

# THE MIDRANGE KINGDOM



The slim design with tweeter and midrange driver in the upper unit of the baffle and side-firing woofers has always been the hallmark of the Virgo. See above the Virgo 2 of 1995 and below the mark 3 incarnation of the Virgo of 2001.



The Virgo has always held a special place in the Audio Physic product range serving as a perfect link to the larger models and incorporating sophisticated technology. The latest version does not fall short of the mark. Has the new Virgo hit the big time again?

by Matthias Böde

Have we really jumped a Virgo generation without even realising it? To date we have been aware of the existence of a third version of the loudspeaker which has long become an Audio Physic benchmark for success. And now the fifth incarnation of the Virgo is standing before us. Yes you heard right! In response to Asian markets – many Asians believe that the number four is unlucky - Audio Physic took a jump from number three to number five. We figure that is what globalisation is all about, and without access to global resources the brand-new Virgo could not have possibly been built.

With a proven track record since its first design, the Virgo has become one of the most successful export hits of the Birlon based German loudspeaker manufacturer. Audiophiles in Europe and in the USA as well as Asians, bubbling over with enthusiasm for all things hi-fi, simply love the opportunity to buy a still affordable loudspeaker where Audio Physic's strength in sound reproduction is present in abundance. In the light of the experience we have gained, STEREO has always held to the firm belief that the Virgo is "high end for the people", which is - the manufacturer could not agree more - how it should be now and in the future. Part of the deal is of course that Audio Physic must come up with something new each time to assert its claim. The "no loss of fine detail" slogan has served as a source of inspiration for years and is still going strong, filled with new life by the advent of the "Hyper Holographic Cone Mitteltöner (HHCM). The name is

## KEY WORD

**elastic ring**  
The ring helps damp ringing resonances in much the same manner as the sound of a bell is muted by touching it with one's finger. The Audio Physic solution to tension the diaphragm is named „Active Cone Damping II“.

a combination of English and German, with *Mitteltöner* being the German word for midrange driver, and just another sign of the growing globalisation for it is not hard to guess. where the HHCM is produced – yes, in China. The times are changing. It would seem that those who have always spoken out on musical truth as the Holy Grail of midrange performance have also started to shop for low-price drivers in the Middle Kingdom.

It is important not to jump to conclusions before you know the whole story: For Audio Physic's chief designer Manfred Diestertich, a midrange driver such as the HHCM had been in the air for quite a while. He knew exactly how to build it.

With the new radical midrange driver, Audio Physic's "no loss of fine detail" slogan is filled with new meaning.

However the long-established Scandinavian suppliers did not come to his aid in order to make his dream come true. "Too complicated, too much work, not worth the effort," was the common response to his plea. That is how it went until Diestertich struck gold and found a new, highly committed partner. Wavecor, a company located in Hong Kong's back-country, was ready to take on the job. As a matter of fact, the decision was not too far off the mark. The young and upcoming company was actually founded by Allan Isakson from Denmark, the former head of development at Vifa, ensuring the upholding of high quality standards.

It was the following task which many experienced driver manufacturers had shied away from early on: The HHCM was meant to



Double stitching lasts longer. The "Hyper Holographic Cone Midrange Driver" features two baskets, a plastic inside basket and an outside basket made of metal.

have two baskets nested into each other. One basket is made of plastic, the other consists of metal, and the two materials are used where they do their best in what they are best at doing. Moving parts such as the aluminium diaphragm, where an elastic ring designed to fit snugly around the rim helps to avoid resonances, together with the surround, the centering device and the voice coil are held in proper alignment by a plastic inside basket designed to achieve a maximum degree of damping inside. The powerful neodymium magnet is encased in an outside basket made of die-cast aluminium where the generated heat is efficiently dissipated by extensive cooling fins whereas remaining vibrations are transmitted to the mounting ring via slim stiff bridges.

Diestertich had high hopes for the material mix, expecting it to have ultra-low resonance combined with mechanical and thermal stability. Driver and cabinet resonances are effectively kept away from the diaphragm while at the same time the stress behaviour of the midrange driver significantly improves. Sonically speaking, Diestertich hoped to achieve a perfect marriage of ultimate resolution performance and absolute freedom from coloration.

