

Special Edition

Issue: 1/2014



hifi
& records

Das Magazin für
hochwertige Musikwiedergabe

Loudspeaker:

Audio Physic Step Plus +

The first time I saw the compact Audio Physic Step 25 Plus+, I was reminded of a rather nice story. A friend of mine was traveling to Zurich to meet with the chairman of a rather big Swiss firm, and I was accompanying him on the trip. Sitting in the train, I started imagining what kind of car this man (or perhaps his chauffeur) would drive. When I arrived in Zurich, though, I was disappointed to see that he was at the wheel of a common-or-garden Audi A4 Avant. I'd rather hoped we would be zipping through the Alps in something a little more unusual. Driving out of the car park delivered no surprises whatsoever. But once we got onto the motorway, the Audi took my breath away as it accelerated to 120 km/h in what felt like less than five seconds. Turns out I was actually sitting in a tuned S4 Avant – there was just no way of telling that from looking at it. The same thing applies to Audio Physic's new Step 25 Plus+. It's the audio equivalent of an S-model Audi: same as the Step 25 on the outside, very different on the inside.

Manfred Diestertich has spent the past 15 years in the Sauerland region in Germany, applying his talent, training and experience (a very useful combination, if you ask us music aficionados) to overseeing the sound that comes out of Audio Physic's speakers. So what happens when this renowned developer decides to take each of the company's products in turn and adapt them here and there so that they perform even better than before? Well, expectations start to grow, even if the loudspeakers don't. The Step 25 is extremely compact, at just 25 centimetres deep and 32 centimetres high. It's available in five different wood veneers, as well as high-gloss black or white.

I can tell I'm dealing with a high-end loudspeaker from the shape of the cabinet alone. The baffle slopes slightly backwards so as to achieve time alignment between the bass/midrange driver and the tweeter. The sides curve gently outwards to prevent standing waves.

Test: Audio Physic Step 25 Plus + Loudspeaker

Audio Physic has launched an optimised version of its mini monitor. But is it worth shelling out the extra money for the new Step 25 plus+?

A peek around the back reveals two secrets that say a lot about the musical standards at work here. Where most loudspeakers in this category feature a standard plastic bi-wiring terminal that has gold-plated sheet metal jumpers and barely reaches ten centimetres in height, the Audio Physic model has a panel, sunk carefully into the rear of the cabinet, measuring an impressive 9 cm by 25 cm. This, as I see from the words printed on the panel, is the Vibration Control Terminal. Chief designer Diestertich is an expert in vibration control, or rather in intelligently optimised vibration damping. Another plus point for the loudspeakers is their state-of-the-art WBT nextgen binding posts. Anyone who has done even the slightest bit of research into this topic will understand just how much of the music's charm can get lost here. Incidentally, a lot of other loudspeakers can handle being retrofitted with this terminal. The Step 25's bass reflex port for the two-way system sits neatly below the binding posts.

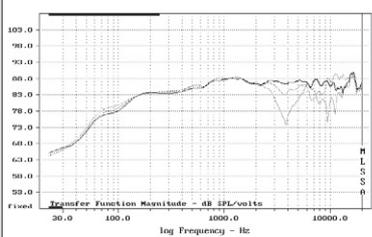
There's nothing dull about the front of the loudspeakers, either. Audio Physic only uses specially developed chassis. In other words, this is all about exclusivity, not mass production. Ceramic-coated aluminium features on the tweeter and the bass/midrange driver, and both are driven by high-performance neodymium magnets. Also, the vibration-prone chassis is completely decoupled from the basket construction. This is to ensure that all the energy is emitted as airborne vibrations, not as structure-borne vibrations that wander through the cabinet. The first time I look at the tweeter, I think I'm dealing with a soft dome that's sitting in a foam-covered horn. But closer inspection reveals that it's a cone membrane with a dome fitted in the centre. That's a smart move, Mr Diestertich, because I know from personal experience that some standard soft dome tweeters can really get on your nerves after a while. Incidentally, the tweeter cone has been so carefully made that there's no need for the

Fountain of Youth

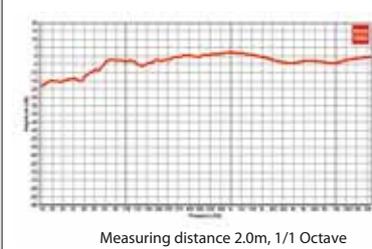
Lab Report

The optimised Step's frequency response at the crossover point depends heavily on the height of the ear/microphone, and, given the loudspeakers' size, is rather restrained in the bass range. If the speakers are positioned more openly, away from the wall, the sound balance in the in-room frequency response is slightly midrange-centred. If they are positioned close to the wall, you get a lot more bass. If you align the speakers vertically, the highest position works best. This is shown in bold in the diagram. The minimum impedance is 7 ohm, and loudspeaker efficiency is 87 decibels (2.83V/1m, 500-5000 Hz).

