



**Highlight**  
3/2019  
**HiFi Test**  
TV-HIFI

# Masterly Performance

**When Manfred Diestertich from Audio Physic goes about something, you ought to be sure that something exciting will come out of it. We have tested the seemingly unfussy floorstanding speaker "Midex", the latest creation of the ingenious chief designer. Look out to the results!**

At Audio Physic in Brilon, a small town located in Germany's Sauerland region, loudspeakers are developed and tested, and finally, once they have reached their maturity for production, also manufactured in large quantities. During a recent visit on-site, we could convince ourselves of the high degree of vertical integration and the great motivation of the employees. The speakers are built by trained professionals with great care, an outright guarantee for best sound quality in the living space listening room. One employee builds each pair of speakers from the ground up, and signs the result on the terminal plates after the work has been completed and the final test passed. Since each worker is trained to build several speaker types, the knowledge of speakers and their technology

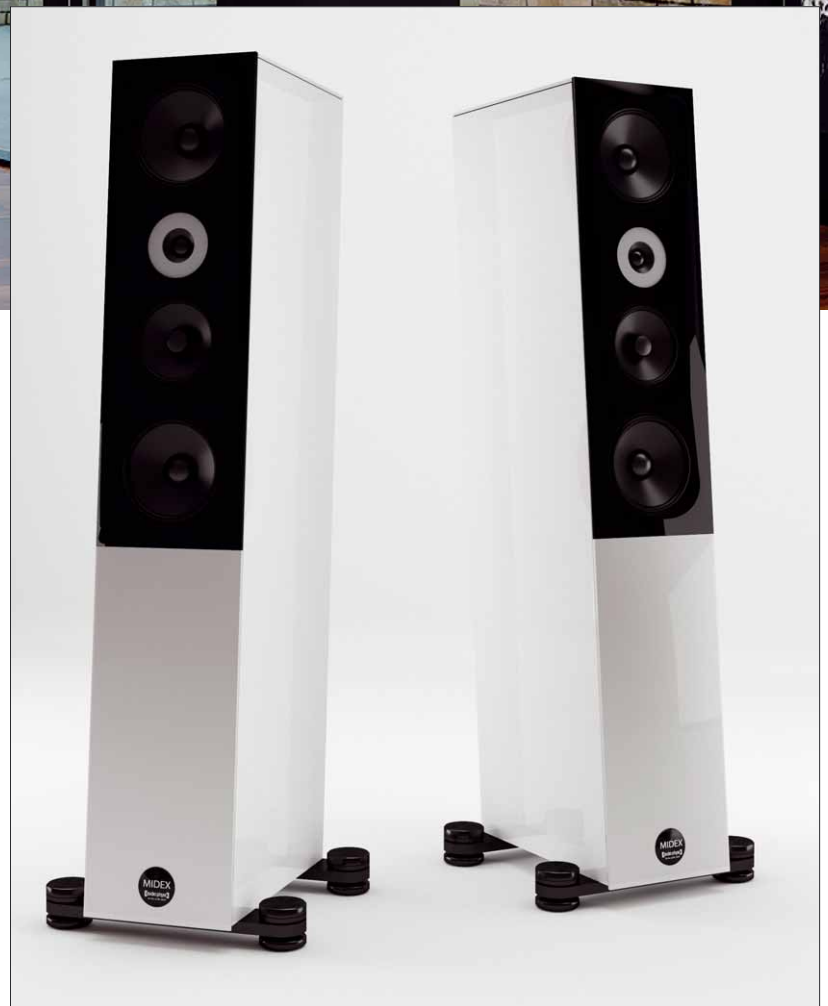
is correspondingly thorough across the staff. Everyone at AUDIO PHYSIC is proud of their well-shaped and well-sounding "babies", thoroughly crafted by hand.

**Floorstander Midex** Being "Made in Germany", these loudspeakers present themselves visually and technically in an inspiring way, garnished with beautiful detail solutions, such as enclosures made of a glass-MDF sandwich or clad in impeccable high-gloss real wood veneers. Our test sample shows up in the latter variant, made of sturdy MDF and refined with noble wood veneer.

**Midrange drivers and tweeters are equipped with cones made from aluminum. The front grille is held in place magnetically**

As customary with Audio Physic, they take different paths than usual, and so the cabinet is equipped with a number of special features, such as the very low-resonance "Honeycomb Sandwich Board" or the ultra-hard ceramic foam elements. In a special process, this high-strength ceramic material is foamed and manufactured into





small plates, which originally are used in industrial filter systems. What makes this material so special, is the fact that it consists mostly of air. You can imagine the ceramic foam as a flat sponge, except that it's just ultra-hard. Because of its open structure, only very little volume is lost to the speaker cabinet. In the Midex, it's mainly used as an internal stiffener, but the ceramic foam boards purposefully also serve as dampening elements. The honeycomb sandwich boards, the Midex inherited from the Structure, Audio Physic's proprietary flagship speaker. However, not in that large extent, but specifically within the cabinet sections of midrange and tweeter, and also as a decoupling carrier for the crossover components. This honeycomb material is very light and, with comparable stability, less resonant than MDF. "You get what you see" is the Midex' dictum when looking at the number of drivers – there are no hidden units or side woofers as known from some of the other Audio Physic models.

