

## Loudspeaker Focus



## YG Acoustics Vantage Live

### Trailblazer

Robert Harley

**I**ntegrated audio systems—products that combine speakers, amplification, and streaming functions—tend to be aimed at the consumer who values convenience, ease of use, and fewer boxes over ultimate sound quality. There have been a few excellent upscale offerings in the category—the Image 1 from Gayle Sanders’ Ikon Audio and the Meridian Digital Loudspeakers, for examples—but by and large the category is dominated by mid-priced efforts. Despite the inherent technical, sonic, and cost-saving advantages of integrated systems, these all-in-one packages largely haven’t caught on with audiophiles. Indeed, the hard-core enthusiast revels in building a piece-by-piece

component system perfectly tailored to his room, tastes, and budget, finding just the right amplifier, or reveling at the upgrade rendered by a new DAC. Frankly, the thrill of the chase is an important part of the allure of high-end audio.

But what about the well-heeled music lover who just wants to enjoy listening without all the fuss? For many

people, component audio is intimidating to buy, unwieldy in the home, and difficult to use daily. What does the high-end industry offer this music lover? How can we bring the uncompromising ethos of performance audio to a much larger group of people, who love music and have the means to acquire a quality system? How do we save those consumers from mass-market dreck and change their lives through a deeper relationship with music?

YG Acoustics has addressed this dilemma with the new Vantage Live system reviewed here. The \$59,800 system is a pair of YG’s Vantage loudspeakers with integral amplification, DACs, and streaming. Just plug the pair of speakers and a small control box into wall power, run a pair of thin ST-Type optical cables, connect to a network, and you can begin streaming from your phone or tablet (streaming subscription required) with the excellent Roon interface. The system couldn’t be easier to set up and use, and room placement turned out to be surprisingly unfussy.

But is the Vantage Live “high end?” Does it embody the highest aspirations and values that are the foundation of the field? Or are there inevitable compromises inherent in combining so many functions in a single product? Those are the questions we’ll explore in this review.

The Vantage Live is the result of a partnership between loudspeaker maker YG Acoustics, electronics and DAC manufacturer Bel Canto, and the British design firm Cambridge Acoustic Sciences. Most of you are familiar

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## Specs & Pricing

### Vantage Live Loudspeakers

**Type:** Tri-amped powered loudspeaker with integral streaming and digital-to-analog conversion

**Driver complement:** BilletCore 8.75" woofer, BilletCore 7.25" mid-woofer, ForgeCore dome tweeter

**Loading:** Sealed

**Crossover:** DSP

**Frequency response:** 25Hz–30kHz

**Phase deviation:**  $\pm 2^\circ$  over audio bandwidth

**Integral amplification:** 3x 700W per speaker; 0.001THD+N from 20Hz–20kHz at half peak power; 135dB signal-to-noise ratio unweighted referenced to peak power; 93% efficiency at peak power; 1.5m ohm output impedance

**DACs:** Three per loudspeaker, 126dB dynamic range

**Finishes:** Anodized ChromALure, high-gloss paint, custom finishes available

**Dimensions:** 13" x 44" x 54"

**Weight:** 176 lbs. each, net

### Vantage Live Controller

**Digital inputs:** USB, TosLink, SPDIF (BNC), AES/EBU

**Digital formats supported:** Up to 192kHz/24-bit on AES/EBU, SPDIF, and TosLink; up to DSD128 and PCM 192kHz/24-bit on USB (DoP); MQA decoding, Roon Endpoint

**Network:** Ethernet, Wi-Fi (dongle included)

**Analog inputs:** Two line, one phono

**Phono input sensitivity:** 2.5mV to 5mV (mm); 0.25mV to 0.5mV (mc)

**Phono loading:** 47k ohms (mm); 50, 100, 500, 1k ohms (mc)

**RIAA accuracy:**  $\pm 0.25$ dB 50Hz–15kHz

**Phono signal-to-noise ratio:** >70dB A-weighted

**Digital outputs:** Left/right-channel digital outputs on ST-Type optical jacks

**Analog outputs:** One line level (to drive powered subwoofer)

**Processing:** Selectable second-order high-pass filter for main output used with a subwoofer; subwoofer gain; bass tilt adjustment

