

ORIGINAL: <https://www.lowbeats.de/test-standbox-audio-physic-classic-25/>

Since its foundation (at that time by Joachim Gerhard), Audio Physic, the small loudspeaker manufactory from the German town of Brilon, has stood for its prominently fine but never outstandingly expensive high-end. Even though these hallowed halls now have dispatched a real flagship named Structure at a price of almost 50,000 euros around the globe, the men from Brilon have never lost sight of their genuine down-to-earth approach. And there's one speaker that embodies these ideals better than any other model in the company's portfolio: the Audio Physic Classic 25, which *LowBeats* has been testing for a few weeks now



*Speaker art, the unobtrusive way: The Audio Physic Classic 25 (price per pair: from 3,690 euros) stands out for its prominently fine and natural sound (Photo: Audio Physic)*

The appearance of the 3-way speaker is pleasantly unobtrusive. Its dimensions are 105.0 x 17.0 x 29.0cm (H x W x D) – the typical representative of a slender floorstanding speaker. With the exception of the back wall,

is panelled with glass all around. This ensures smooth surfaces and a multitude of colour variations, given that the glass supplier lacquers the glass panels from behind, thus theoretically allowing for any desired speaker colour.



*The Audio Physic Classic 25 is available in seven different colours. It is panelled all round with glass panes, which are lacquered from behind. Because of its elaborate sandwich cabinet, the Classic 25 is not as light as it looks: after all, it weighs a good 27.0 kilograms (Photo: Audio Physic)*

Actually, glass isn't quite the right material to be favoured in Hi-Fi, as it tends to ring unpleasantly, making the sound hard. However, if you know the ropes and are familiar with damping, then great things can be achieved with glass. And with Audio Physic, you can rightly expect a great deal of expertise, since it's Manfred Diestertich, who has been heading the R&D department of the speaker specialists from the rural Sauerland region for more than 20 years. Diestertich is the one among Germany's loudspeaker designers who concentrates most intensively on decoupling technologies.

Beginning of the 90s back in the times of the IQ speaker company, he invented the SSC component feet, which still today do their job well and successfully under their new name VCF – and by coincidence also were accompanying our test samples. But more on that later.

## THE CONCEPT OF THE AUDIO PHYSIC CLASSIC 25

Of course, the cabinet of the Audio Physic Classic 25 is not made of glass alone. Diestertich has conceived a sandwich construction in which glass panes are connected to the 12 mm thick MDF cabinet boards by means of elastic acrylic adhesive strips, thus combining two oppositely resonating materials via a thin but elastic intermediate layer, thereby achieving (in addition to the good looks) an immense rigidity and high sound impermeability.



*The permanently elastic acrylic is applied in Brilon by hand (Photo: Audio Physic)*

It is one of the biggest problems with loudspeaker enclosures that portions of the sound diffuse through their walls, thus affecting the sound. "This type of sandwich," Diestertich says, "works like a double glazing. There remains only very little sound permeating."

This combination is anything but randomly chosen, but has been developed in innumerable listening sessions. "Our Manfred," so Audio Physic's CEO Wolfgang Lücke says with a smile, "listens to each and every screw." Those who know Diestertich, rightly suspect: this is truly not understated.

And herein are reasoned some of the particular details found in the Audio Physic Classic 25, that you'll never come across in this price range. Like, for example, that the crossover uses copper foam. Why that? "It sounds much more accurate than the usual circuit boards," Diestertich says. Or that the drivers are anchored in rubber sleeves. Or that the (single-wiring) terminal of course uses the

excellent WBT NextGen binding posts (also made of a synthetic material). Or that the basket of the sonically relevant mid-woofer is decoupled within itself, so that vibrations originating from the baffle are filtered. Wherever you look, nothing appears to be random, all solutions are obviously chosen for good acoustical reasons.

## THE TECHNOLOGY OF THE AUDIO PHYSIC CLASSIC 25

In light of a speaker of this size and aspiration, most speaker designers would have probably decided upon a 2-way construction. Strictly speaking, the Classic 25 really is a 2-way speaker – but one with an invisible built-in sub-woofer.

