

# THE GRYPHON



## Zena Owner's Manual

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## Introduction

Welcome to the global family of proud owners of fine audio components from Gryphon Audio Designs of Denmark.

Your new Gryphon unit has been painstakingly designed to re-create the sound of live music taking place in its original recorded space. Every Gryphon product is designed to cater to the needs of the most discerning music enthusiast with sumptuous styling and superb user-friendliness which elevate it above the mundane world of conventional audio components.

As audiophiles, the members of the Gryphon design team are constantly reminded to keep their priorities straight. We are not involved in “Hi-Fi” for its own sake, but strictly as a means to an end, in the service of our life-long love of the live music experience in all its sonic and emotional glory.

Our higher goal is to bring to the listener a “You-Are-There” sensation. In taking up this challenge, the Gryphon designers go back to basics to analyze the essential nature of the live music experience.

For us, an awareness of sound-staging, ambience and concert hall dimensions are necessary components. Dynamics and an unambiguous sense of instrument location even in the loudest passages are also high priorities. To achieve these objectives, Gryphon products offer exceptional speed and agility along with seamless coherence in the time domain.

Since 1985, Gryphon Audio Designs has quietly gone about the business of creating fine home audio components.

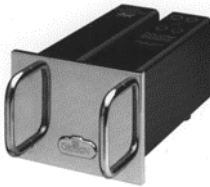
We know that you will appreciate and enjoy the benefits of our accumulated experience and share our abiding passion for music.



## The Gryphon

In Greek mythology: A fabled creature, half-lion and half-eagle, combining the power of the “King of Beasts” with the grace of the “King of Birds”. The guardian of the source of gold and protector of the Dionysian cup of infinite wealth.

In the real world: An acclaimed Danish audio engineering company employing cutting edge technology and common sense in the pursuit of the purest musical experience. We feel that the gryphon is an appropriate symbol for our high sonic goals.



The Gryphon Head Amp 1985

## The Man

Gryphon Audio Designs is the brainchild of Flemming E. Rasmussen and the fulfillment of a lifelong dream to allow the purest essence of the live music experience to be recreated in the home environment.

Rasmussen holds a degree in painting and graphic arts from the Aarhus Art Academy, Denmark. During his studies, Rasmussen developed close relationships with the local music community and designed many LP covers and concert posters. After graduation, he taught photography and painting and designed textiles, before founding 2R Marketing, which quickly became Denmark's leading High-End audio import company.

Gryphon Audio Designs was founded in 1985 as an offshoot of 2R Marketing. The first product, the now legendary Gryphon Head Amp, grew from a one-off spare time project developed only for the designers' own home systems. Although the Gryphon project was initially strictly a hobby, not an actively pursued commercial venture, demand generated by reviews and word-of-mouth led to the formal establishment of Gryphon Audio Designs as a separate corporate entity.

Following the immediate success of the Gryphon brand, all import business was phased out in 1993, so that Rasmussen could dedicate his efforts entirely to Gryphon.

## Made in Denmark

Every product from Gryphon Audio Designs is designed and built in Denmark. This is much more than just a geographical fact. It is also a seal of approval, a stamp of quality. Living in a region with no natural resources (no oil, coal, precious metals, etc.), the Danes have learned to rely on their quick wits and skilled hands. Innovative technology, beautiful craftsmanship, pride in one's craft and a keen eye for attractive design are some of the long-standing Danish traditions which are distilled to their finest essence in every unit that bears the Gryphon name.

## Musical Objectives

While scientific method and sophisticated technology play an important role in our electronics design work, at Gryphon we never lose sight of the fact that the keen ears of an experienced listener are the most crucial "calibration tools." Therefore, every Gryphon product



The house of Gryphon, this is where all Gryphon products are developed. Manufacturing is in the hands of a select number of highly specialized danish companies.

We take the "Made in Denmark" very seriously.



Gryphon is located in beautiful tranquil surroundings.

exists for one simple purpose: To bring the user closer in the never-ending quest for a more natural and convincing musical illusion.

Every Gryphon design has been built to cruise effortlessly through even the most demanding musical passages, regardless of volume level, with a musical presentation defined by supreme articulation and immediacy, subtle dynamic shading and razor-sharp focus. Refinement and delicacy are combined with power and authority for a natural, involving listening experience.

