

THE
GRYPHON



THE GRYPHON POSEIDON REFERENCE STANDARD SYSTEM

Gryphon Poseidon Reference Standard Loudspeaker System

Poseidon. God who holds dominion over the seas and earthquakes in Greek mythology

Features

- *Four-way twin-tower loudspeaker
- *Constant Phase crossover for perfect phase at all frequencies at all times
- *System response 16 - 40,000 Hz, +/- 3 dB (depending on Q setting and room size)
- *Separate active crossover network for each channel isolated in bass tower
- *Remote control for Q setting, Bass Level and Low Cut
- *Time-aligned front baffle curvature for identical arrival time from all drivers at the listening position
- *34 customized, extensively modified Danish drive units
- *Special cone surround termination to eliminate edge reflections
- *Symmetrical vertical driver array for ideal point source presentation
- *Eight 8" bass drivers for extreme speed and precision with massive air displacement
- *Custom designed Gryphon bass tower amplifiers capable of delivering 1000 Watts continuously (4 ohms)
- *Integrated Linkwitz-Greiner Q Controller with preset and custom Q settings for ideal low frequency integration in any room
- *Hand-adjusted passive mid/high crossover network pre-biased from the bass module

- *Triple-magnet bass/midrange driver motor system for maximum force and precise focus
- *Scan Speak Revelator ring radiator high frequency driver in specially developed 1 kg. Gryphon aluminum housing
- *Four sealed enclosures with extensive internal bracing
- *Combination of pure wool and synthetic interior damping materials
- *Stylish string grille for driver protection
- *Virtually unlimited custom finish options
- *Designed and built in Denmark

By the millennium, Gryphon Audio Designs had long been firmly established as a major international player with a range of amplification components and CD players widely regarded as among the very best in the esoteric world of High End audio. Gryphon innovations include the world's first single-chassis CD player with onboard upsampling, critical system enhancements such as the acclaimed Exorcist system demagnetizer, and, of course, beautifully finished amplifiers that steadily advance the state of the art in build quality and sonic performance.

Having earned a global reputation for unsurpassed excellence in amplification and in digital source components, it was a natural evolutionary move to broaden our scope and apply the uncompromising Gryphon take-no-prisoners approach to the final link in the audio chain, the loudspeaker. Our introductory offering, the highly

acclaimed stand-mounted Cantata was designed for more size-sensitive installations and paved the way for the Gryphon Poseidon Reference system.

While Cantata is for those times when size matters, the Poseidon is the ultimate Statement from Gryphon founder and CEO Flemming E. Rasmussen, the definitive full-range system to be partnered with equipment and a room truly worthy of such a loudspeaker.

Lavishly built by even the most uncompromising High End standards, the exquisitely finished Gryphon Poseidon offers expressive musical communication and a gripping sensation of involvement in the performance as it unfolds before you.

Because Poseidon employs a large number of smaller, heavily modified drive units instead of a few larger drivers, the Gryphon system delivers faster, cleaner response. Sharing the work between 34 drivers ensures a level of dynamic headroom and accuracy that sets new standards as its projects a focused image whether from an intimate ensemble or the elaborately interwoven textures of a full orchestra.

15 Years in the Making

The development and, in particular, the actual production of Cantata with its innumerable tailor-made components gave Gryphon valuable experience and the courage to bring to market an even more ambitious loudspeaker that had been in the works for nearly two decades.

As was once the norm in the High End, Gryphon is still run by enthusiasts able and willing to take risks and push back boundaries out of sheer curiosity as to what awaits them in the uncharted territories where no one has gone before in order to make our products the best that they can be.

For loudspeakers, the essential definition of "the best that they can be" can easily be summed up in a single statement: "All drivers must be in phase at all times at all frequencies." The hard part is making that happen in a real room with a real loudspeaker.

Initially on a strictly informal basis, an in-depth exploration was undertaken that would take full advantage of Gryphon's assembled expertise and extensive experience in design and manufacturing to transform this theoretical ideal into real-world products with scant regard for such details as pricing, parts availability, prevailing attitudes and preconceived notions.

Based on Rasmussen's clearly defined conceptual and physical framework, he and the Gryphon design team set about the daunting task of translating theory into workable, practical solutions.

The Perfect Driver

The first step was to acknowledge that the greatest challenge facing loudspeaker designers is the simple fact that conventional dynamic drive units are by nature fundamentally



flawed and compromised. For the same reasons that no one ever built a Formula One racing car from stock parts, Gryphon could not build a Formula One loudspeaker from existing components.

Every aspect of driver design, assembly and function was thoroughly investigated without prejudice and with scant respect for received wisdom. The end result was drive units with extremely low Q, high power handling, no dynamic compression and a linear piston range that pushed back the limits of driver design.

In order to live up to the uncompromising design goal of perfect phase all the time at all frequencies, the enclosure incorporated a concave



curved front to form a direct angled, time-aligned system with identical distance from the listener to the acoustic center of each driver.

Gone were the sluggishness and "whitewashed" uniformity typical of loudspeakers with complex crossovers where most of the components are dedicated to the thankless task of compensating for the basic imperfections of inferior drivers. In such speakers, the crossover becomes a virtual "black hole," sucking up energy instead of conveying it to the drivers, resulting in a superficially neat and tidy musical presentation that quickly becomes tedious and uninspiring.

