

PHILIPS
Fidelio



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Obsessed with sound

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The journey continues

Obsessed with sound

Philips holds a special place within the world of audio. An admired innovator, Philips has defined the standards of what we hear and how we experience it, bringing to consumers numerous ground-breaking products such as portable radio, compact cassette and recorder, compact disc, and wireless Hi-Fi. With the launch of Philips premium Fidelio range, our obsession with sound continues.

As we near a centenary in audio innovation, we share our philosophy and introduce you to the people behind it. Join us on our sound journey - Philips' quest to improve and enhance the listening experience of music lovers, offering them the most authentic sound possible: just as the artist intended.



Philips
sound heritage



Chapel Radio, 1931. This iconic radio set was nicknamed 'The Little Chapel'.



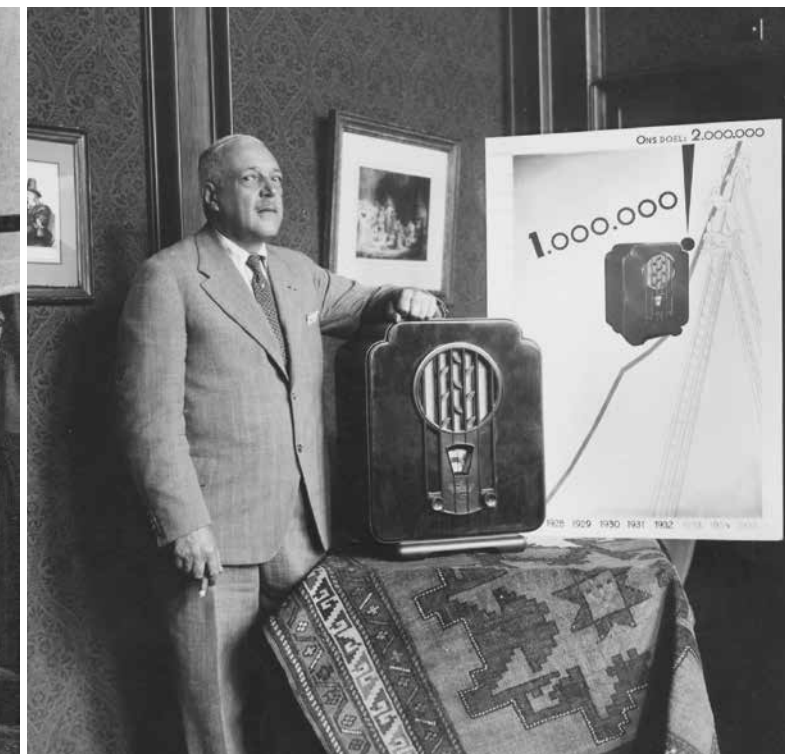
Speech by Dutch Queen Wilhelmina and Princess Juliana via a Philips short-wave transmitter, 1927.

Defining sound since the 1920s

For almost a century, Philips has pioneered audio innovations that have transformed the way the world enjoys sound.

Our quest for the most authentic sound reproduction began in the early days of radio. In 1923, we produced the Miniwatt radio valve, a smaller, more powerful and more energy efficient valve than previously available. This meant that radio listeners could replace headphones with a loudspeaker, allowing music to be enjoyed with families as a shared experience. This was the first in a long line of innovations that would cement Philips' position as one of the most important players in audio history.

The Miniwatt radio valve's packaging proudly bore the iconic Philips shield logo with its memorable waves and stars. Reflecting the role and significance of sound within the company, the waves symbolized radio waves and the stars represented the evening sky because, at the time, families would gather around the radio set in the evening to listen to news and shows. These were cherished moments that created lasting memories.



Anton Philips, co-founder of Royal Philips N.V., with the one millionth radio set sold in 1932.

The radio goes global

Philips' next major innovation, introduced in 1927, was the pentode – a five electrode radio valve. Essentially a high power electron tube that minimized signal distortion, it was the first step toward the pure sound that Philips strives for.

In 1927, The Netherlands' Queen Wilhelmina and Princess Juliana addressed compatriots in the East and West Indies using a Philips short-wave transmitter set up in a laboratory. This first-of-its-kind breakthrough generated national acclaim. Encouraged, Philips set up N.V. Philips Omroep Holland-Indie, a world broadcasting service.

Philips went on to develop and introduce a small domestic radio set in 1927. It was released at the same time as the most powerful transmitter in the world. These radio sets would soon be found in homes all around the world.

We produced the one millionth Philips radio set in 1932 and the hundred millionth radio valve in 1933, securing our position as Europe's biggest manufacturer of radio valves and the world leader in radio sets.

A legend of the recording industry

Philips' recording history began with the 1942 acquisition of Nederlandsche Decca Distributie (NDD), exclusive Dutch distributor of Decca Records and gramophone producer. Philips Phonografische Industrie (PPI) was formed in 1950 as an entrant to the record manufacturing and recording industries.

PPI played an important role in introducing the long-playing vinyl (LP) record to Europe and it distributed Mercury Records worldwide. In 1962, PPI merged with Deutsche Grammophon Gesellschaft (DGG), owner of Polydor Records to form GPG, the largest record company in Europe.

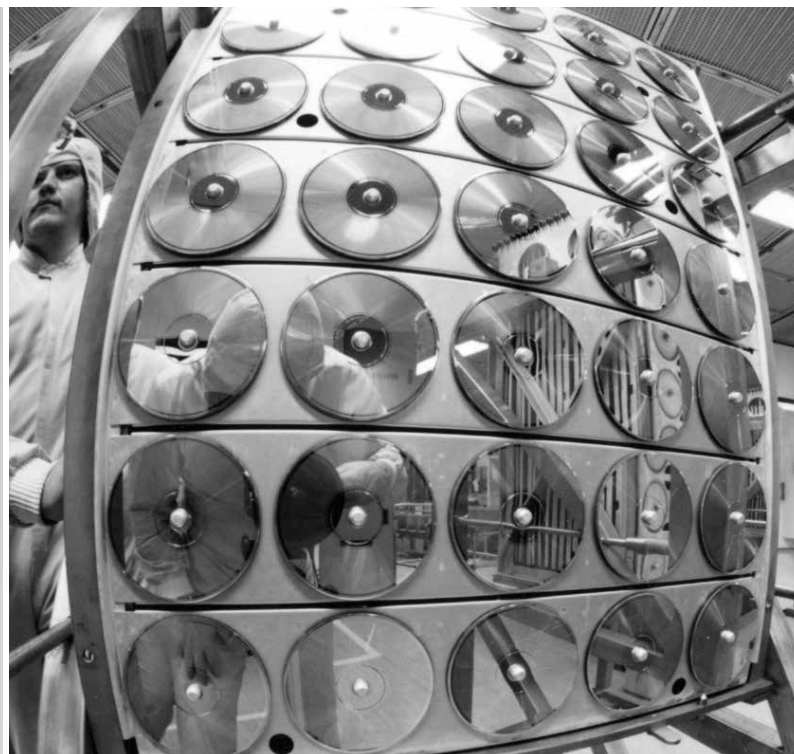
GPG became PolyGram and Polydor Records in the US in 1972 and acquired famous American and British labels including MGM Records and Decca. The disco craze of the 1970s marked Polygram's peak, thanks to multi-million selling records and soundtracks.

For a time it was the world's biggest record company, bolstered by acquisitions of famous labels including Motown. Sadly, the company's fortunes dwindled and it was sold to Seagram in 1998 to become Universal Music. Today it survives through the reissue of music under the Polydor Records label.