## The Gryphon Master Tape Collection

In the Gryphon listening rooms, we have over the years used a unique library original master tapes of recordings made during the Golden Age of studio engineering from 1956-1976.

Unlike conventional commercial releases, the master tapes capture the dynamic contrasts and subtle inner harmonic structure of the musical event, forcing us to work to a higher standard in our efforts to maintain the integrity of the original musical performance.

## Design Principles

With state of the art technical equipment and some of the finest minds in the audio engineering field at our disposal, the Gryphon brand name continues to define the highest audiophile standards of subjective and technical performance.

The dual mono configuration radically eliminates any possibility of crosstalk or other interference between channels and provides infinite channel separation which contributes to the ability to create space, focus, depth and transparency.

Because the electrical power coming out of your wall fluctuates wildly in terms of voltage and distortion, Gryphon incorporates heavily regulated multi-stage power supplies that act as effective mains conditioning filters. Displays and control circuits are fed by a separate power supply to isolate any digital noise artifacts and effectively prevent them from contaminating the signal path.

While the printed circuit boards in more conventional audio products, utilize conductor tracks a mere 35 um thick, Gryphon employs at least 70 um traces of the highest purity.

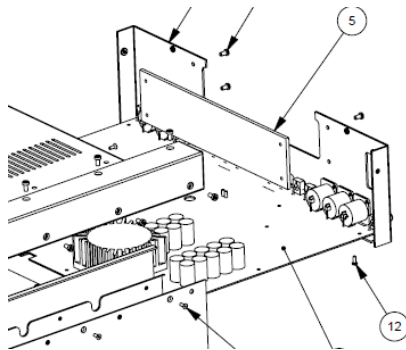
Beginning with our very first product, "The Head Amp" all Gryphon products have featured extremely wide frequency bandwidth, because the ability to reproduce ultra-sonic frequencies with no difficulty ensures linear phase across the audible frequency range.

The implementation of circuits with wideband frequency response is a painstaking endeavor in which the actual layout and ground pattern of the PC boards are crucial to the achievement of superior sonic performance with no loss of inherent stability.

Wideband frequency response ensures the high slew-rate essential to the realistic handling of the ultra-fast transients which routinely occur in live music and is crucial in recreating the natural decay of musical instruments. Wide bandwidth also improves phase characteristics, for more correct sound-staging and imaging.

All Gryphon designs are realized with none or an absolute minimum of negative feedback, which when present in large amounts can actually increase TIM-distortion. All Gryphon preamplifiers are designed with zero negative feedback. Only the Gryphon Antileon series of power amplifiers have a minimum amount of negative feedback for improved linearity and bandwidth.

Gryphon research into the detrimental effects of magnetically induced distorted (MID) has led to the elimination of magnetizable materials wherever possible. To eliminate the effects of stray magnetic fields, non-magnetic materials are employed throughout, with the unavoidable exception of the transformer shield box.



Section of exploded-view drawing

The mechanical design of the cabinet and assembly methods are all carefully calculated to ensure minimal resonance, either through the use of mechanically grounded high mass or decoupling. Vibration-sensitive components, capacitors in particular, are thus guaranteed a non-resonant environment.

The heavy, thick chassis offers a vibration-proof environment for the sensitive electronics inside and provides crucial shielding from a polluted world of low and high-frequency radio waves, power-line radiation and other electrical interference. Meticulous attention to such issues makes a significant contribution to the relaxing, open and transparent Gryphon sound.

Unique, non-invasive protection circuitry offers reliable, fuss-free protection without compromising signal purity and signal path simplicity, with no conventional relays in the signal path to degrade or compress sound.

The ground path has been carefully laid out in order to achieve superior sonic performance with no loss of stability. Component layout has been designed to ensure the shortest conceivable signal path.

Exhaustive investigation underlies the selection of every component part and many original, proprietary components are custom-built exclusively for Gryphon. Because what is left out is just as important as what goes in, an absolute minimum of internal wiring is included.

By lavishing attention on each aspect of the circuit and fully understanding the purpose and behavior of every single part of the whole, our designers can optimize performance in each section, before moving on to the next step. This ensures simplicity, a short signal path and a unity of purpose with a single, well-defined objective: musical purity.

