

THE
GRYPHON



**OWNERS MANUAL
THE GRYPHON BEL CANTO**

The Gryphon team would like to take this opportunity to congratulate and thank you for purchasing the Gryphon Bel Canto. To ensure optimum performance and maximum satisfaction, please read the owner's manual before proceeding to listen to your latest acquisition. As designers, audiophiles and music enthusiasts, we are well aware that most manuals are read in the first heated moments of actually listening to the equipment, but we do advise you to read the manual carefully before installing the Gryphon Bel Canto.

The Gryphon Bel Canto is a prestige product in the only meaningful sense of the term: a handmade product in very limited numbers based on the extensive research and development efforts of professional audio engineers, a component expert, a mechanical engineer and a designer. The Gryphon Bel Canto is the end result of six years of constant experimentation and investigation into the behavior of audio circuits under real world conditions. It is our intention to offer to the serious music lover a true state of the art system control amplifier which will extract the full measure of musical satisfaction from whatever source is used.

Working for our own pleasure as much as for anything else, we have challenged ourselves to push back the borders of audio component performance in a series of no-compromise, cost-no-object designs. The Gryphon Bel Canto is the latest realization of these goals and stands proudly alongside the other Gryphon products.

THE GRYPHON

Myth: Creature which combines the power of lion King of Beasts, with the grace of the King of Birds. Known in Greek mythology as the guardian of the source of gold and protector of the Dionysian cup of infinite wealth. Reality: Danish audio engineering company employing cutting edge technology and common sense in the pursuit of musical excellence.

FEATURES

- Dual mono configuration
- 24-position passive resistor volume control
- Fully discrete construction
- Select premium-grade components
- Short signal-path with limited internal wiring
- 40,000 micro Farad capacitor bank
- Flat megabandwidth frequency response
- Zero negative feedback
- Pure Class A mode x 100
- Custom-built C-core transformer
- low output impedance for long cable runs
- DC coupling with servo-control
- Independent, regulated power supplies with noise filters
- 24 K gold plated phono sockets
- Eleven-stage voltage regulation per channel
- Five year warranty

MUSICAL OBJECTIVES

Let us make one thing perfectly clear:
The sound of live music must be the ultimate reference in the design of any audio playback system.
Of course, there is one endangered species of " techno-freaks" who se-

riously maintain that the concert hall experience is irrelevant to the hi-fi experience. The techno-freak finds live music in real space duller than the thrill of hi-fi, lacking the ultra sharp focus on instruments. The predominance of reflected sound in the concert hall also takes the edge of live music for the techno-freak.

The sole purpose of every Gryphon product is to recreate as accurate an illusion of the live music experience as is humanly possible. We are successful only if our endeavours move you not to say What a wonderful amplifier, but to say instead, "What marvellous music".

THE GRYPHON CREW

The exterior design, ergonomics and basic philosophy behind every Gryphon project are the brainchild of Gryphon founder Flemming E. Rasmussen.

More often than not, a full line of audio products is conceived and designed by a single person whose lack of overall expertise is revealed by the fact that a fine power amplifier is followed by a mediocre preamplifier or that the phonostage in an otherwise excellent preamplifier is not up to the same standard.

The Gryphon design team consists of two permanent members to ensure a consistent standard of performance, ergonomics and styling. They are assisted by a strong line-up of specialists who provide additional know-how and creativity for each individual project.

THE GRYPHON DESIGN GOAL

One immediately obvious aspect of Gryphon products is the dual mono concept which is carried to its ultimate extreme in the topology of every Gryphon design in order to achieve minimal crosstalk and maximal channel separation. The use of large, separate power supplies and multistage AC regulation and filtering are also Gryphon trademarks. Simplicity is the watchword in Gryphon circuit design, with painstaking attention to the layout of grounding paths. Even the earliest version of the Gryphon Head Amp in 1984 featured true star grounding. The presence of the MUTE function the program selector switch is just one example of our deceptively simple approach to maintaining the shortest possible signal path.

What is left out in audio engineering is every bit as important as what is put in.