The world's first compact cassette recorder, 1963.



Compact discs at their peak — CD factory in Hannover, 1985.



CD -100 — The world's first CD player, 1982 (Invented by Philips in cooperation with Sony).



Streamium MC-i250 — The world's first wireless broadband internet micro Hi-Fi system, 2003.

The birth of portable audio

Philips focused on more than sound quality, releasing many product innovations that were ground-breaking in their time. It became synonymous with melding innovation and premium sound quality.

Following World War II, Philips manufactured tape recorders for magnetic sound and playback, but their loose reels meant that threading the tape was a fiddly task, restricting them to professional applications.

In 1963, the world's first compact cassette recorder was presented at the International Radio Exhibition in Berlin. This revolutionary product encased both tape reels in plastic, overcoming the problem of loose reels and was conveniently small. Originally conceived for dictation rather than music, record companies soon recognized its potential. Philips decided to license the cassette format for free, establishing itself as the founder of portable audio and a new format that would become a world standard for decades to come.

In 1966, the first albums on cassette were released under the Philips-owned Mercury label. By the 1970s, the compact cassette had become one of the most popular formats for pre-recorded music.

The CD revolution

When the popularity of the compact cassette was at its peak, Philips prepared to unveil yet another ground-breaking audio innovation. In 1974, a team of researchers at Philips' labs in Eindhoven had developed a 20cm optical audio disc with sound quality superior to the large yet fragile vinyl record. What was ultimately unveiled to the world in 1979 was an 11.5cm optical audio disc called the 'Compact Disc'. As international standardization was key to its success, Philips collaborated with Sony to establish the global Red Book standard for digital audio discs.

Philips' researchers had succeeded in their objective: music reproduction was of an unprecedented quality; without interference and noise, and resilient to light fingerprints, dust and scratches.

In 1982, the 'Big Bang' of the digital audio revolution occurred as CD players and discs were widely released in the US and other markets. As CDs became more affordable, it revolutionized the record industry and the way people listened to music at home, thanks to improved sound quality, durable materials and the ability to skip whole tracks in an instant. This firmly established Philips' reputation as an undisputed global leader in audio.

Pioneering connected audio

Hot on the heels of the compact disc came the FW-i1000 — the world's first integrated audio device connecting to more than a thousand Internet radio stations. This was shortly followed by the Philips Streamium MC-i250 — the world's first wireless broadband internet micro Hi-Fi system. This wireless product was a pioneer in connected entertainment and the forerunner of the wireless speakers that we enjoy today. It was the first audio product to offer access to multiple online music services and streaming of digital music from multiple devices on a home network.

The MC-i250 was followed by more 'Streamium' products that provided integrated home entertainment functions, accompanied with the slogan: 'Don't dream it, stream it!'.



'Chapel Radio'
Radio Receiver

1931



Philetta Radio

1955



Compact
Cassette Recorder

1963



CD Player

1982



Digital Compact
Cassette Recorder

1992



Super Audio CD Player

2000



Streamium Wireless Broadband
Internet Micro Hi-Fi System

2003



Primo Docking Speaker

2010



Philips Fidelio

2012

Fidelio heralds a new era

Building on its credentials in audio, Philips went on to develop the Fidelio range, which marked the next chapter in Philips' illustrious sound journey. Specially designed for discerning music lovers, the range is based on the premise that if you truly love sound, every detail matters. Whether it's your favorite song or movie soundtrack, you should experience sound and all its nuances exactly as the artist intended.

The Fidelio heralded a new era for Philips. Featuring docking speakers, wireless Hi-Fi, headphones, and home cinema sound, it offered a comprehensive range of premium products, all characterized by unparalleled sound quality, craftsmanship and leading-edge connected functionality.

The Fidelio remains a testament to Philips' continual obsession with sound.



Philips
competencies



Fidelio sound

Philips' acoustic engineers' creativity and daring to think beyond the boundaries of current technologies is what drives their ideas for new products. Extensive research into emerging technologies, competitor activities, and blue sky thinking from universities and innovation networks, keep them one step ahead of the game.

Fundamental to the success of the product development process is the ability to tune in to the needs and aspirations of our end users. Understanding our consumers is the cornerstone of Philips' sound engineering philosophy. Our engineers strive for solutions that will improve the everyday lives of sound aspirers and create products that deliver sound just as it is meant to be heard.

Our engineers also work closely with marketers and product designers to consider important factors, such as potential markets, technological feasibility and sales channels to ensure that new concepts reflect Philips' values and philosophy of delivering best-in-class sound, design and connectivity, before letting an idea blossom into full development.



Golden Ears

At the heart of Philips' audio division lies a team of expert engineers and technicians who share a common desire: to be the best in sound. This team of committed and collaborative specialists is the key in influencing Philips' sound signature. Despite being surrounded by the very latest monitoring and testing equipment in their innovation labs, the human ear is relied upon to help refine each product, resulting in the superior sound clarity and warmth that music lovers have come to expect from Philips. After years of experience, this highly skilled panel has earned the respected name, 'Golden Ears'.

Today, fifty Golden Ears specialists – trained to detect the smallest nuances in sound – are located at four Philips audio innovation sites worldwide. All our products undergo a sound quality engineering process, beginning with the Golden Ears panel. They define a listening standard through stringent tests and measurements to ensure our product outperforms others in a similar price range.

A functional prototype is then developed using the intended key components and architecture of the final product. At this stage, the components and design features are optimized in order to best match the product with purchasers and their budgets. Prior to launch, every product must pass the final Golden Ears blind preference test against competitor products. Only then is it ready to entertain our customers.



Design and acoustic engineering

At Philips, acoustic design and product design are inextricably linked. Both collaborate symbiotically throughout the development process – from concept to production. During this time, it is continuously refined in design and acoustics, passing through countless prototyping tests.

The collaboration between product design and acoustics is crucial to ensure that optimal balance of form and sound performance is achieved so our customer will get only the best audio experience in its class. Our teams are completely interdependent in defining new sound and design concepts, working together to create the best listening and aesthetic experience.

Fidelio Surround on Demand **A holistic approach to audio innovation**

True innovation arises from challenges and dilemmas. Home cinema users were once forced to choose between a totally immersive multi-speaker surround sound system and a simple no-fuss Soundbar.

When Philips invented the all-in-one Soundbar years ago, we brought simplicity to the home cinema experience. Over time expectations have grown higher and living conditions have changed. Today people appreciate Soundbars for their simplicity but they want more. They are looking for a full 5.1 experience and total freedom of speaker placement, without wires.

Intrigued by this dilemma, our designers and engineers collaborated to come up with a revolutionary solution that would combine the best of both worlds: the immersive power of a 5.1 system with real rear surround sound from the back – all packaged in the sophisticated simplicity of a Soundbar.

Our engineers explored and incorporated new wireless technologies into our designers' flexible and innovative design that celebrated intuitive ease and enjoyment of use. And so, the Fidelio SoundBar HTL9100 was born. No detail was spared in the creation of this unique product. We found a way to tuck two fully wireless battery run speakers into a sleek Soundbar, and designed it so that they could be easily removed when required for an immersive 5.1 sound experience. Its simple twist-and-release mechanism allowed users to remove these side speakers with just one hand, transforming them into powerful rear surround sound speakers.

