

HiFi VISION

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ONE-WAY TO HAPPINESS

“This is not only the best full-range transducer in the world, it is the only true full-range transducer in the world!” These are grand words from Holger Mueller to describe the Unicorn MkII, and they are one more reason for us to have a closer look at these exotic loudspeakers from Hessa.

Like many products, the German Physiks (yes, it's spelled with a "k") Unicorn have had a rather chequered history. They first saw the light of day more than 10 years ago, when the shrewd heads from the company with the DDD (Dicks Dipole Driver) bending wave transducers thought about employing them solo for the first time. Until then, this had never been tried, as the DDD is not really a deep-bass driver, but rather a specialist for everything above that frequency range, although it can indeed deal with a lot of power and it is capable of quite a long diaphragm stroke. Consequently it can be crossed over at such a low frequency that it is possible to mount the complementing bass driver at completely the opposite end of the cabinet and still have the system sound like a single source. It would however, rather leave the really low frequencies to purpose-built drivers. For more information on the operation of the DDD bending wave transducer, you should visit the German Physiks website at www.german-physiks.com, where the principles are explained very clearly and in great detail.

So, how can you make the DDD reproduce real bass? Answer: with the right cabinet. A horn-loaded design seems to be the obvious choice, as it amplifies the movements of the diaphragm in the low frequency range much more effectively. It is as if the driver is radiating its sound waves directly to the ear. After a lot of experimentation and numerous prototypes, a cabinet design was arrived at that can only be described as being a mix of traditional types, including the horn. This very elaborate and precisely defined structure combines resonance chambers and flow resistors with selectively resonating walls. The complexity of the cabinet makes it virtually impossible to deviate from the basic shape. Each corner and every curve has its significance and every wall has its required stiffness. Even on the top version, which is finished in carbon fibre (18,400 Euro/pair), only the side panels are coated with real carbon fibre, because it would otherwise make the front and the back panels too stiff. These keep their "ordinary" deep-black piano finish. Veneers are easier to use in this design, so the basic version for 14,400 Euro per pair, is available in a wide range of woods. Cabinets in veneer with a high polish lacquer cost another 1,000 Euro/pair.

The Unicorn basically has been built like a musical instrument, not like a traditional loudspeaker with a maximally stiff cabinet. It is obvious that such an approach takes quite a long time to deliver a perfect product, as the whole process is influenced by a very large number of factors. Firstly the DDD development team invested a huge amount of effort to produce a loudspeaker to be used as an internal reference for their baby. The object was to create a tool that made the characteristics of the DDD come alive as purely and unfiltered as possible. The result is still a key standard by which all other German Physiks loudspeakers must be judged. No matter the weight, size, or price, if a prototype doesn't match the Unicorn's naturalness, timing or spatial reproduction, it has no chance of being put on the market: at least not in that form. This means back to the developers!

The man who is to a large extent responsible for the Unicorn making it on to the market is Okihiko Sugano, the chief tester of Japan's biggest HiFi magazine "Stereo Sound". He noticed the prototypes when visiting the German Physiks factory and wasn't fooled by their modest looks. He listened to them and strongly suggested that they be made into a product for the consumer market. No sooner said than done, and the Unicorn started its success story on the Asian market. Of course one has to appreciate that Asians generally don't mind odd looks in loudspeakers, but rather value beautiful sound, which is a different conception of HiFi. It is

also a fact that makes the Unicorns somehow more acceptable despite their visual challenges. At least I can't think of another explanation for the fact that some Japanese HiFi-enthusiasts basically live inside their stereo systems and/or sacrifice a substantial part of their home for very large loudspeakers.

Broadband drivers, bulky cabinets and a lack of user friendliness have long been and remain accepted in Asia as in no other region of the world. In the end it is hardly surprising that the eccentric design of the Unicorn MkII, which is dictated by the technological necessities, has not found a bigger fan base in Europe yet. Imagine you're proudly presenting your brand new Unicorns to a good friend and tell him that you've paid almost 20 grand for the top model. What you'll get as a reaction most likely is a pitiful smile that says, "Now he's finally gone completely nuts." And let's not even think about what your wife might say. As Holger Mueller said during his visit, "You don't have to accept any compromise, apart from the looks: that cannot be changed, unfortunately." The Unicorns cannot even be concealed close to the back wall, as the DDD needs some clearance in order to unfold its unique omnidirectional radiation talent. However, you'll only consider the purchase of these loudspeakers to be inconceivable as long as you haven't heard them...