In the interest of ultimate fidelity, tone controls, balance-controls and other unnecessary components have been banished from the signal path.

## Exterior Design

From the very beginning, every Gryphon product has offered stunning audio performance, sumptuous styling and superb user-friendliness, catering to the needs of the discerning audiophile who demands musicality, convenience and aesthetics, all without compromise.

In every Gryphon product, form follows function in a unique synthesis of aesthetics and practicality. Gryphon stands for sophisticated technology with a high standard of industrial finish that also incorporates the best of handcraftsmanship.

The peerless finish, build quality, ergonomics and pride of ownership that contribute to the totality of the Gryphon concept can only be fully understood and appreciated up close and in person.

Rasmussen's background in fine arts and industrial design gives every Gryphon product a distinctive, luxuriant finish which arises organically out of the audio circuit design and the user interface for a truly unique integration of form and function.



Close-up detail of the Zena front/top

## SAFETY INSTRUCTIONS



The main ON/OFF switch on the Zena is placed on the bottom right side of the unit near the front.

If the blue LED to the left of the ON/STD symbol is flashing 3 times in STB mode, it indicates wrong /defective AC mains voltage.

## Manufacture and Assembly

At our laboratories and manufacturing facilities in Denmark, we maintain full control over every aspect of development and production, and the members of our conscientious staff diligently follow each Gryphon model from initial concept to early prototype, through to final quality control.

Printed circuit boards are assembled by a supplier of precision military and medical equipment with strict standards of quality control and pre-inspection of components. Chassis parts are manufactured by a specialist chosen solely for the outstanding quality of workmanship. In every aspect of every Gryphon product, the same stringent standards of excellence apply.

Each unit is individually tested, after a 48-hour burn-in sequence, each product is undergoing both electronically and audio performance tests again.

### Placement:

Do not place the Zena on or near any source of heat such as power amplifiers. Do not place any object on the top covering the ventilation holes of the Zena. Do not place the Zena in an enclosed space such as a cabinet unless ample ventilation is provided. If these guidelines are not observed, overheating may result.

### Mains Switch:

To power your Zena fully ON/OFF use the main switch. The switch is located in the bottom on the right side just beneath the acrylic front panel.

### AC Voltage

Your Gryphon unit is especially made for the AC voltage of the country to which it has been shipped. If the voltage has been changed, the warranty is void and the product may be unsafe or malfunction.

Correct AC polarity contributes greatly to optimum performance. If you are not using a three-pin, non-reversible power plug, please experiment with the orientation of the plug for optimum performance.



## **Burn-In and Warm-Up**

Your Gryphon unit has been thoroughly tested and burned in before shipping. Performance will continue to improve during the first 40 – 50 hours of normal use. After this period optimum performance will be reached approximately 45 minutes after turn-on. With the exception of Class-A power amplifiers, we recommend leaving your Gryphon components powered up at all times.

## **Menu-activated functions**

The Gryphon Zena incorporates several functions which are accessed via a Menu system.

To access the Menu, press Menu. MENU will appear in the display. Exit will blink. To enter the menu, press input up/down and then monitor. The Zena will mute its outputs.

If you do not wish to access the menu-controlled functions, press Monitor when exits blink. You will then return to normal playback mode and default display.

When you enter the Menu, NAME INPUT will appear in the display. Press Menu again to move through the menu-controlled functions in the following order:

Name Input - Change Max Level - Change Start Level - Brightness - Input level match – Green Bias Setup - Dedicate input 3 to AV - Restore Settings - Continue/Exit

At the end, you can either continue from the beginning of the list or exit the Menu. To return to the top of the list, press Monitor and NAME INPUT will appear in the display. To exit the Menu, press an Input button so that EXIT blinks in the display, then press Monitor to return to normal playback and to the normal display. Any settings which you have changed are automatically stored in memory.

