that OpenSound Navigator improves speech understanding in noise, even when facing away from the target talker, while providing access to multiple speakers in the environment\*.

Background noise from all directions



Noise between speakers from specific directions

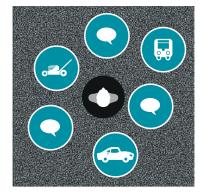


Distinct speech

#### Traditional technology

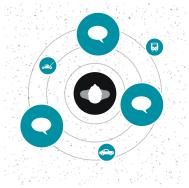


Traditional directionality - focusing on one speaker, while suppressing all other sounds.



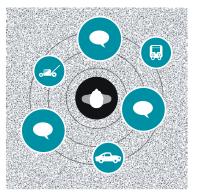
Traditional omni-directional technology – giving equal access to speech and noise, which limits speech understanding in noise.

#### MSAT in: Oticon Opn Play 1



The easiest listening experience with maximum reduction of irrelevant background noise and rapid reduction of loud noise coming from specific directions, while preserving speech.

#### Oticon Opn Play 2



An improved listening experience with basic reduction of irrelevant background noise and reduction of loud noise coming from specific directions, while preserving speech.

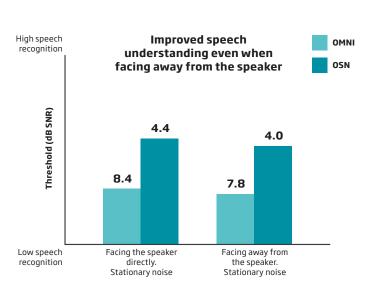
# OpenSound Navigator is proven to improve speech understanding by up to 30%

Children listen and learn in noisy environments. For that reason, it is important for children with hearing loss to hear as much of the auditory environment as possible. Providing good speech understanding in noise while allowing them to have access to multiple speakers is essential.

A study of children with hearing loss, ages 6 - 15 years, was conducted at Boys Town National Research Hospital. Results showed that OpenSound Navigator (OSN) significantly improved speech understanding in noise by up to 30% when compared to omni-directional technology. The result held true whether the

child directly faced or faced away from the target speaker. This benefit is particularly important for children because they do not always look at the talker while they listen. Children can benefit from OSN even when they look away.\*

In the same study, OpenSound Navigator and omni-directional technology resulted in comparable speech recognition performance. This shows that OpenSound Navigator preserves competing speech, allowing access to multiple talkers and thereby provides opportunities for incidental learning.







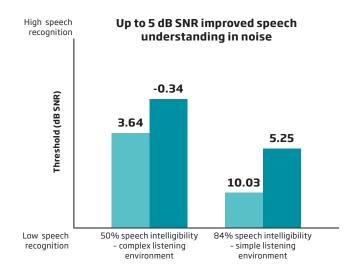
# Open sound experience with less effort

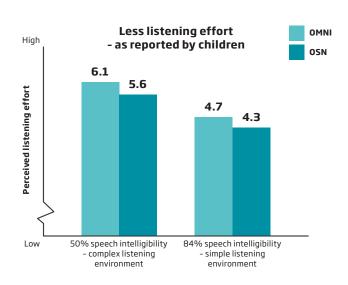
Everyone has limited cognitive resources when it comes to handling numerous mental processes simultaneously. The ability to listen with less effort is important for children with hearing loss when they are listening and learning at the same time.

A study was conducted at VU University Medical Center in Amsterdam to investigate the benefit of OpenSound Navigator on speech understanding and listening effort. Evidence has shown that, for children in the study ages

12 - 16, OpenSound Navigator improved speech understanding in both complex and simple listening environments. Children in the study also reported significantly less listening effort with OpenSound Navigator in these two listening environments.\*

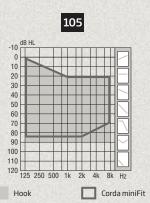
If children use less effort to listen, they are able to put more effort into all other concurrent classroom learning, such as acquiring new skills and knowledge and other everyday activities.







#### DSL fitting range\*



#### OSPL90 (peak)

Ear simulator 138 dB SPL 2cc coupler 131 dB SPL

#### Full-on gain (peak)

Ear simulator 73 dB 2cc coupler 66 dB

The DSL fitting range has a fitting level of 90 dB HL. The fitting level 105 assigned above the graph does not match this number because general fitting levels refers to fittings with VAC+ or NAL-NL2 prescriptive rationales.

\* Fitting range is based on Oticon Opn Play 1. Details for Oticon Opn Play 2 are available in Technical Data sheets.

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## Versatile and compact BTE PP



Oticon Opn Play BTE PP has a perfect balance of size, ease of use and power. It's an all-round pediatric instrument that will accommodate the needs of most children - covering hearing losses from mild to severe.

The compact and versatile Made for iPhone® hearing aid provides an MPO of 138 dB SPL and offers a full set of features and functionalities. Connectivity and remote microphone access are available through integrated 2.4 GHz technology, and direct FM input.

Oticon Opn Play BTE PP comes with an LED indicator to monitor hearing aid status and optional tamper resistant battery drawers.

