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# YG Acoustics Vantage floorstanding loudspeaker

by Chris Martens

he Vantage is the newest floorstanding loudspeaker from the Arvada, Colorado-based firm YG Acoustics—a model many of us did not see coming. I say this because the Vantage is in essence a three-way, three-driver, tower-type loudspeaker that strongly resembles the firm's £53,000/pair Hailey 2.2 loudspeaker, but is priced many thousands of dollars (and pounds) lower, at £39,990/pair. Were significant corners cut to achieve this reduction in price? Let me answer by paraphrasing everyone's favourite nanny, Mary Poppins, who when asked if she had noteworthy imperfections replied, "Well, hardly any..." In short, the Vantage preserves most—albeit not quite all—of the technical features of the Hailey 2.2 while offering substantial cost savings.

Before we delve deeper into the specifics of the Vantage design, let's take a brief tour of YG Acoustics' signature 'building block' loudspeaker technologies—the technologies that form the essence of the brand's identity.

First, all YG cabinet enclosure panels are CNC machined from thick slabs of aircraft aluminium and fastened together using aircrafttype "vibration-free pressurised assembly" techniques. Second, all YG speaker cabinets use the firm's proprietary FocusedElimination™ anti-resonance technology said to keep "mechanical losses lower than any competing speaker, by combining the minimised turbulence of a sealed design with the low friction otherwise associated with enclosurefree concepts." Third, all YG loudspeakers, share the firm's signature 'tapered obelisk' industrial design motif-a motif developed with input from none other than Porsche Design. One interesting aspect of this motif is that cabinet panels initially appear to be flat, but prove on closer inspection to combine extremely subtle compound curves. The cabinet sides are precision machined, then surface finished to a satin sheen and finally anodised in jet-black or silver. Stated simply, YG's speaker enclosures represent a tour de force in the fine art of precision metalwork.

Shared YG Acoustics design features go far beyond the loudspeaker enclosures, per se. For example, all YG bass, mid-bass, and midrange drivers feature the firm's signature BilletCore™ driver diaphragms—so named because the diaphragms are milled from solid billets of aluminium. This might seem an exercise in gratuitous machine shop excess, but according to company founder Yoav Geva it is not. Instead, his findings have shown that stamped metal driver diaphragms ▶



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## "What are the differences between the Hailey 2.2 and Vantage, and exactly how significant are those differences from a sonic perspective."

▶ are prone to dimensional inconsistencies, problems with uncontrolled resonance, and the formation of eventual stress cracks over time. Similarly, Geva argues that composite driver diaphragms, too, form microscopic internal cracks (or de-laminations) that slowly can become audible over time. In contrast, YG's machined diaphragms are dimensionally stable, have machined-in resonance control ribs precisely where they are needed, and exhibit no structural degradation over time. In short, the drivers perform beautifully when new and will continue to do so year after year.

Further, YG's tweeters use so-called ForgeCore™ motor assemblies, which use complex 3D machining operations on internal motor/magnet assemblies to achieve dramatic reductions in distortion vis-à-vis even the best of off-the-shelf tweeters. YG crossover networks feature signal path parts of the highest quality such as 'unobtainium'grade Mundorf capacitors, etc. However, where the firm deems available premium parts to be good but not quite good enough, it can and does make its own parts as necessary. For example, YG uses PCB blanks that have ultra heavy-duty, ultra pure conductive layers so thick that circuit board traces must be machined-not photo-etched-into the board surfaces. Similarly, YG has created its own proprietary ToroAir™ inductors, which are said to eliminate cross-talk, and its own ViseCoil™ bass inductors, which are said to reduce residual losses and improve linearity while reducing audible mechanical vibrations. The point is that YG Acoustics builds all of its loudspeakers to one extremely high quality standard and leaves few stones unturned in looking for ways to enhance audible performance, long-term reliability, or both.

The most significant 'jewel' in YG's loudspeaker design crown is arguably the

firm's proprietary, Geva-developed loudspeaker CAD (computer aided design) software, which yields so-called DualCoherent  $^{\rm TM}$  crossover networks. These networks enable YG's speakers simultaneously to achieve flat frequency response and linear phase response ( $\pm$  5° relative phase across the entire overlap region between drivers). While many competitors swear it is impossible to co-optimise frequency and phase response, YG Acoustics has quietly rolled up its sleeves and got the job done.