When watching a movie or playing games on the Fidelio SoundBar HTL9100, the wireless side speakers can be detached from the main unit, transforming into powerful rear surround sound speakers. Its graceful airfoil design is smooth and seamless, without any hard edges to ensure clean and natural sound.

Through the Fidelio SoundBar speaker with Surround on Demand, we deliver maximum audio enjoyment and absolute flexibility through sleek design and wireless detachable speakers. It offers people the choice of simplicity or immersion whenever they want.

Sound and acoustics innovation engineers



Benoît Burette

The scientific side of sound and music has always been the most attractive to me. I've never been a musician: my career began as a sound engineer's assistant, aged nineteen. The practical experience I gained in a recording studio spurred me to undertake a further degree in scientific computing followed by another degree in acoustics, which brought me to Philips.

I particularly enjoy collaborating with other 'Golden Ear' acoustic engineers at Philips. We collaborate regularly on ideas. Our passion for sound unites us and there's a real spirit for sharing our obsession. For example, when developing SoundSphere we experimented with ways of making it more compact, changing tweeter positions and monitoring the effect. We toyed and toyed until we were happy with the product you can buy today. This typifies our approach to innovation: discovery, building great things from unlikely sources and the persistence to make it work.

In my role you need to understand what people desire from sound. You need a good technology background in order to translate sound needs into a great product that will excite them – it's not about being obsessed with the technology, it's about being obsessed with sound, and those subtle details that make the difference.



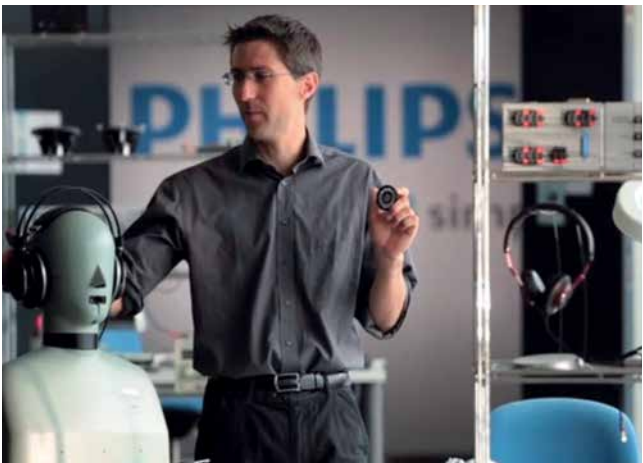
Lee Kheng Wee

I joined Philips in 1991 as an acoustical engineer and will have been with the company twenty three years by the end of 2013. In this time, I have had the privilege of spinning off many new audio products, from portable audio all the way to multi-channel home cinema systems.

Music has always been a major influence in my life and cultivated an interest in audio engineering. This in turn brought me into the audio design field, developing systems that create beautiful music. My goal is to craft products that replicate music faithfully and my passion is designing affordable products that produce satisfying sound.

My current role is in sound and acoustics function management for home cinema sound. This involves the creation of audio technologies that support the vision for the business and help set out our product strategy in the long term. I am also responsible for developing audio architectures, defining key audio functions and features and collaborating with product designers to ensure the quality of every product launch.

In my job, I have had complete freedom to deliver innovations and ideas. This freedom to develop great sound products is what helped us gain market share in the early years and it continues to this day with our 'Obsessed with sound' mantra. The many great product awards and reviews we have received over the years as a result of this dedication are especially rewarding and gratifying.



Loïc Tanghe

Every day I am inspired by the prospect of creating something that can change the way people enjoy music. As a child, I was eager to understand how things worked and I have always been passionate about music – both listening and playing to it. Sound engineering offered me the perfect mix for a career.

At Philips, I run the headphones pre-development program, which involves developing new products and product ideas. I collaborate closely with the engineering, design and marketing teams, especially on Fidelio products where we fuse science and craftsmanship. We all share a common goal: to ensure people can enjoy a better listening experience in their everyday life.

The desire to be innovative is widespread at Philips. Previously, I worked on HP1000 Hi-Fi headphones, which allowed for experimentation with transducer technologies. This allowed for better understanding of the membrane motion of a speaker; providing new ways of measuring and understanding speakers. The product we went to market with was well received by customers and professional reviewers – particularly in relation to sound quality.

To work for Philips sound, you have to be dedicated. Of course understanding the technology is a prerequisite, but most of us believe we must experiment with ideas and have our customers in mind.



Thomas Peeters

As long as I can remember, I've been passionate about music and sound. At home, music was always a part of my environment thanks to my father's keen interest in Hi-Fi, so I got to appreciate what great sound is all about from a young age.

I started playing the guitar when I was just six years old. Since then I've continued to make music in a variety of ways, like experimenting with and crafting my own sound. I was especially interested in the engineering that goes into making electronic music and I got more and more interested in understanding the acoustics and the science of sound.

During my academic career and after, I spent time in research – both for Philips and the European Space Agency. The work for ESA involved analyzing heart, blood pressure and breathing signals by using tools that I learned about whilst studying audio signal processing. These attributes enabled me to actively apply my knowledge within Philips. I feel I'm in my element.

For decades, people have taken their music with them on the go. In terms of sound, compromises are still being made so you don't get the same experience from your portable music player and headphones as from a big, high quality sound system. For me – in an ideal world – you would be able to enjoy and share your music in perfect sound quality no matter what the circumstances. Once the reproduction system becomes perfectly transparent, it will be all about the music again. In addition, wires in any shape or form will become a thing of the past and your sound system will blend well with the environment.

Product designers



Bazil Tung

I've always been very hands-on since I was young, and I get immense gratification out of making things with my hands. Whether making objects or music, I've always felt a natural urge to create. Over the years, this grew into an appreciation for well-designed objects and an admiration for well-produced sound. Soon, passion turned into an obsession, and it became clear that audio design was the best possible outlet for me to live out both of these passions.

The great thing about my role as an audio designer at Philips is that it allows me to be very hands-on in the entire development process – from start to finish, defining and drawing out product concepts, prototyping acoustic and wearing comfort ideas, and following through to manufacturing executions before the piece is finally completed and delivered to the shop shelves.

Each day can be different from the next. We could be throwing innovative product ideas around the room one day, making decisions on colors and finishing with the trends team the next, and in between we're challenging our acoustic experts and suppliers to achieve the perfect sound and bring all of our ideas to reality. The only typical thing at Philips is that there is never a typical day, never a dull moment.

To work in audio design at Philips, you have to be truly passionate about making great design and great sound, be engaged in what you create and genuinely care about reaching people. I think only this kind of obsession inspires creativity and, in turn, makes truly great and meaningful audio products.



Charlie Bolton

I have been a product designer for over ten years, with seven of those years spent working at Philips. I've designed many products for Philips, including headphones, TVs and speakers. In 2007, I moved to the Hong Kong Design Studio where I am now the lead designer for the Fidelio speaker range. This is one of the highlights of my career so far. I've worked on the original Fidelio speaker family and have seen it grow to become market leaders in this category.

My role as Senior Design Consultant has a wide range of responsibilities. The most enjoyable part is the actual designing: the early stage in the project where you have to think of new ideas and create new concepts. However, that is just one part of my job. As important as coming up with the design is making sure it gets to market. Therefore co-designing with acoustic and mechanical engineers is essential in achieving a winning proposition. For the Fidelio docking range, we are looking at using natural materials that enhance acoustic performance. It is the first time we are using real wood housing instead of plastic.