**Technology** The three-way design uses two woofers, a midrange driver and a tweeter – all using conical dia-phragms. The two woofers are 180 mm drivers with an effective cone diameter of 130 mm. One is placed at the top of the baffle, while the other sits at its bottom, having the midrange and tweeter in between them.

The Midex, too, uses the double-basket design in the HHCMIII midrange driver to ensure best sonic performance. Already knowing this feature from other Audio Physic models, it basically takes care of reducing the transmission of mechanical resonances between driver and cabinet.

Conventional drivers are equipped with only one basket which therefore carries all moving parts as well as the magnetic motor. When the cone is in motion, vibrations are transmitted to the basket via the surround and the suspension, and from there to the speaker's enclosure.



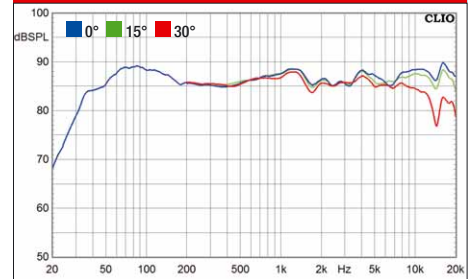
**Rigid core:** In the Midex, ceramic foam is used to stiffen the enclosure and to also act as a diffusor due to its porous structure

The "Hyper Holographic Cone Midrange" driver features a dual-basket design: The inner basket made of plastic has very good damping properties and reduces resonances already where they emerge. Stability is ensured by the outer basket made of solid die-cast aluminum, which is connected to the inner basket via a narrow, ring-shaped surface. In the center of the midrange, a fixed phase plug with a flat nose thermally optimizes the driver. In contrast to today's widely used dome or Air Motion tweeters, Manfred Diestertich deliberately uses a cone driver in his Midex. It features the same diaphragm material as the midrange (ceramic-coated aluminum) and can perform highly dynamic due to its large cone area. And again, also here has the head of design come up with something special to cope with the commonly known metallic sound character of aluminum. He specifically preloads the conical diaphragm with a silicone rubber ring to prevent the tweeter from the typical "ringing" effect.

**Features** At first glance, one might think that the slender Midex is a closed cabinet design. Instead, the bass reflex vent sits in the baffle hidden behind the front panel and radiates the low frequent energy towards the floor. Baffle and rear cabinet wall are slightly tilted backwards, which gives the speaker a dynamic appearance. Apart from that, the 1100 mm high, 202 mm wide and 335 mm deep Midex exercises visual understatement. As standard, height-adjustable M8 metal spikes screwed into solid crossbars (36 cm wide) anchor the loudspeakers on the floor. However, we like to speak out a proper recommendation to the optionally available VCF feet from Audio Physic. Hereby, the Midex manages to even increase its light-footedness, acutance and spatial imaging. Demonstrating the Midex with or without reveals a really astonishing experience. If you decide to invest around 9,000 euros in Audio Physic's Midex, various wood veneers and high-gloss glass finishes are at your choice. Upon request, the glass panels can be ordered in almost any desired colour.

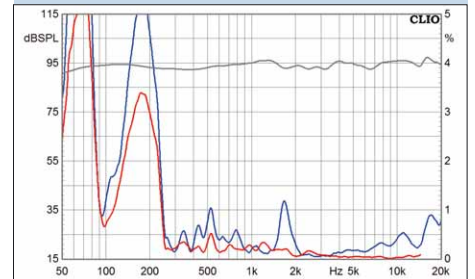
**Laboratory** In the lab the Midex shows itself in full accuracy. It plays down to the very lows, from about 35 Hertz upwards the vented speakers start feeling at home. A relatively strong emphasis in the upper bass gives the speaker a bit of a "sound".

**Test-Information**



**Frequency Response**

Overall balanced characteristic with deep bass and good dispersion



**Distortion**

Distortion measurements remains inconspicuous. Especially the critical K3 value always remains very low

From 200 hertz upwards, the Midex performs in a very balanced manner, with almost identical amplitude responses at 0 and 15 degrees. Measured at 30 degrees, the speaker starts losing SPL from around eight kHz, which is an excellent result for a cone tweeter. Harmonic distortion behaviour shows nothing out of the ordinary. The good-natured



The Midex can be ordered with glass or wood panels in almost endless finish variants. The real wood veneers are matched in pairs

K2 value slightly touches the upper 1% mark twice, while the critical K3 value always makes its way along the lower measuring limit. Between 500 and 1000 hertz, the waterfall diagram shows a few minimal harmless resonances, while above that the Midex displays an exemplary behaviour.

