

# **Invisible sound systems**

#### 1. OVERVIEW

Be one step ahead of your competitors with an even more innovative and emotional positioning of your brand on the market.

Easily make your products sound: your customers will be amazed by the personal experience! We'll show you how it works.

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# Why would a product need to make sounds and play music?



Music gets us moving, helps us relax and puts us in a good mood. Whether first thing in the morning, in the evening after work or while working, music helps improve concentration by conveying emotions that have a significant positive effect on our well-being. Music can give us those real goosebumps moments – or simply something to enjoy and put us in high spirits. Music brings people together and creates very personal moments.

Imagine if you could simply take a product from your range and, on top of all its fantastic features, it could play music! What if you could take an innovative product and make it even more **emotional** for your target audience? That's precisely what we do.

Based on our technology using surface transducers (exciters) with Bluetooth receivers, we make it possible for **companies of all sizes** to turn their existing products into a unique sound experience, enabling their target audience to really connect with their products on an innovative level.



# Make your product sound in three simple steps:

1 Testing



Installation



3 Marketing



# There is more in it - for you and your customers

With a built-in sound system, your customers will be able to simply stream their favorite music directly to the new product from their smartphone or any other source. As a manufacturer or dealer, it's extremely simple to equip your products with this technology and launch a new product

that you can develop within a very short of time and, in most in most cases, push it to market by yourself! If you do have any questions or wishes and require help with calibration, you can simply send us your product and we'll create custom sound settings for your particular application. With our extensive expertise, we can also help you to position the product on the market by providing you with sales pitches for promoting the product internally, as well as supporting your sales and distribution team with ideas to ensure people understand – and buy – your new product!







"It's always great to see how users are instantly wowed by everyday objects when they play music. Their eyes light up, and it creates a truly personal moment for them and turns a common, everyday product into something highly emotional.

All thanks to the invisible built-in sound systems from WHD."

Stefan Huber, Managing Director of WHD



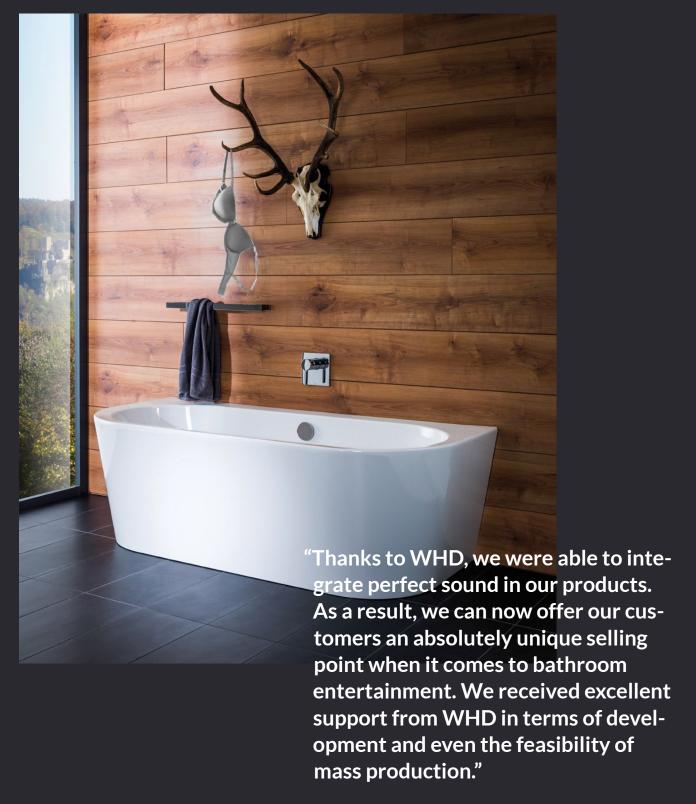
# Companies consider adding sound to their products when...

- ... they are planning a new product or product line
- ... they want to use technology to make a non-technical product more innovative
- ... there is no room for conventional speakers
- ... they have a product that is directly exposed to the elements, such as a terrace roof or a screening wall
- ... they have a product which could be subjected to vandalism, such as on buses and trains or in parking ticket machines
- ... the climatic conditions simply do not allow for conventional speakers in the room, such as in saunas, steam caves, etc.
- ... they want to make music felt through vibrations, for example in relaxation loungers, bathtubs or even in medical applications

- ... they have a product that needs to meet the strictest hygienic conditions and conventional speakers are therefore out of the question
- ... they have a design product that cannot be spoiled with technology or speakers
- ... they operate in a market with high competition and cannot come up with any other distinguishing features
- ... they want to make their product more emotional by giving it the ability to play music
- ... they want to increase the interaction between the user and their product
- ... they are looking for a new product that will help them increase sales
- ... they are focusing on the idea of the 'Smart Home' and cannot develop all the components themselves



