

# G Force!



eijing-based Auralic has been going for a decade or so, their original Aries 'wireless streaming bridge' being nominated for 2017's 'Best Network Player' in the last Hi-Fi World Awards. Now there is a G2 update that I am reviewing here.

The Aries G2 is a 'Wireless Streaming Transport', controlled via a 'Lightning DS' iOS II app (there's no Android support) and compatible with DSD and PCM content as well as lossily-compressed formats like MP3 and AAC. In addition to FLAC, there's support for the less-common WavPack and Monkeys Audio lossless codecs.

The Aries lacks analogue outputs, so you must have some kind of digital-to-analogue conversion at your disposal.

Although this could mean additional expenditure, the sound and performance can be customised to your specific requirements.

The Aries G2 has at its heart what Auralic calls the 'Tesla platform'. Reflecting four years of progress, this is underpinned by a processor chip that's "50% faster than the original's" and augmented by twice the system memory (i.e. 2GB) and data storage (4GB). Claimed benefits include greater freedom from dropouts, and better handling of hi-res formats like 32/384kHz PCM and DSD.512; MQA is supported. There are highly-accurate timing chains based around precision 'Femto clocks', dual-band Wi-Fi, USB (for playing locally-stored content), Ethernet, a front-panel display, a receiver for the remote-control handset (presumably for those who aren't Apple evangelists) and digital audio (S/PDIF) output connectivity - optical, coaxial and AES/EBU.

The G2 also has what looks like an HDMI A/V port. But Auralic merely use the same type of connector for what they term

'Lightning Link' – a proprietary "low-jitter, bi-directional 18Gbps coupling". This proprietary interface, UK distributor Richard Bates told me, conveys clock signals, control and audio data to the £5,500 Vega G2 "streaming DAC" – also part of the new range.

The new Aries G2 has a very different appearance to its predecessor. Reassuringly-weighty, the unit is completely different inside too – it's built within what Auralic calls its 'Unity' chassis, machined from a single lump of aluminium. This is intended to shield the unit's inner workings from electromagnetic interference (EMI), and provide "superior dampening and absorption" characteristics.

Internally, there are linear power supplies driven by three independent mains transformers. The first "feeds the processing circuit, display, and storage", the second being dedicated to "sensitive audio components, such as the



timing circuitry and audio output". A third, smaller, supply provides the standby mode.

The Aries OLED display has been replaced by a colour screen, but it's not of the 'touch' variety. Furthermore, a remote isn't supplied; apparently, the handset supplied with previous models attracted criticism. Instead, Auralic has a novel system that turns the old 'learning remote' concept on its head; you teach the Aries G2 to respond to the commands of an existing handset, so that its buttons can be signed to specific functions. This is just as well, as four years on there's still no Android support (it's "officially a consideration", I was told, "but don't hold your breath!).

Worse still, you now need a device capable of running the latest iOS 11 – the previous Lightning DS app, as created for the original Aries, would run under iOS 7.1 (or above). Use of iOS 11 means 32-bit devices like the iPhone 5 and iPad Mini are ruled out. Auralic should make the older version available too!

The app is essential, if the most is to be made of the Aries G2. Driving it from the front panel (five non-backlit buttons, which blend in a little bit too well with the background, in conjunction with the screen) is frustratingly long-winded, and Auralic's novel approach to infra-red remote control lacks the 'feedback' or visuals that a smart device gives you.

# **USAGE AND PERFORMANCE**

The app also happens to be essential for setting up Internet radio, which isn't even discussed in the unit's frankly-inadequate manual. Bates explains that installation would normally be the responsibility of a dealer.

Defining network shares (the folders containing your lovingly-curated music collection) from the front panel is also a long-winded operation; thankfully, this (but not finding and storing as 'presets', Internet radio stations) can be achieved using the web interface of the unit's Linux-based 'Lightning DS' operating system. You have to enter the path (IP address and directory structure) of each location.