**Remote:** Metal hand-held

**System control:** SEEK music-management app; Roon (requires Roon subscription)

**Integration:** RS232

**Dimensions:** 15.7" x 3.7" x 12.4"

**Weight:** 19.2 lbs.

**System price:** \$59,800

with YG and Bel Canto, but Cambridge Acoustic Sciences (CAS) is likely a new name. The firm was founded by a group of Ph.D.s, including a person with a doctorate in musicology. CAS had taken advantage of its cutting-edge expertise in computational modeling in a variety of fields and applied it to acoustic design and loudspeaker engineering. Specifically, CAS has developed the ability to mathematically model a loudspeaker's performance, create separate mathematical models of a wide range of listening rooms and furniture layouts, and then "place" the loudspeaker model in one of more than 300 room models, with the resulting data guiding the development effort. These models are so computationally intensive that they can be realized only through cloud computing. The company's co-founder, Dr. Matthew Webster, wrote his doctoral dissertation in astrophysics on modeling the large-scale structure of the universe. He is also a long-time owner of a pair of YG loudspeakers and a serious music lover. During a visit to the YG factory late last year I spent an hour on a Zoom call with Dr. Webster in which he talked about CAS' unique approach to loudspeaker design and to the Vantage Live, in particular. In addition to developing the acoustic design, CAS programmed the DSP crossover and provided the overall system integration of the Vantage Live. Incidentally, CAS also contributed all the design and engineering of YG Acoustics' new Peaks series, a line of passive loudspeakers that range in price from \$8500 to \$25,000 per pair.

The Vantage Live is rather short and stout, with an upper module housing the 7.25" mid/woofer and 1" dome tweeter, and the lower flared module containing the single 8.75" woofer. The woofer enclosure is sealed, as it is with all YG designs. The system is only 44" high, but rather deep. Each speaker weighs a hefty 176 pounds. Rather than binding posts on the rear panel, the Vantage Live has ST-Type fiber-optic ports that connect to the included controller, a preamp-sized chassis that is the system's heart. The controller connects to your network through Ethernet or via a supplied Wi-Fi dongle, offers an extensive complement of digital and analog inputs (see Specs & Pricing), provides source switching, has integral streaming functions, and sends a digital output via fiber-optic cables to the speakers. The system is fully MQA compatible and is a Roon Endpoint. The music-management app SEEK is included, and although I didn't use this app, it's unlikely that it approaches Roon's unparalleled capabilities and user experience. Featuring electronics designed and built by Bel Canto, the controller converts incoming analog signals to digital for transmission to the speakers. The controller's phono input isn't an afterthought; it offers variable gain and loading to accommodate a range of cartridges, and as we'll see, sounds surprisingly good. Unlike some integrated systems, the Vantage Live doesn't incorporate DSP room correction.

The Vantage Live offers a wide range of features and set-up options via the controller. A "Tilt" control allows you to subtly shift the tonal

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balance with a bass cut and treble boost, or bass boost and treble cut in 0.6dB steps, with a hinge point of 775Hz. The “Bass EQ” adjustment can boost or attenuate the bass level in 0.6dB steps up to  $\pm 3$ dB. If you decide to augment the Vantage Live with a subwoofer, you can engage a second-order high-pass filter to keep low bass out of the Vantage Live. A USB-A port allows you to access music stored on a hard-disk drive connected to the port. The system is UPnP and Roon-ready compliant, and a machined metal remote control provides complete system control, including a balance adjustment.

The 8.75" woofer and 7.25" mid/bass driver feature YG's BilletCore technology, in which the diaphragms are machined from solid blocks of aluminum. The result is a cone that is incredibly stiff and resistant to flexing, while also being lightweight—the holy grail of driver design. This manufacturing method is also incredibly expensive; it takes the five-axis, half-million-dollar Gildemeister CNC machine an hour to turn an 11-pound aluminum billet into a 45g woofer cone. The 7.25" midrange diaphragm is also machined from solid billet. The soft-dome tweeter is YG's ForgeCore design in which the magnet system serves as both motor and enclosure. This unique optimization of both motor and enclosure in a single structure reportedly lowers distortion.

As mentioned, each loudspeaker receives a digital datastream from the controller. Inside the speaker, the digital signal is split up into three frequency bands. A digital-domain crossover filters the wideband signal by performing mathematical computations on the digital data representing the music. The three band-limited digital signals—bass to drive the woofer, midband frequencies to the midrange driver, and treble to the tweeter—are then independently converted to analog via one of three DACs. Each DAC drives custom Class A I/V (current-to-voltage converter). The current-to-voltage converter exerts a significant influence on the DAC's sound; most are realized with op-amps. A discrete current-to-voltage converter is a tweaky approach. A voltage gain stage, realized with MELF high-precision resistors (made by Vishay), drives a low-gain 700W discrete switching (Class D) amplifier. This means that the Vantage Live is tri-amplified with 2100 watts total per speaker.