We do not want to keep you in the dark any longer: the midrange driver provides excellent performance. While other loudspeaker manufacturers give much thought to the tweeter and/or woofer configuration to distinguish them from the crowd, the Audio Physic's focus is on the frequencies where the acoustic perception is the most sensitive. Audio Physic has revamped its top-class speaker with the previously introduced "Hyper Holographic Cone Tweeter", affixed by a thin foam ring, as well as two bottom-mounted woofers, fitted with aluminium diaphragms and provided with a bass reflex port at the bottom of the cabinet giving them plenty of room to breathe. The high-performance components are manufactured by the aforementioned Scandinavian company and sent to Audio Physic for the final touches. After a longer burn-in period where each chassis is "pre-treated" before assembly and without a limiting crossover, we put the new Virgo to the test by playing Munyungo Jackson's "Columbiana", a highly complex VTL recording. The musicians perform in a hall

Audio Physic's new midrange driver operates exactly in the frequency range to which the ear is most sensitive.

instruments further down the stage were portrayed lead to a kind of holographic effect which we have not experienced with other loudspeakers. Two of my favourite loudspeakers in this class, the B&W 804 S with the famous yellow driver, a design by the British manufacturer which is not supported in place by a surround, as well as Dynaudio's Contour S 3.4 also walk the extra mile when it comes to the midrange unit. As a two-and-a half way design, the Dynaudio does not feature a specific mid-

range driver chassis, and yet each time I hear it I am impressed by its definition and neutrality.

Fierce enemies the both of them, and so the Virgo was facing a hard battle. However the loudspeaker fought back in the midrange unit and won on points. Blessed with tonal sonority and a wonderfully seamless transition to the woofer, the HHCM came out winner in the categories of resolution, precision and transparency. Even B&W's yellow masterpiece could not hold a candle to the HHCM: it sounded slightly lumpy which was enough to make it seem heavier and less resolving of the musical texture. How on earth Dynaudio

manages to achieve such a wonderfully airy and uninhibited sound reproduction despite the absence of a specific mid-range design will remain the Danes' secret.

Instead of the provided spikes or glider pads (right) we recommend Audio Physic's new VCF high-end feet. With 200 Euro for 8 VCF, they are worth every cent of their price.

However even the Contour had to step back in line when the Virgo turned on its charm sounding smooth, sweet and colourful. The S 3.4's style is more sober, a bit stiff and less diverse – this was especially noticeably when we were listening to Christy Baron's voice.

The differentiated and punchy bass of the Virgo, bred for speed and precision, proved a better match as well as the provided HHCT. Believe it or not, the high-frequency wizard is just perfectly married to the graceful stoutness of the midrange driver. The result of the marriage is an absolutely seamless blend of razor-sharp

clarity and full-bodied homogeneity without any chubby quality to it. The Virgo's awesome perfection was best enjoyed by us in its fullness after we had mounted the brand-new

**Associated Equipment**

- (SA)CD-PLAYER: NAD M5, Rega Apollo
- INTEGRATED AMPLIFIER: Marantz PM-11S1, Prima Luna Dialogue One
- PREAMPLIFIER/AMPLIFIER: Soullution 720/710
- LOUDSPEAKER: B&W 804S, Dynaudio C. S3.4

"Vibration Control Feet", courtesy of Audio Physic, to the 0.3" (8 mm) sockets of the solid aluminium feet. The new VCF do not come with the Virgo, however they present a great alternative to spikes or rubber tipped pads, where the latter should only be used to move the loudspeaker around. With approx. 200 Euro for 8 VCF, they are worth every cent of their price and should definitely be purchased with the Virgo. The special material used for the Vibration Control Feet is based on the tried and tested SSC technology where all vibrations are translated into pull energy. With the delivered spikes, the advantages of HHCT and HHCM could still be enjoyed, however the spectrum was more focused around

the cabinet of the loudspeaker instead of unfolding in the room. In fact the highs which before were nothing short of fascinating, as soft as whipped cream at the highest resolution, lost some of their velvety smoothness and became all of a sudden a bit rougher. Tiny spikes and edges appeared which had not been there before. And it did not make a difference whether the loud-speakers were placed on a softer or harder floor. Hence our suggestion to Audio Physic: Why not make the Virgo a bit more