Designers collaborate closely with engineers to find the perfect balance of form and function, resulting in truly immersive yet natural sound in a stunning design. I am always surrounded by inspiring material in the design studio. Our visual trends team has a complete library of every imaginable material. In addition, my design colleagues always have their latest ideas and projects on display, so just by walking around the studio you can get inspired by other people's work.



Greg Foster

I first joined Philips in Melbourne in 1981, followed by The Netherlands and Singapore, before settling in Hong Kong in 1997 as creative director, leading the Lifestyle Entertainment design team.

Having been in product design for many years, I've experienced many changes in technology, design methodologies to generate ideas and solutions closer to user desires and needs, and resulting aesthetic themes and transformations.

As designers, we define and shape these transformations into great, relevant product solutions and experiences. These evolving challenges fuel our passion and our responsibility of how we define the future. Our passion also arises from the desire to create solutions that are recognised and valued by users as solving a problem or need, or simply as objects that they take pride and enjoyment in owning. The ultimate reward is building trust and excitement in the brand through the consistency of design quality and creativity in future solutions.

As Creative Director for home audio, connected entertainment and home cinema and video systems, I work with a great product design team of diverse international backgrounds and talent covering all the categories. This diversity brings a richness and comprehensive view to the creative input and design solutions. In home cinema, product design, together with other design competences, is continually raising the bar in design quality and innovation through the exploration of new archetypes and unique form languages, new materials to address contextual applications, and originality in propositions (eg. Surround on Demand), leading to improving consumers' overall experiences.

It is the element of creation that keeps me moving forward and wanting to continue developing objects that are desirable, relevant and purposeful.



Wai Chung

Philips is my first employer and I'm still working here now, so essentially this is my first job! I have been in design for sixteen years and have been involved in audio since 2002. I started out with headphones, before moving onto personal audio and now my role is Senior Design Consultant in the home audio team working with a group of designers on products such as Hi-Fi systems, clocks and boomboxes.

Basically, I am product designer. I help with the entire process of product development from concept to final design. It all starts with initial sketching workshops, then discussions with the engineers regarding technical restraints, finalizing the design, and the production of the first molded parts right down to the trial runs until the product is realized.

It is an exciting time for those of us developing the Fidelio range. We have a clear vision of what we want to achieve. Working with the acoustic engineers from the early stages, we are very proud to be able to craft a selection of premium products that have great sound, are well integrated and have really well-considered features.

Indeed, the Fidelio is a truly inspiring range in terms of design.



Philips Fidelio

Philips Fidelio





Philips Fidelio headphones

The Philips Fidelio headphones range follows a simple design philosophy with a focus on unique functions. Its high fidelity sound signature is complemented by refined craftsmanship and offers music lovers a distinctive listening experience. Every material has been carefully selected for its unique characteristics, with the single-minded goal of offering the most comfortable and enjoyable experience, whether in your own home or on the go.



Philips Fidelio M1BT headphones

The Philips Fidelio M1BT features seamless *Bluetooth*® 4.0 connectivity with high definition sound and is the ideal companion for anyone that enjoys high quality wireless music. Its lightweight yet robust construction is specifically developed for superb comfort on the go. Memory foam ear-pads are designed with breathable materials to disperse pressure and heat build-up. They are so comfortable you might even forget you have them on.

Acoustically sealed cushions ensure every note and nuance comes through as the artist originally intended while internal chambers are controlled to eliminate sound leakage, even at higher volumes. High powered 40mm neodymium drivers reproduce all the dynamics of your favorite music, delivering rich bass, natural mid-range and clear highs that altogether make up the unmistakable signature of Fidelio's meticulous sound engineering.

Two microphones, one for voice and the other for ambient noise, adjusts sound for optimal call quality. You can switch easily between music and calls using the intuitive ear shell controls.

From the acoustically sealed cushions and aluminum hinge system to the internally integrated cables and stitched genuine leather headband, every detail of the Fidelio M1BT is the result of our passion and dedication to deliver an optimal sound experience – always.

Philips Fidelio S2 headphones

For a truly immersive and comfortable music experience on the go, look no further than the Fidelio S2, the result of our obsession with delivering high fidelity, balanced sound from an advanced design.

After extensive testing, our designers decided on a durable copper alloy outer housing featuring a concave form to disperse pressure on the ear for longer wearing comfort. This housing is also engineered to reduce resonance and vibration, ensuring genuine precision and superb sound detail. A semi-closed back architecture, combined with large premium-quality drivers, deliver greater bass and minimize sound leakage while a Layered Motion Control (LMC) diaphragm delivers high frequency reproduction to complete the Fidelio sound signature of extended bass, transparent mid-range and a more natural sound profile.

The Fidelio S2 comes with five sizes of ultra-soft acoustically sealed silicone cushions and two sets of Comply™ foam tips to provide a perfect fit with superb noise-isolation. Its dual-sided cable features an in-line control and microphone, allowing easy switching between music and calls. Smart details like the anti-tangle slider makes life even easier.





Philips Fidelio portable speakers

Mobile lifestyles demand high quality mobile music. Philips Fidelio wireless portable speakers deliver the perfect balance of convenient portability with high definition sound performance that is true to the original recording, as the artist intended, and in a truly portable format. Whether for enjoyment while traveling or around the house, you can immerse yourself in your favorite music, brought amazingly to life – wirelessly.

Philips Fidelio wireless portable speaker P9X

The Fidelio P9X wireless portable speaker delivers perfectly on every Fidelio proposition, from its timeless and durable design to its signature clear and immersive sound performance.

Conceptualized as a stretched mono block form factor, the speaker creates a wide stereo soundstage from a sophisticated yet understated design. It is finely crafted using real wood and premium materials, including robust aircraft grade aluminum for the front grille.

The Fidelio P9X boasts high fidelity aptX® and AAC Bluetooth® wireless technology, delivering rich, powerful and crystal clear sound. Compatible with both latest Android and Apple iOS smartphones, tablets and other devices, the Fidelio P9X delivers audio quality our customers have come to expect from us. Wireless music has never sounded this good.



Portable speaker sound technology

The Fidelio P9X is equipped with a total of six high efficiency transducers: four high-power 2" woofers, two ¾" soft dome tweeters, and a large area passive radiator per channel. The use of soft dome tweeters ensures incredibly detailed and precise high frequencies, resulting in an immense spatial soundstage. The woofers and passive radiator technology work in combination to deliver vivid mid- and low-ranges, accompanied with deep and tight bass.

Our engineers also included high performance amplifiers to create dynamic sound that comfortably retains its impact at all listening levels. At the same time, an optimized crossover filter ensures that the sound remains as natural as possible in different acoustic environments – from small rooms to open spaces, and from soft listening levels to maximum volume. Whatever your preferred music genre and volume levels, and wherever you choose to enjoy your music, you can be sure that the Fidelio P9X exceeds all expectations.

The Fidelio P9X also comes with the latest wireless technology so you can easily stream your music from your smartphone, tablet, laptop or other Bluetooth®- enabled device. With NFC technology for one-touch pairing with NFC-enabled smartphones and tablets, the Fidelio P9X streams high-quality music via Bluetooth® in an instant, both indoors and outdoors.

“When it comes to providing great sound from compact forms, there can be no compromise on component quality. Every element must be carefully tuned to work together to deliver on the Fidelio promise.”

Matthew Dore, Sound & Acoustics Innovation Engineer



Philips Fidelio docking speakers

Listen to music on headphones while out and about, then connect it to speakers back home in seconds. The exquisitely crafted Fidelio docking speakers unleash music with unadulterated gusto. Built to the standards of high-quality acoustic equipment, the range features custom-made docking speakers designed for Apple as well as Android products to ensure everybody can enjoy the same simple, plug-and-play functionality.