#### Hook and Corda miniFit options

BTE PP comes default with an undamped hook. This is interchangeable with a damped hook or child hooks (damped/undamped) or the more discreet Corda miniFit Power and Corda minFit option. Corda miniFit Power (1.3 mm thin tube) and Corda miniFit (0.9 mm thin tube) are available in 6 different lengths (-1 to 4).







#### Accessories for Corda miniFit:

Measuring tool

#### Battery drawers, FM receiver and adapters

The standard battery drawer can be replaced with the following battery drawers, adapters and receivers. The battery drawers and the dedicated FM receiver are available to match instrument colors.



Tamper











receiver Oticon

Amigo R12G2



adapter

FM10



Direct Audio Input adapter AP1000

## Corda miniFit earpieces

#### Standard earpieces

miniFit domes

5 mm 6 mm 8 mm 10 mm 12	5 mm	6 mm	8 mm	10 mm	12 r
-------------------------	------	------	------	-------	------

Open dome*	Con	•	•	•	•	
Bass dome, single vent (0.8 mm)	13		•	•	•	•
Bass dome, double vent (1.4 mm)	(2)		•	•	•	•
Power dome			•	•	•	•

#### All domes:

- Are made of silicone
- Are only compatible with Corda
- miniFit Power
- Have built-in wax protection

\* Corda miniFit only

#### Grip Tip

Select between two different Grip Tip types, in two different sizes (small & large) for both left and right ear.





#### Grip Tip:

- Is tinted pink
- Is more durable than domes
- Has a tacky texture to help prevent slippage

#### Customized earpieces1

#### Please note:

VarioTherm® requires gentle warming of the mold with a hair dryer before insertion or removal of the - Available in two hardnesses - 50 and 70. thin tube.

#### Micro mold:

- Made of acrylic
- Uses ProWax filter

#### VarioTherm®:

- Thermoplastic
- Remains hard at room temperature for easy insertion
- Softens at body temperature for increased comfort and optimum sealing
- 70 is standard.

C057 C058 C063 C090 Aguamarine Diamond Chroma Chestnut Terracotta 13 Battery size Battery life (h)\* 80-105 Wireless Directional LED Program control Volume control Made for iPhone ConnectClip TV Adapter 3.0 DAI/FM Noahlink Wireless/ Wireless fitting FittingLINK 3.0 Cable fitting Cable #3 Hardware certification IP68

Purple Cool Red Cool Blue Emerald

C079

Baby

C044

<sup>1)</sup> Requires taking an ear impression.

<sup>®</sup> VarioTherm is a registered trademark of Dreve.

<sup>\*</sup> 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). Interval is shown for miniFit 60. Details for other speakers can be found in Technical data sheets.

#### DSL fitting ranges\*



#### OSPL90 (peak)

116 dB SPL Ear simulator Ear simulator 2cc coupler 2cc coupler

#### Full-on gain (peak)

Ear simulator 2cc coupler

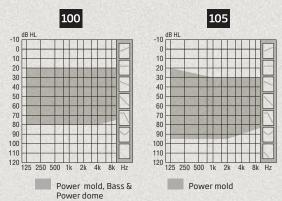
Full-on gain (peak) Ear simulator 66 dB

2cc coupler 54 dB

OSPL90 (peak)

127 dB SPL

116 dB SPL



#### OSPL90 (peak)

OSPL90 (peak) Ear simulator 132 dB SPL Ear simulator 135 dB SPL 127 dB SPL 2cc coupler 122 dB SPL 2cc coupler

#### Full-on gain (peak)

Ear simulator 57 dB 2cc coupler

#### Full-on gain (peak)

Ear simulator 72 dB 2cc coupler 64 dB

## Easy, discreet miniRITE R



Oticon Opn Play miniRITE R is a discreet rechargeable style with a lithium-ion battery and easyto-use charger. The wireless charging is based on inductive technology and enables reliable and fast charging in just 3 hours for a full day of hearing, including streaming\*. A guick recharge of 30 minutes gives an additional six hours of power. If a replacement is needed, the lithium-ion battery is easy to replace in the clinic. No need to send in for service.

With miniRITE R, children with hearing loss up to 95 dB HL can choose a rechargeable Made for iPhone® hearing aid with a full set of features

and functionalities. Connectivity and remote microphone access are available through integrated 2.4 GHz technology, and FM can be accessed through the telecoil.

The DSL fitting ranges display fitting levels of 55, 80, 80 and 95 dB HL. The corresponding fitting level 60, 85, 100 and 105 assigned above the graphs do not match these numbers because general fitting levels refers to fittings with VAC+ or NAL-NL2 prescriptive rationales.

#### miniFit receivers

Select between three different receivers. miniFit receivers are available with length 0-5.







#### Accessories for miniFit receivers:

- Different ear grips for receiver 60 and 85
- Use ProWax miniFit filter
- Measuring tool

#### Power receiver molds

Select between two Power molds. Power receiver molds have separate wires, available in length 1-5.