expensive and include the VCF in the delivery. Then everyone will be sure to understand what "no loss of fine detail" exactly means. After all, customers are not asked whether or not they would like to have the Perfect Sound Chip which is attached to the rear of the HHCM. Yes, you heard right. Audio Physic has introduced a mysterious chip which has had us all buzzing at STEREO, and which creates an astonishing effect on fuse boxes and equipment. Just like many of our readers, chief designer Diestertich did some tests on the chip and was so impressed with the results that he instantly made up his mind to also introduce chip tuning to loudspeakers. Now a customised version tailored to loudspeakers is about to be implemented

Whatever your opinion on this matter is, be assured that this guy will never act against his own conviction. Apart from such seemingly bizarre ideas, many of Audio Physic's physical achievements are present in abundance in the new loudspeaker such as the walls of the HHCM chamber created to serve like a diffuser. The Virgo is the star of the successful loudspeaker quartet capable of magically whisking the listeners off to a world of sound instead of just leaving them under the rule of the midrange kingdom.

Single wiring with WBT NextGen plugs avoids the loss of sound due to a multipole terminal. Bi-wiring is available on request.

**AUDIO PHYSIC VIRGO V**

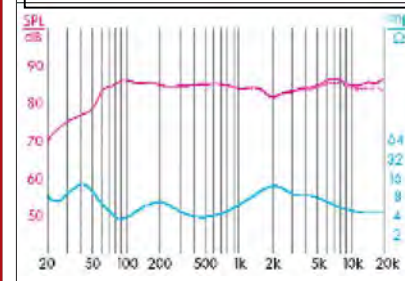


Dimensions: 39" (990mm) H by 9" (230mm) W by 16" (400mm) D  
 Guarantee: 10 years  
 Distribution: Audio Physic,  
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 www.audiophysic.de

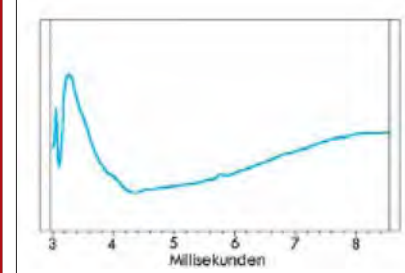
Thanks to the double basket design of the midrange driver, the new Virgo creates an awesome multi-faceted and homogeneous sound where one can experience the unfolding of an incredibly realistic soundstage, seeming to have an almost holographic quality to it. The legend continues with the new Virgo elevating the success model to levels previously unattained. Even the highly accomplished third incarnation of the loudspeaker did not have such an explosive effect.

**LABORATORY**

**Frequency Response / Impedance**



**STEP RESPONSE**



"There is more to the loudspeaker than what can be seen from the diagram" says STEREO's measuring technician Rolf Hähle when it comes to the woofer output. Due to the woofers arrayed in the sides of the cabinet, the positioning well away from the side walls of our measuring room and the short time window where reflections are mostly suppressed, a part of the energy is not shown in the graph. However the clear impedance trace at 25 Hz during the uncritical impedance response shows the sheer verve of the loudspeaker. Apart from a dip at 2 kHz, the result was very linear, offering excellent dispersion characteristics (dashed line) and a precise step response with no noticeable resonances.

**STEREO-TEST**

SOUND LEVEL 84%

PRICE/PERFORMANCE RATIO



EXCELLENT



Many components of the two-part crossover are custom-made for Audio Physic. The one for the higher frequencies (left) is mounted in the midrange unit.

panelled in cedar wood, adding an additional tonal glow to the already dense and spatial soundstage. It did not take us long to figure out what "Hyper Holographic" was supposed to mean when the somewhat cryptic names of the new midrange driver and tweeter were coined. Thanks to the exemplary three-dimensional music reproduction demonstrating a quite unusual spatial sound distribution in the lower ranges, the meaning became clear. We at STEREO have seldomly enjoyed such an uninhibited and utterly relaxed reproduction of the track. The sound of the plucked guitar strings seemed to float in the air, as light as a feather, and the clarity with which