Philips Fidelio SoundSphere wireless speakers

Philips Fidelio SoundSphere wireless speakers provide both high fidelity sound and hassle-free access to all your music from iTunes. They exemplify perfection through uncompromised excellence in acoustic engineering and exceptional craftsmanship. The stunning sound quality of the SoundSphere wireless speaker lies within its unique design, through the patented positioning of the tweeters and the woofer. The quality of selected internal components and materials, as well as the care taken in tuning the loudspeakers for extreme acoustic environments, guarantees a sound that is detailed and dynamic in all circumstances.

The Fidelio SoundSphere wireless speaker utilizes Airplay to seamlessly stream music over the home Wi-Fi network from iTunes on Mac and PC, iPhone, iPad and iPod Touch. With AirPlay, you can enjoy all your music via the high fidelity speakers of the Philips Fidelio SoundSphere without plugging in cables or even docking your device.



SoundSphere technology

The focus of Philips Fidelio speakers has always been on sound quality – pure and simple. By combining SoundSphere technology with Apple's Airplay system, the SoundSphere offers a unique audiophile-quality Hi-Fi experience. The performance of the SoundSphere speakers is the result of a 7-year research program by Philips audio experts coupled with excellent acoustic engineering and exceptional craftsmanship. It also has a striking design:

“Fidelio SoundSphere speakers feature unique tweeters. Released from the traditional speaker boxes, the tweeters are free to deliver sound in all directions. The outcome is a very natural sound, with deeper and wider sound stage.”

Benoît Burette, Sound & Acoustics Innovation Engineer

Each Philips Fidelio SoundSphere speaker has its high-frequency transducer – the tweeter – positioned outside the speaker box. Suspended above, the tweeter's acoustic radiation is not impeded by any physical structures, so the ideal listening sweet-spot area is larger. The positioning of this is linked to the acoustic principle that if a driver is mounted into a large (and usually flat) front baffle, its directivity increases. Conversely, if the tweeter's faceplate dimensions are minimized, the differences perceived in sound when the listener moves are smaller. This architecture transforms the tweeter, up to high frequencies, into a point source that emits spherical sound waves – one of the holy grails of acoustics.

Cradling the tweeter below is the low-frequency transducer, or the woofer, which has a patented position and angle. Together with rigorous passive crossover engineering, this minimizes the interference between the transducers and ensures the output of a particularly natural sound.

One challenge was defining the best position for the tweeter in combination with the woofer, and avoiding early reflections on the tweeter cabinet. The solution was to make the tweeter cabinet and arm as thin as possible so it would be acoustically transparent to the woofer's sound waves. The combination of the transducers positioning, crossover design, and structure allows for very balanced and detailed sound throughout the listening room. A patent application has been filed to protect this unique combination of technology and design.

Philips Fidelio

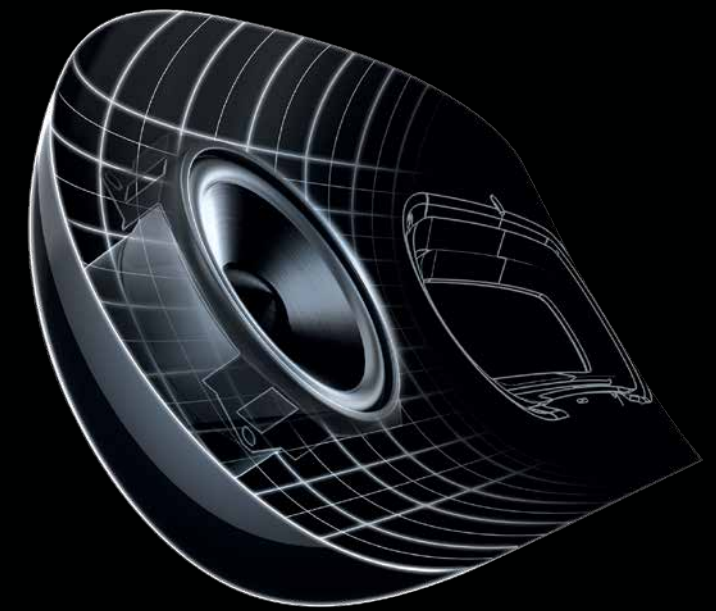
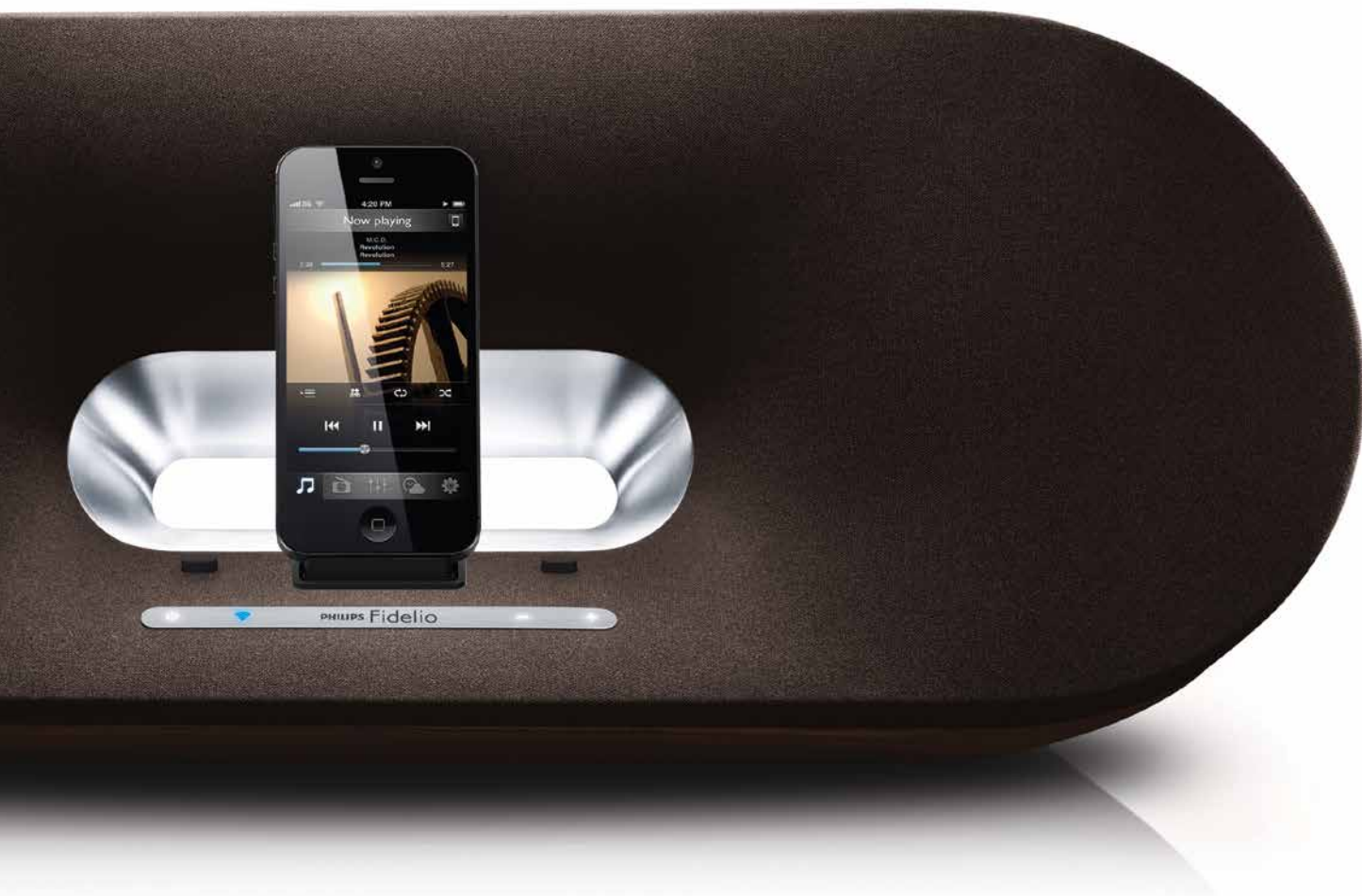
Primo wireless docking speaker