The finished Gryphon loudspeaker can only be described as an open window, utterly transparent to the original recorded event with equally remarkable dynamic headroom that re-creates the true power and full weight of live music, both in details such as a drum rimshot and in the effortless expansion of an orchestral crescendo in a large-scale symphonic piece.◊

An Idea Whose Time Has Come

However, Rasmussen decided not to pursue it as a commercial venture, using the constantly evolving loudspeakers only as a valued tool in the company's electronics development work. The decision was based on the fact that the many hand-tweaked, non-standard components made it a slow, expensive and exceedingly complex system to build.

But following the overwhelming response to the Cantata and countless queries from Gryphon enthusiasts wondering what we would do if size and cost were no object, it was agreed that the Gryphon ultimate reference loudspeaker was an idea whose time had come.

Gryphon's unquestioned High End stature and the success of the Cantata attracted the interest of an internationally respected Danish driver manufacturer willing to build drive units to Gryphon's strict specifications. Tightly specified capacitors and inductors were built for the crossovers and a German manufacturer devised a surround that matched the cone geometry.

At long last, the Gryphon Poseidon is a reality.

Exquisite Design

The Poseidon is a four-way loudspeaker system consisting of four separate sealed enclosures, each 199 cm tall, coincidentally (?) the same height as Mr. Rasmussen himself.

All drivers are custom designed and emphasis had been placed on low Q and lack of dynamic compression. Specially developed surrounds that match the curve of the driver diaphragm are employed and the fiber glass cone material is layer damped. Dust caps are non-deformable, low-mass and highly rigid.

The imposing cabinets are built for Gryphon by a woodworking company specializing in custom design work



for recording studios and musicians. Their staff includes musicians who combine a perfectionist approach to their craft with an open mind to unconventional solutions. Rasmussen frequently tested the limits of their open-mindedness as he specified a time-aligned baffle curvature, side panels that come to a point midway and a complex combination of MDF, plywood, acrylic, aluminum, PVA, Teflon, steel, bitumen, felt, elastomers and Nappa. The very different characteristics of these materials make combining them in a single seamless structure a formidable task, but the specific mix was essential in preserving the structural and aesthetic integrity of an enclosure on this grand scale.

Side panels are always carefully matched for each complete Poseidon system. Available finish options are limited only by the customer's imagination and, possibly, his bank manager.

The Bass Module

Each bass tower houses eight custom designed 8" drive units and a built-in Gryphon power amplifier capable of 1,000 Watts continuous output into a 4 Ohm load. For ultimate headroom, peak power is approximately 4,000 Watts or 4.5 horsepower.

The amplifier module incorporates sophisticated Q Control circuitry to fine-tune bass response and additional features to ensure ideal room interface. The Poseidon remote con-

trol allows adjustment of bass level, Q, low cut and other parameters from the listening position.

The bass module offers Standby mode and provides effective driver protection via a comprehensive non-invasive system that monitors all functions more than 100 times per second.



The active bass system with purpose-built amplification is designed for optimal integration with the selected drive units and with the array of user-adjustable parameters. Active bass allows the user to select a separate amplifier for the mid/high modules without having to worry about the power demands of the massive Poseidon bass system.

The singular bass performance of the Gryphon Poseidon system heightens awareness of rhythmic subtleties and nuances as it immerses the listener in music's rhythmic power.

The Mid/High-Frequency Module

The narrower upper-frequency enclosures complement the design of the bass towers with nine drivers laid out in a symmetrical vertical array with

four 5" Gryphon midbass drivers (two at the top and two at the bottom) and four of the 5" Gryphon midrange drivers originally developed for the Cantata (two directly above and two directly below the central high frequency driver).

The legendary Scan Speak Ring radiator high-frequency driver is modified with a 1 kg aluminum housing, designed by Gryphon for perfect time alignment and minimal diffraction.

The radical passive crossover, based on carefully selected custom components, ensures ideal phase at all frequencies, a perfect result achieved by no other loudspeaker than the Gryphon Cantata and Poseidon.

The nine drivers share the workload from 200 Hz to 40 kHz. The upper-frequency module is extremely efficient, 92 dB (1 Watt, 1 meter) with an impedance that never dips below 4 Ohms, making the passive tower a very amplifier-friendly load.

A Gryphon Milestone

The Poseidon system's low-frequency cut-off is room-dependent and is also a result of the user-selectable Q setting. Useable room response from the system's 34 drivers will cover the range from 16 Hz to 40 kHz.

The system is designed to be angled towards the listener in both the horizontal and vertical planes.

While it does not require huge quantities of power, the Poseidon deserves

to be mated with the finest possible amplifiers. Anything less will be mercilessly revealed. In return, the very best will shine.

High End audiophiles are raising their standards as they come to appreciate that natural, undoctored, realistic sound must always maintain the integrity of the musical performance without focusing narrowly on details and without losing sight of the big picture.



A loudspeaker must not be an instrument with its own voice or an interpreter, only a neutral conduit that lets us hear what is there, no more and no less, for better or for worse.

Flemming E. Rasmussen and the Poseidon design crew take immense satisfaction in this milestone in the history of the company.

Gryphon Poseidon redefines loudspeaker performance in such crucial areas as sonic continuity and integrity, allowing the listener to create a more vivid mental image of the musical event with a greater sense of wholeness and consummate ease.



The privileged owner of the Poseidon can sit back in wonder as the walls of his listening room fade away, leaving the only thing that matters. Music.

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