

# Supreme Standards

With the Midex, Audio Physic remains true to their fundamental principle: It's all about detail. But in the end it's the overall result that really counts, and that must fit the bill.

**H**i-Fi manufacturers who carry terms such as "physics" in their names, from the outset you'd like to place your trust in their greater technical competence. Anyhow, especially the designing of loudspeakers requires a solid understanding of certain physical correlations. So, anyone who claims physics as their own, God willing, will certainly pay particular attention to it. Fortunately, Audio Physic won't disappoint you at all. Mainly responsible for this fact is Manfred Diestertich, who has been giving his very own signature to the portfolio of the traditional German brand as head of development for almost twenty years. With innovative approaches and well thought-out loudspeaker concepts, Audio Physic therefore stands out from the broad mass of loudspeaker manufacturers with an encouraging degree of regularity, thus enjoying an excellent reputation worldwide, especially among connoisseurs.

Apart from that, Audio Physic has recently undergone a lot of changes: new director, new distribution, new models – a breath of fresh air sweeps through the premises of the

company, located in the town of Brilon in Germany's Sauerland region. The product range is headed by a new flagship, the Structure, and it has also been extended by several new entry-level models from the Classic series. Their latest release now is the Midex, which ranks between the in 2015 on the occasion of the 30th company anniversary newly launched Avanti and the bigger Codex, which itself has been derived from the Avanti. Whereby the Midex, retailing the pair at 9000 euros, in the end substantially catches up more to the Codex as to the significantly cheaper Avanti.

## Everything has its price

That was not to be expected differently. Unlike their two siblings, the Midex dispenses with a hidden, laterally mounted subwoofer inside the cabinet, but otherwise accommodates a lot of technical details that just cannot be had for free. For example, it features a new composite material with honeycomb structure, which until now has only been applied to the Structure model. It is similarly stable, but significantly less resonant and much lighter than the MDF (Medium Density





*The woofer is dedicated to performance. The generous surround allows high excursions, the magnet ensures a powerful drive. The ventilation holes in the voice coil carrier serve for better heat dissipation.*

Fibreboard) otherwise used in cabinet construction. The partially open honeycomb structure also increases the acoustically effective volume of the enclosure, so that the speaker offers both a lower weight and a larger internal volume while with given external dimensions.

The open-pored ceramic foam, on the other hand, is almost a classic among the technical features found in Audio Physic speakers. One may visualize this unusual material as a kind of petrified sponge. It consists mostly of air, being firstly very light, and secondly, due to its ceramic pore structure, also extremely hard, while acting as a diffuser as well.

The ceramic foam serves to both constructively strengthen the inside of the speaker enclosure as well as to dampen it acoustically, thus implying that the special structure of this particular material hardly diminishes the effective inner volume of the cabinet. In its outward looks, the Midex does not stand out of line and typically follows the Audio Physic tradition. The slim, but edgy-looking cabinet is slightly tilted to the rear, while showing

high-quality craftsmanship equivalent to its price range. Who opts for the slightly more expensive external panelling made of coloured glass instead of a wood veneer finish, purchases a carcass with a multi-layered outer skin, thus providing an additional acoustic damping. All in all, already the enclosure of the Midex alone is constructed in a much more elaborate way than its rather simple appearance might suggest.

### **Extraordinary Ideas**

As for the drivers, Audio Physic pursue their very own approaches as well. It is particularly unusual that the manufacturer uses a cone tweeter not only in the Midex, but almost across the entire speaker portfolio, while competitors commonly use drivers with dome-shaped diaphragms or completely different types of transducers such as Air Motion Transformers. The original idea behind this concept is that the cone driver with its comparatively large diaphragm offers a higher efficiency, which in particular improves its distortion behaviour. Above all this is supposed to allow to listen to the



The Midex tweeter is referred to by Audio Physic as the third-generation Hyper Holographic Cone. Unusually looking is its eponymous tapered cone, which is rarely to be found in tweeter designs. To optimize its resonance behavior, the aluminum cone is preloaded by a rubber ring.

loudspeakers for extended periods of time without any fatigue.

In addition, a cone-shaped tweeter is intended to better harmonize with the midrange cone driver. For good reason, therefore, does Audio Physic designate both transducers, which are separated at about 2.8kHz, as "Hyper Holographic Cone" drivers.

The Midex already uses the third generation of this tried-and-tested twosome. Each of the transducers uses a cone made from aluminum, which is specifically preloaded with a rubber ring to control its resonance behaviour and to prevent the much-feared break-up into partial oscillations. The midrange driver features also a distinctive flat-nosed phase plug, primarily intended for heat dissipation, and a double basket designed to dampen vibration. Its outer basket is made of die-cast aluminum, which provides the

necessary stability, while the inner basket is made of plastic to absorb vibrations. This design allows for the moving parts of the midrange driver to be largely decoupled from the enclosure.

**Wrong Speculations**

However, Manfred Diestertich put an unexpectedly sudden end to all speculations regarding which kind of acoustic effect the felt ring around the tweeter cone might have. As response to our direct question, he stated that actually this ring is only there for optical reasons. This driver twosome in Audio Physic's

Midex is flanked at top and bottom by two woofers that operate below 200 Hz and are supported by an invisible bass reflex duct that emerges at the cabinet's bottom front edge.

This flanking arrangement of the two bass drivers is intended to provide a certain radiation convergence in order to concentrate the bass energy and to prevent uncontrolled radiation into the room.

**Great Performance**

In the listening room, the Midex had to prove its finesse, while alluring with its sincere



The felt ring around the cone tweeter is mainly installed for optical reasons.



