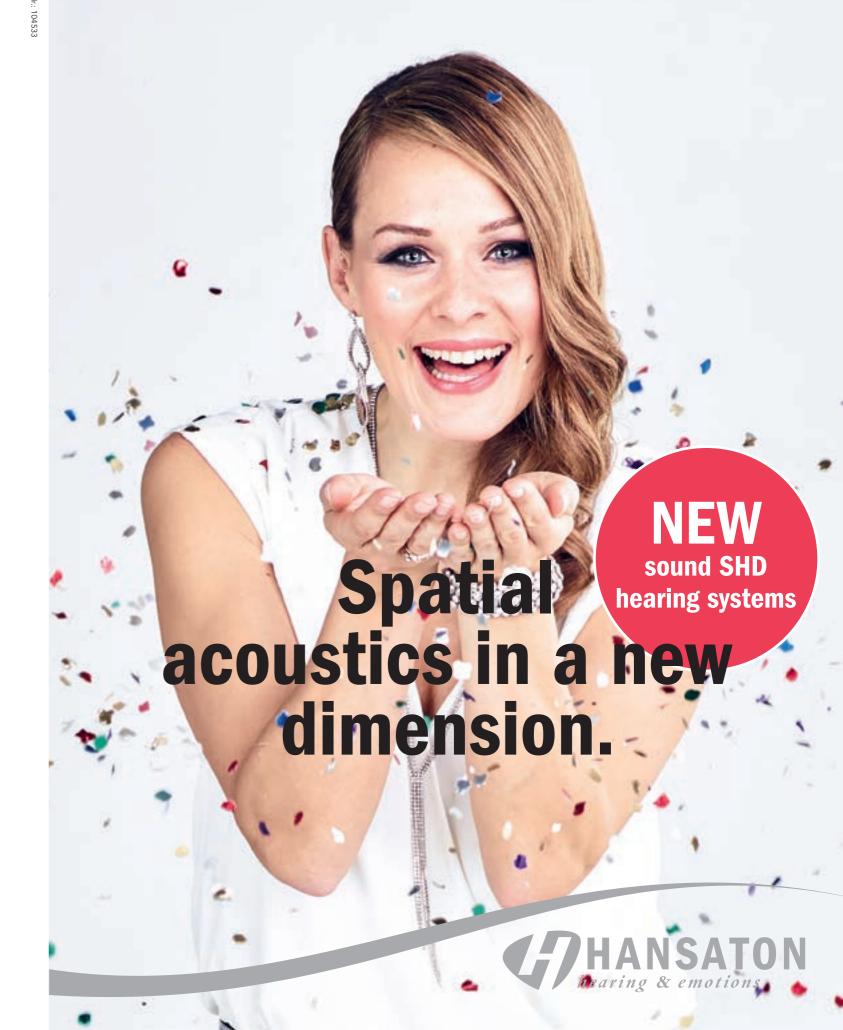
You can find out more about the HANSATON nearing instruments from your local hearing profession or online at www.hansaton.com	nals



Hansaton Akustik GmbH • Sachsenkamp 5 • 20097 Hamburg • Germany Telephone: +49 40 29 80 11 0 • Fax: +49 40 29 80 11 860 E-mail: info@hansaton.de • Internet: www.hansaton.com EN HANSATON product information.
Spatial acoustics in a new dimension.





6 (years hearing & emotions by HANSATON

**HANSATON** product information.

60 years of Hanseatic tradition.

# What's important to us. Today, tomorrow, and every day going forward, we want to use our decades of experience in the hearing system industry and its continuously advanced technologies, obstructed in sophisticated product designs, to leverage people to an optimum hearing experience.

# **60** years of Hanseatic tradition. We combine high-tech with personality.

When our father, Uwe Fischer, joined our grandfather's acoustics company, he had one vision more than anything: to help hearing-impaired people enjoy better quality of life. For that reason, he established the company's own research and development department, laying the foundations for high quality, HANSATON-made hearing systems. Together with our dedicated employees, we are continuing this tradition responsibly into the third generation.

This year, we are celebrating 60 Years of HANSATON. We're very proud of that achievement – it shows that we've taken our company down the right path over the course of our long and successful history. As a traditional Hanseatic company, we stand for innovative technologies and award-winning design. We work together with audiologists and other partners to develop tailor-made solutions that will help people achieve optimum hearing experiences. Every day. Around the world.