## **Naming Inputs**

You can assign a specific name to each input, either a pre-programmed standard name or a custom name of your choice of up to 8 characters. When NAME INPUT appears in the display, press Monitor. SELECT INPUT: 1 will appear in the display. To choose a different input for naming, press an Input button to move up or down through the five inputs. When the number of the input which you wish to name is displayed, press Monitor. CUSTOM will blink in the display. If you wish to create a custom name for the input, press Monitor and skip to section 1.a. below. If you wish to select a name

from the standard list, press an Input button so that STANDARD blinks, then press Monitor and skip to section 1.b. below. Please note: If a name has previously been assigned to the input, that name will be deleted if you press Monitor while STANDARD is flashing.

1.a. If you have chosen custom naming, CUSTOM will appear in the first line of the display. The selected input number will appear in the second line, followed by a colon (:) and a cursor marking the first position in the 8-character name which you can create. If a custom name has already been assigned to this input, it will be displayed. To select a character (letter, number, symbol, empty space or punctuation mark) for the first position, continuously press one of the Volume buttons until the desired character is displayed. Press Input Up to move to the next position, then use the Volume buttons to select the desired character. Repeat for each character in the name. If you make a mistake or change your mind, use the Input Down button to move back and change a previously selected character. When the name is complete, press Monitor. The name is now stored in memory and will be displayed each time you select that input. NAME INPUT will appear in the display. You can go back to step 1 above to name another input or press Menu to select the next menu-controlled function.

1.b. If you have chosen standard naming, SELECT STANDARD NAME will appear in the first line of the display. The selected input number and the first name in the standard list (CD) will appear in the second line. To select the name which you wish to assign to the input, press the volume buttons to move up or down through the standard name list in the following order:

CD – DVD – DSD – TUNER – TAPE – PHONO – AUX

When the name which you wish to assign to the input is displayed, press Monitor. The name is now stored in memory and will be displayed each time you select that input. NAME INPUT will appear in the display. You can go back to step 1 above to name another input or press Menu to select another menu-controlled function.

### **Setting Maximum Level**

You can select and store in memory a maximum volume level (between 0 and 42) which cannot be exceeded, manually or by remote, until you re-set this function. This effectively protects your audio system from expensive accidents. When CHANGE MAX LEVEL

appears in the display, press Monitor. MAX LEVEL: and the currently assigned maximum volume setting will appear in the display. To change this setting, press Volume Up or Down until the desired maximum volume level is displayed. Press Monitor. The selected maximum volume setting is now stored in memory. CHANGE MAX LEVEL will appear in the display. Press Menu to select the next menu-controlled function.

### **Setting Start-Up Level**

You can select and store in memory a default volume level (between 00 and 26) which will automatically be set by the amplifier each time you turn it on. When CHANGE START LEVEL appears in the display, press Monitor. START LEVEL: and the current default start level will appear in the display. To change this setting, press Volume Up or Down until the desired start level is displayed. Press Monitor. The selected start level is now stored in memory and will be set each time you turn on the amplifier. CHANGE START LEVEL will appear in the display. Press Menu to select the next menu-controlled function.

### **Setting Display Brightness**

You can select and store in memory the desired level of brightness in the front-panel display. When BRIGHTNESS CONTROL appears in the display, press Monitor. 100% will appear in the display. Choose between 100%,75%,50%,25% and Off. Press an Input button repeatedly until the desired level of brightness appears. The display will immediately change to the selected brightness, unless you have selected OFF. If OFF is selected, the display will turn off after you exit the Menu. Press Monitor. The selected brightness level is now stored in memory. BRIGHTNESS CONTROL will appear in the display. Press Menu to select the next menu-controlled function.

NOTE: When the display is turned completely off, pressing any button on the front panel or on the remote will cause the display to turn on briefly so that you can see the current volume level and selected input. Press a second time to activate the desired function.

### **Input level match**

Within the level match menu, you must choose the input that you wish to adjust. This is done with the input up/down buttons.

After you have selected your input you can increase the level in 2dB steps from 0 dB - 8dB.

Default is 0 dB on all inputs.

## Green Bias set up

Within the Green bias set up menu you can choose the following settings:

**Low setting:**

Vol. 00-09 Bias low

Vol. 10-19 Bias medium

Vol. 20-42 Bias high

**High Setting:**

Vol. 00-15 Bias low

Vol. 16-25 Bias medium

Vol. 26-42 Bias high

## Assigning Input 2 or 3 as a Dedicated AV Connection

You can use the Zena with a stereo power amplifier in a normal stereo set-up but using a separate surround processor.