This architecture, in which the amplifier outputs are connected directly to the driver with no crossover components in the signal path, confers considerable advantages. The benefit of removing the inductors, capacitors, and resistors of an analog crossover cannot be overstated. This is particularly true of removing the large series inductor in the woofer circuit—a crossover part that reduces the amplifier's ability to control the woofer's motion. Moreover, the crossover can have any characteristics of slope and phase that the designer specifies without the limitations of analog components. DSP crossovers also make it possible to program small response variations to compensate for less-than-linear driver behavior. Finally, the amplifier designer can design the amplifier circuit tailored precisely to the driver's characteristic rather than building a general-purpose amplifier that will work under entirely unknown conditions.

In short, the Vantage Live is the high end's most ambitious attempt yet at creating an integrated system.

### Listening

Although I briefly auditioned the Vantage Live at YG's factory, it was only in the familiar setting of my listening room that I discovered that the Vantage Live sounds different from just about any system I've heard before in this price range. If you've ever put on a direct-to-disc LP and heard a sudden increase in that sense of presence, of the removal of “something” between you and the music, you have an idea of how Vantage Live sounds. The Vantage Live has a crystalline clarity, a dynamic verve, and an immediacy that are striking, much in the way a direct-to-disc LP exhibits those characteristics.

Part of this quality is due to the speaker's overall voicing, which has a decidedly extroverted personality. The midrange is projected forward in front of the speakers rather than laying back. But this heightened presence doesn't sound like a coloration or an unnatural emphasis on a band of frequencies in the presence range (1–4kHz), but, rather, as if a scrim between you and the music has been stripped away. Jonathan Valin had recently put me on to the album *Jederman Revisited* by Dutch blues master Hans Theessink, an album that perfectly highlighted the Vantage Live's extraordinary magic act of conjuring up the performer in your listening room. Theessink's exquisitely recorded voice and slide guitar had such realism and presence it was uncanny. I had the same impression with Melody Gardot's gorgeous vocal on her album *Sunset in the Blue*—her voice projected forward, seemingly *right there*, vividly present. Or try Ruth Moody on her album *These*

*Wilder Things*. In the sense of midrange realism and presence, and of the sound being completely detached from the speakers, the Vantage Live was reminiscent of a full-range planar loudspeaker. Which is high praise, indeed.

I thought of the Vantage Live's signal path, and how the design affects the product's sound. Each of the Vantage Live's three drivers is powered by its own Class D amplifier connected directly to the driver with no crossover components in the signal path. Removing the resistors, inductors, capacitors, and long speaker cables between the amplifier and driver may be responsible for the Vantage Live's presence and immediacy. Significantly, the Vantage Live didn't exhibit the characteristics I associate with some Class D amplifiers—a kind of “chalky” whiteness overlaying timbres. I have, however, not heard the latest and best switching amplifiers, but I understand that they have made great progress recently. Our Steven Stone, in his review of the Bel Canto Ref 600M monoblocks [Issue 268] proclaimed these amps to be of reference quality. Hearing Bel Canto's amplifiers in the Vantage Live, without crossover parts in the signal path, has elevated my view of switching-amplifier technology.

The advantage of connecting the loudspeaker driver directly to the power amplifier output terminals is particularly beneficial in the bass, where Class D amplification excels. Removing the large series inductor of an analog crossover in the woofer circuit allows the amplifier to take iron-fisted control over the movement of the woofer cone, both by virtue of the Class D design



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(including its vanishingly low output impedance) and the direct connection between amp and speaker driver with no intervening crossover components. You can hear these technical advantages in the Vantage Live's bass, which is tuneful, extended, and precise in pitch and dynamics. The sealed enclosure, coupled with the Class D amplification, confers a sense of clarity in bass lines. The Vantage Live is very resolving in the bass, clearly revealing the starts and stops of notes, as well as their pitch and texture. The bottom end is the antithesis of thick, slow, and confused. I really enjoyed this aspect of the Vantage Live. Ray Brown's acoustic instrument on *Soular Energy*, Ernest Tubbs' electric bass on the new Simon Phillips album *Protocol V*, and the double-bass section of the orchestra on *The Arnold Overtures* [Reference Recordings 192/24] were all exemplary, with every note clearly articulated. Moreover, the Vantage Live has superb dynamic agility in the bottom end, with sudden attacks, rapid decays, and wide dynamic swings. These sonic characteristics add up to a musical presentation with a powerful rhythmic drive, or what the British call PRaT ("pace, rhythm, and timing"). This bass clarity was coupled with a warmth and weight, a nice combination that provides a strong rhythmic and harmonic foundation for the music. A good example is the big-band arrangement (with a Hammond B-3) of Stevie Wonder's "I Wish" by Dave Seibels with Gordon Goodwin's Big Phat Band. The Vantage Live's bass solidity, taut pitch definition, and effortless dynamics combined to make this track rhythmically powerful and thrilling. The complex instrumental lines remained coherent at high levels rather than congealing. This track revealed many virtues of the Vantage Live, but also its somewhat unforgiving character in the treble. This recording is a bit bright—the upper harmonics of the brass and woodwinds are on the steely side, and the cymbals are a little hot. The Vantage Live isn't a speaker that glosses over or softens these overly bright recordings.