For customers in Germany, these loudspeakers also enjoy German Physiks' unique customer service. For example, a five-year warranty and 20 years of extended warranty for registration after the purchase. Also for customers in Germany, if within three years of buying these loudspeakers you decide you would like to upgrade to one of German Physiks' larger models, their national distributor will gladly take them back and offer an allowance, depending on their condition, against the purchase of the new set. Their confidence to do this becomes more understandable when you consider that the guys at German Physiks know better than anyone else the quality of their products, which are entirely hand-built in Germany.


The Unicorn's "crossover", is in fact more a correction module that is connected in series with the loudspeakers and is housed in an external case. Using jumpers on the top of the module, the owner can adjust the frequency response. At 8 kHz the level can be decreased by 2 dB, or raised by 2 or 4 dB. This of course not only affects the tonality, but also the spatial reproduction. I recommend every owner to experiment with this feature, though purists will prefer to leave the jumper in its neutral position and enjoy the Unicorns as they are.

The bass output can be increased in three steps by up to 3 dB, also by using jumpers on top of the correction module. At the same time, the lower cut-off frequency is slightly raised, which is especially recommended for analog chains. The subsonic frequencies created by a warped disc, or accidentally dropping the arm onto the record, can mean sudden death for the DDD. The same care and attention was given to the selection of the components used in the correction module as was given to the design and construction of the Unicorn itself. The developers have not simply reached into the biggest boxes of parts from the best premium manufacturers, but have dared to employ more "average" parts when they proved to sound better in a particular application. In the end, Holger Mueller's top goal is to convey the joy of listening to music with each of his models. The Unicorn, as the purest possible incarnation of the DDD concept, is of course on the very top of the list.

Change of subject: Listening test. The best full-range loudspeaker in the world. Holger Mueller: "When you sit in front of really good multi-way loudspeakers, you will say, "These are very good loudspeakers". When you sit in front of the Unicorns, you will say, "This is very good music". After long listening sessions I tend to agree with him: unconditionally. At least I don't know any other loudspeaker with just one driver that can reproduce such a complete sonic image and at the same time asks for so little compromise from its owner as the Unicorn. There's no sweet-spot for just one person, no lack of bass or treble, no resolution deficiency and no unrealistic maximum level limit. With the Unicorn, music can really be enjoyed in an incredibly relaxed manner. They manage to involve the listener and to put him or her in the middle of the action. This is what almost no other loudspeakers, apart from other German Physiks models, manage to do. However, compared to the other models, the Unicorn offers an unrivaled purity and spatial precision that makes me thankful for the fact that they made it to the market.

Tonally, the Unicorn MkII is very balanced and incredibly complete. With your eyes closed, you'd never guess that you're listening to a pair of single-way loudspeakers. The superb resolution over the whole frequency range is unrivaled by any other broadband driver, at least not in combination with such crystal-clear and phase-coherent reproduction. The Unicorns also excel in other areas. They mercilessly expose recording flaws, while maintaining musical enjoyment overall. Things that get stuck in the crossover networks and the system-inherent picking-to-pieces of conventional multi-way loudspeakers are brought to daylight by the Unicorn. Piano recordings are the best example. Maybe you will only realise the difference when you have a direct comparison between the DDD and a conventional loudspeaker, but the intensity with which the bending wave transducers strike a note is as incomparable as the purity with which they let the note decay. The difference is subtle, but the advantage in terms of authenticity of the reproduction is gigantic.

The low-frequency range of the Unicorn MkII is stunning too. Its character matches the unobtrusive, smooth nature of the midrange and treble reproduction. The DDD doesn't produce an ascetic pseudo-bass, but a real, rich and powerful low-frequency range, that is even able to fulfill party and "level-orgy" needs. The only broadband loudspeaker without compromise and the best full-range design in the world? Yes, Mr. Mueller!

Verdict		German Physiks Unicorn MkII	
Price p. pair	ab 14400 Euro		
Internet	www.german-physiks.com		
Weight	56 kg	 <p>At the end of the day...</p> <p>„...reproduces music airily and with a spatial precision that takes our breath away!“</p>	
Warranty	5 years		
Driver	1 x DDD Bending Wave Transducer		
W x H x D	550 x 1241 x 460 mm		