### Accessories for Power receiver molds:

- Use ProWax filter
- Measuring tool

#### Standard earpieces

miniFit domes 5 mm 6 mm 8 mm 10 mm 12 mm

Open dome	C	60	60 85	60 85	60 85	
Bass dome, single vent (0.8 mm)	(E)		60 85 100	60 85 100	60 85 100	60 85 100
Bass dome, double vent (1.4 mm)	C		60 85 100	60 85 100	60 85 100	60 85 100
Power dome			60 85 100	60 85 100	85 100	60 85 100

#### All domes:

- Are made of silicone
- Are only compatible with miniFit receivers
- Have built-in wax protection

#### Grip Tip

Select between two different Grip Tip types, in two different sizes (small & large) for both left and right ear.





#### Grip Tip:

- Is tinted pink - Is more durable than domes
- Has a tacky texture to help prevent slippage

#### Customized earpieces1

Micro mold <sup>2</sup>	C.	60 85
LiteTip <sup>2</sup>		60 85
Power mold		100
Micro mold, VarioTherm®		60 85
LiteTip, VarioTherm®	To the second	60 85

#### Micro mold and LiteTip:

- Made of acrylic
- Use ProWax filter

#### VarioTherm®:

- Thermoplastic
- Remains hard at room temperature for easy insertion
- Softens at body temperature for increased comfort and optimum sealing
- Available in two hardnesses 50 and 70.70 is standard

#### Please note:

VarioTherm® requires gentle warming of the mold with a hair dryer before insertion or removal of the receiver.

C057 C058 C063 C090 Aquamarine Diamond Chroma Chestnut Terracotta Brown Lithium-ion Battery Expected operating time (h)\*

Purple Cool Red Cool Blue Emerald

Rechargeable

Directional

Program control Volume control

Made for iPhone

ConnectClip TV Adapter 3.0

Wireless

LED

C079

C044

Telecoil

Wireless fitting

Cable fitting

Cable #3 Hardware certification

IP68

Noahlink Wireless/

FittingLINK 3.0

FlexConnect and

33

\* Expected operating time for rechargeable battery depends on use pattern, active feature set, hearing loss, sound envi-

ronment, battery age and use of wireless accessories.

<sup>\*</sup> Fitting range is based on Oticon Opn Play 1. Details for \* Expected operating time for rechargeable battery depends on use pattern, active feature set, hearing loss, Oticon Opn Play 2 are available in Technical Data sheets. sound environment, battery age and use of wireless accessories.

<sup>1)</sup> Requires taking an ear impression. 2) Uses ProWax filter.

<sup>®</sup> VarioTherm is a registered trademark of Dreve.

#### DSL fitting ranges\*



#### OSPL90 (peak) 116 dB SPL Ear simulator

2cc coupler

Full-on gain (peak)

Ear simulator 2cc coupler

Full-on gain (peak) Ear simulator 66 dB 2cc coupler 54 dB

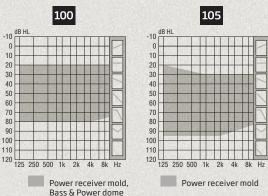
Ear simulator

2cc coupler

OSPL90 (peak)

127 dB SPL

116 dB SPL



#### OSPL90 (peak)

Ear simulator 132 dB SPL 2cc coupler 122 dB SPL

Full-on gain (peak)

Ear simulator 57 dB 2cc coupler

Full-on gain (peak) 72 dB 64 dB

OSPL90 (peak)

135 dB SPL

127 dB SPL

Ear simulator 2cc coupler

Ear simulator

2cc coupler

## Sleek and discreet miniRITE T



Oticon Opn Play miniRITE T is a sleek and stylish style featuring a telecoil, a double push button for easy volume and program control and LED for monitoring hearing aid status.

With miniRITE T, children with hearing loss up to 95 dB HL can choose a discreet Made for iPhone® hearing aid with a full set of features and functionalities. Connectivity and remote microphone access are available through integrated 2.4 GHz technology. FM can be accessed through the telecoil.

The DSL fitting ranges display fitting levels of 55, 80, 80 and 95 dB HL. The corresponding fitting level 60, 85, 100 and 105 assigned above the graphs do not match these numbers because general fitting levels refers to fittings with VAC+ or NAL-NL2 prescriptive rationales.

#### miniFit receivers

Select between three different receivers. miniFit receivers are available with length 0-5.







#### Accessories for miniFit receivers:

- Different ear grips for receiver 60 and 85
- Use ProWax miniFit filter
- Measuring tool

#### Power receiver molds

Select between two Power molds. Power receiver molds have separate wires, available in length 1-5.





#### Accessories for Power receiver molds:

- Use ProWax filter
- Measuring tool

#### Standard earpieces

miniFit domes 5 mm 6 mm 8 mm 10 mm 12 mm

Open dome	7	60	60 85	60 85	60 85	
Bass dome, single vent (0.8 mm)	27		60 85 100	60 85 100	60 85 100	60 85 100
Bass dome, double vent (1.4 mm)	(2)		60 85 100	60 85 100	60 85 100	60 85 100
Power dome			60 85 100	60 85 100	60 85 100	60 85 100

#### All domes:

- Are made of silicone
- Are only compatible with miniFit receivers
- Have built-in wax protection

#### Grip Tip

Select between two different Grip Tip types, in two different sizes (small & large) for both left and right ear.





