

THE REAL BIG THING

The new Cardeas from Audio Physic is an absolute premium-class speaker. Surprisingly, the midrange driver does without a spider.

■ by Andreas Günther

It can turn out to be a fatal mistake to underestimate other people for any reason. Someone who comes from a village or a small town may know or produce just as much as a city dweller, sometimes even more. Thus, many a German loudspeaker manufacturer has settled beyond the metropolises; Audio Physic is one of them. The company's home is Brilon, a small town of 25,000 souls in the centrally located beautiful Sauerland region.

Such a company domicile may not offer the Berlin Philharmonic or Elton John in concert, but that can prove to be an unbeatable advantage: In the absence of major distractions, one has time and above all the necessary leisure for extensive tinkering. Manfred Diestertich is the mastermind behind Audio Physic and also the creator of this manufacturer's latest and tallest floorstanding loudspeaker, the Cardeas. It's a true dream, a Mount Everest in the company's own mountain ranges - and a miracle loudspeaker for the world.

However, the high technology behind this sound transducer also comes at a price: we are talking about two imposing speakers that together cost an imposing 38500€ We take a heavy breath, we might even make an appointment with the friendly representative from our savings bank.

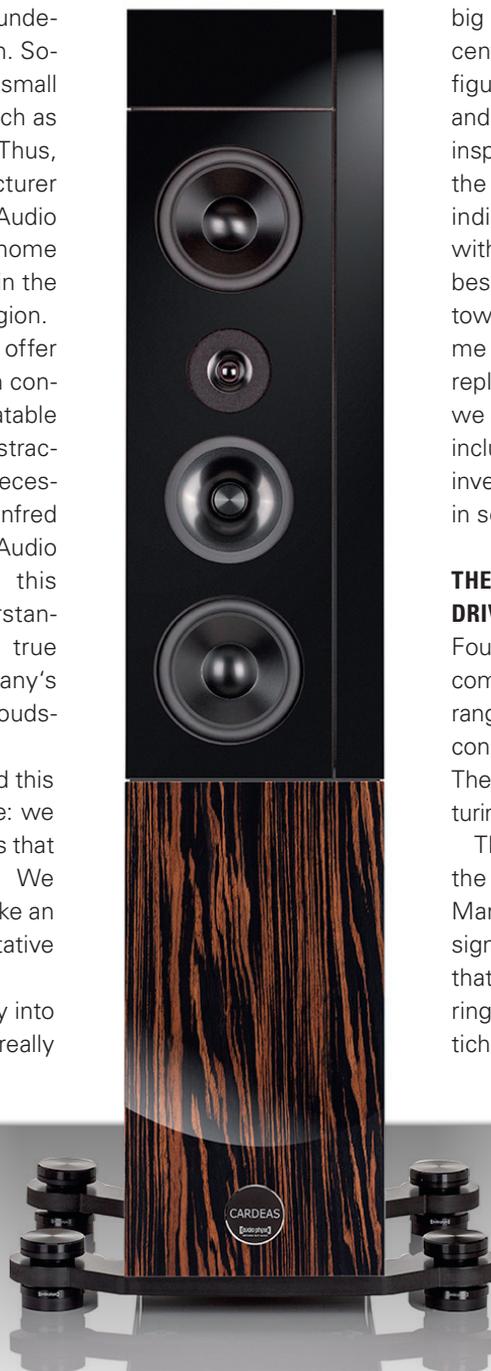
Let us get impressed. I flop elegantly into the sofa in the AUDIO listening room. A really

big speaker is standing in front of me - 128 centimetres of height is a quite remarkable figure. We initially focus on the outriggers and their feet: These beams look confidence-inspiringly massive. For positioning, however, the manoeuvrable version with thick balls is indispensable. After some experimenting with the placement, we eventually found the best point - not too far away, slightly angled towards the listening position. Actually, it came to be the ideal stereo triangle. Then we replace the feet: Instead of the simple balls, we affix the VCF V magnetic feet, which are included in the delivery. For this, no additional investment is required, and the improvement in sound is enormous.

THE FLAT MIDRANGE DRIVER SETS THE SCENE

Four drivers catch our eye: The mid-woofer comes as a pair. They encircle a genuine mid-range driver equipped with a phase plug. All cones are made of black anodised aluminum. The tweeters have a different cone design featuring a black dyed fabric dust protection dome.

The highlight of this speaker, however, is the new and surprisingly flat mid-range unit. Manfred Diestertich, its incredibly skilful designer, has come up with a transducer model that simply dispenses with the usual centering spider. How did you do that, Mr. Diestertich?