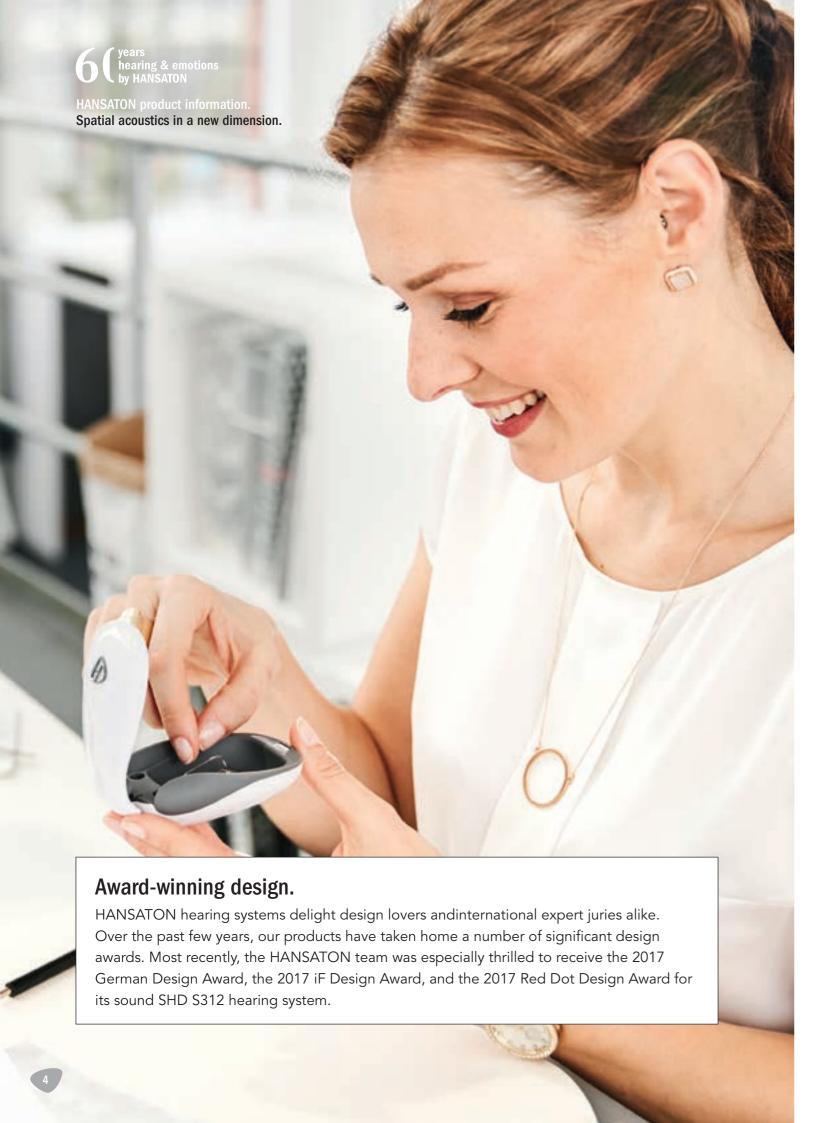
All the best from Hamburg,

Johannes Fischer

Johannes Fischer

Andreas Fischer

Indreas Tosas



### Spatial acoustics in a new dimension. Acoustic experiences meet exceptional design.

Sometimes we take the simple things in life for granted... until they no longer fully function, and then we realize how important they really are. Hearing is one such example. Hearing loss makes natural acoustic perception – and thus everyday life – more difficult.

Shape your life the way you want it to be – the newest sound SHD HANSATON hearing systems with innovative SphereHD Technology provide cutting- edge spatial acoustics, so you can experience natural hearing in all kinds of life situations.

This brochure provides you with detailed information about the new sound SHD hearing system and its matching multimedia accessories.











### Hearing and understanding. How do we actually hear?

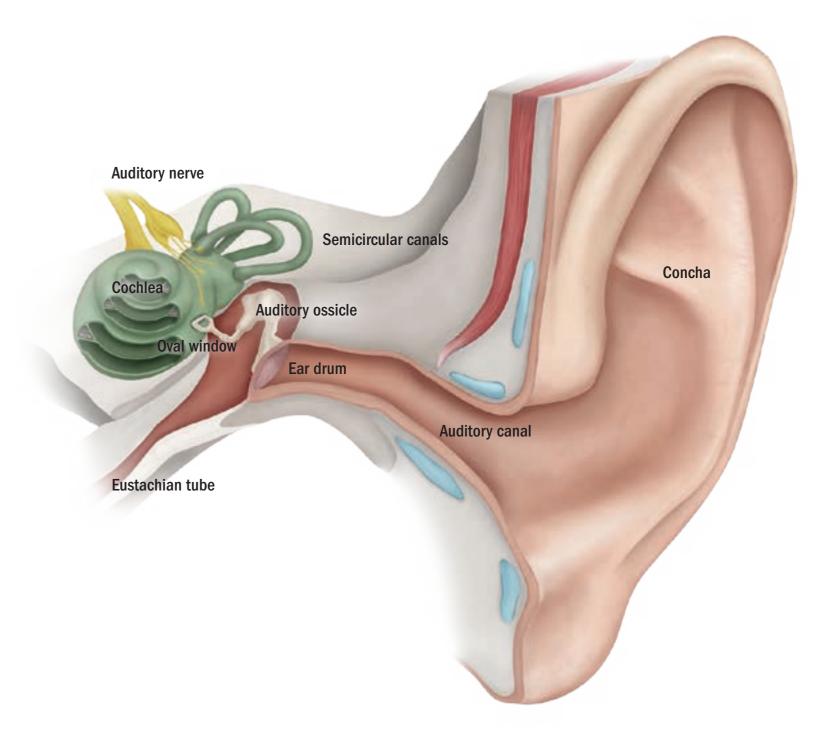
Sound is a movement of air guided through the concha to the auditory canal. At the end of the auditory canal, the sound collides with the eardrum and makes it vibrate. The sound is then conveyed to the inner ear via the chain of auditory ossicles. Hair cells convert the movement there into electrical impulses, which are transmitted to the brain via the auditory nerve.

#### The brain processes what the ear picks up.

Where does a sound come from, how loud is it, is it a word, and, if yes, what does it mean? By the time we grow up, we are already listening from experience. We »block out« noise that we have learned are not important, such as continual background noises. But emotional significance also plays a role. The gentle sobbing of a baby will wake mothers from the deepest sleep although other, louder noises may not disturb them.

Our speech comprehension depends on the extent to which we learn a language. After all, auditory comprehension is not the job of the ear, but rather of the brain.