#### Grip Tip:

- Is tinted pink
- Is more durable than domes
- Has a tacky texture to help prevent slippage

#### Customized earpieces1

Micro mold <sup>2</sup>	Lie	60 85
LiteTip <sup>2</sup>		60 85
Power receiver mold	1	100
Micro mold, VarioTherm®		60 85
LiteTip, VarioTherm®	TP .	60 85

#### Micro mold and LiteTip:

- Made of acrylic
- Use ProWax filter

#### VarioTherm®:

- Thermoplastic
- Remains hard at room temperature for easy insertion
- Softens at body temperature for increased comfort and optimum sealing
- Available in two hardnesses 50 and 70.70 is standard

#### Please note:

VarioTherm® requires gentle warming of the mold with a hair dryer before insertion or removal of the receiver.

312 Battery size Battery life (h)\* 60-65

C063

Black

C090

Beige

Brown

Noahlink Wireless/

Aquamarine Diamond Chroma Chestnut Terracotta

Purple Cool Red Cool Blue Emerald

Wireless Directional

LED

Program control Volume control

Made for iPhone

ConnectClip TV Adapter 3.0

Telecoil Wireless fitting

C079

C057

C044

C058

FittingLINK 3.0 FlexConnect and Cable fitting

Cable #3

Hardware certification IP68

\* 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). Interval is shown for miniFit 60. Details for other speakers can be found in Technical data sheets.

® VarioTherm is a registered trademark of Dreve. 35

<sup>\*</sup> Fitting range is based on Oticon Opn Play 1. Details for Oticon Opn Play 2 are available in Technical Data sheets.

<sup>1)</sup> Requires taking an ear impression. 2) Uses ProWax filter.

#### DSL fitting ranges\*



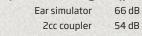
#### OSPL90 (peak) 116 dB SPL Ear simulator

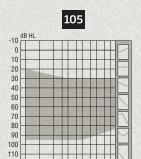
2cc coupler

Full-on gain (peak) Ear simulator 2cc coupler

100

## Full-on gain (peak)





Power receiver mold

OSPL90 (peak)

127 dB SPL

116 dB SPL

66 dB

Ear simulator

2cc coupler

#### Power receiver mold, Bass & Power dome

#### OSPL90 (peak) OSPL90 (peak)

Ear simulator 132 dB SPL Ear simulator 135 dB SPL 127 dB SPL 2cc coupler 122 dB SPL 2cc coupler

#### Full-on gain (peak)

Ear simulator 57 dB 2cc coupler

36

Full-on gain (peak) Ear simulator 72 dB 2cc coupler 64 dB

\* Fitting range is based on Oticon Opn Play 1. Details for Oticon Opn Play 2 are available in Technical Data sheets.

## Small, discreet miniRITE



Oticon Opn Play miniRITE is a stylish and discreet hearing aid that sits snugly behind the ear and has a smart single push button. With miniRITE, children with hearing loss up to 95 dB HL can choose a discreet Made for iPhone® hearing aid with a full set of features and functionalities. Connectivity and remote microphone access are available through integrated 2.4 GHz technology.

The DSL fitting ranges display fitting levels of 55, 80, 80 and 95 dB HL. The corresponding fitting level 60, 85, 100 and 105 assigned above the graphs do not match these numbers because general fitting levels refers to fittings with VAC+ or NAL-NL2 prescriptive rationales.

#### miniFit receivers

Select between three different receivers. miniFit receivers are available with length 0-5.





#### Accessories for miniFit receivers:

- Different ear grips for receiver 60 and 85
- Use ProWax miniFit filter
- Measuring tool

#### Power receiver molds

Select between two Power receiver molds. Power molds have separate wires, available in length 1-5.





#### Accessories for Power receiver molds:

- Use ProWax filter
- Measuring tool

#### Standard earpieces

miniFit domes

#### 5 mm 6 mm 8 mm 10 mm 12 mm

Open dome	CENT	60	60 85	60 85	60 85	
opendome	7					
Bass dome, single vent (0.8 mm)	E.B.		85 100	85 100	85 100	85 100
Bass dome, double vent (1.4 mm)	(C)		85 100	85 100	85 100	60 85 100
Power dome	9		60 85 100	60 85 100	60 85 100	60 85 100

#### All domes:

- Are made of silicone
- Are only compatible with miniFit receivers
- Have built-in wax protection

#### Grip Tip

Select between two different Grip Tip types, in two different sizes (small & large) for both left and right ear.





