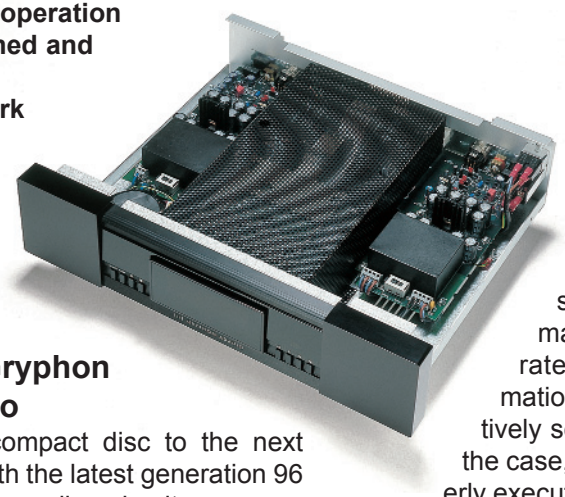
THE GRYPHON


# GRYPHON ADAGIO

# Gryphon Adagio CD Player

## Features:

**˙Four stereo 24 bit/96 kHz Digital-to-Analog Converters in a Dual-differential topology.**
**˙Upsampling to 24bit/96kHz for enhanced sonic performance**
**˙True Class A, fully discrete analog circuits with no negative feedback**
**˙Two custom-built, temperature-compensated crystal oscillators with better than 5 parts per million accuracy**
**˙Separate custom-built C-Core transformers for left and right analog sections for total isolation from digital noise**
**˙12,000 microFarad power capacitor banks per channel**
**˙Completely isolated power supplies for digital section and transport/display**
**˙True Dual Mono Configuration**
**˙Ultra-short signal path with minimal Internal wiring**
**˙Modified dual digital servo transport with fixed pick-up mechanism**
**˙Multi-layer printed circuit boards for minimal noise and optimal signal transfer**
**˙Balanced analog outputs with PCB-mounted gold-plated Swiss Neutrik XLR sockets**
**˙Single-ended analog outputs with PCB-mounted gold-plated phono sockets**
**˙Balanced 110 ohm AES/EBU and 75 ohm S/PDIF digital outputs**
**˙Layer of bitumen inside cover for effective resonance damping**
**˙Fully remote controlled operation**
**˙Designed and built in Denmark**



## The Gryphon Adagio

takes compact disc to the next level with the latest generation 96 kHz upsampling circuitry.
The Gryphon CDP1 was the world's first CD player to offer advanced 88,2 kHz upsampling technology in a single-chassis transport/converter. This innovation was immediately recognized as an amazing technological breakthrough:

*"This enhancement elevates the resolution of ordinary CD's to a previously unachievable level."*
(Audio magazine, Germany).

*"A marvelous sonic calm and clarity fill the room, with sweet precision and openness."*
(High Fidelity magazine, Denmark).

*"If all CD players were as good, we probably wouldn't need any new audio formats."*
(as reviewed by Greg Borrowman in the Sydney Morning Herald Newspaper, Australia)

**Upsampling**

While upsampling, obviously, cannot reconstruct lost information or generate "new" information, it will subjectively seem that this is the case, because properly executed sample rate conversion in the Gryphon Adagio creates optimal working conditions for the digital and analog circuits, allowing them to more accurately reproduce the information that is encoded on the disc.

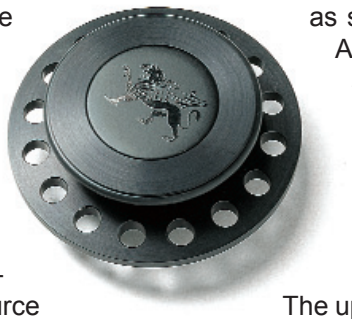
Through upsampling, aliasing noise is shifted upwards in frequency and the upper corner frequency of the digital anti-aliasing filters will be more than doubled

compared to the standard 44.1kHz sample rate. The analog filter following the digital-to-analog converters can then be a simple first order filter with substantially improved sonic characteristics.
For these reasons, upsampling in the Gryphon Adagio enhances impulse response, resolution of fine detail, image focus and high-frequency extension in comparison with conventional 44.1kHz D/A conversion.

**Uncompromising Design**
Other key factors contribute to the exceptional level of sonic resolution achieved in the Gryphon Adagio. It is a strictly symmetrical, dual mono configuration with both channels fully independent from the C-core transformer to the audio outputs. Equally impressive is the selection of high quality components employed from the power supplies to the voltage regulation straight through to the lavishly engineered output stages.

Gryphon Adagio features separate analog and digital power supplies and an absolute minimum of internal wiring. The digital power supply has its own separate transformer with four secondary windings for optimal electrical separation and noise suppression. Local filtering and regulators ensure optimal working conditions.

**Independent Master Clocks**
Most CD players employ a single basic clock oscillator placed near the CD transport to supply the clock signal to the transport, digital filter and D/A converter. Unfortunately, allowing the oscillator from the CD transport to generate the overall master clock introduces both mechanical and electrical jitter.



To effectively eliminate this serious source of sonic degradation, Gryphon Adagio takes a radically different approach to these crucial timing (jitter) issues with separate local master clocks placed near the CD transport and D/A converters. With independent, specially designed, temperature-compensated crystal oscillators with accuracy better than 5 parts per million and an asynchronous sample rate converter, the Gryphon Adagio transport mechanism is completely isolated from the conversion process, keeping jitter at an absolute minimum.

The oscillators have their own separate low-noise power supply with independent supply and ground planes on the printed circuit board.

In lesser players, timing errors cause a "blurring" of fine detail and intertransient silences, especially in fast passages with rapid dynamic variations, such as solo piano. Gryphon Adagio keeps the sonic image in ultra-sharp focus.

**Analog Reconstruction**
The upsampled digital signal is then directed to 4 stereo 24/96 D/A bitstream converters in a special Dual Differential coupling for a 3 dB improvement in dynamic range, as well as significantly reduced noise.

The analog signal passes through an absolute minimum of components via the shortest possible signal path. The analog output stage employs a non-invasive 100 kHz first order output filter to effectively remove high-frequency aliasing distortion. The filter, a Polypropylene capacitor with very high slew rate and tight tolerances, was selected following extensive listening sessions for its minimal influence on the audio frequency range.

The main printed circuit board is a 4-layer glassfiber board with a 70mu copper trace to ensure optimal grounding, power distribution and signal transfer. All resistors in the analog outputs are SMD (Surface Mount Device) types with low induction and excellent audio performance.

Each channel has its own power supply with custom-made C-core transformer, film capacitors and fast electrolytic capacitors with low ESR/ESL (inner resistance and induction). In addition, the most sensitive components incorporate local filtering.

Once again, Gryphon establishes a new benchmark for your CD listening pleasure, as Gryphon Adagio fully exploits cutting edge upsampling and jitter-reduction technologies to bring you more of the heart and soul of any musical performance.

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