Too many audio engineers use large numbers of mediocre components in a vain effort to compensate for fundamental shortcomings in circuit design, resulting in overly-complex products with textbook specifications, yet mediocre sound quality.

Equally irrelevant to the quest for realistic home music reproduction is the school of thought which subscribes to the indiscriminate use of only the "best and most fashionable" components, "dream caps", "superresistors", etc. That approach guarantees nothing but a very high price.

The Gryphon design team employs premium grade components, some of which one very expensive, others of which are less well known in consumer audio but held in high regard in the computer industry and other professional applications. Rather than view these components in isolation, the interface and synergy of every part of the whole is carefully scrutinized.

Because Gryphon products are designed with careful attention to the true relationship of measured performance to subjective sonic performance, the Gryphon Bel Canto is an ideal tool for the evaluation of other components.

EXTERIOR DESIGN

Even if beauty is only skin deep, we see no reason why a fine (and expensive) audio instrument should not be to the eye as it is to the ear, so long as the visuals do not constitute an aesthetic dictatorship which compromise performance.

The Gryphon philosophy makes no allowance for convenience features such as remote control or digital c long as they cannot be executed without dire consequences for sonic performance.

In the Gryphon Bel Canto form follows function, reinforcing the basic principles of the Gryphon concept and the dual mono topology. Because form follows function, the thoughtfully laid out features of the Gryphon Bel Canto are largely self-explanatory, breaking down the barriers that are usually erected between technology and the consumer.

MANUFACTURE AND ASSEMBLY

The Gryphon Bel Canto is manufactured by a select team of specialists. The fully sealed printed circuit boards with purity copper are assembled by a supplier of precision medical equipment with strict standards of quality control and pre-inspection of components. Chassis parts are manufactured by a specialist chosen solely for the outstand of workmanship every aspect of the Gryphon Bel Canto, from the acrylic cover to the handmade knobs, stringent standards of excellence apply. Final assembly and testing take place in the Gryphon laboratories. Our research and development experience give us the confidence to back these products with a five year guarantee.

UNPACKING THE GRYPHON BEL CANTO

The carton includes:

- 1 Gryphon Bel Canto
- 2 power supplies
- 2 power supply cords
- 2 AC Cords
- 1 pair of gloves

Please keep the carton and all original packing materials for safe future transportation of your Gryphon gear

PLACEMENT

Your system should be set up for the shortest possible cable lengths, although the extreme low output impedance of the Gryphon Bel Canto does make it suitable for long cable runs. In order to optimize the outstanding signal-to noise ratio of the Gryphon Bel Canto, it should be placed as far away as possible from strong magnetic fields (such as large transformers in power amplifiers, etc.) Careful placement of the power supply and Bel Canto will prevent hum and noise in unshielded cables which may be caused by the electromagnetic field generated by power supply transformers.

We suggest that you experiment in order to find the position that works best in your environment.

The power supply includes a captive 1,2 meter connecting cable.

Generally, power cords should be kept away from signal interconnect cables and loudspeaker cables should not be wound in circles.

AC CONNECTION

The proper voltage for your Gryphon Bel Canto is factory pre-set. Ideally, you should use the same AC power source for the Gryphon Bel Canto and source components (turntable, tuner, CD player, etc.), except devices with large powerconsumption, such as power amplifiers. All power supplies should ideally be connected symmetrically to the power source for identical polarity. Experiment with reversing both power supply plugs to find the optimum position. Connect polarity will particularly af-

fect the reproduction of the decay of transients, the depth of the sound-stage and the ambience of the recording venue. The power card of the Gryphon Bel canto is terminated with a three-pin plug. Connection to mains earth is strongly recommended to derive maximum benefit from the AC filtering of the power supply. See the section on "The Art of Grounding" for further advice.

TOPOLOGY

DUAL MONO DESIGN

The Gryphon Bel Canto is a pure dual-mono configuration with two independent power supplies and separate AC cords for total galvanic channel separation.

The Gryphon Bel Canto is, in fact, two completely autonomous mono pre-amplifiers.