## Grip Tip:

#### - Is tinted pink

- Is more durable than domes
- Has a tacky texture to help prevent slippage

#### Customised earpieces1

Micro mold <sup>2</sup>	<b>1</b>	60 85
LiteTip <sup>2</sup>		60 85
Power receiver mold	W. B.	100
Micro mold, VarioTherm®		60 85
LiteTip, VarioTherm®	150	60 85

#### Micro mold and LiteTip:

- Are made of acrylic
- Use ProWax filter

#### VarioTherm®:

- Thermoplastic
- Remains hard at room temperature for easy insertion
- Softens at body temperature for increased comfort and optimum sealing
- Available in two hardnesses 50 and 70.70 is standard.

#### Please note:

VarioTherm® requires gentle warming of the mold with a hair dryer before insertion or removal of the receiver.

Purple Cool Red Cool Blue Emerald C057 C058 C063 C090 Aquamarine Diamond Chroma Chestnut Terracotta Beige Brown Battery size 312 60-65 Battery life (h)\* Wireless Directional Program control Volume control Made for iPhone ConnectClip TV Adapter 3.0 Wireless fitting Noahlink Wireless/ FittingLINK 3.0

C079

C044

Cable fitting

Hardware certification

\* 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). Interval is shown for miniFit 60. Details for other speakers can be found in Technical data sheets.

FlexConnect and

37

Cable #3

IP68

<sup>1)</sup> Requires taking an ear impression. 2) Uses ProWax filter.

<sup>®</sup> VarioTherm is a registered trademark of Dreve.



# TELL PARENTS OR CAREGIVERS Let your child enjoy audio streamed directly to their hearing aids from an iPhone®, iPad® or iPod touch®.



# TELL PARENTS OR CAREGIVERS This app connects an iPhone or Android™ smartphone directly to your child's hearing aids so you or they can control volume, switch programs, adjust settings and more with just a tap of your fingers.

## Made for iPhone

Oticon Opn Play is a Made for iPhone® hearing aid. The hearing aids connect directly to iPhone and double as a wireless headset - without the need for an intermediary device. The Bluetooth technology in Oticon Opn Play supports stereo streaming of music and produces sound with high fidelity and bandwidth. When making

calls, the child's voice is picked up by the iPhone microphone. iPhone also serves as a basic remote control for the hearing aids.



## Oticon ON App



Oticon ON App empowers parents and children with a range of features that allow them to easily control and monitor the hearing aids by adjusting volume levels and switching between programs, settings and more. The app is available for both iPhone and Android smartphones and connects directly to the hearing aids using Bluetooth technology.

The app also offers a "find my hearing aid" search feature, HearingFitness, a client information and education guide, links to hearing aid instructions and low battery notification.

The OpenSound Booster feature gives older children and teens greater control over their hearing, allowing them access to more noise reduction and balancing support from OpenSound Navigator in noisy everyday situations, when needed most.







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## HearingFitness™

Like an exercise app for the ears, Hearing Fitness in Oticon ON App gives parents and children advice and encouragement on using hearing aids more, protecting hearing, and staying healthy.

The feature receives data from the hearing aids and analyzes current sound environments, total daily hearing aid use, and historical usage data. Hearing Fitness can also use data from other apps and wearable devices, such as measurements of heart rate and sleep patterns, to guide users towards healthier habits\*.

\* HearingFitness will evolve continuously. Please find the current version and available functionalities on the App Store or Google Play..



- Get an overview of the hearing aid usage
- Set hearing goals and track progress
- Receive suggestions for the optimal program setting
- Be motivated to get out into challenging sound environments



4:26h

## **Internet Connectivity**

Through a unique Oticon cloud solution, Oticon Opn Play can be linked to the If This Then That (IFTTT) network. This allows parents and children to connect to and control an endless range of devices used in everyday life. Imagine, for instance that hearing aids are able to notify the parent or the child when an email is received, turn the home alarm system on and off, or tell them when someone is at the front door – all of this is possible with Oticon Opn Play.

Explore the endless possibilities available when connecting Oticon Opn Play to the internet.

Visit oticon.com/support/how-to/ifttt

#### IDEAS FOR USE

- Send a text when battery is low
- Get a voice alert when the doorbell rings
- Turn off lights when you leave home
- Switch to home program when entering the front door

# Oticon's ConnectClip is a small wireless microphone you or teachers can wear in difficult listening environments at home, in the classroom or on the sports field to make sure your child can hear what is being said.



## ConnectClip

ConnectClip is used with mobile phones and other audio devices that don't support direct wireless connectivity (or streaming) to the hearing aids. The ConnectClip microphone option is also ideal for streaming another person's voice directly to Oticon Opn Play hearing aids from up to 66 feet away.

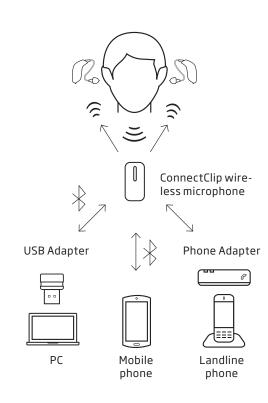
For phone calls, the hearing aids function as a wireless headset and the child's conversation is picked up by the built-in directional microphones. Audio from the mobile phone streams to ConnectClip using standard Bluetooth technology. The audio is then streamed directly to the child's hearing aids using 2.4 GHz Bluetooth low energy technology. ConnectClip works with almost any mobile phone with Bluetooth from 2010 onwards.