Everything that the brain does, it needs to practice.

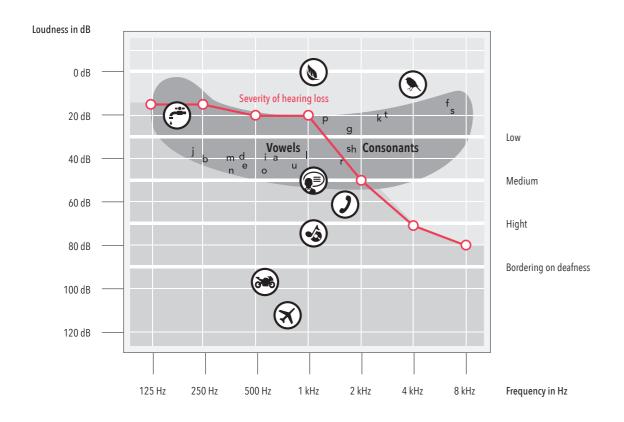


### Information.

The ear is composed of the outer ear and the middle ear, all of which pick up, bundle, and transmit sounds. The anterior cartilaginous section of the auditory canal contains glands, which produce cerumen (ear wax), and cilia which transport the wax to the outside. You could say that the ear cleans itself. The inner ear is home to the semicircular canals (our organ of balance) and the cochlea. The cochlea contains approximately 12,000 outer and 3,000 inner hair nerve cells, which are responsible for converting the sound into neural impulses. The outer hair nerve cells allow fine differentiation of pitch and volume.



#### Hearing profile with main speech range.



## Recognize hearing loss. Relaxed hearing improves quality of life.

Others are usually the first to realize that someone cant hear like they used to. Family members and friends notice that you have to ask people to repeat themselves more often, speak unusually loud on the telephone, or have the television so loud that the whole neighborhood can hear it.

You can feel exhausted quickly and try to avoid situations which are uncomfortable for you, for example conversations involving larger groups of people or lots of background noise. Reduced hearing can have a range of different effects on your life, predominantly on the contact you have with those around you. Speech becomes blurred and many words are not understood correctly.

#### Now is the right time to do something about it.

The severity of the hearing difficulty can be represented in an individual tone audiogram. This is done by measuring the hearing threshold for different frequencies. In other words, it is the lowest volume at which you can hear a tone. The severity of hearing reduction can then be determined depending on how low this hearing threshold is. People often do not hear all frequencies equally well or equally badly: Hearing loss is frequency-dependent. This also explains why you often don't even notice the first signs of hearing loss yourself.

Hearing reduction creeps up on you slowly. Your brain gets used to not hearing certain sounds. These tired zones first need to be retrained. Wearing a hearing system helps you step by step to start perceiving sounds again that you had forgotten ages ago. Then you can easily understand the person you are speaking with again. Don't allow your hearing to get tired. The earlier you decide to start using a hearing system, the easier it will be to return to hearing everything again. There is no reason to let another day go by with an imperfect hearing experience.



### Not sure?

### Find out whether you suffer from hearing loss.

Of course this test is no substitute for an in-depth conversation with your hearing systems specialist. However, if you answer »Yes« to more than three questions, it may be an initial indicator that you have some degree of hearing loss.

### Test yourself:

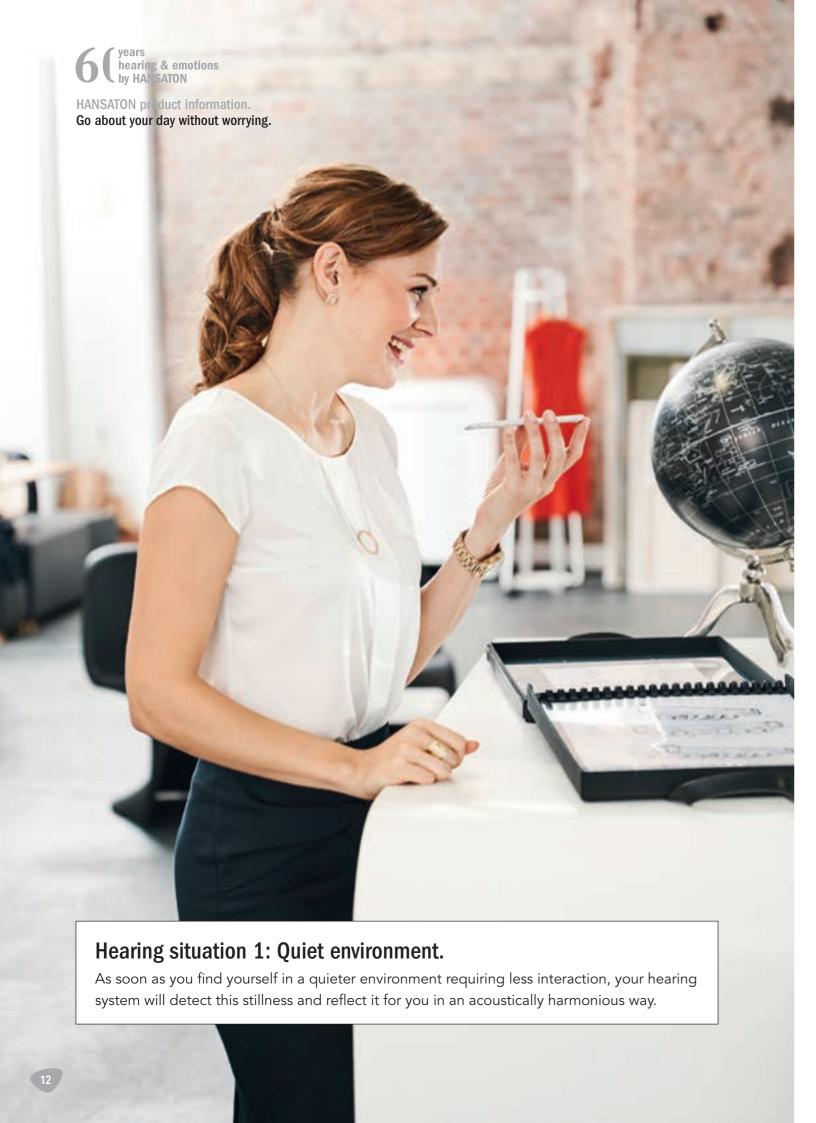
1. Do you find you no longer hear ticking clocks?	○Yes	○ No	
2. When you attend plays, do you have a hard time understanding dialogue?	○Yes	○ No	
3. Do you feel like most people do not speak clearly?	○Yes	○ No	○ Sometimes
4. Have you noticed that you hardly ever hear birds chirping anymore?	○Yes	○ No	
5. Have you ever failed to notice an approaching car until the last second?	○Yes	○No	
6. Do you have trouble following normal conversations with several people at once?	○Yes	○ No	
7. Do your relatives or neighbors ever complain that you turn the volume up too high on your TV or radio?	○Yes	○ No	○ Sometimes
8. Do you have difficulties on the telephone?	○Yes	$\bigcirc$ No	○ Sometimes