ROOM AND POSITIONING

Room size
K M G

Acoustics
T A H

Positioning
D W F

Set up close to the wall or free-standing, adjust brilliance by angling towards the listener, neutral acoustics, listening distance from 2.5m.

You will find a breakdown of the symbols on page 106.



TRUE AND CLEAR: The baffle reveals the concept of a three-way speaker. But,

Well, the spider connects the oscillating part with the basket, and it ensures that the diaphragm and the voice coil swing back again after an impulse. For that purpose Diestertich has created an extremely complex clamping system at the edge of the diaphragm, which takes over the function of the spider, so to speak. We are seeing a truly remarkable innovation here.

THE BASS REFLEX PORT IS THE FINEST HIGH TECH

What our eyes don't see: At the bottom of the cabinet, two basses pulsate against each other. These show up as two 11-inchers, back to back, ready to lay out a massive bass foundation. The reflex energy is channeled towards the floor. But, there is no traditional port design, but a large surface made up from ceramic foam, ultra-hard, but permeable. This is the finest high-tech, unique to Audio Physic.

The mix of materials, by contrast, triggers astonishment: The shell, the exterior panels are actually made of glass. How is that going to work? Glass is known to ring, it abducts energy - why does Audio Physic use it as the outermost layer? Because it looks extremely good and because they have found an elaborate way of incorporating the commonly considered as



the bottom of the Cardeas hides two woofers that are pumping against each other.

'evil' glass as part of the good sound in an absolutely effective manner.

THE GLASS TRICK

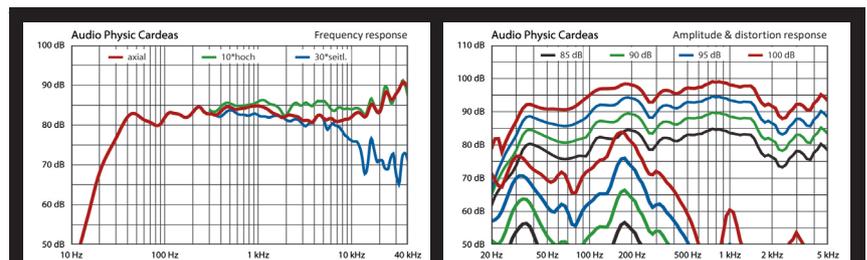
Audio Physic has developed a high-tech honeycomb/multiplex sandwich construction. This means that the glass panels are not rigidly connected to the cabinet, but are damped via a honeycomb structure. It is precisely the mixture that makes it so exciting: Here, the inventors have combined two completely different materials with completely different natural frequencies. And with success: there are no disturbing vibrations, we only hear a perfect "knock" when we tap on the enclosure. And so wonderful combinations are created in the mind's eye: white lacquer, transparent glass, all the way to ebony in high-gloss finishing. Or, let's put it absolutely: The room which isn't ready to welcome this speaker, simply doesn't exist. Visually speaking, of course. Sonically, we recommend a room with a size of at least 20 square meters.

Vinyl or streaming? We are in the mood for hi-res, so we let a file fill the room in 24 bit and 96 kilohertz. Jean-Michel Jarre is back: The renowned Frenchman dedicates his new album „Amazonia“ to the magic of the Amazon. The synthesizer

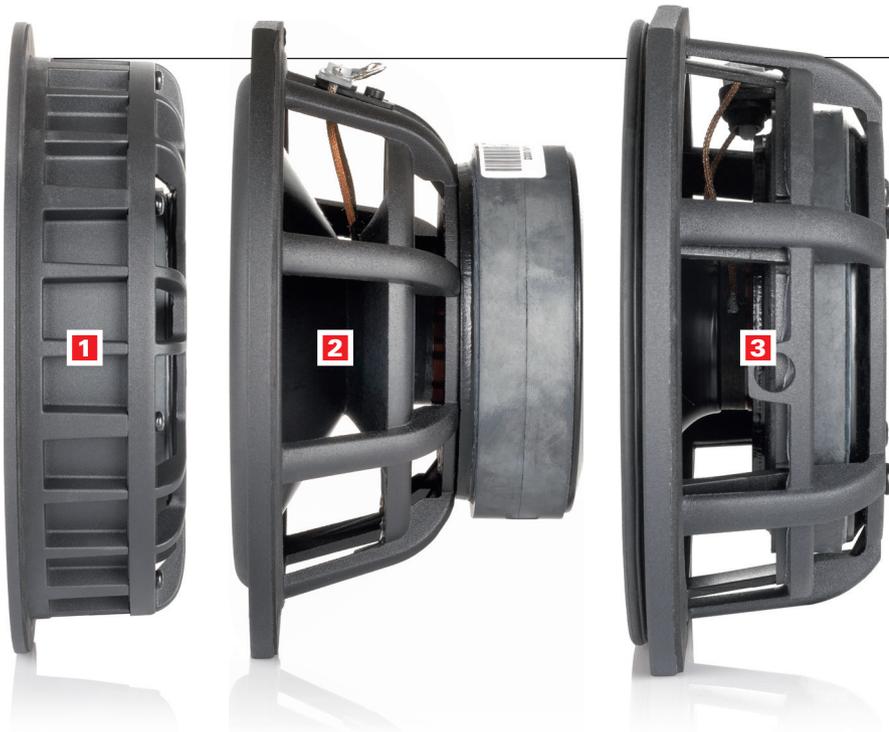
SCOPE OF DELIVERY: Audio Physic includes their superb proprietary magnetic feet (RRP 1,400 €). A clear improvement in sound.



MEASURING LABORATORY



The Cardeas offers a balanced frequency response with a deep, rather slim bass (-6 dB: 30 Hz, max. 97 dB SPL). Midrange and presence can be influenced by angling the speaker vertically, treble by angling it (laterally) towards the listener. The mid-woofer's tendency to distortion can be measured, but is not critical to the ear due to the K2 dominance. **AK 65.**



sparks off a festival, shaped by Brazilian atmosphere. A symphony of sound in nine movements. First of all, a brutal bass strikes us, but the Cardeas overcame it. There was nothing wafting around. Everything seemed almost smooth, but also up to the mark. In the fourth movement, violent beats below 80 hertz break forth. All details were there, but they did not superpose the overtones - somewhat austere, but in a deeper sense highly musical. And, here's just another music tip, almost too popular to mention: Taylor Swift completely re-interpreted and re-recorded her early album "Fearless". Awesome. Everything appears to be lighter and at the same time more gentle, „Love Story“ strikes us straight to the heart, starting over the stereo axis

with the customary interplay of two opposing guitars, then speeding up to full throttle.

And the Audio Physic Cardeas immediately felt at home with this music. The sonic image clearly stood in front of the drivers. These are the moments that separate very good speakers from the legendary ones. Who's got the time and gained a taste for it, should definitely give a listen to "Untouchable" from the new-old Taylor Swift album - a ballad without any kind of show. We think: This speaker sounds best when utmost concentration and sincerity are required. Magnificent and strong.

THREE MUSKETEERS: The Cardeas is a true four-way speaker. **1** The woofers are slim and invisible, two units with a basket diameter of 28 centimetres operate against each other. **2** The mid-woofers, on the other hand, turn up in a classic appearance. **3** The mid-range driver does without the centering spider and is therefore so slender looking.

AUDIO
HIGHLIGHT

FACT SHEET

AUDIO PHYSIC CARDEAS	
Distribution	Audio Physic GmbH Phone +49 2961 96170
www.	audiophysic.com/de
Warranty period	10 years upon registration
Dimensions (WxHxD)	25 x 128 x 43 cm
Weight	63 kg
Veneer/Foil/Lacquer +/-	-
Colours	White, Black, Walnut etc.
Operating principles	4-way, bass reflex
Room adjustment	-
Features	Magnetic feet included in scope of delivery

AUDIOGRAMM **AUDIO** 06/2021

ultimate transparency, fantastic response	108	100%
Neutrality (2x)	108	100%
Level of detail (2x)	108	100%
Locatability	107	100%
Spatiality	106	100%
Fine dynamics	107	100%
Peak level	106	100%
Bass quality	107	100%
Bass depth	105	100%
Workmanship	outstanding	

AUDIO SONIC EVALUATION **107 POINTS**
PRICE/PERFORMANCE **OUTSTANDING**

CONCLUSION



Andreas Günther
AUDIO-collaborator

This is one of those loudspeakers you dare to dream about. The concept is classic, but ultimate. Simply unbeatable. The structure of the outer shell is perfect and clever. The enclosure not only looks good, it also insulates to the max. The sonic image is ultra-fast and clearly snaps into place centimetres before the baffle plane. From here it already becomes holographic, encouraging to reach into it. A real big thing, a solid investment.



MIGHTY THE NAME: Audio Physic has the capacitors manufactured, but does not forego the magic of its own name - which is printed there loudly and audibly.