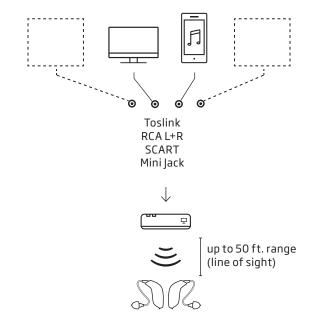
## Phone Adapter 2.0

Phone Adapter connects wirelessly to ConnectClip - allowing for hassle-free daily use of traditional analog landline phones.

## **USB** Adapter

USB Adapter (BTD 800) is a "plug and play" solution which wirelessly connects ConnectClip to practically any computer for Skype, Messenger, Lync and other softphones.





## TV Adapter 3.0

TV Adapter wirelessly transmits real-time stereo audio from a TV or home entertainment system directly to Oticon Opn Play hearing aids at a distance of up to 50 ft. The child can set the volume to their preferred level for a listening experience free from the distraction of surrounding noise. TV Adapter is installed and placed at the TV. Practically any audio source can be connected to TV Adapter including digital stereo (PCM) and Dolby Digital® (Optical Toslink input).

TV Adapter can be installed in most existing home entertainment systems.

TELL PARENTS OR CAREGIVERS
With TV Adapter, your child can enjoy TV sound directly in the hearing aids, at the volume they prefer without the distraction of surrounding noise.



Learn more at oticon.com/connectivity

.

# TELL PARENTS OR CAREGIVERS Gives you discreet and easy control over your child's Oticon Opn Play hearing aids - adjust volume or switch between programs with this small device, roughly the size of a modern car key.

### TELL TEACHERS

Oticon Amigo FM transmitters are comfortable, easy to handle and reliable. The built-in LEDs in both the FM receiver and transmitter let you know that the system is working and that your students can hear your voice.

## Remote Control 3.0

Remote Control, roughly the size of a modern car key, allows discreet control over Oticon Opn Play hearing aids. Use Remote Control to easily adjust volume, switch between programs or control connectivity sources.



## Oticon Amigo T31/T5 FM transmitters

Amigo FM transmits the teacher's voice clearly and consistently to Oticon Opn Play hearing aids, without affecting the student's ability to hear other sounds and speech in the environment. With built-in LEDs in both receiver and transmitter, teachers can be certain that the Amigo products are working properly. Amigo FM comes with a high-quality omnidirectional lapel microphone or a boom microphone – each with a built-in external antenna in the microphone cord.

Setting up the FM system requires both an FM transmitter and FM receiver. Connect the FM receiver to the BTE PP (universal or integrated) and switch on the FM transmitter to activate the FM system. miniRITE T and miniRITE R can access an FM signal via telecoil and an FM neckloop receiver.





## Oticon SafeLine™

Oticon SafeLine is a retention cord that is attached to the hearing aids and to the child's collar with a clip to prevent hearing aid loss or damage. With SafeLine, children can enjoy activities while retaining access to sound and with confidence that the hearing aids are safe.

SafeLine comes in two lengths and a choice of two sizes - for BTE or miniRITEs - and has a breakaway cord with a unique quick-release clasp that easily opens if snagged or pulled.

TELL PARENTS OR CAREGIVERS
Oticon SafeLine retention cord attaches
Oticon Opn Play hearing aids to your child's
collar with a clip to prevent hearing aid loss
and damage.

## Es Acoustics AUDIOMETRIC DATA @~ RECD € NEUG MORETOOLS NE REM Fitting Ils Data Logging Speech Rescue INTRODUCING 0 4 In-situ Audiometry TECHNOLOGY & FEATURES 🔘 8 GAIN CONTROLS INSTRUMENTS 🔘 22 CONNECTIVITY & ACCESSORIES 38 FITTING 🍎 46

#### Oticon Firmware Updater

Oticon Firmware Updater allows you to perform on-the-spot firmware updates to Oticon Opn Play hearing aids, TV Adapter 3.0 and ConnectClip. Oticon Firmware Updater provides these clear benefits:

- Access to the very latest platform features and performance improvements
- Convenience and time-savings with no need to send hearing aids and connectivity accessories for service

Please note that cable connection is required. Expect significantly slower firmware update times with HiPro and HiPro USB as these are older devices.



For more information go to oticon.com/professionals

#### **BE INFORMED**

The new hearing aids you receive may have a new FW version that is not compatible with your old Genie 2 installation. Therefore you must always install the latest Genie 2 software, when you receive it from Oticon.

## New features in Oticon Genie 2

#### Breakthrough technology in Oticon Opn Play gives you a whole new level of fitting freedom

New features and enhancements in the updated Genie 2 let you take full advantage of the OpenSound Optimizer in Oticon Opn Play. Same acoustics now allow for more stable gain. Extra gain is automatically used to reach the rationale target when needed.

Predicted feedback limits have been replaced with an Unstable gain indicator that uses live measurements from the hearing aids, without

affecting the fitting flow. The Unstable gain indicator provides continuous visual indication of unstable gain or feedback risk.