# Which hearing type are you? Do a preliminary test here!

Are you suffering from hearing loss? Talking to your hearing systems specialist will help you both figure out which hearing system is right for you. This quick test can give you an idea of which system may be most suited to your needs.

### Tick your answers:

1. How active are you?	OHighly	O Moderately	O Not very
2. Do you regularly go out to restaurants?	<ul><li>Frequently</li></ul>	Occasionally	Rarely
3. Do you listen to classical music?	Often	○ Sometimes	Rarely
4. Do you attend lectures or classes?	○ Frequently	○ Sometimes	Rarely
5. Do you take part in discussion panels or speak in front of audiences?	○ Frequently	○ Sometimes	○ Rarely
6. Do you drive with passengers?	<ul><li>Frequently</li></ul>	○ Sometimes	Rarely
7. How important is it to you to detect fine sound nuances clearly and naturally?	○ Highly	O Moderately	O Not very
8. Are you sensitive to noise?	○ Highly	OModerately	O Not very
9. Do you often find yourself in a wide variety of hearing situations, either in business or personal life?	○ Frequently	Occasionally	○ Rarely



# Go about your day without worrying. With hearing systems that adjust to your life.

Everyday life holds a variety of situations. And whether they are part of work or free time, every one of those situations is unique and valuable. Being present during conversations does not always mean being able to take part in them actively. Hearing loss can make a lot of things more difficult. With HANSATON's new SphereHD chip technology, remedying the situation is easy. In these next few pages, we'd like to tell you a little about the seven most important hearing situations you encounter in everyday life – situations the innovative AutoSurround SHD program automatically detects for you.