**Sound Check** Manfred Diestertich himself delivered the loudspeakers for testing. Fortunately, he brought them in an already well burnt-in condition, so that we could set them up and start the first listening together. Having them at a distance of about three meters with a slightly smaller distance between them and somewhat angled in to



"Nextgen" single-wiring binding posts from WBT, mounted to the "Vibration Control Terminals", provide proper connectivity for speaker cables



Die-cast aluminum on the outside, "technical plastic" on the inside: the dual-basket design of the midrange driver is one of Audio Physic's tried-and-tested means to instantly suppress sound-impairing resonances

the seating position, the sonic image in the listening room immediately locked into place. Connected to our high-grade Class A amplifier, the Audio Physic Midex sounded incredibly rich, wonderfully musical and absolutely flawless. At the listening position, all four drivers of each of the slender three-way speaker merged into one. In terms of spatial imaging, the Midex work superbly. They create a very opulent space, with a three-dimensional rendering of musical events. Voices and instruments stay immovably in focus, with clear and precise detailing. The Midex performs with a self-evidence that makes you instantly loose your worries about the involved audio system and lets you easily immerse into the music. Everything is exactly where it should be. We lean back and relax on our listening sofa, while we enjoy the test CD in the player. And that, without rushing through the tracks – just because it's so beautifully sounding. You love a powerful bass with lots of pressure and blackness? Well, the Midex could definitely be the best of choice. It's really amazing, what these slender and visually unobtrusive floorstanders are able to "spew out", if you want to. The four long-stroke 18-inch woofers in the vented enclosures always remain firm and contoured, while willingly following any change in the music's tempo. You love to listen at low volumes? Then the Midex is also made for you.

The speaker is vented through a slot in the cabinet's bottom plate. The protruding crossbars with their threaded M8 metal spikes ensure a secure footing

These speakers sound energetic even at low volumes, with excellent dynamics and without losing any informational content. Anyone who likes to lose himself in musical spheres can get these new creations from Audio Physic, set them up and simply enjoy them. And those who look for even the smallest musical detail, can also take the Midex and be equally happy. These floorstanding speakers never try to impose anything on you. Instead, they they simply render any detail that's in your music. We couldn't find any kind of music we wouldn't have enjoyed through the Midex. In our opinion, these Audio Physic speakers are outstandingly well done.

**Conclusion** This speaker isn't cheap, and yet a great bargain! What is offered here for around 9,000 euros the pair, is a true joy for any music connoisseur and Hi-Fi enthusiast. Sonically, the Midex does everything right – it performs delightfully and celebrates music in all its facets. The slight "sounding" gives the Midex an individual, positively captivating character that the listener can hardly escape. Anyone who experiences these speakers will fall for them – undoubtedly, a true highlight!

Jochen Schmitt

Floorstanding Speaker	Audio Physic Midex	Evaluation	Highlight 3/2019	HiFi Test TV-HIFI
· Price per Pair	um 9.000 Euro	<b>Sound</b>	<b>70 %</b>	<b>0,9</b>
· Distribution	Audio Physic, Brilon	· Tonal Balance	20 %	0,9
· Phone	02961 96170	· Imaging	15 %	0,8
· Internet	www.audiophysic.de	· Detail Resolution	15 %	0,9
<b>Features</b>		· Spaciousness	10 %	0,8
· Finishes	available in several glass and wood veneer finishes	· Dynamics	10 %	1,0
· Dimensions (W x H x D in mm)	202 x 1100 x 335	<b>Lab</b>	<b>15 %</b>	<b>1,0</b>
· Weight (in kg)	35	· Frequency Response	5 %	1,0
· Principle	Bassreflex	· Distortion	5 %	1,0
· Connection Type	Single-Wiring	· High-level Stability	5 %	1,0
· Impedance (Ohms)	4	<b>Practice</b>	<b>15 %</b>	<b>0,9</b>
· Woofer (nominal/Cone)	2 x 180 / 130 mm	· Build Quality	5 %	1,0
· Midrange (nominal/Cone)	1 x 150 / 110 mm	· Equipment	5 %	1,0
· Tweeter	1 x 39 mm HHCT III Konus	· Instruction Manual	5 %	0,8
		<b>In Short:</b>	<ul style="list-style-type: none"> <li>+ fantastically detailed Sound</li> <li>+ very musical</li> <li>+ available in many finishes</li> </ul>	
		<b>Sound</b>	<b>70 %</b>	<b>1+</b>
		<b>Lab</b>	<b>15 %</b>	<b>1,0</b>
		<b>Practice</b>	<b>15 %</b>	<b>1+</b>
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