The Unstable gain indicator will only appear when the risk of feedback is high. This feedback risk is based on a measurement sample every second. If the indicator is visible in Genie 2, you are recommended to run the Feedback Analyzer as part of the fitting.

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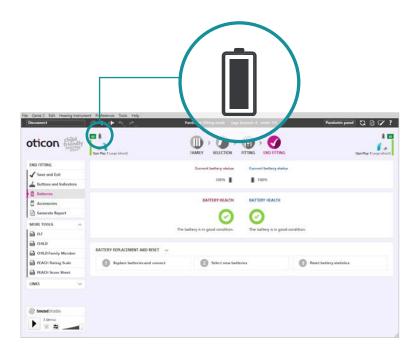
#### Fitting the new rechargeable miniRITE R

miniRITE R offers a unique combination of the open sound experience, superior connectivity and a state-of-the-art rechargeable lithium-ion solution. In addition to full-day operation, the miniRITE R offers market-leading charging time and an easy-to-use inductive charger.

In Genie 2, useful information about the rechargeable batteries is accessible in the End Fitting step, where you can find information about the current battery level as well as the

general battery health. Daily battery use, streaming behavior and hearing loss all impact the need for battery capacity. With information provided about the child's daily use of the hearing aids, you can easily advise when the battery may need replacement. The battery can easily be replaced by you.

Current battery level is accessible throughout the fitting session, when hovering over the battery indicator.



# The pediatric fitting experience

The Pediatric fitting mode is optimized for the pediatric fitting process and offers easy access to audiogram, RECD and REM tools, and a range of pediatric validation tools to support the hearing aid intervention.

The Pediatric panel provides a centralized way to view and change the child's hearing aid settings and allows you to confirm the settings, so you are confident that the settings are as you intended.

Pediatric fitting mode is an integral part of Oticon Opn Play and cannot be disabled.



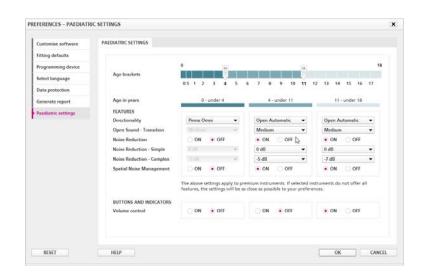
## Pediatric settings

There is no clear cut consensus concerning the ages certain features should be enabled or at what level of effectiveness, and so it is important that the default setting can be customized as a function of age, based on your preferences. Go to Preferences --> Pediatric settings. The following feature default settings can be customized:

- Directionality and Open Sound Transition
- Noise reduction for simple and complex environments
- Spatial Noise Management
- Volume control

You can customize the settings for three age-brackets: 0 - 3 years, 4 - 10 years, and 11 - 17 years. Each age-bracket can be adjusted. The preferences you set for each age-bracket will be used for all fittings and hearing aids.

When a child grows older and enters a new age bracket, the current settings of a child's hearing aids may not match your preferences for this bracket. If this is the case, the specific settings are marked in the Pediatric panel to indicate the discrepancy. In addition, you can reset to the prescribed pediatric settings should you make changes and want to undo them later.



## REM AutoFit with Verifit® LINK

REM AutoFit allows you to complete the REM process efficiently by automatically matching hearing aid gain to targets. This enables you to conveniently complete real ear verification of Oticon Opn Play hearing aids in order to support seamless compliance with current amplification guidelines. Individualizing the fitting to the child's ear acoustics ensures consistent audibility\* and optimal outcomes.\*\*

REM AutoFit is already compatible with several measurement systems on the market

including Interacoustics, MedRx® and Otometrics. Now, REM Autofit is able to communicate with your Verifit system\*\*\* using Audioscan's built-in software interface, VerifitLINK.

Furthermore, you maintain full control over the fitting with the option to manually finetune and verify to further personalize the fitting to the child.



<sup>\*</sup> McCreery, R. W. et al. (2013). Ear Hear, 34(6). \*\* Tomblin, J. B. et al. (2015). Ear Hear, 36(Suppl 1).

\*\*\* Verifit2 and Verifit1 (S/N 2070 and higher).

## OpenSound Navigator in Genie 2

YouMatic LX is specifically used to adjust OpenSound Navigator and how the child's hearing aids process sound in simple and complex environments. Default settings are based on the pediatric settings in preferences.

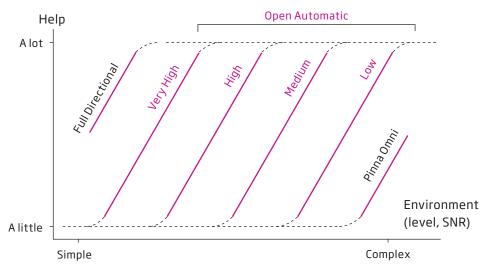
(A) OpenSound Navigator is enabled for all fittings which is reflected in the Open Automatic selection in the Directionality settings drop down menu. Alternatively, you can choose a non-adaptive directionality: Pinna Omni or Full Directionality.