Absolute dual-mono construction ensures minimal crosstalk and maximum channel separation, for improved stereo perspective, better focus and greater dynamic stability.

ZERO NEGATIVE FEEDBACK

The absence of feedback means the virtual elimination of SID and TIM distortion, for cleaner, faster transients and sweeter, purer high end response.

NO CAPACITORS IN THE SIGNAL PATH

The elimination of AC coupling capacitors and compensating capacitors in the signal path preserves signal purity with superior bass performance and more airy reproduction of fine detail.

PURE CLASS A MODE x 100

The Extremely high bias current means that the Gryphon Bel Canto uses a mere fraction of its capacity for even the most demanding signal. The Bel Canto literally "coasts" along well within its wide operating range with an ease which can be heard as smoother, more coherent reproduction, without grain or suppression of dynamics.

DISCRETE CONSTRUCTION

Integrated circuits may well be both practical and economical in mass-market applications, but when it comes to ultimate transparency and sonic purity in music reproduction, there is no substitute for discrete components judiciously deployed in the simplest possible circuit layout.

PREMIUM GRADE COMPONENTS

One of the major strengths of the Gryphon design team is 0111 wide experience in fields outside consumer audio. We have drawn on this experience in the selection of components which are less well-known in hi-fi but held in high regard in the computer industry and other professional applications.

The selection of components in the Gryphon Bel canto is based solely on sonic performance with no concern for tradition, size or cost.

TWO SEPARATE POWER SUPPLIES

In order to fully exploit the advantages of the dual-mono concept, the Gryphon Bel Canto employs completely independent power supplies with DC conditioning, AC filtering and separate mains connections. The Gryphon Bel Canto power supplies incorporate 36 capacitors and 11 voltage regulations for each channel in a 40,000 microFarad capacitor bank for a pure, stable power supply that is larger than in most 60 Watt power amplifiers. Some might call it overkill, but experience has taught us that the design and capacity of the power supply is of critical importance in the performance of an audio component.

SPECIFICATIONS

Signal to noise ratio:	90dB ref. 10mV, un-weighted
Frequency response:	1Hz - 3.5MHz
Overload:	1kHz, 300mVRMS
Input impedance:	8k ohms
Gain:	21dB
Output impedance:	22 ohms
Output max.:	11.5 VRMS
Output voltage swing:	33 Vpp
Regulation stages:	11 per channel
Shipping weight:	20 kgs

FRONT PANEL FUNCTIONS

CUSTOM-MADE PRECISION 24 STEP VOLUME ATTENUATOR

The stepped passive resistor network volume control offers superior sound quality to even the most expensive potentiometers with their inherent tracking and noise problems. The fixed-resistor stepped rotary switch offers pristine sound and improved resolution of fine musical detail.

PROGRAM SELECTOR SWITCH

The input selector has six positions marked . (Mute), A, B, C, D, E & F. The position marked . (before A) is the mute function which may be used as an alternative to turning the volume control all the way down when changing records or during brief interruptions.

REAR PANEL CONNECTIONS

Interconnect cables should be connected as indicated on the rear panel. The 2 sets of outputs allows easy bi-wiring or bi-amping without the degrading influence of Y-connectors.

THE ART OF GROUNDING

In a normal audio system we recommend the use of both grounding posts (if grounding is required at all). Grounding and the grounding path are high priorities in the Gryphon design philosophy, and we strongly recommend that you experiment with various means of grounding your system.

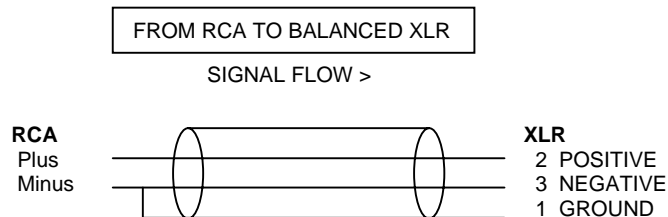
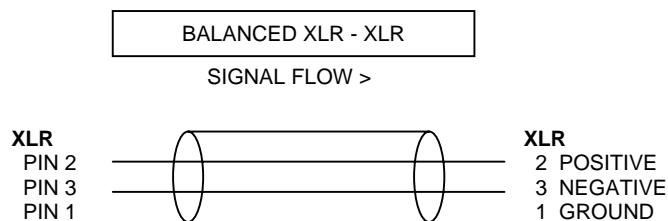
Correct grounding is not a simple matter of the absence of hum. Grounding has a profound influence on system performance in such essential areas as tonal balance, stereo perspective and dynamics, to name but a few.