Connect the left and right front channels from your surround processor to either Input 2 or Input 3 of the Zena and use the Menu to configure this input. The Zena will then be set to a fixed volume level (0dB) when selecting this dedicated AV input. This allows you to enjoy the full performance of the Zena for stereo and surround sound listening without placing any sound degrading components in the stereo signal path.

**CAUTION:** When Input 2 or 3 is set up as a dedicated AV connection, the Zena gain is automatically set to 0dB. The signal from the surround processor is NOT attenuated by the Zena and MUST be calibrated and attenuated by the surround processor.

When DEDICATE INPUT TO AV appears in the display, press Menu to select the next menu-controlled function, if you do NOT wish to connect the left and right front channels from a surround processor to Input 2 of the Athena.

If you do wish to make a dedicated AV connection to either Input 2 or Input 3, press Monitor at the relevant function.

“INPUT: none” will appear in the display. Press INPUT UP or DOWN touch button to select between INPUT 2 (XLR) or 3 (RCA). Confirm your selection by touching the MONITOR button.

**WARNING!** NO ATTENUATION will blink in the display for 5 seconds, after which you will be asked to confirm that you wish to configure this input as a dedicated AV connection. ARE YOU SURE? will appear in the first line of the display. NO and YES will appear in the second line. NO will blink. If you do NOT wish to make a dedicated AV connection, press Monitor while NO is flashing, then press Menu to select the next menu-controlled function.

If you do wish to make this AV connection, press Input Up so that YES blinks in the display. Press Monitor. This selected input is now configured as a dedicated AV connection input, which sets the Zena volume control to 0dB. This dedicated AV input should ONLY be used with a source which has its own volume control, such as a surround processor. NEVER connect a normal line-level source such as a tuner, CD player, etc. directly to this input, while it is configured in this manner. You can always restore Input 2 or 3 to normal operation via the Menu.

When you have configured Input 2 or 3, "DEDICATE INP.2 (or 3) TO AV" will appear in the display. Press Menu to select the next menu-controlled function.

### **Restoring Default Settings**

You can delete all your custom Menu settings and return to the factory pre-set default settings.

Doing so deletes all input names, sets Maximum Level at 42, sets Start Level at 00, sets Brightness at 100%, sets default input names and sets Input 2 or 3 as a normal audio input.

When RESTORE SETTINGS appears in the display, press Monitor. RESTORE? appears in the first line of the display. NO and YES appear in the second line. NO will blink. If you do NOT wish to delete your custom settings, press Monitor, while NO is flashing, then press Menu to select the next menu-controlled function.

If you do wish to delete all your custom settings, press Input Up until YES blinks, then press Monitor. You have now deleted all your custom settings. The factory preset default settings are now in effect. RESTORE SETTINGS will appear in the display. Press Menu to select the next menu-controlled function.

### **Exiting the Menu**

When CONTINUE and EXIT appear in the display, you can either exit the Menu or return to the beginning of the list of menu-controlled functions.

To go to the top of the list, press Monitor while CONTINUE is flashing.

To exit the Menu, press an Input button so that EXIT blinks, then press Monitor to return to normal playback and to the normal display.

## **Subwoofer connection**

This single ended RCA output allows you to connect an active subwoofer or a second power amplifier. This output is full range but generated with a high-grade Op-Amp.

## **Green Bias**

If you are using a compatible Gryphon power amplifier, you may choose to connect the Green Bias control link for automatic regulation of Class A bias of your power amplifier.

## **12V Link**

12V LINK IN is for switching the Zena between standby and ON when connected to a unit with same feature and protocol.

12V LINK OUT is for switching other compatible units between standby and ON following the standby/ON state of the Zena.

## **Balanced Connections**

All Gryphon products uses the AES standard for balanced connections.

1. Ground    2. Positive    3. Negative

We recommend the use of dedicated balanced cables. Avoid the use of adaptors as they degrade performance.