B Open Sound - Transition: Adjust the amount of help (Low, Medium, High or Very High) the child needs in order to focus on speech in noisy environments. The Transition graph right above it reflects your choices graphically by showing you at what point help will kick in for the child in environments ranging from simple to complex.

© Noise reduction controls: Adjustments to noise reduction are divided into Noise Reduction - Simple and Noise Reduction - Complex. Noise reduction choices are displayed visually in the speech waveforms above each control.

D Noise reduction on/off: By default, noise reduction is on because it is an integral part of OpenSound Navigator, but it can easily be deactivated if needed.

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Open Sound Transitions. Pinna Omni does not balance speech and noise sources but gives equal focus to all sounds even in complex listening environments. Full Directional focuses on sounds coming from the front. Open Automatics adapts to the acoustical conditions based on one of the four transition profiles: Very High, High, Medium, or Low.

## Data Logging

Data Logging allows you to assess and monitor the child's progress with hearing aid usage. Data Logging provides statistics on the child's use of the hearing aids: how many hours they are used, in which programs and with which accessories. Data Logging also shows the average volume control settings in different sound environments.

When you connect Oticon Opn Play, Genie 2 saves the hearing aid's current log. When you exit Genie 2 or disconnect the hearing aid, the log is cleared in the hearing aid, but retained in Genie 2. You can access Data Logging from the task pane in the Fitting step.

Usage time is displayed both as total usage time and relative running time per use. If most of the running time occurs for shorter durations for example, it indicates that the hearing aids are frequently turned on and off. This data can help you determine what is going on and what to ask the parents about.

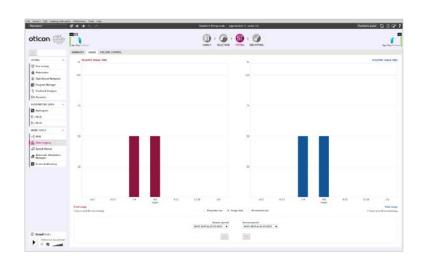
# as total usage time use. If most of the er durations for hearing aids are ConnectClip fitting As with other accessor paired with Oticon Op manually outside the

As with other accessories, ConnectClip is paired with Oticon Opn Play hearing aids manually outside the Genie 2 fitting session.

Once paired, you can adjust the remote microphone in the Accessories section under the ConnectClip tab, e.g., the level of the hearing aid microphones in relation to the streamed remote microphone signal.

Note: These settings apply to the remote microphone only. To adjust the phone sound settings, use the Phone tab.

Other adjustments of the streamed signal from ConnectClip can be made on ConnectClip itself or using Oticon ON app.



#### LED for immediate visual confirmation

The well-known LED on Oticon pediatric hearing aids provides you, teachers and caregivers with immediate visual confirmation of the status of the hearing aids.

The LED can blink to indicate user interaction like program change, volume control level and start-up. The blink pattern for programs, flight mode and mute are repeated continuously to indicate the listening state of the hearing aids. As the child grows older, the patterns can be set to only repeat three times and eventually can be switched off. The LED also has warning indicators such as a battery low warning. The visual indicators are on by default for all children.

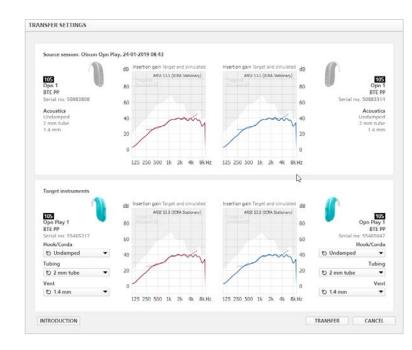
## Transfer gain-related settings

You can transfer gain-related settings from one Oticon hearing aid to another - even when the hearing aids differ in style, fitting level or price point. This is especially useful during the fitting session when you are demonstrating different hearing aids to the same child and would like to retain your fine tunings as you change the hearing aid selection.

The Transfer Settings functionality allows you to copy: Gain, MPO, Adaptation Step, Brightness and Soft Sound Perception of each assigned listening program, as well as the

settings of acoustic and local controls, beeps and visual indicators into a new hearing aid. These settings are copied as close as possible given the limitations of the target hearing aids. All other settings are prescribed for the target hearing aids.

The tool can be accessed through Tools -> Transfer Settings, or when the settings of a new connected hearing aid differ from the existing Noah session. Please refer to the help files for details for how to use the Transfer Settings functionality.



## Programming devices

In Genie 2, you can use a range of programming devices to program Oticon hearing aids:

#### Wireless

- Noahlink Wireless\*
- FittingLINK 3.0

#### Wired

- HiPro 2 ExpressLINK 3
- NOAHlink
- HiPro USB\*\*
- HiPro\*\*

Please see the Programming devices overview (available in Genie 2) for details on which instrument styles are compatible with which programming devices.

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<sup>\*</sup>Compatible with 2.4 GHz hearing aids.

<sup>\*\*</sup>Expect slower programming and firmware update times as these are older devices.