Our experiments have demonstrated that "star" grounding is very effective. In a star ground, all chassis are grounded to the same point. This point is then truly grounded (a long metal pipe in the ground or a water-pipe). However, the results will vary depending on the audio system, the electrical environment and the purity of the AC supply.

In some cases a water pipe may prove to be a very poor solution. Experiment, it pays off.

INTERCON- NECTIONS

Although you probably already have a favorite cable, the Gryphon Bel Canto is so revealing that you may have cause to rethink your opinion on this crucial optimum contact. A bad connection becomes a series resistance, with degrading effect on performance. Use only gold plated connectors of premium quality.



CARE & MAINTENANCE

Do not apply any abrasive cleaning agents to the Gryphon Bel Canto. The black coated sections may be cleaned using a moist cloth. Use only a soft cloth to remove dust and fingerprints from the front panel. There are no user serviceable parts inside the Gryphon Bel Canto. All components are carefully selected and matched to meet the stringent demands of the sophisticated dual mono design. For service or advice, please contact your Gryphon dealer or your national Gryphon distributor. Any attempt by unauthorized personnel to repair or modify the Gryphon Bel Canto invalidates the warranty.

TWEAK ALERT

In the best Gryphon tradition we have spent a huge amount of time with our prototypes before we release a new product. We are obsessed with what we do and consider ourselves to be open minded and are fascinated by the "grey area" between logical, technical facts and things we just hear that make no obvious technical sense. If we find that a "grey trick" makes musical sense, we will implement it as long as it does not sacrifice safety or reliability. In the Bel Canto design a number of tweaks can be found and the result is a fine balance that can easily be disturbed.

We strongly advise against any alteration of the original design, it will void the warranty and most certainly not provide more than a difference instead of a real improvement of musical realism.

We are fully aware of the fun of playing with AC conditioners, bricks, platforms, cables and so on. We appreciate much of it, but please listen to our intentions before you go ahead and if you do, do yourself (and us) the favor of now and then go back and listen to the "naked" design as it was intended.

Enjoy...

GRYPHON WARRANTY



The Gryphon Bel Canto is warranted against failures arising through faulty workmanship and materials for a period of 5 year from date of purchase. The warranty is not transferable. All claims under this warranty must be made to the distributor in the buyers country by returning the unit securely packed in the original box with all accessories, postage/freight prepaid and insured. The unit will be repaired or replaced at no charge for parts and labor.

This warranty remains valid only if the serial number of the unit has not been defaced or removed and if repairs are performed only by authorized Gryphon dealers or distributors. It does not cover damage due to misuse, accident or neglect. The distributor or manufacturer, Gryphon Audio Designs, Denmark, retains the exclusive right to make such judgement on the basis of inspection.

The retailer, distributor or manufacturer of the Gryphon shall not be liable for consequential damage arising from the use, misuse or failure of this product, including injuries to persons or property.

To qualify, the warranty registration card must be filled out and returned to the manufacturer within 10 days of purchase.

GRYPHON MAILING LIST

The warranty of your Gryphon Sonata is effective only if you fill out the enclosed registration card and return it to us or to your national Gryphon distributor. Your comments are highly appreciated. When we receive the card from you, we will send you a small token gift and keep you informed of future product development. Thank you.

If you attend Hi Fi Shows, please look us up. We always welcome the opportunity to meet people who live with our products and share our love of music.

NOTES



GRYPHON AUDIO DESIGNS
Industrivej 9
8680 Ry
Tel. +45 8689 1200
Fax. +45 8689 1277