To give you my raw, in-the-moment impressions of the Vantage Live, I'm going to include my verbatim listening notes about the track "Cousin Dupree" from Steely Dan's *Two Against Nature*. This is a spectacular recording, and one that reveals so much about many aspects of an audio system's performance. This is what I wrote in my notes the moment just after this track ended: "Something different about this speaker; clarity, pristine, crystalline. Every musical line clearly resolved. Background vocals so easily audible rather than hinted at or as an undifferentiated sound. Massive dynamic speed and snap. Very punchy. Powerful rhythmic drive. Huge stage, wider than it is deep. Upbeat, alive, and vivid. Great clarity of instrumental line."

The Vantage Live plays far bigger than its size suggests, in many ways. Spatially, the Vantage Live throws a wide and deep soundstage—try *The Cowboys Overture* from *John Williams at the Movies* [Reference Recordings 192/24], for example. The Vantage Live was notable for the way it threw a tangible soundstage even when I was sitting off-axis. The image didn't collapse as I moved to the side, an important consideration for two (or more) person listening. The speaker also sounds bigger than its size in the bass, with a solidity and extension more in line with much larger speakers. Similarly, the Vantage Live played big dynamically, with a startling physicality on kick drum and the big brass tuttis of

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the John Williams album, for examples.

I was pleasantly surprised by the Vantage Live's performance with streaming (Tidal and Qobuz), but completely taken aback by how good it sounded playing vinyl. The Vantage Live's controller digitizes analog signals, including phono signals. I don't know what alchemy is in Vantage Live's controller chassis, but vinyl sounded shockingly great through the Vantage Live. In previous products I've auditioned that digitize phono signals, the losses have been significant—reductions of air and space, truncation of the soundstage, reduction in immediacy, and a hardness overlaying midrange and treble textures. I pulled out all the most challenging LPs that I know intimately and was repeatedly shocked by the Vantage Live's performance with vinyl. *Satchmo Plays King Oliver*, the classic direct-to-disc *For Duke*, MoFi One-Step pressings of Yes' *Fragile* or Santana's *Abraxas*, Phoebe Snow's first album on a superb Analogue Productions 45rpm remaster—you get the idea. The eerie sense of space and presence on "St. James Infirmary" from *Satchmo Plays King Oliver* wasn't foreshortened, and the cymbal crash at the end hung in space without being truncated and with no added grunge. These spectacular LPs, all made from pure

analog sources, still sounded spectacular through the Vantage Live and its phonostage, despite the analog-to-digital and digital-to-analog conversions. The quality of the Vantage Live's phono section says much about the product's ambition as a serious alternative to a component-based system.

## Conclusion

YG Acoustics' \$59,800 Vantage Live integrated system is a bold venture into relatively uncharted territory. Will audiophiles give up the ability to mix and match components, upgrade a single product, and tailor a system to their tastes for the convenience of an all-in-one package? Will music lovers who are turned off by the complexity of component audio embrace a \$60k system? Those questions have yet to be answered. It will be interesting to learn whether the Vantage Live is a commercial success.

There's no question, however, as to the Vantage Live's high-end credentials. This is a system that needs no apology for its convenience or any equivocation when describing its sound quality. In fact, this new YG system's architecture confers some outstanding sonic qualities including superb bass definition and a midrange with a startling sense of clarity and immediacy. The Vantage Live sounds like a full-fledged high-quality system that just happens to offer ease of setup, is simple to use on a daily basis, is relatively unobtrusive, and has handsome good looks.

That sounds to me like a recipe for bringing high-end audio values and performance to an entirely new audience. **tas**