

# AURALiC VEGA G2.1 streaming DAC

by Jason Kennedy

Remember when AURALiC first appeared on the international scene. It was back in the good ole, bad ole days at the CES in Las Vegas, when streaming was fairly new to the audio world. The first AURALiC was an ARIES network bridge; a streamer without a DAC. It looked great in a compact case with a distinctive wavy shape that seemed pretty radical at the time. I was a little disappointed to find that the case was plastic but that did make the first ARIES relatively affordable. Today AURALiC have realised that the audio market has fairly conservative tastes and prefers machined aluminium, preferably in black, hence the appearance of its G series of components.

There are two tiers (not *that* sort) of G; there's G1 at the relatively affordable end and G2 at the top. It's the latter that has received an overhaul hence the .1 suffix. The first G2 models had casework that was machined from solid aluminium, an expensive and time consuming process that made it difficult to achieve a consistent anodised colour finish. For G2.1, AURALiC has changed the casework to a more sophisticated alternative that still uses machined parts such as the fascia, but goes to greater lengths to isolate the electronics from the world outside. It is essentially a case within a case design with aluminium exterior and a separate copper case enclosing the active components.

The copper acts as a shield to electromagnetic and radio frequency interference, which is the invisible noise that surrounds us and undermines the sound quality of digital electronics in particular. Every time you reduce this type of apparently inaudible noise in a digital system you can hear more low level detail, reducing this noise floor exposes the quietest elements of the music and makes for a more open and relaxed sound. The other problem area that tends to affect digital clocks among other things is vibration, a crystal clock oscillates at very high frequencies and external vibration can negatively affect the accuracy of that oscillation. Understanding this, AURALiC has come up with spring isolation in the feet of the G2.1 series components; they've gone for an elaborate arrangement of six springs in each foot that form a relatively stiff overall support but it's definitely a step in the right direction.

The VEGA G2.1 is essentially a digital to analogue converter but it confuses the uninitiated by incorporating a streaming engine among its roster of features. However, it's not as fully featured as an ARIES which is AURALiC's dedicated network bridge/streamer. What this means is that it doesn't have Lightning Server software onboard and that reduces its compatibility with music servers. I use an Innuos Zenith SE server and couldn't persuade the two to play nice ▶



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- ▶ without abandoning the Lightning control app and using Roon. It would work with a Melco server however. It has many of the other features found in the ARIES including on-device playlists, memory caching and gapless playback, for those wanting to dip a toe into streaming it's a pretty good place to start.

The converter at the heart of the VEGA G2.1 is an ESS Sabre DAC chip that AURALiC has modified. This offers four filter modes and copes with sample rates up to 32-bit/384kHz for PCM and DSD512; not silly numbers in the scheme of things and more than adequate for anything you might actually want to listen to. It also has volume control, it's a preamplifier as well albeit with only one analogue input, that uses a resistor ladder network that's passive once level is set, which should be a good thing. Digital inputs cover the gamut of requirements including AES, USB which is a rarity, and AURALiC's Lightning Link which is a proprietary system on an HDMI connector for other AURALiC G2 and G2.1 components. Outputs are available in single-ended and balanced forms. Front panel controls consist of just one knob that you can use to scroll through various options on the display. The latter was presumably designed by people with great eyesight because the font is tiny, but among the plethora of features there is the option to pair the VEGA with a remote IR handset, then you can switch inputs, play/pause and adjust volume among other things from the armchair. At this price point, I would have hoped that AURALiC could supply a suitable handset but at least this DIY option exists.

The majority of the time, of course, you use the Lightning app to do what needs to be done. However, with a DAC, Lightning isn't much unless you use multiple sources as well as the onboard volume control, and this can be done from your iOS device (if not an Android based one).

Listening commenced with the VEGA providing streaming (from a Melco N1A server) and preamplifier functions and connected directly to the power amplifier, which was a B.Audio amp one. This pairing worked rather well, delivering excellent 3D image solidity with lots of depth and revealing a great deal about the recording being played. It drew out the powerful atmosphere of Tom Waits' '9th and Hennepin' [*Rain Dogs*, Island] and emphasised the perfection of the lyrics without trying; the instruments groaning in the background as the trash rattles around a dark alley, or so they make it seem. It's not as rhythmically compelling as the vinyl on a great turntable, but that is the key strength of pure analogue. Here, however, the timbre of voice and instruments is very strong and the performance highly compelling.