The 'Lightning Server' that forms part of Lightning DS then adds all of the music it finds to its 'library', meaning that it's not reliant on protocols like uPnP. Multiple network-shares, USB

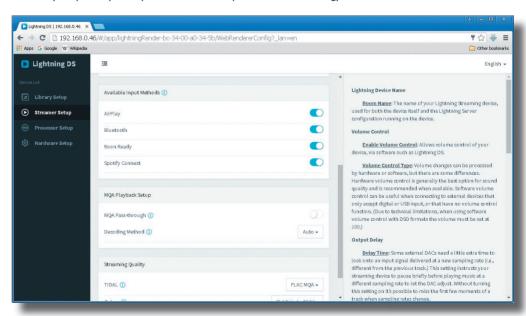


The neat internal layout of the Aries G2. There are two linear power supplies driven by those green transformers, plus a small standby supply. An internal bay for a 2.5in hard drive or Solid State Drive (SSD) sits a bottom right. At rear sit wi-fi aerials. The whole sits in a rigid machined alloy one-piece case.

storage and – new feature alert!
- an internal 2.5in. SATA drive that can be fitted into a compartment accessible when the lid is removed (any capacity, SSD or standard drive, Bates assured me) are accommodated. That could add up to a lot of music; no wonder there's 8GB of non-volatile storage to keep track of it!

Auralic's decision to go its own way helps to speed up the

selection of, and access to, the tracks you want to play. Selection criteria include album, artist, genre, composer, orchestra, conductor, folder and even date. Cover art, if provided, is shown on the app as well as the player's own screen. Other features include an AirPlay mode (no great surprise, given that it's an Apple development) and support for 'Songcast' — as in the open-source technology for



The Aries G2 can also be configured from the web interface – here are options related to streaming music services like Spotify Connect and TIDAL. For now, though, it won't let you find and store as 'presets' in the library, Internet radio stations.





The Aries G2's main front-panel screen, divided into eight categories. Unless you're using the Vega G2 streaming DAC, or another Auralic model equipped with Lightning Link, the DAC and master clock icons will be greyed-out. Note the lack of an Internet radio menu.

streaming music from Macs or Windows PCs.

Bates drew my attention to an Android app called BubbleUPnP. With this, I was able to select music and 'push' it to the Aries G2, although much of the Aries G2's finer functionality (Internet radio, for one) remains exclusive to the Lightning DS app. The indicators of the DAC I was using (Prism's Callia) confirmed that no unwanted transcoding was being applied.

In other words, 24-bit PCM and DSD hi-res content were being experienced as intended. On which subject, I should confirm that Auralic's 'conventional' digital outputs support DSD-over-PCM (DoP), meaning that you'll get the full 'native' benefit of DSD with compatible converters like the Callia (note, however, that the latter only supports DSD64 in this

way). Great news for those who want to escape the chains of their PCs, when it comes to hi-res music playback.

I should also mention that Lightning DS is highly-tweakable. certainly via that web interface. You can engage or disengage a volume control, change the behaviour of the display, experiment with power management, configure the network (wireless/Ethernet) and Bluetooth, specify how the streaming services with which the Aries G2 is compatible (among them Spotify Connect, Qobuz and TIDAL) are handled and - to suit the capabilities of your DAC - how DSD and different sampling rates are treated (output natively or upsampled). There are also four digital filters (Precise, Dynamic, Balanced and Smooth) at your disposal. But you can't - yet, at any rate! - locate Internet radio stations and add them to the library!

As well as the aforementioned Prism Callia DAC, I used a Chord TToby. They fed either Focal Utopia headphones or an Arcam A49 integrated amplifier driving Quadral



Album cover art can, if present, be displayed both on the front panel and the Lightning DS app.

**Processor** Resampler Configuration On > PCM Auto Detect Convert DSD to PCM Off > DoP Marker 0x05/FA > Smooth > 44.1KHz 44.1KHz > 48KHz > 88.2KHz > 88.2KHz 96KHz > 176 4KHz 176.4KHz >

To suit the capabilities of an external DAC, DSD can be converted to PCM, while PCM-derived files can be output natively or in upsampled form.

Aurum Wotan VIII floorstanders. Music was held on a DLNA server or USB memory device plugged into one of the Aries G2's two rearpanel ports. Playing with the digital filters, I settled on the 'smooth' setting as it seemed to strike the right sonic balance. The effects are subtle, and more evident with some types of music than others.