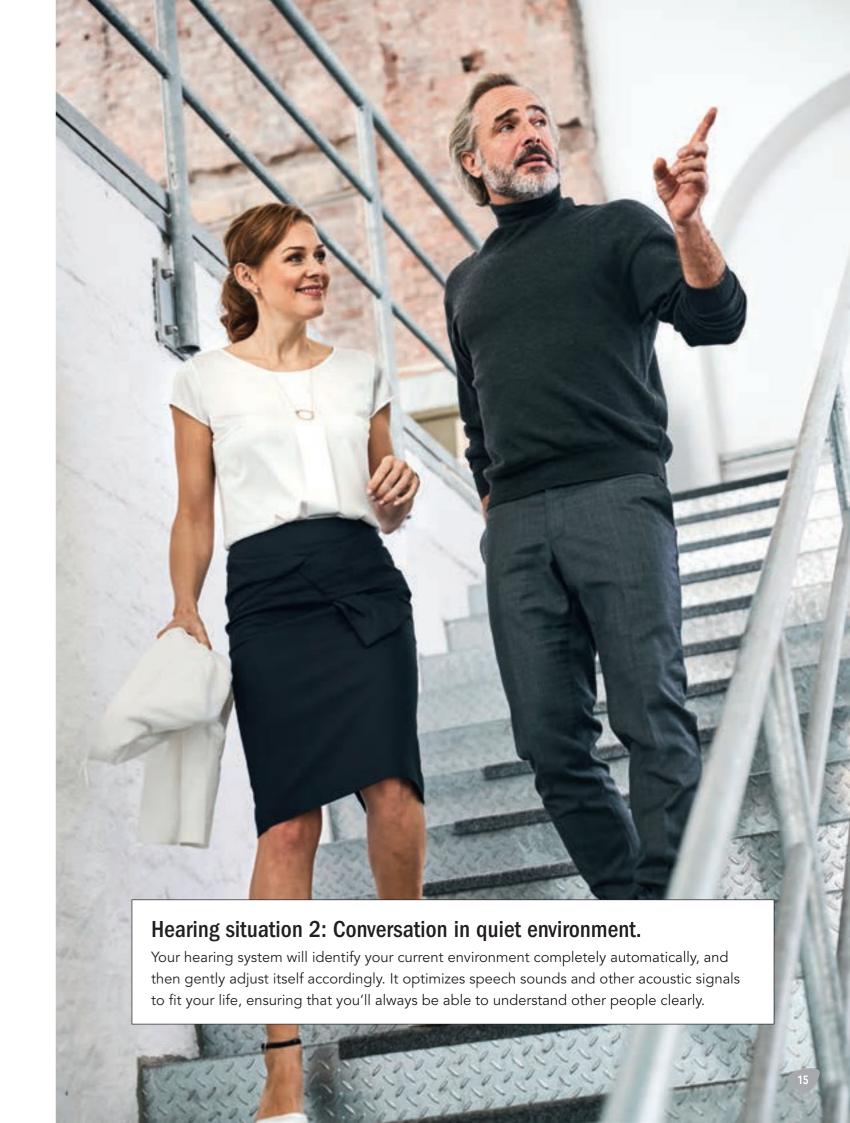


# **Spatial hearing.**The new SphereHD chip technology makes it possible.

Acoustic environments aren't one-dimensional – they're varied and highly complex. We encounter a wide variety of acoustic signals, speech sounds, and other noises every day, twenty-four hours a day, throughout our entire lives. HANSATON's new SphereHD chip technology ensures exceptionally natural hearing in all of these situations.

Its high-speed detection systems, optimized signal processing, and innovative SphereSound SHD algorithm work together to take natural spatial acoustics to the next level for you.

Discover a whole new dimension of spatial acoustics. Discover SphereHD.





### The sound SHD product family. Acoustic experiences meet exceptional design.

Everyone's needs and desires are different. HANSATON has a wide range of external-receiver hearing systems available, to help you and your audiologist find the perfect solution for you. Choosing HANSATON means choosing modern, refined hearing systems that are aesthetically appealing, and provide exceptional spatial acoustics with the help of cutting-edge SphereHD Technology.



sound SHD 10 HANSATON's tiny

sound SHD S13 Top performance meets

Boundless freedom – hearing without batteries: Ask your audiologist about the AQ sound SHD, HANSATON's rechargeable hearing systems with lithium-ion battery technology, as well.



Discover the whole rainbow of options: HANSATON hearing systems are available in seven different colors. No matter which hearing system you choose, you'll always be choosing exceptional quality and cutting-edge technology. The sound SHD 10 and sound SHD S312 hearing systems are also available as Black Edition systems (more on page 28).



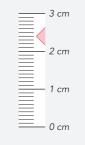
White Pearl



### sound SHD S312.

### Award-winning design and optimal speech clarity.

The sound SHD S312's ergonomic design – including a specially formed push button and an easy-to-feel battery compartment – makes it particularly simple and convenient to operate. And it delights design lovers and international expert juries alike with its sweeping curves and harmonious interplay of colors.







Convenient:
The small, award-winning housing ensures ease of operation.



The plasma-coated surface protects the system against external influences such as dirt and moisture.





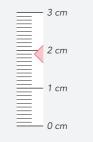






### **sound SHD 10. HANSATON's smallest all-rounder.**

The sound SHD 10 is the newest and smallest member of the sound SHD hearing system family. With its beautiful, delicate housing, the tiny masterpiece not only nestles perfectly against your ear, but keeps itself almost completely out of sight as well. Thanks to innovative SHD Technology, the tiny, little genius even helps you perceive acoustic signals spatially.







Great things come in small packages: This small all-rounder measures just 19 mm in size.



IP68 certified
The plasma-coated surface protects the system against external influences such as dirt and moisture



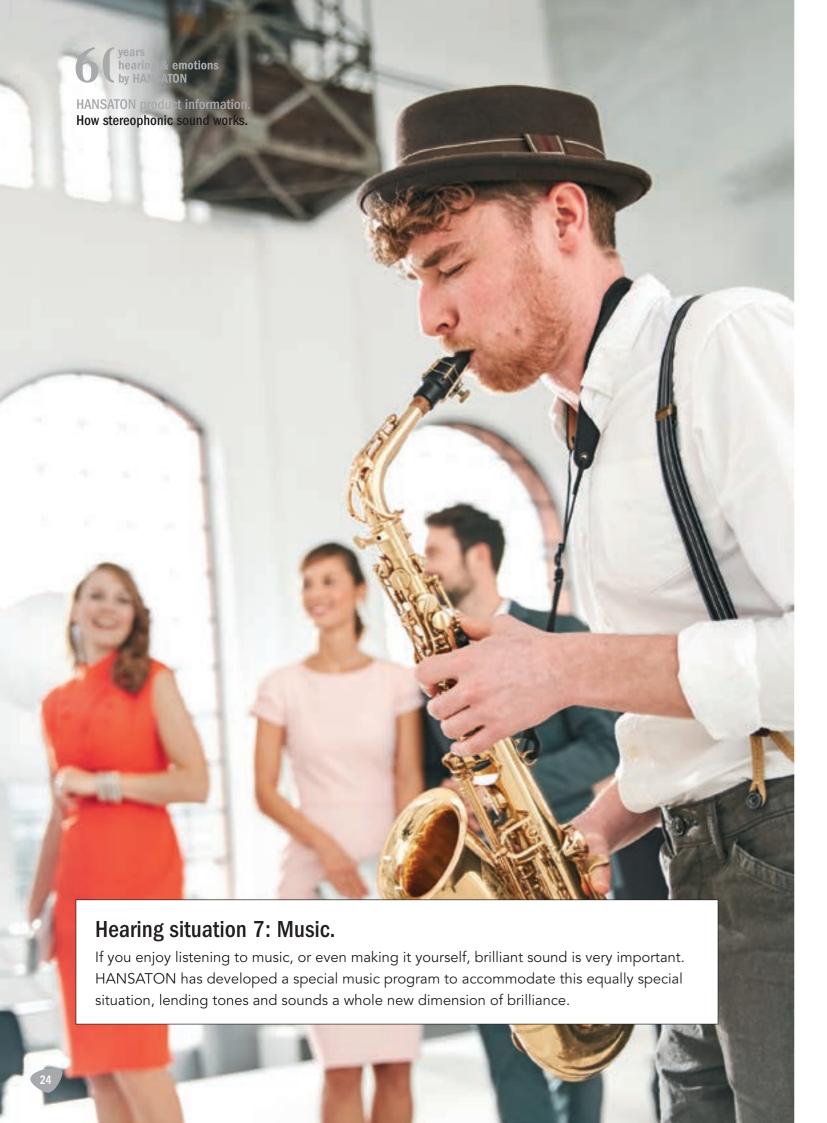
# sound SHD S13. Top performance meets innovation.