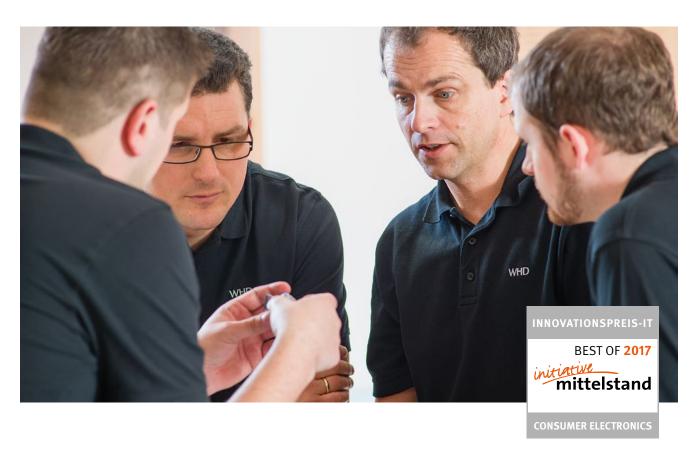
#### **CASE STUDY**



**Gunther Stolz,** Managing Director of repaBAD GmbH www.repabad.com



# Why does WHD do what it does?



We have already brought sound to over 100,000 objects, so we know what enormous benefits our system brings to manufacturers and retailers. Products from small manufacturers can be enhanced simply by adding sound as an extra dimension, but large industrial customers can also take advantage of our technology to wow users at home, in hotels and on buses and trains on a daily basis. They are all driven by the idea of creating a personal connection between their products and users and offering them real added value. You too can astonish your customers by transforming lights into a full-fledged sound system,

making bar tables and benches in the outdoor area at an event play gentle music or even adding superb sound to bathroom mirrors without any visible speakers, which is sure to brighten anyone's day first thing in the morning.

Thanks to our system, we have helped many of our customers to significantly increase their sales. Other driving forces behind the use of sound in everyday products and objects include the added value for users, innovative solutions, interaction through networked products, new product lines and, of course, a certain wow factor.



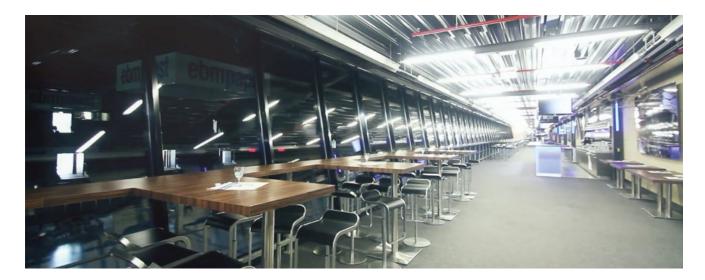
#### **CASE STUDY**



"Thanks to the invisible sound system, we were able to position our innovative solar bench even more clearly on the market in a very short time, as the sound system really brought the bench to life and thus gave us an even greater advantage over our competitors. Our customers simply love being able to communicate with the general public/tourists using speech or videos. And young people also immediately recognized the benefits the sound system offered them."

Jens Gröschner, Owner of EnerWit www.enerwit.de





# The story behind what is perhaps the largest invisible speaker in the world.

WHD has built what is probably the world's largest speaker. It can be found in the Helios Arena in Villingen-Schwenningen, Germany – home to the DEL ice hockey team, the Wild Wings.

The Wild Wings marketing department asked regional partner WHD for advice: In the Fürstenberg Lounge – a room measuring approximately 5 m wide and almost 60 m long – music and speech was easy to

understand thanks to the mounted speakers. But only next to the wall. It was almost impossible to understand anything next to the window facade. If the speakers were turned up loud enough that announcements by the stadium announcer, press conferences and other acoustic signals could be heard next to the window facade. it would then be too loud on the wall side. WHD had the idea to use the approximately 60 m-long and 3 m-high window facade itself as a speaker. To this end, sound pressure transducers were installed 1 m apart on the glass above the viewing area. These so-called exciters make the window panes vibrate and therefore make a sound.

With a diaphragm surface of around 200 m<sup>2</sup>, the resulting speaker not only solved the problem, but is also probably the largest speaker in the world.



http://bit.ly/unsichtbar-riesig



# Frequently asked questions:

#### How good does it sound?

Absolutely. Depending on the product, material and volume, it can even sound truly astonishing.

## What applications is the system suitable for?

The system is suitable for a variety of purposes. Furniture, Smart Home, lights, outdoor furniture, surfaces, cabinets, ceramics, glass, mirrors and many other products besides. Our technology is especially popular in applications that require hygienic, maintenance-free, invisible solutions that are protected from theft and vandalism, as well as weather-resistant solutions for outdoor use.

# How can I test whether my product will sound good?

The Soundwaver is a simple way of testing "on the fly" whether your product would generally sound good. If the initial results are positive, the installation set consisting of two or four exciters usually yields even better results.

# The test with the Soundwaver delivered good results, what now?

Order the installation kit and simply mount it on your product with the help of our documentation and positioning aid. Connect it up by Bluetooth, and you're good to go.



# Our company has no experience with audio products, where can I get help?

Most of our existing customers did not have any prior experience either. Thanks to our experience and expertise, we are able to share our knowledge with you in our materials and documentation. As a result, a new product can be developed and launched on the market within a very short time by yourself.

#### Is your system TÜV-tested?

Of course. Our installation kit is subject to the strictest international regulations. The health and safety (radio, radiation) of our system has been tested by Bureau Veritas.

# Is the installation kit also available in a Wi-Fi version?

Yes, our installation kit is also available with a wireless receiver, which you can simply connect to your existing Wi-Fi network. Please feel free to contact us about this version!

# Will my product vibrate a lot when playing music?

Yes, depending on the composition of your product and the volume of the music, some parts, such as loose cables or parts that are simply plugged together, may vibrate slightly. However, this can usually be fixed easily by securing/affixing these loose parts. Why not try it out with the Soundwayer?

#### What if I still need help?

Please do not hesitate to contact us at any time. We have large measurement facilities and audio experts who have managed to bring sound to even the most complicated products and optimized conventional ones. Feel free to send us your product, and we will set everything up and return the product to you equipped with our technology. The one-off cost for setting up your product is usually €980 net. Please contact us about this first, so we can get the ball rolling for you.



We're all ears...
... we look forward to hearing your ideas!











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Facebook: fb.com/whdsounds

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