## **Zena Volume control**

A unique new volume control was developed for the Zena and this new principle will in future be found in all Gryphons top of the line products. It is not a digital device, but a discrete solution based on fixed resistors in an ultra-short signal path involving a very small number of relays selected for perfect function and sonic “invisible” qualities. This technology can sometimes - depending on the material played - make a very small clicking noise when used. This is not a sign that anything is wrong and is normal.

## **Choice of Cables**

Because your Zena preamplifier is a high-resolution Gryphon audio device, it will immediately reveal the characteristics and possible limitations of the other components in your system, as well as those of the interconnects and loudspeaker cables used to connect your system.

Wiring should never be utilized as "equalizers" to correct errors elsewhere in the system. Instead, any error should be corrected at the source, so that interconnects and loudspeaker cables can be selected solely on the basis of sonic neutrality. For this reason, we employ Gryphon's own range of interconnects and cables in every stage of the design of every Gryphon product.

## **Care & Maintenance**

Gryphon products are handcrafted by individuals who take great pride in the high level of fit and finish which we achieve. To maintain your Gryphon components in pristine condition, please follow these simple instructions.

Metal surfaces may be cleaned with a damp cloth. Some product made for treatment of vinyl interiors in cars may be useful. Test the product on a non-visible surface, before using any fluids.

Acrylic surfaces should only be wiped with a very soft, dry cloth. Small scratches may be removed with fiberglass polish. Fingerprints may be removed with a damp cloth. Do NOT use spirits or paper tissue.

## OPTIONAL PS2 Phono module

Gain:

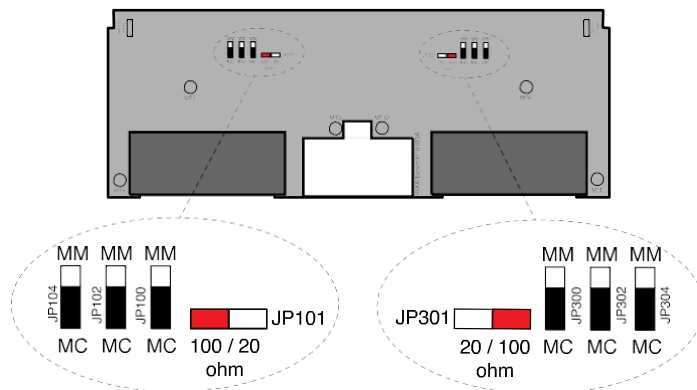
|                    |      |
|--------------------|------|
| Moving Coil (MC)   | 64dB |
| Moving Magnet (MM) | 42dB |

Impedance:

|                    |               |
|--------------------|---------------|
| Moving Coil (MC)   | 20 or 100 Ohm |
| Moving Magnet (MM) | 47 kOhm/200pF |

S/N ratio:

|                        |       |
|------------------------|-------|
| MC, Input 250mV, 1kHz: | >72dB |
| MM, Input 2.5mV, 1kHz: | >84dB |



### Input impedance in MC mode

With the (red) jumper placed to the right side of the jumper sockets (JP101) and (JP301) the input impedance will be 100 Ohm in MC mode.

With the jumper placed to the left side of the jumper socket the input impedance will be 20 Ohm in MC mode.

### Input impedance in MM mode

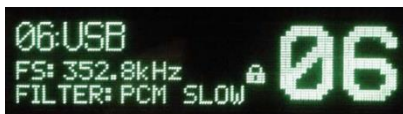
The input impedance in MM mode is 47kOhm/200pF.

### Switching between MM and MC

The selection of MC or MM is made with jumpers JP100, JP102, JP104, JP300, JP302, and JP304



## Optional Zena DAC module



The Zena DAC module is the perfect match for the Zena preamplifier, adding 5 top notch digital inputs to the Zena's existing five analog inputs. With the DAC module build in, the Zena display informs you about the chosen digital input Sampling frequency, PCM/DSD format and chosen digital filter setting.

### Zena display DAC information, example

'06:' actual digital input number (06 to 10).

'USB' input name, which can be changed via the Zena menu, please consult the Zena user instruction for details.

'FS:' actual sample frequency.

'Padlock symbol': Zena DAC locked/unlocked to input signal

'FILTER:' Actual format being played, PCM or DSD and actual Digital Filter being used.

'06' actual volume level (00 to 42).