Given similarities in size, shape, design technologies, and overall configuration, we should ask what are the differences between the Hailey 2.2 and Vantage, and exactly how significant are those differences from a sonic perspective?

Perhaps the most obvious difference involves the fact that the Hailey 2.2 uses YG's state-of-the-art BilletDome™/ForgeCore™ 25mm fabric/metal AirFrame™-reinforced dome tweeter, whereas the Vantage uses the firm's earlier generation ForgeCore™ 25mm fabric dome tweeter (also used in the firm's Carmel 2 loudspeaker). This difference alone accounts for a significant chunk of the price offset between the two loudspeakers as the BilletDome™ tweeter is difficult to build, tricky to mass-produce, and thus extremely expensive to make. But how do the two tweeters differ in terms of audible performance? According to a YG spokesperson (and to my ears as well), the extreme high frequency response of the two tweeters is surprisingly similar. The observable differences, however, fall more in the upper midrange/lower treble region when pushed hard, as the BilletDome™ tweeter exhibits greater smoothness and composure under pressure, and thus more free-flowing dynamics and superior resolution on complex musical passages. The operative phrase, here, is "when pushed hard"; if you run the two tweeters side-by-side either in smaller rooms or at moderate volume levels, performance differences between the two become much harder to discern.

Second, the Hailey 2.2 uses a larger 260mm woofer whereas the Vantage employs and 222mm woofer drawn from YG's earlier-generation Kipod 2 loudspeaker. The larger surface area of the Hailey 2.2 woofer enables the speaker to claim usable low-frequency output all the way down to 20Hz, while the Vantage has a just slightly higher low-frequency limit of 26Hz (which is still extremely low, once room gain is taken into account). Interestingly, both speakers carry the exact same sensitivity rating:  $87 \, \text{dB}/2.83 \, \text{V}/1 \, \text{m} \, 2\pi$  anechoic. My listening tests confirmed the similar sensitivities of the two models, although if anything the Vantage struck me as being just a hair easier for my amplifier to drive than the Hailey 2.2.

Finally, the Hailey 2.2 is just slightly larger and heavier than the Vantage, although both speakers share nearly identical floor footprint dimensions. The Hailey 2.2 loudspeakers weigh 76 kg each and measure (H×W×D) 122 × 33 × 54 cm, where the Vantage speakers weigh 72 kg each and measure

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"I suspect the two speakers would seem almost interchangable – wherein lies the true magic of the Vantage."

 $(H\times W\times D)$  112  $\times$  32  $\times$  54 cm. Further, the Hailey 2.2 ships with comparatively tall, multi-layer isolation feet whereas the Vantage comes with much smaller, simpler isolation feet/spikes that sink so far into carpeted surfaces that they all but disappear. But how do the Hailey 2.2 and Vantage perform when heard in direct comparison playing reference recordings.

I had the opportunity to make this comparison when YG Acoustics removed the Hailey 2.2s that had been in my system and replaced them with the Vantages. My reference system consists of a Rega Osiris integrated amplifier and Isis CD player, an AURALIC ARIES wireless bridge and VEGA G2 DAC, a Vertere Dynamic Groove turntable and Phono 1 phonostage, an Audio-Technica phono cartridge, Furutech cables and power conditioning equipment, and Auralex, RPG, and Vicoustic room treatments. As he had done for my earlier Hailey 2.2 review, YG's system set-up wizard Dick Diamond positioned and dialled-in the Vantages in my room. This time, though, the process did not take long as Diamond almost immediately found the Vantages' 'happy place' and then sat back to admire how beautifully the speakers coupled with my room.

Coming in, I had suspected/expected that performance differences between the Hailey 2.2 and the Vantages might be pretty obvious and not work to the favour of the less expensive speaker, but that wasn't the case at all. In fact, in my medium-sized room and at my typically moderate listening levels, the speakers sounded almost identical, which proved a very pleasant surprise indeed. If I listened very carefully and with volume elevated a bit, I could just pick out the Hailey 2.2's slightly purer, smoother highs and upper midrange, while down very low I could just discern the Hailey 2.2's 'nth' degree of deeper bass extension, but that was about it for discernible differences. However, for most listeners, most of the time. I suspect the two speakers would seem almost interchangeable—wherein lies the true magic >

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### "Here, the powerful, but also tautly controlled and sharply focussed, bass of the Vantages comes into play."

of the Vantage. The Hailey 2.2s are without a doubt the superior speakers, but the Vantages come so very close in most musically important respects, and at a 30% lower price, that one cannot help but admire the sheer value for money on offer (even though the Vantages are by no means 'inexpensive' loudspeakers).