Designed for audiophile quality, the Fidelio Primo wireless docking speaker with AirPlay offers wireless connectivity, AirPlay, and enhanced bass performance with even more clarity than its earlier generations. Enabling consumers to play music from their iPad, iPhone, or iPod with optimum precision, its crossover design lets you hear the detail of every note, in a natural and complete way.

With its distinctive, contemporary design featuring the clean lines and sensuality of the curved wooden back, the Fidelio Primo not only looks stylish but is in itself a more effective structure for acoustics. This is Philips SoundCurve technology.

We redesigned the bass port to reduce turbulent noise and to provide pure and clean bass. Premium audio technologies, including active crossover and PureDigital engineering, have been employed for clearer vocals and voice presence, enhanced sound balance, and defined instrument differentiation.

Handcrafted from natural materials and featuring an iconic wooden back, the Fidelio Primo is a top-of-the-range speaker that epitomizes craftsmanship in terms of acoustics and design. With its sleek, premium form, it will make a bold statement even in the most stylish home.



SoundCurve technology

Elegance meets superb sound quality with the Fidelio Primo wireless docking speaker. It is designed with a curved back, which naturally reduces internal resonance as opposed to a conventional parallelepiped box-shaped speaker design, which is prone to internal 'standing wave' build-up – a strong energy build-up at a particular frequency. The curvature also increases the stiffness of the speaker cabinet, further reducing internal structural mechanical resonance and coloration, which results in higher precision and natural sound, both in the midrange and bass reproduction.

Listeners will recognize the difference in sound quality between the SoundCurve and conventional box-shaped speakers in the midrange (frequency spectrum for voice, guitars and violins). Less resonance brings more precision, therefore improving instrument differentiation and reduction of coloration. The curved back cabinet is a perfect blend of authentic sound and iconic design. Essentially, every Fidelio product is a combination of authentic sound, iconic design and simplicity of user experience.

“The Fidelio Primo exudes user-friendliness and elegance, crafted to reflect the beauty of objects in the modern home. Superb looks and sensational acoustics cross paths in this docking speaker.”

Benoît Burette, Sound & Acoustics Innovation Engineer

A speaker driver has a front wave – the one you want to hear, as well as a back wave, which is best kept inside the box. It cancels out the front wave and reduces bass level dramatically. When two walls of the box are parallel, the back wave will bounce back and forth between them, creating a standing wave. This resonance at a single frequency is more audible and the sound is said to be 'colored'. Curved walls will make these reflections occur in a more diffused way inside the box, so that the back wave will die away without creating a strong standing wave. Sound remains natural and clear, unaffected by the typical 'shoebox' sound that usually occurs with square box designs.



Philips Fidelio wireless Hi-Fi

Philips has long been a leader in wireless Hi-Fi, evolving the technology in line with the demands of music lovers around the world. A large music collection is no longer necessary since music can be streamed straight off the internet and accessed on smartphones, tablets and computers. This has had a significant impact on what can be expected from new wireless audio products.



Fidelio wireless Hi-Fi speakers A9

Philips Fidelio wireless Hi-Fi range

The Philips Fidelio wireless Hi-Fi range is designed for the connected audiophile. It combines advanced acoustic engineering with cutting-edge wireless technology and is fully compatible with all Apple and Android devices. It's so easy to access all your digital music directly from a smartphone, tablet or computer in order to enjoy online music services, or listen to more than 30,000 internet radio stations available via the Fidelio wireless Hi-Fi range. No remote is required as the Philips AirStudio app allows you to play and control content from all your music libraries wirelessly, just by using your smartphone or tablet.

The Fidelio wireless Hi-Fi is available in three sizes: the dual A9 speakers for the most discerning sound purist; the all-in-one A5 for large rooms, and the compact yet powerful A3 speaker, which is ideal for secondary rooms.

The range has been carefully crafted with innovative design for high fidelity sound and features Class-D digital amplifiers, gold-plated connectors and lossless audio codec support, providing a completely immersive yet pristinely detailed listening experience.

The top-of-the-range A9 model also boasts dual speaker boxes with 100W audiophile grade Hi-Fi transducers, dome tweeters and low distortion woofers for the ultimate high-end sound.

To create a wide stereo sound effect, the Fidelio wireless Hi-Fi incorporates angled technology. Each unit is designed with angled speakers to maximize the listening sound stage. Dedicated side-firing drivers and tweeters create a more precise separation, and a split acoustic chamber further enhances the stereo sound impression. Thanks to this Philips technology, the speakers are able to reproduce true Hi-Fi quality sound.

The speakers can be expanded over time throughout your home and controlled directly from your handheld device. If you want to keep your existing speakers or Hi-Fi, the Fidelio wireless Hi-Fi receiver A2 will upgrade your speakers, or the Fidelio wireless Hi-Fi link A1 will transform your Hi-Fi into a wireless music portal, bringing a host of features and connectivity to your existing kit.

“The Fidelio wireless Hi-Fi speaker range feature Philips high-end drivers and cutting-edge digital amplifiers. The idea behind the design is to improve the speakers’ versatility both in terms of positioning in your room, and listening area.”