An aesthetically appealing and acoustically impressive powerhouse: the new sound SHD S13 external-receiver system is particularly powerful, but it has nothing to hide when it comes to design or technology, either. Its all-new SHD Technology offers improved sound quality and speech clarity, giving the wearer an especially natural hearing experience.





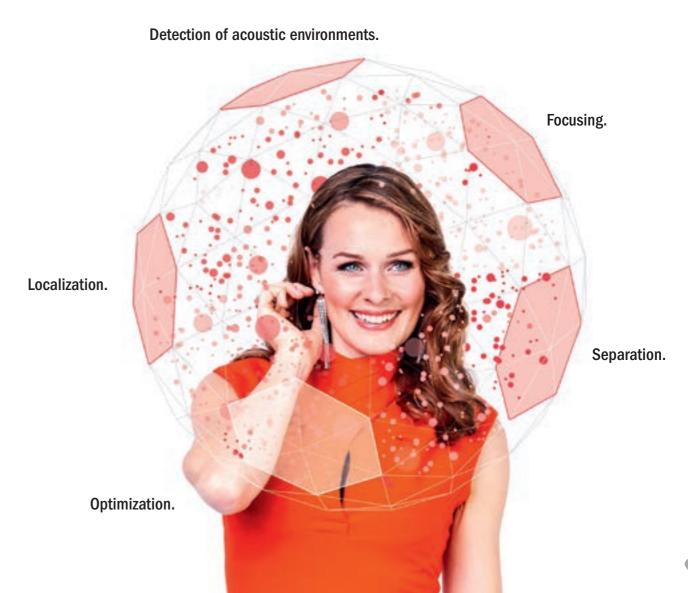
IP68 certified
The plasma-coated surface protects the system against external influences such as dirt and moisture.



# How stereophonic sound works. Intelligent hearing means natural hearing.

Acoustic environments are complex. We are surrounded by a variety of different acoustic signals, speech sounds, and noises nearly 24 hours a day, every day, week after week, for our entire lives. Our perception is heavily influenced by the shapes of our heads and ears, so each person's concept of "natural sound" is different. A number of different, complex, intelligent processes happen inside our brains automatically, all at the same time. For example, they detect acoustic signals, determine the signals' spatial locations, and evaluate their importance. Each person has his or her own individual, natural auditory intelligence.

Thanks to innovative SHD Technology the new HANSATON hearing systems are able to map the acoustic environment realistically and recreate a natural sound experience.





# **Performance levels.**From first class to economy class.

The new sound SHD hearing systems are available in Performance Levels 9, 7, 5, and 3, depending on your preferences and needs.

#### Performance Level 9 – First

Our top Performance Level allows you to experience unparalleled speech clarity and spatial acoustics. Even in extremely challenging acoustic situations, Performance Level 9 systems can localize sounds, and localize and precisely focus in on speech. As natural as never before and fully automatically.

#### Performance Level 7 - Business

Performance Level 7 provides an individualized hearing experience. Hearing system wearers can perceive sounds and also focus in on speech precisely. The personal acoustic characteristics of the auditory canal are taken into consideration, ensuring a natural hearing experience in a wide variety of situations.

#### Performance Level 5 - Comfort

Performance Level 5 systems account for the way the wearer's head and ear shape naturally affect sound, providing a more natural hearing experience. They are capable of focusing in on relevant speakers.

#### Performance Level 3 - Economy

Innovative technology ensures listening comfort and speech comprehension in the most important acoustic situations.