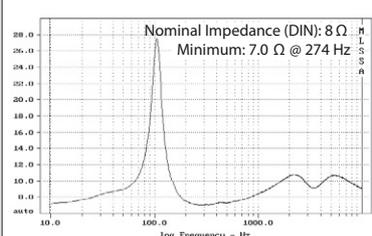
Frequency Response: Step 25 Plus + vertikal



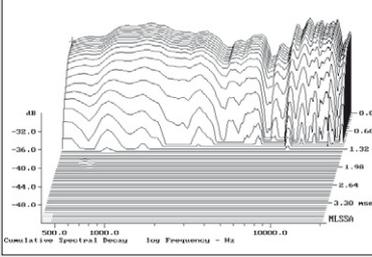
In-room Frequency Response: Step 25 Plus +



Impedance: Audio Physic Step 25 Plus +



Cascade: Audio Physic Step 25 Plus +



ferrofluid so often used as a marketing tool in loudspeakers. The crossover isn't made up of too many parts. That's thanks to the high quality of the chassis, which Diestertich says should sound good even without a crossover. Still, the parts show just how seriously Audio Physic takes the question of materials. Diestertich gives a very vivid explanation of how using different types of wires on the condensers can affect the sound. A whole range of wires were tested for the Step 25 Plus+, and the company chose the one that performed best. The resistors were also subjected to very close aural scrutiny. Audio Physic says the ones it selected deliver a more neutral sound.

A loudspeaker obviously needs a suitable cabinet if it is to fully exploit the drivers' potential. I removed the three-centimetre-long screws from the rubber-coated threads, and took a look at the MDF interior. Rather than use solid struts, which take up valuable space, or overdoing it with wool insulation, which has the same effect, Audio Physic has opted for a fine ceramic foam. It is an excellent insulator and doesn't take up too much room – another extremely smart choice.

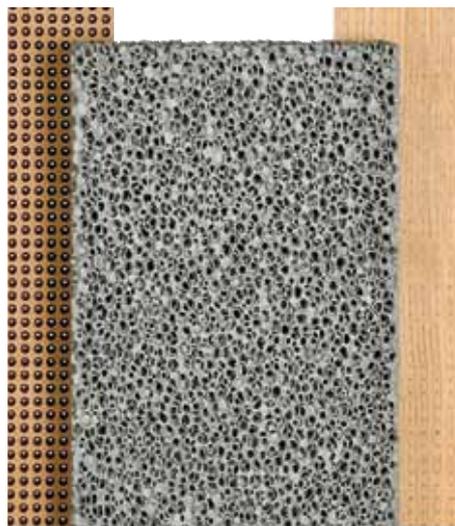
With all these components on board, the Step 25 Plus+ took up its position on an Audio Magic stand in the listening room. I used two amps: a Naim Supernait 2 (hifi & records 4/2013) and



the sensational Jeff Rowland Continuum S2. Experience with compact, high-end speakers shows that the result can often be ruined by using an amp that's too small. It's worth experimenting with the connecting cables, as they can create very subtle shifts in the sound pattern.

I started the test with the 88.2-kHz / 24-bit version of My Foolish Heart by the Holly Cole Trio. As soon as the piano started playing, the Step 25 Plus+ revealed one of its key characteristics: the loudspeaker

is unbelievably open. It creates genuine space for the piano and allows the sound of the strings to fade out fully. The result is melodious and truly enchanting. But this is just one of the many details that you get with the Audio Physic loudspeaker. Before Ms Cole starts singing, she coughs faintly, making a noise that many other loudspeakers either fail to pick up or, worse still, turn into a brief burst of interference. As the song continues, Ms Cole's



voice soars wonderfully from the loudspeaker. It sounds crystal-clear, natural, free – just as you would expect from a high-end model. The double bass, plucked so gently, also feels utterly real, even though it could do with more of a push, or a bit more independence. Now, hold



on to your hat because things are about to get really interesting. Normally you'd expect that kind of comment about a compact speaker's ability to handle bass to just finish there. Who'd want to start talking about physics at this point? But when I changed amps, I could hardly believe my ears. I'm well aware that very few people would actually pair a set of loudspeakers worth €1900 with an amp that will set you back €11,500 – but the Audio Physic / Jeff Rowland combination left me awe-struck for days. The loudspeaker was suddenly playing octaves that it shouldn't have been able to play, and was producing a three-dimensionality that simply shouldn't exist in this price bracket. I sat back in my seat, amazed, and enjoyed the sound of the Hilliard Ensemble's polyphonic performance of *Missa de profunctis*. I delighted in being able to pick out the individual voices with such precision, and in Audio Physic's ability to deliver the reverb as an entirely integral detail rather than some kind of vague, tacked-on sound.

The Step uses a cone tweeter, not a dome. Previous page: The WBT Nextgen binding posts and, below, the ceramic foam.

For the sake of getting a meaningful picture, I plugged the loudspeakers back into the Naim Supernait 2. The next challenge was Jazzkantine's *Smoke on the Water*. The band's jazzy take on this classic number swings along at a relaxed, lighthearted pace. The brass section shone in the right light, and never became in the least bit annoying. I also thoroughly enjoyed the precise rendering of the rhythm carried by the drum and bass guitar. Bass-heavy floorstanding loudspeakers can transform the rhythm into an over-exaggerated, extremely irritating timekeeper, but the Step 25 Plus+ used it to draw a beautifully subtle outline. The loudspeaker shows no sign of wanting to tip over into spectacular extravagance, which means it will keep its owners happy for a very long time to come.

Conclusion

There is no question that Audio Physic builds high-quality loudspeakers that sound impressive even in their basic incarnations. But the Step 25 Plus+, which has added €200 to the standard price tag, has improved a great deal on the mechanics and electrics of the Step 25. The changes are clearly discernible in the enhanced sound. To get the most out of the Step 25 Plus+, you need to be careful about how you set it up and about the electronics you choose. Take that to heart, and you can look forward to many hours of musical enjoyment. ☒

Olaf Sturm

Audio Physic Step 25 Plus +

WxHxD	17.5 x 32 x 25 cm
Warranty	10 years
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* Step 25: 1690 Euros