These built-in subwoofers are a special feature of the Classic line. The efficiency of these designs is usually modest, but when well done, they stand for very precise bass and low filtering effort within the crossover circuitry – thus because the bass reflex port in itself has a filtering effect. And there's yet another, almost unbeatable advantage: It's simply invisible ...

And because of the concept of a 2-way system plus sub-woofer being consistently implemented in the Audio Physic Classic 25, the cut-off frequency is also set at a very low point: namely at 100 hertz. Such a low separation requires a very broadband and highly stressable mid-woofer.

Diestertich discovered it – as well as the tweeter and the woofer – on the shelves of the Chinese-Danish specialist Wavecor. And how could it be otherwise, the tinkerer found



*The baffle reveals how the sandwich looks like: On the inside there is MDF, next to it thin strips of acrylate, framing wide areas of air, while on the outside there is glass (Photo: H. Biermann)*

of course many points that had to be improved on the drivers from the company's standard portfolio.

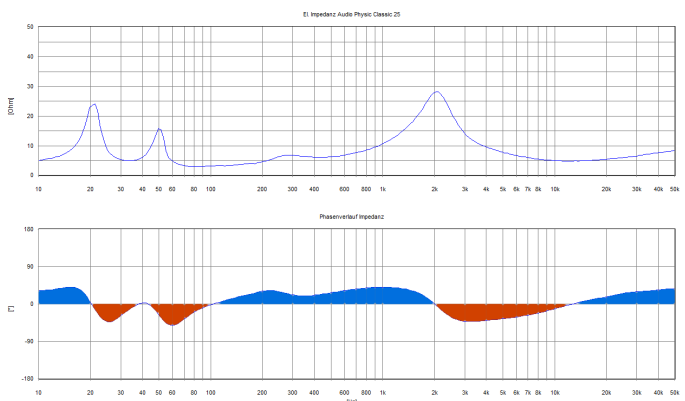
And again we come across the abundant topic of decoupling. Especially the driver that transmits the important vocal range – i.e. the mid-woofer – shouldn't be affected by the almost unavoidable vibrations of the cabinet.

Diestertich's answer to this challenge is a decoupling dual basket in which a mix of materials barely allows any vibrations to pass. This special basket is built-up by a specialist company and then sent to Wavecor, where they assemble the optimal driver for him.

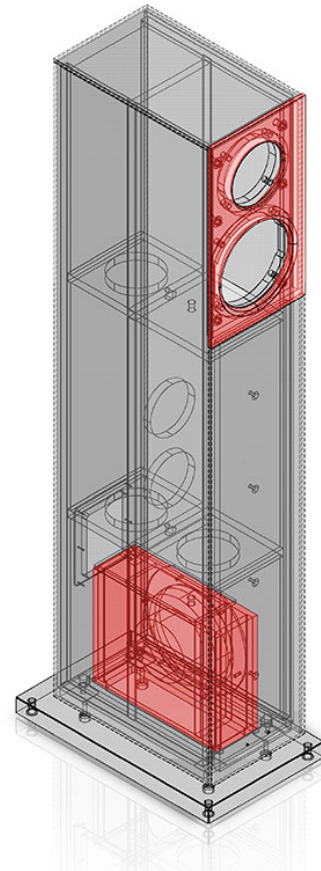
The tweeter with its 22 mm silk dome is to be found within Wavecor's standard program, but also this one doesn't get of scot-free: Diestertich covered its face plate entirely with a firm layer of felt. This tweak he uses to quieten both the tweeter itself and the overlying glass grille. I like to repeat myself: It all appears to be very carefully thought-out.

In search of suitable amplifiers, we first take a look at the impedance curve and the phase response of the Classic 25, which both look pretty neat – especially when taking into account that the bandpass construction of the sub-woofer operates with a very low cut-off frequency. The impedance minimum of 3 ohms at 80 hertz usually is mastered by today's amplifiers without any problem.

