

THE
GRYPHON



THE GRYPHON CANTATA SYSTEM

Gryphon Cantata

Gryphon Audio Designs stands at the vanguard of home entertainment design and engineering. Founded in 1986, Gryphon achieved immediate global acclaim for the state of the art performance, intuitive ergonomics and stunning beauty of the cost-no-object Gryphon pre-amplifiers and power amplifiers.

Now, the Gryphon Cantata loudspeaker system reaps the benefits of the vast body of technical knowledge and experience accumulated by Gryphon at the cutting edge of audio engineering.

Designed and built by our dedicated, conscientious team of award-winning engineers, Gryphon Cantata sets a new high-water mark for sonic realism and emotional involvement with bold innovative design that will be a handsome addition to any contemporary interior.

The arrival of the Gryphon Cantata forces us to seek out entirely new descriptive paradigms in order to convey the full magnitude of its achievement.

A Monumental Achievement Without the Monument

We didn't set out to build a compact floor-standing loudspeaker. We set out to build the best possible loudspeaker, one truly worthy of the Gryphon name. When we applied Gryphon's assembled expertise in a unified effort to re-think every aspect of the process of loudspeaker design and assembly, questioning what had been accepted wisdom for nearly a century, we soon discovered that there was simply no



reason to make it bigger. And lots of sound reasons to keep it compact.

At Gryphon, decades of experience have taught us this crucial lesson: What is left out can make even more difference than what goes in. By attacking the familiar problems of loudspeaker design from this fresh perspective, Gryphon's engineers acquired new knowledge and understanding that offered a unique opportunity to optimize every aspect of loudspeaker performance in a system of greater beauty and more modest dimensions than ever before at this exalted level of quality.

A Celebration of Beauty

Because the Gryphon Cantata so radically re-defines loudspeaker performance, we felt it appropriate that it should also re-define the loudspeaker's role as a physical object in the domestic landscape, as a thing of beauty to be celebrated in its own right.

To set the Gryphon Cantata apart as a work of audio art, High-gloss black Methacrylate and black Nappa are standard finishes. Side panels are also available in High-gloss black, American Walnut Burl and Black Anodized aluminum. Optional finishes include Vavona Veneer, Ebony Veneer, Perforated Steel, black rubber and other distinctive finishes. For a truly customized finish, panels can be upholstered with textiles, carpeting, fur, leather or just about anything you can imagine. Your Gryphon dealer can assist you in creating a uniquely personalized Cantata System.

Thinking Outside the Box

To fully understand the towering accomplishment that the Gryphon Cantata loudspeaker represents, consider the contradictory demands that a loudspeaker must live up to. It must be able to reproduce the highest audible frequencies by carefully controlling the microscopic motion of a nearly weightless diaphragm that vibrates up to 20,000 times per second, yet it must also displace massive amounts of air to reproduce the soul-shaking rumble of a church organ.

Elegance and Brute Force

To use a metaphor from the animal kingdom, a loudspeaker must offer the speed, elegance and accuracy of a lion (for mid and high frequencies) along with the brute

strength of an elephant (for bass frequencies). But put a lion and an elephant together in the same cage and they will only hurt each other. This is exactly what happens in a conventional loudspeaker as it attempts to cope with the challenges of achieving undistorted, full-range frequency response.

The central problem here is the traditional brute force approach to bass that remains virtually unchanged after nearly a century: The largest possible driver with the largest possible motor system attempts to shift the largest possible air mass. This approach can produce impressive results if all you want to do is measure bass response in free air or under anechoic conditions. But under real-world conditions in real living spaces, all bets are off.

The simple fact is that no loudspeaker can be better than the room allows it to be, particularly at lower frequencies where the room's unwanted contribution is greatest. To eliminate this major obstacle, Gryphon has executed a detailed analysis of the complex room-speaker interface and devised a reliable, scientifically sound solution, the Gryphon Cantata Q Controller.

Working with the Room

Built to the same exacting standards as the acclaimed Gryphon range of audio amplification components, the Gryphon Cantata Q Controller ensures outstanding room integration for extended, natural room-independent deep bass to match the stunning clarity and resolution of the mid and upper frequencies. Described briefly, the Q Controller exploits an acoustical phenomenon known as room gain, the fact that in any room, the enclosed space will reinforce frequencies below the room resonance frequency by 12 dB per octave. Since system response from a sealed loudspeaker cab-



inet rolls off by 12 dB/octave below the loudspeaker's resonance frequency, it is possible to calculate complementary resonance and Q values for the loudspeaker and for the room in order to obtain resonance-free bass response extending down to DC (zero Hz).