sound SHD 10



sound SHD S312





Performance features	9 (First)	7 (Business)	5 (Comfort)	3 (Economy)
Spatial acoustics with SphereSound SHD: Sound is influenced by the individual head and ear. SphereSound SHD takes these anatomical characteristics into account: for natural, spatially resonant sound.				
SphereSound SHD: Dynamic				
SphereSound SHD: Personal				
SphereSound SHD: Static AutoSurround SHD:				
An automatic program which detects a multitude of acoustic situations and which adjusts itself automatically without any manual switching.				
AutoSurround SHD: Music				
AutoSurround SHD: Noise				
AutoSurround SHD: Conversation in a small group				
AutoSurround SHD: Conversation in a crowd				
AutoSurround SHD: Conversation in noise			•	•
AutoSurround SHD: Conversation in quiet				•
AutoSurround SHD: Quiet		•	•	•
SpeechBeam SHD: Focusing in on speech creates better and more natural speech clarity all round.  Multi-channel signal processing: The number of frequency ranges a system covers	SHD-3	SHD-2	SHD-1	
determines its flexibility in caring for hearing loss. The more frequency ranges, the more options for adjustment.  Multi-microphone technology: The use of multiple microphones ensures optimum	20 Channels	16 Channels	12 Channels	8 Channels
speech clarity in every situation. The microphones' intelligent and automatic directional capabilities also create a uniquely natural sound.	:	:	:	
SurroundSupervisor SHD: More than 30 high-resolution sensors analyze the acoustic environment nearly 700 times per second for precise signal processing.	:	:	:	•
Sound Impulse Manager SHD: Pleasant hearing without interference by sudden impulse signals.		:	:	
Speech detection: Brings out speech while effectively suppressing disruptive background noise.		:	:	
Noise reduction: Continually reduces background noise to provide pleasant sound in noisy environments.		:	:	•
Wind Noise Manager: Detects and immediately suppresses disruptive wind noise.	:	:	:	
Digital Noise Reduction: Reduces background noise in quiet situations.		:	:	
Feedback Manager: Immediately suppresses annoying feedback – including on the phone.				
<b>BiLink:</b> Continuous, automatic synchronization of the two hearing systems ensures improved speech clarity and directional hearing, especially in noisy environments.				
<b>BiPhone</b> : During telephone conversations, the system transmits the speaker's voice to the other side to improve speech clarity and make conversation easier.				
PhoneConnect: Make telephone calls easily and reliably via the hearing system.				

Please contact your hearing professional for more detailed information.

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HANSATON product information. Black Edition.

DIACK EUILIOI

### **Black Edition.**

### A special edition with "piano lacquer" finish.

HANSATON is celebrating its 60th anniversary this year. To mark the occasion, we have created elegant black lacquer Special Edition models of two of our hearing systems. The sound SHD 10 and the sound SHD S312 are now available in these elegant Black Edition versions (each in Performance Levels 9 and 7). The battery compartment features an elegant HANSATON signet. All of these limited-edition models are IP68-certified, meaning that their plasma-coated surfaces protect the hearing systems from external influences like dirt and moisture.



AQ sound SHD S The rechargeable hearing system as Black Edition.



sound SHD S312 The Black Edition of the design-award winner.



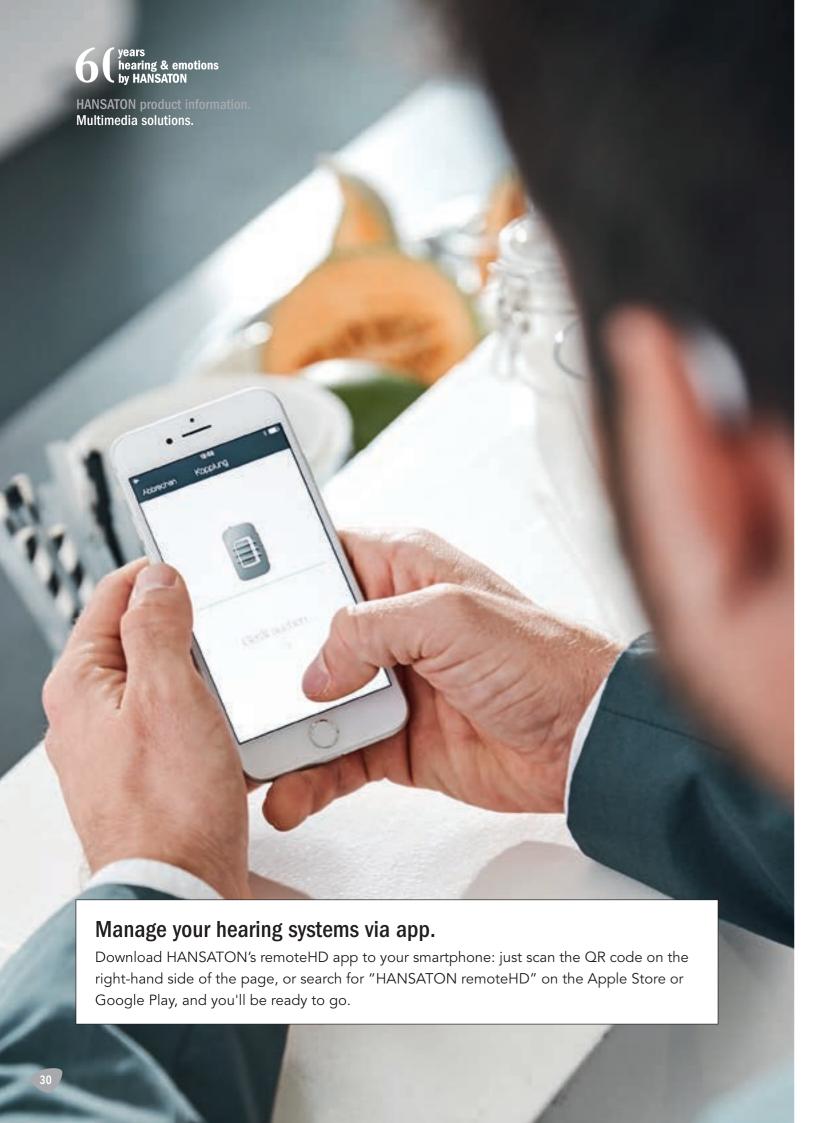
sound SHD 10 The Black Edition of the tiny all-rounder.











# Multimedia solutions. Easy adjustments via smartphone.

Modern technology makes many things possible. Which is why HANSATON has tapped into the many advantages of the multimedia world and used them in creating little high-tech miracles: intelligent remote controls and multimedia devices for your sound SHD hearing systems.