The same happens to the inductive (blue) and capacitive phase characteristics. They as well run very moderately over the entire frequency band.



*The critical impedance minimum is to be found at 3 ohms @ 80Hz. The impedance shows an uncritical phase response. (Measurement: J. Schröder)*

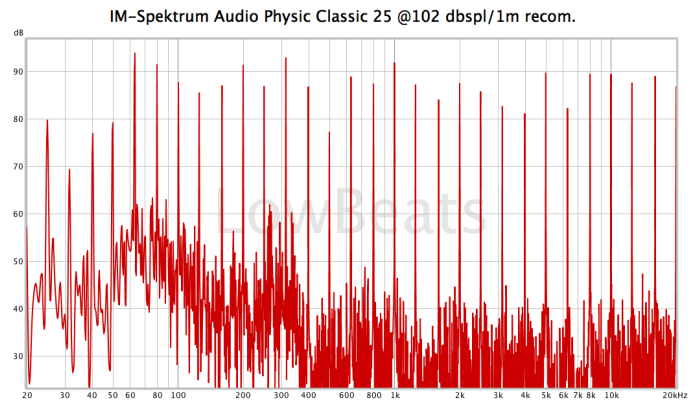
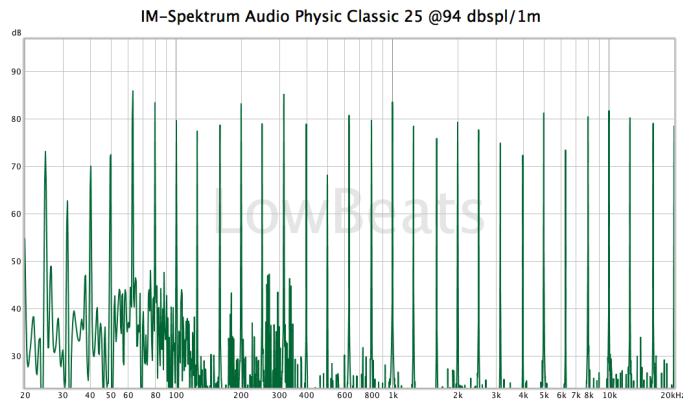


*The drawing shows the subwoofer plug-in module in the lower part of the enclosure, where a 21 cm woofer operates on a bandpass construction. Inside the module it encounters a very small volume, while its front has almost the entire internal volume of the Classic 25 at its disposal (less the compartment for the mid-woofer, of course). It contributes to the overall signal exclusively through the bass reflex port (Drawing: Audio Physic)*

Nevertheless, the used amplifier should offer a reasonable power rating; In conjunction with this speaker, I wouldn't even start below 100 watts at 4 ohms, due to the speaker's efficiency being rather modest. However, it still allows peak levels of up to 110 decibels – given, of course, that the connected amplifier provides sufficient power.

Amplifiers such as an Atoll IN 400 ES (4,500 euros) or a Neukomm CPA 155S (6,000 euros) are therefore by no means oversized. On the contrary: Connected to really good amplifier electronics, the slender Classic 25 is capable of definitely outgrowing itself...





IM spectrum Audio Physic Classic 25 @ 94dBspl/1m. Noticeable distortion only in the lower part of the mid-woofer's frequency range. Otherwise very good (Measurement: J. Schröder)

IM spectrum Audio Physic Classic 25 @ 102dBspl/1m. Even at higher levels, the frequency field between 250 - 300Hz remains somewhat critical. Here, the small mid-woofer is fully challenged (Measurement: J. Schröder)

The measurements on the maximum SPL underline that the Classic 25 was developed for rooms up to about 30 square metres. I didn't find it critical in terms of installation, but the distance to the rear wall and the side walls respectively shouldn't be less than the usual 30 / 30 centimetres.

The tested pair also came with two sets of the VCF Feet. Of course, disciples of the spike league can use the plinth's threads for the provided spikes, but I have to discourage them, and with that I am in the best of company: Manfred Diesterich also recommends the decoupling feet, as with them, the sound becomes more natural and better defined.