Blue LED indicator to the left of ON/STB symbol: Flashing when Zena (with DAC module installed) is ON, indicates that the USB Super-Cap supply is being charged. This can take up to 4 minutes, depending upon the degree of Super-Cap discharge, at the time the Zena is powered up. The blue LED indicator stops flashing when the USB Super-Cap supply is fully charged.



Changes the Zena input down by one step. Input 01 to 05 are analog inputs. Input 06 to 10 are digital inputs and are only present when the Zena DAC module is installed.



Changes the Zena input up by one step. Input 01 to 05 are analog inputs. Input 06 to 10 are digital inputs and are only present when the Zena DAC module is installed.

### Zena DAC 'MENU' guide:

To be able to navigate through the DAC menu options, after entering the Zena MENU option, some of the Zena front touch buttons changes function:



MENU button is now used to toggle through the Zena menu options.



MON.(MONITOR) now acts as the menu ENTER button, confirming the selected option



INP. down and - up buttons now scroll down and up between the possible sub-menu settings.



VOL. down and 'VOL. up buttons are used to scroll between the possible digital filter and gain settings.

### **CHANGING STANDARD DAC SETTINGS:**

When the Gryphon Zena DAC module is installed in the Zena, it is possible to change several standard Digital Filter and output settings via the Zena 'MENU' function. The standard settings were chosen by Gryphon because these standard settings perform very well sonically. Regarding sound quality; we recommend using a high quality high-end USB cable between the PC/Mac and Zena DAC USB input – not a standard USB data cable.

Access the 'DAC SETUP' sub-menu by touching the following Zena front touch button combination:

'MENU'  
'MON.'  
5 times 'MENU'  
'MON.'

The Zena display shows now: 'PCM DSD GAIN' where 'PCM' is flashing, indicating the actual choice. Touch the 'INP. down or 'INP. up to toggle between the 'PCM DSD GAIN' options. Confirm the actual choice by touching the 'MON.' button.

If selecting 'PCM', it is now possible to change the Zena DAC's digital filter slope for the PCM format:

'PCM FILTER: SLOW' indicates Slow Roll Off (short Group Delay) digital filter (standard setting).

'PCM FILTER: FAST' indicates Sharp Roll Off (long Group Delay) digital filter.

Confirm the chosen setting by touching the 'MON.' button.

If selecting 'DSD', the following DSD digital filter options are possible: 'DSD FILTER: x0kHz' 'DSD LP FILTER: OFF'

Touch 'INP. down or 'INP. up to toggle between the options above.

Use 'VOL. down (or 'VOL. up ) to select between '50kHz', 60kHz' or '70kHz', -3dB pass band frequency. (50kHz is standard).

Use 'VOL. down (or 'VOL. up) to select between first order analog DSD Low-Pass filter 'ON' or 'OFF' when the 'DSD LP FILTER: OFF' line is active ( OFF is standard).

Confirm the chosen settings by touching the MON.' button.

If selecting 'GAIN' in the DAC setup menu, the following DAC output level options are available: '0dB' or '-6dB' toggle between the settings with 'VOL. down or 'VOL. up

Confirm the chosen DAC output level by touching the 'MON.' button.

The chosen DAC output level is valid for all five digital inputs. (0dB is standard)

Leave the Zena MENU function, please consult the Zena user manual for details.

It is always possible to reset possibly changed DAC settings back to standard, using the Zena MENU function 'RESTORE SETTINGS', please consult the Zena user manual for details.

PLEASE NOTE: 'RESTORE SETTING' will also reset all other Zena settings too, incl. 'INPUT NAMING' and 'INPUT LEVEL MATCH'!

## Zena DAC module connections:



### INPUT 6: USB

Connect your PC, Mac or streamer via your preferred dedicated USB Audio cable. Please see separate PC/Mac player information and guide on: [www.gryphon-audio.com](http://www.gryphon-audio.com).

Accepted USB formats and sample rates:

PCM (Pulse Code Modulated): Fs: 44.1Khz, 48Khz, 88.2Khz, 96Khz, 176.4Khz, 192Khz, 352.8Khz or 384Khz

DSD (Direct-Stream Digital):

- Mac: DSD64 and DSD128
- Windows: DSD64, DSD128, DSD256 and DSD512

NO Drivers needed for Mac OSX 10.6+ and Linux with UAC2 compliant kernel.