There are several filter settings on the VEGA G2.1 and I initially selected 'smooth' but gave the 'balance' option a go to see what it did. Which was to inject more life into the sound by increasing midrange energy, bringing out a bit more speed and snap in the music. The solidity of imaging remains and the soundstage is extremely open when Jaco and Joni play 'Pork Pie Hat' on *Mingus* [Joni Mitchell, Asylum]. Switching to my regular ATC P2 amplifier via the Bowers & ▶

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- ▶ Wilkins 802 D3 speakers revealed just how muscular the bass can be with this AURALiC, which is ‘very’ when there’s some serious double bass playing going down. I used this combo to contrast Roon with Lightning app control through the VEGA, a comparison that very much favoured AURALiC’s native app which delivered greater clarity and openness to the extent that factors like ‘air’, essentially the scale and nature of the reverb, became much easier to appreciate.

Using the VEGA G2.1 purely as a DAC with the USB output of the Melco delivered better results than I usually get with this approach; timing in particular, which can be rather uninspiring, being clearly better. So much so that I enjoyed Herbie Hancock’s experimental *Sextant* [CBS] album to a greater degree than previously. I contrasted this playback method with the ethernet/streaming approach with the same source and generally got a better result with the latter; imaging, clarity, timing and precision were all greater. The next step was to introduce the ARIES G1 streamer that I generally use into the equation. This doesn’t have a Lightning Link output so I stuck with USB, which upped the sound quality to the next level, bringing out more detail and doing so in a highly coherent fashion with great pace and plenty of openness. Now the sound was vital and fun with fabulous bass lines and no difficulty when things got dense.

The depth of information that the VEGA G2.1 can pull out of a signal is remarkable. It really delivers the full picture to the extent that it’s hard to imagine how things could be much better. The noise floor is clearly way, way down because everything is so clear and easy to understand, it makes more affordable DACs sound positively flat. Remember that I was still using the onboard volume control at this stage, such things are usually a serious limiting factor with DACs. The space it allows for each instrument or voice to express itself is quite inspiring, you get the full intensity and power of drums alongside the nuances of voice and other quieter sources. Switching to a high-end preamplifier and using a fixed output did introduce a level of ease and flow to the sound, but in fairness this was the Townshend Allegri Reference, which has become my go-to product for ‘ease’ and ‘flow’.

I got a very good result with the VEGA G2.1. It seems to be a big upgrade on its G2 predecessor if memory serves and clearly the box within a box chassis design is doing precisely

## TECHNICAL SPECIFICATIONS

**Type:** Solid-state digital-to-analogue converter/streamer/preamplifier

**Digital Inputs:** AES/EBU, Coaxial, Toslink, USB B, Lightning Link, RJ45 Gigabit Ethernet

**Analogue Outputs:** One stereo single-ended (via RCA jacks), one balanced (via XLR connectors). Both outputs are configurable for fixed or variable level operation

**DAC Resolution/Supported Digital Formats:** All PCM from 44.1KS/s to 384KS/s with word lengths up to 32-bit, DSD64 (2.8224MHz) and DSD128 (5.6448MHz), DSD256(11.2896MHz), DSD512(22.57892MHz). The following format restrictions apply:

352.8KS/s and 384KS/s are supported streaming, USB and Lightning-Link input only.

32-bit word lengths supported through streaming, USB and Lightning-Link input only.

DoP V1.1<sup>1</sup> or native DSD protocol through streaming, USB and Lightning-Link input only

**Frequency Response:** 20Hz – 20kHz, ± 0.1dB

**Distortion (THD + Noise):** <0.00015%, 20Hz–20kHz at 0dBFS

**Output Voltage:** balanced: XLR (4.8Vrms at 0dBFS, output impedance 5ohm), unbalanced: RCA (4.8Vrms at 0dBFS, output impedance 50ohm), headphone: 6.35mm headphone jack (output impedance 5ohm)

**User Interface:** 512 × 64 pixel OLED display

**Control systems:** Lightning DS for iOS, Roon (Roon Core required separately), Openhome compatible

**Dimensions (H×W×D):** 96 × 340 × 320mm

**Weight:** 9.5kg

**Price:** £5,499

**Manufacturer Details:** AURALiC

**URL:** [auralic.com](http://auralic.com)

**Distributor Details:** AURALiC Europe

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**URL:** [auralic.com](http://auralic.com)

what it needs to; keeping the noise at bay. Build quality is to a very high standard and while the streamer isn’t in the DAC’s league, taken as a complete device it’s a spectacular piece of kit that I would be more than happy to live with. +