Due to the room-specific nature of resonance and Q, the Gryphon Cantata Q Controller offers a range of adjustment options as well as a slot for installation of a custom value. Once system Q and room Q are defined for your particular room, bass frequencies are coupled ideally to the room and are reproduced in perfect phase with the upper frequency range.

Think of it as teaching a lion to do an elephant's job, using intelligence, instead of brute force.

This unique approach to low frequency reproduction offers numerous audible benefits that have profound positive impact on other critical performance parameters.

Integrating Style and Sound

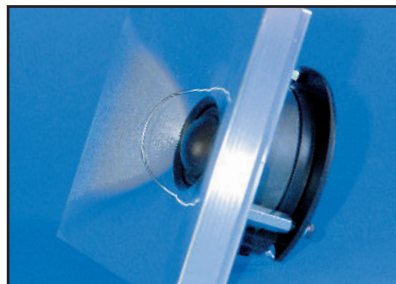
Because the Gryphon Cantata works with the room, not against it, compact bass drivers can be utilized with smaller, lighter cones that respond more rapidly and more accurately to the music signal. Since the Q-controlled Cantata system requires far less internal volume for full-bodied deep bass, the Cantata enclosure is substantially smaller than comparable high end loudspeakers without sacrificing performance. A smaller cabinet also provides enhanced structural integrity, reducing any risk of vibration or panel resonance.

A Solid Foundation

The compact drivers permit a narrower



front baffle as an ideal, stable platform for the highly customized drive units. Gryphon's specially developed 5" driver with coated fibreglass cone and a unique rubber suspension delivers new levels of openness and precision across the crucial midrange. The oil-cooled high-frequency driver with coated textile dome



Tweeter housing machined from solid 6061T6 aircraft aluminum.

and specially designed machined aluminum housing has been optimized for low distortion, high power handling and exceptional resolution of fine detail.

The bass drivers above and below the high-frequency driver in the symmetrical vertical array are equidistant from the listening position and are precisely angled, so that the three drivers form an ideal virtual point source. To eliminate edge reflections, the front baffle features smooth surfaces with no protruding edges. Strategically placed Nappa and Grand Piano felt aid in minimizing diffraction.

Patented Assembly Techniques

Gryphon Cantata employs patented manufacturing techniques, a unique combination of materials and bold contemporary design to create a sonically invisible enclosure for the drive units. Extensive internal bracing and bitumen damping ensure rigidity and high inner damping.

The integral Cantata stand is assembled using the same manufacturing techniques to form a non-resonant chassis for the crossover network. Based on carefully selected components in a layout calculated to eliminate electromagnetic interaction, each Cantata crossover is individually trimmed and fine-tuned by hand to ensure an exceptional level of consistent high performance.



Gryphon founder Flemming E. Rasmussen inspects prototype cabinet



**“Beauty is truth, truth beauty,
That is all Ye know on earth,
and all ye need to know.”**

John Keats



The Gryphon Cantata Q Controller is designed and built to the same high standards as every Gryphon audio component. The Q Controller features flexible single-ended or balanced connection options.





Gryphon Cantata finish options are limited only by your imagination.

Technical Specifications

Two-Way System

Frequency Response (in- Room):

20 Hz - 20 kHz with Gryphon Q Controller

Impedance: minimum 3.4 Ohm max 7.8 Ohm

Crossover Frequency: 2 kHz

Power Handling: 200 Watts

Sensitivity: 90 dB

Resonance Frequency: 58 Hz

System Q: 0.5

Dimensions: (each Speaker)

HxWxD: 118 x 38 x 43 cm.

Weight: 75 kg

Shipping Weight: 130 kg

Dimensions: Q Controller

HxWxD 14 x 48 x 38 cm

Weight: 13 kg

Specifications are the most recently available at the time of publication and are subject to change without notice.

For additional information or for the opportunity to audition the Gryphon Cantata in person, please accept our cordial invitation to visit the showroom of your local authorized Gryphon dealer. A select number of audio salons whose staff share our commitment to excellence have been appointed to guide you on your way to the Gryphon experience.

www.gryphon-audio.com

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