The midrange has a sturdy outer skeleton made from aluminum and an inner basket made from vibration damping plastic.

high-end charm, and that's not only because of its noble glass glass surfaces. What it revealed in terms of detail was simply overwhelming. That high level of fine resolution one can only dream of when taking a look at other loudspeakers, even within the given price range. Whether it were the nuances in the grading of the vocals or the velocity of a piano key, the Midex analysed such often crucial trifles down to their basic structures.

However, this did not happen in an obtrusive, impertinent manner, but in a way that in the end everything melted into an extremely finely drawn, high-resolution sonic image, offering a vast amount of detail and an extremely rich content of musical information.

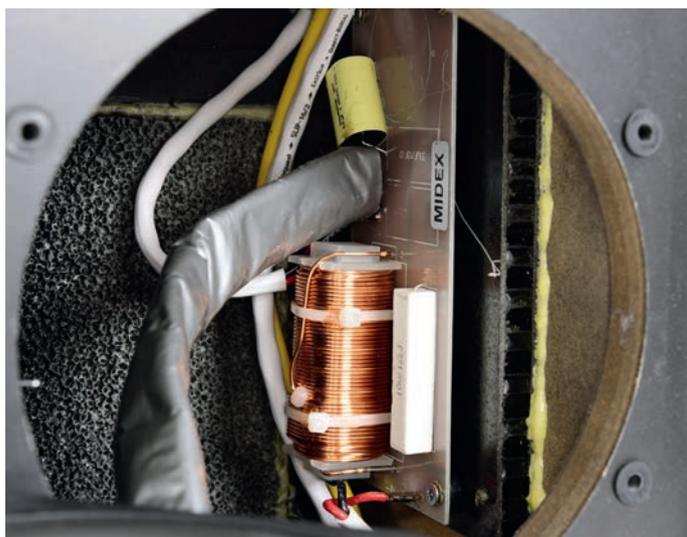
Eventually, it's left to the listener's choice whether he prefers to let the image have an effect on himself as a whole, or immerses himself into specific details. Not all loudspeakers



Der markante, zylinderförmige Phase-Plug optimiert das thermische Verhalten des Mitteltöners.

allow this freedom of choice, but rather impose all information on the listener in one go. This can even culminate in an excessive challenge, especially if one is more in the mood for relaxed music.

The Midex is far from behaving like this – precisely when it comes to such a situation, this speaker manifests its true class. So we suddenly immersed in a whole bunch of new facets while



The distinctive, cylindrical phase plug optimizes the thermal behaviour of the midrange unit.

listening to the *stereoplay* CD "Ultimate Tunes 3", which still is one of our most-used reference discs. Katie Melua's performance in "Lucy In The Sky With Diamonds" became a touch more impressive, Constanze Friend's rough voice in "Walk On The Wild Side" re-inspired with a little more character and Paul O'Brian's vocals in "Big Yellow Taxi" sounded even more sonorous than usual.

The guitars as well seemed to show up a bit more dynamical and accentuated, so we tend to forgive the Midex its slight colouration, which ultimately led to a minor deduction in points within the category "Naturalness".

The legendary version of "Guantanamera" by the Weavers recorded at the Carnegie Hall in 1963, carved out the speaker's second major strength. This live recording is very well-known for its convincing spatiality and stands out particularly because of its depth of image both towards the stage as well as backwards to the audience. The Midex even managed to significantly upsize the scene. It was fascinating to hear how the speaker deepened the room without discerning the soundstage. Moreover, this final sonic statement substantiated its ambitions for the high-end league. One more thing: It certainly does no harm to bring along some experience to really master the Midex. Apart from that, this one is world class!

Klaus Laumann ■

stereoplay  
Highlight

**Audio Physic  
Midex**

**9000 Euro**

**Vertrieb: G8 & Friends**  
**Telefon: +49 2369 2068003**  
**g8friends.de**  
**www.audiophysic.de**

Dimensions (WxHxD): 20,2 x 111 x 33,5 cm  
 Weight: ca. 35 kg

**Measurements**

**Frequency & Impedance Response**  
 Very deep; strong upper base; clear directivity in the treble, balanced on average

**SPL & Distortion 85 -100dB SP**  
 slightly rising distortion under 150Hz, otherwise very clean

**Lower Cutoff freq.** -3/-6 dB      38/32 Hz  
**Max SPL**                                      103 dB

**Practicality & Compatibility**

**Amplifier Compatibility**  
 Avoid amps with little power, otherwise to be operated without problems

Voltage      ██████████ 16,1 V  
 Impedance-Δ ██████████ 3,8 - 15,9 Ω  
 Current      ██████████ 4,5 A

**Room Acoustics & Positioning**  
 Parallel to walls or slightly angled-in, experiment with stereo triangle / wall distance

**Listening Distance** 1 m ██████████ 5 m  
**Wall Distance** 0 m ██████████ 1,5 m  
**Reverberation time** 0,2 s ██████████ 0,8 s

**Scores**

**Naturalness** ██████████ 13  
**Detail Resolution** ██████████ 15  
**Dynamic Limitation** ██████████ 10  
**Bass Quality** ██████████ 12  
**Imaging** ██████████ 13

Very holographic speaker with high grade of resolution; infinite richness of tone-colours, transparency and time-coherence when positioned correctly, which requires some care and attention to room acoustics.

**Measurements** 8      **Practicality** 5      **Quality** 9

**stereoplay Rating**

**Sound** *absolute Top Class* ██████████ 63  
 0 10 20 30 40 50 60 70

**Overall** 85 Points  
**Value** very good