The first thing I noticed is just how well layering is dealt with. Wide Open, a deceptively-simple track from The Chemical Brothers' 2015 album Born in the Echoes (FLAC CD rip), is built up from a multitude of synths. The Aries G2 reveals them all — not just the obvious 'hooks', but the low-level parts in the background too. Indeed, I could







No analogue outputs. An external DAC is connected via co-axial, optical or AES-EBU S/PDIF outputs. There's also Auralic's proprietary 'Lightning Link' using an HDMI port, to send audio, control and clock signals to the matching £5,500 Vega G2 "streaming DAC". The Aries G2 connects to mains via an IEC lead and to a network via wired Ethernet or tri-band Wi-Fi. USB devices containing music are also accommodated.

make out a faint string sound that I hadn't heard before! But it's not just about the quantity; each is accurately rendered with its distinct character intact. A model of clarity, in other words. That didn't stop with the machines; every nuance of Beck's vocal contribution emerged too, while the bassline and rhythm were respectively deep and taut.

I also noted the same attention to detail with The Alan Parsons Project's I Robot (DSD64). I've

more pronounced rhythms of which are also grist to the Aries G2's mill. I then went back in time to a very different Europe, that of Ravel's Bolero. The Aries G2 did justice to my classic Decca recording of the score (L'Orchestre de la Suisse Romande/Ernest Ansermet, Monkey's Audio lossless CD rip).

As the piece slowly builds, the system takes the complexity and scale in its stride with no hint of dynamic strain. A slight 'bloom'

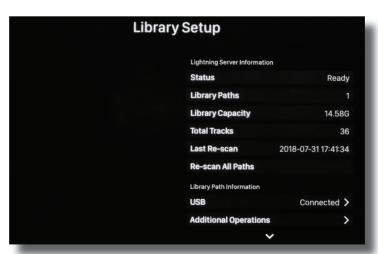
"accurately rendered with its distinct character intact. A model of clarity".

played this album on numerous occasions, but never been able to pull out of the mix so distinctly the kantele and cimbalom - dulcimerlike stringed instruments that add to the album's distinctive tonal character. Yes, the individual elements can be easily resolved. But they also work as a whole - just as you'd expect from a live performance. The tonal balance was neutral and the hi-hats of I Wouldn't Want To Be Like You are spared the traces of 'splashiness' that can affect lesser digital playback systems.

The sequenced analogue synth textures that bubble through Michael Hoenig's 1978 debut Departure From The Northern Wasteland (FLAC CD rip), with their shifts in melody and rhythm, did indeed evoke a train journey through Northern Europe - and the ride is very different to the Trans Europe Express (CD rip) enjoyed by electro-influencers Kraftwerk, the

to be honest the vintage analogue recording (made in 1963) is

can affect the strings at times, but



To speed up access to music, the Aries G2 internally stores a 'database' of all the tracks it finds during scans of networked or locally-stored folders of files in its library. 8 gigabytes of non-volatile memory should accommodate listeners with wideranging tastes and enormous collections!

probably to blame. Putting to one side this observation, the unit gets the best from what is a cracking performance.

Also dynamic in nature is Liszt's Faust suite (as here performed by the Hungarian State Symphony Orchestra/Francesco D'Avalos, FLAC CD rip). The percussive crashes of the third movement were cleanly-resolved and failed to 'dirty' the much quieter triangles. If it's a big sound, the Aries G2 can find space for it.

To be honest, the Aries G2 is responsible for some of the best digital sounds I've heard. A great DAC is important - but so too is the source that feeds it. However, Auralic needs to do something about the user interface as no Android app is available and Lightning DS app requires the latest iOS II.

**ARIES G2 STREAMING TRANSPORT** £3.500



VERDICT



# the best.

Powerful, flexible and ekes the last ounce of performance from digital streams and files but only users of Apple's

newer iOS 11 devices will get the best from it.

- engaging and musical
- compatible with all key formats
- configurable and flexible

## **AGAINST**

- app Apple iOS 11 only
- limited front panel controls
- no touchscreen
- app essential for Internet radio

# Auralic

www.auralic.com

+44 (0)7590 1061015