Zena DAC Kernel-Streaming/ ASIO drivers for MS OS XP to Win10 32-64bit, can be downloaded at: [www.gryphon-audio.com](http://www.gryphon-audio.com)

### INPUT 7: AES/EBU

Connect a digital source with balanced 110 Ohm output to this XLR input.

### INPUT 8-9: S/PDIF

Connect digital sources with single-ended 75 Ohm output to these inputs.

### INPUT 10: TOSLINK

Connect digital sources with optical output to this input.

## **Zena DAC features and specifications:**

- True Dual Mono Class A Analog configuration
- Zero negative feedback
- Sabre ES9018 High-End D/A converter
- USB input compatible with following audio formats via PC/MAC/Linux:
- PCM: 44.1, 48, 88.2, 96, 176.4, 192, 352.8 and 384 kHz, up to 32 bits
- DSD via USB: DSD64 (2.822MHz), DSD128 (3.072MHz), DSD256\* (5.644MHz) and DSD512\* 6.144MHz)
- XLR and BNC inputs compatible with PCM: 22.05, 24, 32, 44.1, 48, 88.2, 96, 176.4 and 192 kHz, up to 32 bits
- TOSLINK input compatible with PCM: 22.05, 24, 32, 44.1, 48, 88.2 and 96 kHz, up to 32 bits
- User-selectable PCM and DSD digital roll-off filters
- Temperature-compensated, ultra-low jitter crystal oscillator with better than 5 parts per million accuracy
- Super-Capacitor (12.5 Farad!) power supply for USB module - acts like a true battery supply
- First-order PCM analogue filters and second-order DSD analogue filters with silvered Mica and Polypropylene capacitors
- Analogue output stages with discrete, ultra-low noise +/- 22VDC regulated voltage supplies for best analogue THD and noise suppression
- Multiple Local Voltage regulators for best digital noise suppression
- Discrete, separate left/right channel ultra-low noise power supply for analogue section of ES9018 DAC
- Ultra-short signal path
- Minimal internal wiring
- Two four-layer printed circuit boards up to 70my copper

- PCB-mounted sockets eliminate wiring and shorten signal path
- Gold-plated Neutric XLR socket for one balanced 110 Ohm AES source
- Gold-plated 75 Ohm BNC sockets with Teflon insulation for 2 S/PDIF sources
- One TOSLINK optical fiber input
- Designed and built in Denmark

\*(at the moment, DSD256 and DSD512 only on Windows systems)

Specifications can be changed by Gryphon Audio Designs without further notice.

## Remote Codes

The Zena remote control uses the Philips RC-5 standard for infrared communication.

The following RC-5, system 16 codes are used for the Gryphon Zena:

|             |    |
|-------------|----|
| ON/OFF:     | 12 |
| MUTE:       | 13 |
| VOL UP:     | 16 |
| VOL DOWN:   | 17 |
| INPUT UP:   | 32 |
| INPUT DOWN: | 33 |

### DIRECT INPUT SELECT:

|          |   |
|----------|---|
| INPUT 1: | 1 |
| INPUT 2: | 2 |
| INPUT 3: | 3 |
| INPUT 4: | 4 |
| INPUT 5: | 5 |

### DIGITAL DAC INPUTS:

|           |    |
|-----------|----|
| INPUT 6:  | 6  |
| INPUT 7:  | 7  |
| INPUT 8:  | 8  |
| INPUT 9:  | 9  |
| INPUT 10: | 10 |



## Warranty & Support

The Gryphon Zena 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.

**This warranty is only valid in the country where the product was purchased.**

All claims under this warranty must be made to the distributor in the buyer's 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 or if repairs are performed by non-authorized Gryphon dealers or distributors.**

The warranty does not cover damage due to misuse, accident or neglect. **This warranty is not valid if the operation voltage of the product has been changed or other modifications are performed.**

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.

Please do not contact Gryphon for repair, warranty issues or technical questions, our local representatives are competent and only happy to help you.

### NOTES

Serial No .....

Date of purchase:

Dealer:

Country:

