

Fedelta Del Suono no. 221, 2014

GRYPHON KALLIOPE DIGITAL TO ANALOG CONVERTER

THOU SHALT HAVE NO OTHER GODS

by Andrea Della Sala

Calliope, the goddess of music. Kalliope, the first DAC from Gryphon.

A high-tech component capable of writing a new captivating chapter in digital audio.

A devastating component for the aficionado, deadly for the poor reviewer!

Recently, after ransacking any number of bookshelves (and I'm not done yet, truth be told), I've devoted myself to listening to several ultra-High End digital components.

The first one that I want to present to you is the new-born child in the house of Gryphon: the Kalliope DAC.

As you may know (and if you don't, you'd do well to), some years ago I was particularly struck by the Gryphon Mikado CD player.

What struck me most was the fact that the Gryphon was created and developed in the context of huge advances in the field of amplification.

Even if, truth be told, the first Gryphon CD player, Tabu CDP1, was already on the market a few years before Mikado. What I'm trying to say is that in choosing from among so many specialists in the digital field, I found the Gryphon CD player much more accomplished than those from manufacturers that for a long time had devoted all their energy, exclusively or very nearly, to the digital world. I will not name names in this regard and, apologies to those who would prefer absolute objectivity, this is my personal taste and individual quest for a specific and 'ideal' sound system.

Be that as it may, I found the Mikado CD player to have a natural, dynamic and astonishing tonal fidelity.

Since then, digital has made great strides forward, so I began asking myself what the legendary Danish company had in mind by putting themselves out there with the production of a DAC with a list price of 25,000 Euros.

It is true that now, with the Far East as a factor, (where, if you don't have a catalogue of products at around 100,000 Euros, you are considered an impoverished street vendor), it is not that unusual to encounter high-cost digital components, but a DAC costing 25,000 Euros, however you look at it, obviously aspires to claim a place at the highest summit of audio reproduction.

When I asked the ever-well-supplied importer, Audio Reference, I thought that with this component and the high-sounding name they'd given it, Gryphon definitely had something up their sleeve. And so they did.

## SOUND

I have used the Gryphon Kalliope in various systems thanks to the audio hardware that makes up my own personal system and there being a lot of components to be auditioned for the magazine in the listening room.

Most of the listening, however, was done using the Naim HDX network streamer as the source, the Spectral DMC 30 SS S2 preamplifier, the Spectral DMA 260 power amplifier and Harbeth Monitor 30.1 speakers. In this setup, the digital cable was the fantastic Neutral Cable Reference BNC, while for loudspeaker and interconnect, I opted for the relatively economical MIT EXP and, for the signal itself between Kalliope and preamp, the RCA Klimo Reference and the fascinating Neutral Cable power cords.

Also, significant testing was carried out with the old Conrad Johnsons, which I recently brought to the public eye, namely the Premier Ten preamp and Premier 11A power amps fitted with General Electric NOS tubes.

MIT cables once again between preamp and power amp and Klimo Reference between Kalliope and preamp. So, how does this new Gryphon DAC sound? Well, I'd like to say – just as you'd expect from a Gryphon, but multiplied at least by a factor of three!

The sound, right from the start, is clean, sculpted, very fast. It is spacious, detailed, free from unwanted overhang yet with huge harmonic content. Rock-solid and tight with a remarkable solidity, it succeeds in bringing an engaging sense of realism to sound reproduction.

Apparently, I don't hear any limitations at the frequency extremes.

The sole fact of not having floorstanding speakers of sufficient capability (I had to make space for the needs of my little girl, Carolina, but never was downsizing more welcome!) prevents me from being able to name the Gryphon as the absolute king of the sonic spectrum, at least in terms of deep bass.

The Harbeth 30.1 monitors, however, as far as they go - and they do go very far down in the bass - really impressed me. But any one of the speakers used from among those in my listening room provided the same results, including the little Spondor S3/5R2, each able to paint an intense fresco of colours with a lively dynamic quality.

A rendering of the bass range at a level of quality that I have never before experienced in my life is partnered with audio reproduction that is both extremely agile, fluid and emotionally uplifting.

The same sensation of the apparent lack of any restriction of bass extension also applies for the upper range – it is positively Olympian in its clarity.

Incredibly detailed, it is able to inject an enormous volume of air in a spatial reconstruction wholly unexpected and perfect in scale.

The greatest impression and one that stayed with me throughout the whole experience with this component is the absolutely spectacular continuity across the frequency spectrum.

So, I can't break down the sonic spectrum in any reasonable manner, as I normally would be tempted to and in fact usually do.

The Gryphon Kalliope offers an engaging coherence across the entire audible range.

The entire spectrum has the same speed and expository clarity, the same vitality.

There you go, the Kalliope, a living DAC, pulsating, responding to the slightest dynamic variation, the tiniest detail, all dressed up with peerless refinement.

I just mentioned the reproduction of the bass. Actually, what is outstanding about this component's performance is how it renders any note whatsoever with perfect clarity, no matter how low its tone may be.

Not a single slip, nor hesitation nor looseness or the slightest hint of being the least bit unfocused.

The bass is loaded like a spring that, once released, allows a physical, dense and corporeal presentation to unfold, agile and finely detailed, drawing arcs of sound that are an indescribable joy to hear.

But, it needs to be said, what I've claimed for the bass applies equally to any other frequency.

Put simply, if I dwell on the bass range, it is because that is where we are mostly likely to understand each other.

In fact, there is no percussion, and, consequently, no transients that are not rendered speedily and with a decay that leaves you breathless, moving you on, effortlessly, through a performance to be ranked at the apex of the very best audio components of all time and, as far as digital goes, quite simply, something never heard before.

In all of this, the midrange is enchanting with its nuances, its jewel-like quality and fidelity of tone.

But, as I was saying, there is no portion of the frequency range that sticks out. Here, there is no trace of that digital fog that sometimes, at very high or ultra-low frequencies, smudges the edges and creates an effect, although sometimes even pleasant, causing a feeling of dissolution, making it hard for the listener to see through the audio window to the sound being reproduced.

In many other instances, one willingly accepts the fact that the sonic picture to some extent fades into silence at the frequency extremes, fading into a twilight zone which can be as alluring as you want, albeit often with signs of confusion. But not so with this DAC.

With the Kalliope, the reproduction remains clear as long as there is something there to be played on the disc. No matter how low the signal may go, no matter, that is, to what extent there may be a natural end to the extension of the audible range close to this boundary, everything remains quite accessible.

Of course, for this you need a system that provides the requisite resolution and transparency, but who would want such a digital components anyway under less than ideal conditions?

In dynamic terms, the Kalliope just won't quit, always sensitive to the subtlest nuance and with scary high resolution.

The slightest variation in acoustic pressure is, in turn, perfectly rendered in the spirit of the musicians' intent.

It is possible, then, to participate in a real explosion of dynamic range when a full orchestra is playing.

The Kalliope does not retreat, it doesn't flinch or cut corners, it makes no compromise to the immediate energy demands: the power reserves appear to be endless.

Put in these terms, you might think that this DAC has bowled me over with its powerful expression, dressed with its great refinement.

Yes, that is true, for sure, but it is specifically its ability to process the smallest and apparently least significant signals that constitutes the greatness of this DAC.

A DAC able to reconstruct the finest possible web of harmonics with a grace and level of respect that is quite moving. When I auditioned the Conrad Johnson tube system mentioned earlier, it performed differently, shifting towards tones that were less markedly effervescent in terms of microdynamics and more relaxing on the level of harmonics, while the degree of control and responsiveness remained the same.

The voice of the Kalliope is immediately recognizable, not so much for its delicate characterization of tone as for its ability to take its place in an audio system and command things from there. Its ability to bring a whole sound texture clearly into focus will, I'm sure, become legendary.

Something that has given me cause for reflection in the course of using old amplification equipment is that not even the people who created it could ever have imagined how it might have sounded with digital components at this level.

I mean to say that when the two Conrad Johnsons were designed, there was no concept of high resolution audio.

With the DSD format, the Kalliope is no longer just a mere DAC, it quite literally takes possession of the core of the ancillary components. For example, in the case of the Premier Ten and Eleven, even with their own magical, warm sonic signature, I am faced with a transformation of such an order as to wipe out the past 25 years of history.

The two American components are resuscitated with a whole new life, becoming much more controlled, dynamic, explosive.

This by way of answer to those who believe that everything digital sounds the same.

Obviously, I also tried listening with my usual sources - the Naim HDX, at the same time with and without the contribution of the Kalliope.

Ah! You know only too well how highly I esteem the English brand but here, it is no match for the Kalliope.

OK, the difference in price is around four times, but the HDX, which really bowled me over in this context on a purely mechanical level, comes away a complete loser in comparison.

The sound comes out more confused, unfocused - especially in the midbass and deep bass - flat and monochordal. Even with 24 bit and 96 kHz formats for both, there really is no competition.

The performance level offered by this DAC, even with 16-bit/44.1kHz audio, and even if ripped from the HDX, goes beyond what was achieved at the time with the Naim CD555.

Probably, the bit perfect transfer by HDX to the UPnP connection and fed to Kalliope, is better at reading faster than any other compact disc player or transport, better, then, than those old integrated top-of-the-range warhorses from Naim. Be that as it may, digital has never sounded so good in my listening room.

Luckily, when I return the Kalliope after a few days, as is always the case, my ears will adjust to the sound I have available to me again, but the sound of this fantastic Dane will live on to torment me forever...

## CONCLUSIONS

Definitely, and by far, the best stand-alone digital to analogue converter ever auditioned by yours truly and in every respect I could consider. There was not one single moment when I was confronted with any idiosyncrasy, a sound that disappointed me in any way or which was below average in the listening undertaken these past two months. I have no reservations on the matter, no remarks to make except perhaps, more from a concern at not speaking out than anything else, for the financial side, the very high price. That said, it must be remembered that, at this level, one acquires a sound almost independently of how and whence it comes; and, granted that this is sound for the gods, the price, in light of what is expected elsewhere from much less musical or more mundane devices, is certainly exorbitant but, paradoxically, almost acceptable. The performance level offered with the high-resolution audio formats was a winner, but this, to a certain extent, was only to be expected. What I still struggle to grasp is how well this DAC treats the dear old compact disc. Considering the fact that the proportion between high-resolution files and 16-bit/44.1 kHz audio formats in my collection is on the order of one to 100 and given that the history of music is one that I have only applied in the latter case and certainly not in DSD, you will surely understand my enthusiasm. I am truly knocked sideways by the quality of the work by the Fleming Rasmussen team and I would like to pay my compliments to him and the whole team.

In the years to come, we shall talk of this DAC as a veritable watershed.

Somebody, please note that this, the humblest of all audio reviewers in the month of May in the year 2014, said... Long live Music

## Technical sidebar

For such an important product, maybe I should have assigned the test to more competent types like our own Giulio Salvioni or Fulvio Chiappetta, but, I said to myself, who am I to shun one or the other?

In that vein, I decided to make the ultimate sacrifice, even if the technical info I can give you does not amount to much more than what can be gleaned from the importer or from the Gryphon website. Still, let us try to sum it up and make a few comments.

First and foremost, Kalliope is a completely dual mono DAC. This is even visible from the exterior from the construction of its chassis. In fact, apart from the fine front panel with a comprehensive touch display to unify the design, we are looking at two physically separate chassis.

This is not quite as extreme as some preamplifiers such as the benchmark Gryphon Pandora which is even fitted with separate power cord connections for the two channels, but it is not far from it. The chassis construction alone, even if Gryphon had not already accustomed us to excellence in this area, would have us throwing our hands up in admiration.

The metal casework of absurd thickness, with the image of the Gryphon stamped on it, encases a DAC weighing more than 20 kg.

The array of connections, beyond being extremely comprehensive, is constructed with attention to quality that is as high as possible today and just looking at it is a great pleasure. Among the input connectors, I was also happy to spot a BNC which I could connect to my Naim HDX, so that it could be used, surprisingly, as a transport.

The green circuit board includes a double set of 32 bit ESS Sabre ES 9018 converters in a dual differential chip topology which I simply adore for its juxtaposition to the old, and, truth be told, the new Analog Devices as well. These chips have as many as eight channels each and so we have a conversion operating in sixteen stages. But what makes for a great component is surely not the conversion chips used.

On the contrary, it is my deeply ingrained conviction that it is the magic worked in implementing conversion with the greatest care and the very best output stage possible that makes the real difference.

Otherwise, we would solely and exclusively be able to listen to DAC circuitry of proprietary design. Sure, there are excellent machines built this way, surely there's a less costly option, but listening to a device like the Kalliope makes you realize that the truth is never one-sided. And maybe all of us, aficionados and journalists alike, ought simply to leave our pre-conceived notions behind before entering the listening room.

A look inside the Danish DAC reveals an attention to construction principles and a short signal path that, although they do not on their own justify a price equal to a mid-range touring car, put it beyond all doubt: Gryphon has been known for a long time in the digital world and they how to put together a digital audio component – period.

The entirely dual mono circuit features separate custom-built toroidal transformers with fully isolated power supplies for digital, analogue and control/display circuits.

With no internal wiring, high-grade components, four-layer motherboards, 70 micrometer tracks are worthy of a great preamplifier even before we talk of a digital component. Each of the two channels, as said, uses a toroidal transformer built to Gryphon specifications with a capacity of 65 VA and an overall power capacitor bank of 34,000 microFarads per channel. To optimally reduce circuit impedance, it was decided to deploy as many as 28 capacitors, instead of two or four of larger size.

Among the various audio formats available, Gryphon overlooks nothing.

Obviously, this DAC plays PCM formats up to 32 bits and 384 kHz sampling frequency, with upsampling of the user's choice, from 32-bit/192 kHz to 32-bit/210 kHz, also offering a pair of digital filters called

fast and slow. But it is perfectly compatible with DSD, up to 6,44 MHz. This means you can fully enjoy files downloaded in SACD format. Unfortunately, there is still the prohibition against extracting the SACD signal from the transport, so you still have to use a computer and surf around the web a bit, if you want to assemble an SACD collection on your Hard Disk. (Unless you happen to have one of the few third generation Sony Playstations, that, for a very limited period of time, were sold with the ability to extract the core signal from SACDs, unless you have modification skills, although by all appearances, this is not allowed. I'm not even able to change the lightbulb on my bedside table, so you can imagine how many SACD files I've ripped with my Playstation...)

Everything above should drive home how absurd it is, at least to my mind, to impose copyright restrictions. Really and truly, the major players seem to be doing their damndest to make life difficult for enthusiasts.

The Kalliope is clearly, thank heaven, completely remote-controllable and has a display that is quite legible (still a long way, though, from my needs as a nearsighted person). Each input can be named, just as it is possible to set the duration of the standby and the brightness of the display. Obviously, it is also equipped with a word clock input, just in case you need to be sure of synchronizing with mechanical perfection, which naturally, must be pre-set for the external clock and converter.

I waited in vain through the whole duration of the trial for the new CEC TLO 3.0, which, in its latest incarnation, offers the exact possibility of synchronizing with the DAC.

It will have wait for the next occasion.

The digital inputs are many and, obviously, galvanically isolated: three 75 Ohm BNC's and an XLR. An XLR output takes the de-jittered signal from the selected input and makes it available for any other device. Not to be left out, there is an asynchronous USB 2.0 input, also galvanically isolated, capable of handling up to 32 bit/384 kHz, the USB data flow processed by a buffer situated near the DAC and hooked up to the internal clock to minimize timing errors as much as possible.

In reality, there are two internal clocks – one dedicated to multiples of 44.1 kHz and the other to multiples of 48 kHz. Together, they ensure an accuracy of five parts per million, which, I think, makes an external clock practically redundant.

### **Manufacturer's Technical Specifications**

Digital to Analogue Converters: ESS SABRE ES9018 32-bit D/A dual mono

USB input via PC/MAC:

**PCM:** 44.1, 48, 88.2, 96, 176.4, 192, 352.8 and 384 kHz, up to 32 bits

**DSD:** 2.822, 3.072, 5.644 and 6.144 MHz

BNC and XLR inputs compatible with PCM: 22.05, 24, 32, 44.1, 48, 64, 88.2, 96, 176.4 and 192 kHz, up to 24 bits

XLR AES/EBU balanced up to 110 Ohms; 3 single-ended 75 Ohm BNC S/PDIF;

Digital outputs: XLR AES/EBU 110 Ohm balanced; 3 single-ended 75 Ohm BNC S/PDIF

Word clock input signal: BNC

Analogue inputs: RCA, XLR

Note: USB input with capacity of 12.5 Farad through power supply with SuperCap, equivalent to buffer battery; BNC and AES/EBU input galvanically isolated to reduce jitter; modular digital audio sections to provide future updates; analogue Class A zero feedback output stage

User-selectable PCM and DSD digital roll-off filters, Mica capacitors

Drivers installed for LINUX, MAC

Price including VAT: 24,160.00 euros

Distributor:

AUDIO REFERENCE – Tel. 02 29404989

Web: [www.audioreference.it](http://www.audioreference.it)

Photo caption p. 53

Lovely screen-printing of the Gryphon in profile on the upper panel.

Photo caption p. 55

The Kalliope's touch display runs the full width of the front panel. Perhaps it could be made a bit more legible, but I know by now that High End planners and designers are not nearsighted.

Photo caption p. 57

The rear panel, apart from being excellently laid out, allows for a very broad range of interfaces, both analogue and digital, USB included.

Photo caption p. 59

No, we haven't made a mistake here - this really is a photo of the dual mono DAC. This really is the spectacular circuit of the Kalliope DAC. Note the absence of cabling, the clean layout achieved and the size of the power supply section.