## LISTENING TEST

I always let loudspeakers burn in with noise, and by the noise already you can identify their character. And that of the Audio Physic Classic 25 is recognizably open and clear. For starting the listening test, I chose Mozart's Piano Concerto No. 20, by letting the Classic 25 play for a few hours in repeat mode. And already when going up the stairs to the listening room, I noticed the sound of the grand piano being unusually clear and open, even through the closed steel door.

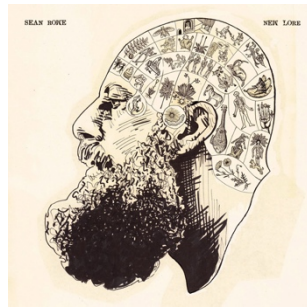
While unlocking the door, I think: Wow! Above all it's the power and the precision in the upper bass range with which the Classic 25 fills with enthusiasm. In the fundamental range, where many competitors use to blur the sound, the Audio Physic offers exceptional authenticity. The striking of the piano's keys simply sounds real: sometimes soft, sometimes hard, but always right. The sonic image has a greater depth than I used to know from most other loudspeakers. This is enjoyable as well. But what really thrills me is the clarity in the vocals, in the strings. Nothing seems artificial or unnatural. Sean Rowe's guitar sounded as if it was playing in the listening room.



With the VCF feet instead of the spikes, the sound becomes finer and more natural. Between the plinth and the cabinet, the discharge opening for the internal subwoofer is clearly visible (Photo: H. Biermann).



Mozart's masterful Piano Concerto No. 20  
(Cover: Amazon)



Record cover of Sean Rowe's album "New Lore"  
(Cover: Amazon)

And this "purity" is not only limited to undynamic campfire-style guitar music. Of course, the Classic 25 also had to face the hard electric bass fare of the Infected Mushrooms.

Believe it or not: This is really fun. The immense bass precision of the small Audio Physic lets the listener guess how much effort is put into the bass collages of Boris Blank (Yello), Underworld or Felix Laband: It is able to neatly distinguish everything from each other even in the lows. A noble art that, for example, the Dynaudio isn't by far able to keep up with as good as the Classic 25.

### STRONG COMPETITION

During the past weeks a number of competitors of the same product class honoured our listening room – some with an unfair advantage: the almost twice as large Heco Celan Revolution 9 with its high peak level skills and lightning-fast impulse response, that literally blows away the much smaller Audio Physic, or, the also much taller (and louder) Dynaudio Evoke 50 with its incredibly fine mid-high range that outshines almost everything in this class.

However, voices and instruments ended up sounding more natural and open, more "real", with the Audio Physic Classic 25. Obviously all the decoupling measures undertaken by Diestertich have a detoxifying effect on the sound...

### CONCLUSION

This floorstanding speaker doesn't look like technology at all and yet is jam-packed with acoustic detail solutions that most often are not to be found with competitors at even three times the price. But this is not about quantity, it's about the noble art of purity in sound. And this loudspeaker masters this task like hardly any other competitor in its price range.

The Audio Physic Classic 25 is an impressive example of high-end not being meant to be expensive and big-sized, but sounding superiorly fine and right. What an unagitated, decent and yet impressive performance – and a big recommendation as well!

<b>AUDIO PHYSIC CLASSIC 25</b>	2019/06
<b>LowBeats</b>	<b>4,6</b>
<b>ÜBERRAGEND</b>	ERGEBNIS
<b>KLANG</b>	★★★★★★
<b>PRAXIS</b>	★★★★★
<b>VERARBEITUNG</b>	★★★★★★
<b>GESAMT</b>	★★★★★★
Die Bewertung bezieht sich immer auf die jeweilige Preisklasse.	

- + Naturally balanced and clear sound
- + Amazingly deep and substantial bass response
- + Discreet dimensions, large range of colour finishes
- + Excellent workmanship