Benoît Burette, Sound & Acoustics Innovation Engineer



Fidelio wireless Hi-Fi speaker A5



Fidelio wireless Hi-Fi speaker A3



Fidelio wireless Hi-Fi receiver A2

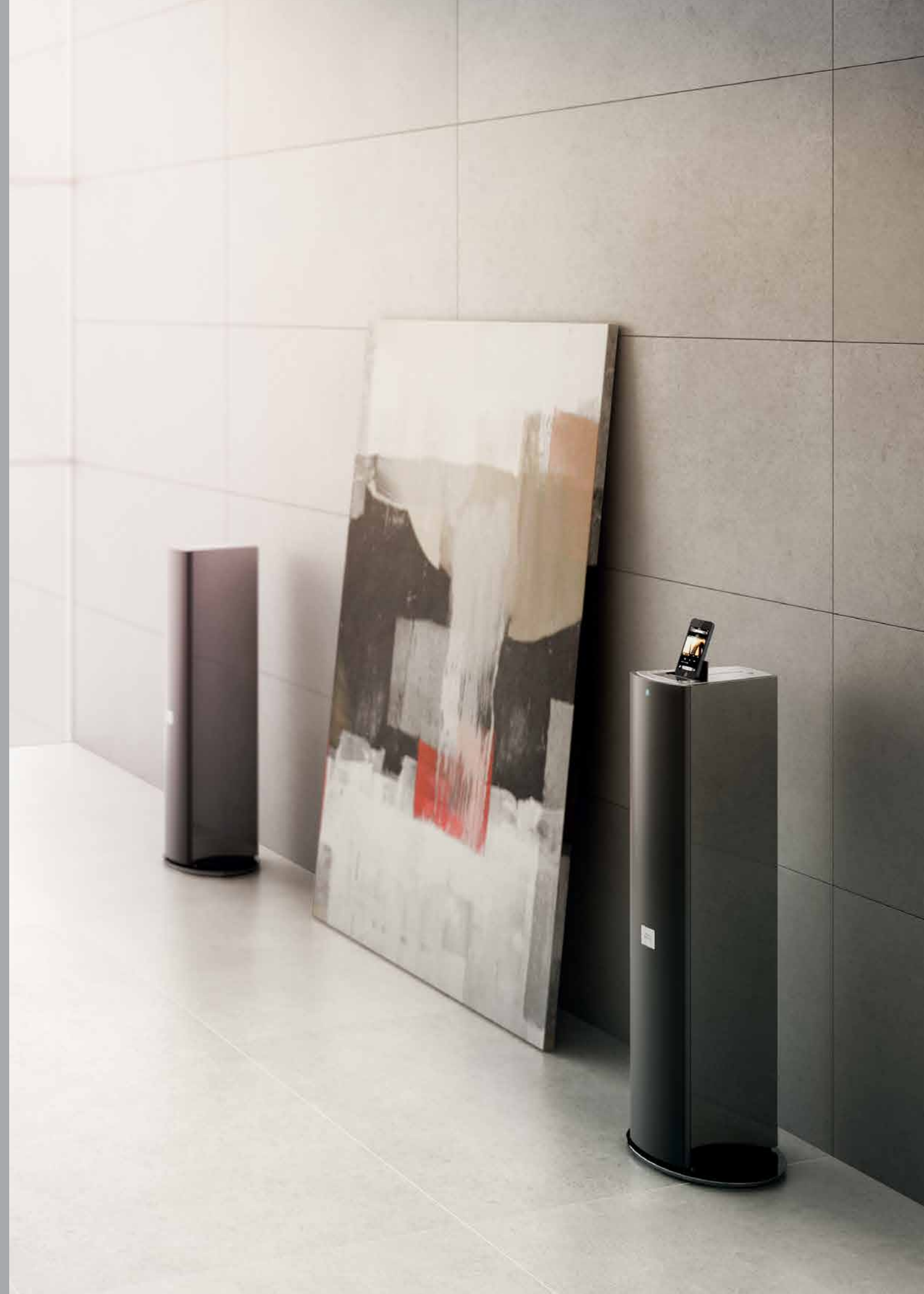


Fidelio wireless Hi-Fi link A1

Philips Fidelio audio systems

Consumers today can enjoy their music freely through convenient of wireless music streaming, while maintaining large CD collections. They demand great sound performance from versatile sound systems that allow them to do all this without hassle.

Philips Fidelio audio systems are all integrated and capable of playing from multiple sources effortlessly. Products like sound towers not only deliver on powerful sound performance whatever the source, but also fit beautifully in any living space.



Philips Fidelio sound towers

The stately Philips Fidelio sound towers is designed to create impact – in every sense of the word.

Its sleek form factor delivers amazingly wide, room-filling and immersive stereo sound. Discerning music lovers no longer have to contend with bulky separates and messy cables that unnecessarily take up space in their homes. With our sound towers, they can have the best of both worlds: efficient form and contemporary simplicity to complement any décor, without any compromise on sound quality.

State-of-the-art technologies, including *Bluetooth*® with aptX®, dual lightning and 30-pin docking, plus CD and tuner are included in the speakers' small footprint. With digital coaxial input and optical input, consumers can enjoy superb sound from their TV just by connecting it to our sound towers.

As an ideal acoustic material, wood is unique in its ability to combine advanced acoustic performance with stylish authenticity. The stiff properties of wood reduce the vibrations that could interfere with the production of crystal clear sound. At the same time, its easily shapeable characteristics make it the ideal material for creating an appealing form factor that today's consumers seek for their contemporary homes.

Fidelio sound towers are made from wood and finished with high-gloss piano lacquer and aluminum. Each cabinet is seamlessly finished from the inside, to create an optimal wave propagation environment for high fidelity audio production.



Floor standing speakers with high fidelity *Bluetooth*® transmission

Fidelio sound towers' floor-standing speakers are designed with an optimal acoustic volume for a rich yet pristine sound experience. They combine the mid-range accuracy of a traditional floor-standing 2-way speaker form factor with dynamic bass extensions to support the lower end of the sonic spectrum, making them ideally tuned for exquisite music reproduction.

We took things further by ensuring that such amazing sound stays that way even when streamed across devices. *Bluetooth*® sound transmission is common in today's sound systems but is often criticized for its average sound quality.

To ensure high fidelity wireless transmission, our engineers equipped our Fidelio sound towers with aptX® and AAC wireless technology, understanding all too well that speaker performance is sometimes limited by the quality of the transmission medium. The codecs allow for high quality music content to be enjoyed on the latest smartphones, tablets and other devices.

Unlike standard *Bluetooth*® audio that uses SBC codec built for basic audio transmission, our sound towers rely on advanced aptX® codec to support the crystal clear yet powerful sound that Philips Fidelio consumers have come to appreciate and expect.

“In terms of delivering quality sound, sound towers are the full package. No matter which of the many source options you choose, the music you hear captures all the emotion of the original performance.”

Matthew Dore, Sound & Acoustics Innovation Engineer



Philips Fidelio home cinema sound

The Philips Fidelio home theater range brings movies to life in your living room by surrounding you with Crystal Clear Sound from every angle. It boasts premium Fidelio design credentials and combines integrated connectivity features with advanced technologies for best-in-class sound quality. The Surround on Demand and SoundSphere DesignLine feature innovative design for discreet entertainment solutions to suit today's modern living spaces.

Philips Fidelio E5 wireless surround cinema speakers

Sound solutions for home entertainment are constantly evolving. The boundary between speaker systems for movies and for music is also blurring. These previously distinct product propositions are now integrating as more and more consumers demand just one good sound system that fits all purposes, without compromising on sound in any usage scenario.

In response, we came up with a breakthrough idea and a visionary solution to this convergence trend: Surround on Demand.

At Philips, we firmly believe that there is no tradeoff between aesthetics and acoustics; design plays a significant role in enhancing sound quality. As such, the Fidelio E5 perfectly integrates beautiful form, intuitive function and amazing sound. Its stunning square profile features soft edges, contributes to minimize disturbance on the sound waves as they emanate from

the speaker and radiate around the cabinet. The refined profile also gains much more acoustic volume within its controlled dimensions.

Through close collaboration between design, acoustics and engineering, we ensured that the Fidelio E5's entire design – that is, its size, components and structure – delivers best-in-class listening experience while enhancing any home interior.

A perfect solution, the Fidelio E5 combines the finest qualities of a high performance music system with a state-of-the-art home cinema speaker set.



Surround on Demand technology

The Philips Fidelio E5 further extends our Surround on Demand concept, which was first introduced to the market as the Fidelio SoundBar HTL9100.

The Fidelio E5 allows you to enjoy your music collection in stereo playing mode, but when you want to watch a movie and have a real immersive experience, just undock the top part of the speaker and place them anywhere behind you. This transforms it into the rear surround channel, giving you a true 5.1 surround sound experience without the clutter of cables and wires.