For you that means more comfort, flexibility and freedom, along with the ability to operate your hearing system discreetly and unobtrusively in public. HANSATON's multimedia solutions and remote controls help you enjoy your newfound freedom to the fullest.

HANSATON offers accessory solutions to fit any hearing system – small and discreet, easy to operate, and multifunctional.







Apple App Store

tore Google Play Store

remoteHD – Operation via smartphone. The remoteHD app lets you adjust your hearing systems quickly and discreetly using your smartphone (uStream or uDirect3 required). HANSATON product information.

#### Multimedia solutions.



#### **Clever streaming with uStream**

HANSATON's new uStream offers you maximum freedom: not only can you change the volume and programming on your hearing systems, you can also connect Bluetooth-compatible devices (such as smartphones). The best part: the uStream is barely noticeable. It can be clipped easily and discreetly to clothing without the need for a cable



#### Full TV enjoyment with uTV3

uTV3 transmits audio signals from the television, the computer, or the stereo to the hearing system via the uDirect3 remote control – simply and comfortably using Bluetooth. The multitalented device does more than just allowing the wearer to regulate the volume of the transmitted audio signal. HANSATON's uTV3 also serves as a charging station and holder for the uDirect3.



#### Simply convenient: the remote control RCV2

The RCV2 remote control allows discreet adjustments to volume controls and hearing system programs. What sets it apart are its simple, intuitive controls.



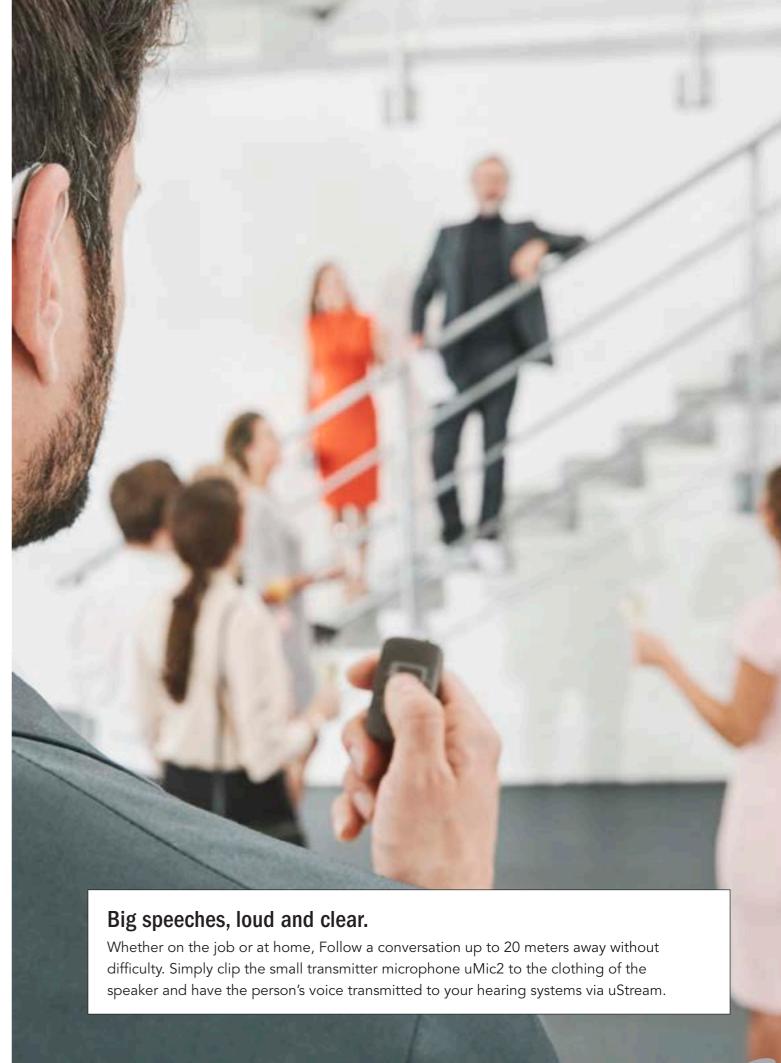
#### Multimedia hearing enjoyment with the uDirect3

The uDirect3 remote control means pure multimedia: it enables connectivity to cell phones, televisions, FM receivers and MP3 players. Wired or wirelessly, whichever the user desires. It provides an especially clear, interference-free hearing experience in a variety of activities.



### uMic2: Understand conversation partners more easily

uMic2 is a wireless microphone system that allows the wearer to understand a conversation partner better and more easily, even in acoustically difficult situations. uMic2 can also be attached to the other person's clothing using an integrated clip. Speech signals coming from the conversation partner are transmitted via uDirect3 to the hearing system, where they arrive clear and easy to understand.





### Hearing is quality of life. Nice to have you here.

We are glad that you have decided to learn more about our hearing systems – you've already taken the first step on your journey to greater quality of life through relaxed hearing and comprehension. Now the only question remaining which hearing system is the right one for you? The best thing to do is test them out together with your hearing health care professional, so you can take plenty of time to discuss your options thoroughly.

- 1. Free hearing screening.
- 2. Free advice.
- 3. Choose the perfect hearing solution.

Shape your life the way you want it to be – the newest sound SHD HANSATON hearing systems with innovative SphereHD Technology provide cutting-edge spatial acoustics, so you can experience natural hearing in all kinds of life situations.

HANSATON wishes you all the best!