One album that shows several of the Vantages' strengths is Grzegorz Krawiec's Journey-Podróz [M•A Recordings, 16/44.1]. The recording capture's Krawiec's classical guitar as heard in the reverberant interior of St Mark Church in Kraków, Poland. On the three movements of Hans Werner Henze's 'Drei Tentos (aus der "Kammermusik 1958")', the guitar sounded wonderfully immediate and alive through the Vantages, and was positioned front and centre near the front of the sanctuary. The YG's perfectly reproduced the resonant acoustics of the church, while serving up almost blueprint-precise imaging and intensely three-dimensional soundstaging. Transient sounds on the guitar notes were razor sharp (yet never edgy or overly aggressive), while the speakers faithfully rendered the golden-hued and seemingly self-luminous tonal qualities of Krawiec's guitar. It was a hi-fi moment that stopped me in my tracks and led me to marvel that this (or really any) loudspeaker could so faithfully render the beauty of the music at hand.

Another track that revealed important aspects of the Vantage's sonic persona is the 'Calliope' from Al Di Meola's *Scenario* [Columbia LP]. This track is something of a jazz-rock fusion classic from the 1980's and it features an all-star cast: Di Meola on electric guitar, Jan Hammer on keyboards, Bill Bruford on electronic drums, and Tony Levin on bass and Chapman stick. What struck me was the sheer grace and ease with which the Vantage teased out the track's intricately interwoven musical lines and phrases and effortlessly 'decoded' Bruford and Levin's at times wildly syncopated rhythm passages. Most of all, though, I was struck by the way the Vantages consistently captured the song's sometimes mysterious but always exuberant and high-energy vibe, which given the four high-powered soloists at play was no mean feat.

Last, let me reference the track 'The Town Burns' from John Williams' original soundtrack for the film *Rosewood* [Sony Masterworks, 16/44.1]. 'The Town Burns' conveys a dark sense of foreboding conveyed in no small part by deep, very low-pitched percussion that seems, at times, to arise out of nowhere. Here, the powerful, but also tautly controlled and sharply focussed, bass of the Vantages comes into play. One moment the listener is following the track's vocals and melodic lines and the next one is aware of the deep, potent, but never overblown or boomy, presence of very low-pitched percussion instruments that fairly bristle with ominous portent. Then, just as suddenly as they appeared, the low percussion sounds decay and vanish—as if inviting the listener to wonder is s/he even heard them at all. Great low bass is often this way; it's not present until the music calls for it, and

#### **TECHNICAL SPECIFICATIONS**

Type: Three-way, three-driver, modular floorstanding loudspeaker with sealed acoustic suspension cabinet enclosures

Driver complement (per loudspeaker):

One 222mm BilletCore<sup>™</sup> woofer, one 185mm BilletCore<sup>™</sup> mid-bass driver, and one 25mm ForgeCore<sup>™</sup> fabric dome tweeter

Frequency response: 26Hz to above 40kHz, ± 2dB in the audible band, ± 5° relative phase throughout the entire overlap

Impedance: 4 Ohms nominal, 3 Ohms

Sensitivity: 87dB/2.83V/1m 2w anechoic Dimensions (H×W×D): 112 × 32 × 54cm Weight: 72kg per channel, unpackaged Price: £39,990/pair

Manufactured by: YG Acoustics LLC Tel: +1 801-726-3887

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**URL**: yg-acoustics.com

it doesn't linger around once its impact has been heard and felt. The Vantages are great low-frequency performers.

To speak candidly, I came to this review with some misgivings and even biases against the Vantage loudspeakers, but they have won me over. They offer much of the sonic excellence of YG's terrific Hailey 2.2 loudspeakers, but at just 70% of the Hailey 2.2's price. What is more, in the right small-to-medium-sized rooms and played at sensible volume levels, sonic differences between the Hailey 2.2 and the Vantage become very difficult to discern. Vive la Vantage. +