The top part of each speaker becomes a fully independent wireless speaker that reconfigures itself automatically to let you benefit from a true surround sound experience. The surround speakers define the spatial positioning of a sound element e.g. any action comes dynamically to life, immersing you in the thrill of your favorite blockbuster.

When the speakers are reconnected and in stereo mode, they automatically readjust take reap and deliver full volume power for high fidelity sound. When having a party, just detach the speakers and position them at different corners of the room to spread the sound evenly throughout the space. Get everyone into the same party vibe with your favorite playlist!

The subwoofer makes use of a down-firing driver to form a tower shape to minimize the footprint without compromising on the sound performance.

Authentic leather handles on top of the satellite speakers make them easy to grip and move around. The spring-loaded mechanism under the handle can be retracted, leaving the design clean and seamless. When you put the satellite speakers back, there are subtle metal guides to help you along.

“Fidelio ‘Surround on Demand’ represents a breakthrough in surround sound. Users want choice and the Fidelio E5 gives them flexibility to enjoy superior audio and surround sound, when and how they want it in their living space.”

Lee Kheng Wee, Sound & Acoustics Innovation Engineer



Philips Fidelio SoundSphere DesignLine

Fidelio SoundSphere DesignLine is a Philips flagship home cinema speaker system designed to provide a pure sound experience for consumers. This entails having the perfect balance between performance and style, with well-defined acoustic properties – all beautifully packaged in a distinctive design.

Three key elements that set the Fidelio SoundSphere DesignLine apart is its timeless design; honesty and authenticity of its selected materials – like real wood, metals and finishing, and the premium quality and harmony of all its composite forms and fine details.

The chrome finishing used for the neck helps to disappear into the ambient environment, allowing the product to blend perfectly with any interior design. Contrast this with the black speaker grille that greatly emphasizes that floating tweeter, which is what gives the SoundSphere its unique design character. In fact, the speakers are designed to look stunning from every angle.

The design and acoustics engineering are explicitly linked. Its elegantly rounded form is not just the result of design, it actually serves to enhance sound performance. Without any straight surfaces, it radiates all the sound waves evenly all around the speaker to reproduce better audio signals and a far superior sound enjoyment experience.

The selection of genuine wood for the cabinet and metal for the tweeter housing – both inert materials, which are dense and solid – makes for good sound dampening. This removes any coloration in sound reproduction, so the listener can appreciate clear yet natural audio.



SoundSphere DesignLine technology

Fidelio SoundSphere DesignLine was conceived to recreate as closely as possible, the acoustic holy grail of a point source: a theoretical ideal speaker that generates all frequencies from a single point in space.

Its tweeters are strategically positioned at 1.1 meters above the floor, which is the optimal seated ear level. Its 6.5" subwoofer – in its rounded conical enclosure – provides tight and powerful bass. With precise audio crossover engineering and careful positioning of the tweeter and subwoofer, interference is greatly minimized.

The free-floating dedicated tweeters above the speaker box deliver truly natural, deep and wide sound image. This arrangement allows sound to radiate more freely and effectively in a room without possible interferences from the speaker box and between the speaker drivers.

Fidelio SoundSphere DesignLine creates a wider and deeper soundstage from non-directional sound waves radiating in free space. Its immersive sound has an exceptional three-dimensional quality to it so that you can clearly discern every instrument. SoundSphere technology also sends off sound waves freely, which fills the room with life-like acoustics, generating a much wider sweet spot than regular speaker boxes. You get to enjoy the same natural and three-dimensional sound no matter where you sit in the room.

It's almost as if it's not there, and you're right in front of the musicians. Without interference from the speaker box the speaker drivers, what you get is unprecedented high definition with detailed bass, uncolored midrange, clean highs and believable vocals, exactly how the music would have sounded as it was played. The 32-bit dual-core DSP is the heart of the SoundSphere DesignLine with Universal Class D (UCD) amplifiers offering distortion-free audiophile dynamics. Last but not least, the advanced intuitive control features *Bluetooth® aptX®* and AAC for lossless music streaming from your mobile device and EasyLink controls HDMI-CEC devices on one remote, while the HDMI Audio Return Channel (ARC) allows users to access all the sound from your TV.

“Fidelio SoundSphere DesignLine dares to be different. Its technological breakthroughs allow it to deliver sound like a single source while creating a wide and deep soundstage. It is certain to make a statement.”

Lee Kheng Wee, Sound & Acoustics Innovation Engineer

Philips Fidelio SoundHub 2.1 home cinema speakers

The SoundHub is a category designed for growing group of consumers who want the full home cinema experience plus a powerful system for listening to music without their living rooms becoming dominated by numerous speakers and cables. An all-in-one system, the Philips Fidelio SoundHub 2.1 speakers with amplifier and 360Sound allows you to enjoy movies and favorite music with best-in-class sound quality and the latest integrated connectivity features.

Each speaker box has three premium drivers: one front-firing driver and two side-firing drivers that project embracing sound from all angles – with the help of Digital Signal Processing – making you feel like you're right at the heart of the action. Together with a powerful active subwoofer, Dolby Digital and DTS Digital Surround, Fidelio SoundHub speakers will fill any room with amazingly immersive surround sound.

The system features Music iLink, which allows the convenience of playing music directly from your MP3 player by simply connecting to the Music iLink jack.

The system's high-quality aluminum finishing gives it a sophisticated look and its compact design means you can enjoy a cinematic listening experience without bulky speakers cluttering your home.



360Sound technology

The joy of going to the cinema is about losing yourself in the moment and becoming completely immersed in the movie you're watching. At Philips, we wanted to recreate this kind of cinematic audio experience where you can easily get lost in the story, surrounded by speakers, without being able to locate where the sound is coming from.

Philips 360Sound brings this same effect to you, but in your living room and from a 5.1 home cinema system.

Vastly different from a conventional 5.1 home theater system, 360Sound is uniquely designed with three drivers in each satellite speaker – a front one, and two side-firing ones that are angled to project immersive sound all around you. In addition to the principle of acoustic dipoles, Philips uses a proprietary algorithm to further enhance the embracing sound effect. Built with premium acoustic components like soft dome tweeters, Neodymium magnets and Class D digital amplifiers, 360Sound delivers exceptional sound from all angles.

The biggest challenge for our audio engineers was finding the right balance between the sound produced by the direct speakers and the side speakers. They were looking for an embracing sound experience that remains natural and provides effortless listening. Following Philips' rigorous development and testing processes, our engineers fine-tuned 360Sound with the expertise of the Golden Ears listening panel, as well as through tests with audiophile consumers.

“For a good cinematic experience, the viewer should be involved in the story of the movie. That means that he or she has to be able to follow the dialogue and at the same time be embraced by the action. The immersive 360Sound is carefully tuned to provide just this balance.”

Gerrit De Poortere, Sound & Acoustics Innovation Engineer

The journey continues

Philips continues to set new standards for audio innovation with the Fidelio range, delivering the best sound performance through distinctive design, alongside intuitive user experiences. These values underpin everything we do and every product we create.

The Fidelio range offers abundant options – headphones, wireless and wired audio, home cinema sound, and portable speakers – all deliver that ‘live’ listening experience, at home or on the move.

We invite you to join us on our ongoing sound journey, reaching ever higher for perfected excellence. After all, we are and always will be obsessed with sound.

For inquiries, please contact:

Irene Wong
BG Lifestyle Entertainment
Philips Consumer Lifestyle
irene.wong@philips.com

www.philips.com/fidelio

www.facebook.com/philipssound

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