DIGITAL DELIGHT

AURENDER'S W20 WOULD LIKE TO TEACH THE WORLD TO STREAM

DEVIALET ENSEMBLE SYSTEM

ECLIPSE TD725SWMK2 SUBWOOFER

TELLURIUM Q DIGITAL CABLES

KOETSU BLUE ONYX CARTRIDGE – THE LEGEND LIVES ON

AURENDER W20

by Chris Thomas

As I was one of the last people on Earth to buy a CD player, on purely personal musical grounds, I could never be accused of being an early adopter where new technologies are concerned. It has taken over three decades to get high-end CD players to the quality I am hearing lately, and the arrival of streaming and file storage has been playing only a bit part in my listening for the past few years, so you won't be surprised to have found me at the back of the queue with a rather unconvinced look on my face during that time. When, somewhat in frustration that I wasn't sharing in the euphoria, I asked respected friends in the hi-fi business in which direction the land of milk and audio honey lay. I was directed toward the Aurender W20. Wise words indeed, as I discovered when I managed to secure a loan of this remarkable device. Earlier last year I got my hands on the dCS Vivaldi, a digital playback system that for me had pushed the art forward to a new level and dCS, being the UK distributor for Aurender, clearly shares many of the same values. In a sense, this made the challenges the Aurender faced even more daunting, especially considering its premium price. Vivaldi sets the musical bar extremely high and any streaming device at this price that doesn't compete musically with the best that CD has to offer is going to be a big disappointment.

The W20 has all the hallmarks of a high-end audio component. Build quality is as good as I have seen, being incredibly impressive inside and out, with each section of the machine located in its own 'room' and separated by thick aluminium walls. The front panel display is a model of clarity as it is easy enough to read from across the room, and the information is scrolled across the large screen. I cannot tell you how much I like this after a succession of micro readouts, illegible from more than a few inches, that illogically seem to adorn so much high-end audio these days. The panel can also be set to display a pair of large coloured output meters, which is rather retro, but interesting.

Internally, Aurender has gone to great lengths to reduce noise. The audio board is both mechanically isolated and powered separately by a pair of dedicated lithium iron phosphate batteries. These have automatic alternating charging cycles, which mean that neither battery is allowed to run so low that it might affect audio performance. This also eliminates any mains noise that might otherwise find its way into the audio side of things. Battery replacement? I hear you ask. Forty years at eight hours a day, every day, says Aurender.

The W20 is available in two versions, and these relate to the size of the HD's in each. The model I had utilised two 3TB drives, though there is a version that increases this to twin ▶

▶ 4TB drives. When you think that the smaller version can store up to 15,000 CDs, the 8TB version might be gilding the lily for most listeners.

I see the W20 as a computer transport, or you could call it a server. It is not a one-box solution as there is no on-board DAC, but there is the ability to clock the unit externally and I did this through the Vivaldi clock. In fact, there is a USB-RS232 dongle that is made specifically for dCS clocks with their variable output banks. The on-board clock is already extremely good, though, and is comprised of three oven-controlled crystal oscillators; but once you have heard the extra stability and strength of the W20 clocked externally through the clock-out of the quality of the dCS Vivaldi, you will almost certainly mark it as a future upgrade. Considerable work, done between the two companies, ensures complete compatibility, but whichever direction you go, a top quality DAC is absolutely mandatory to realise the W20's formidable quality.

Digital outputs comprise a pair of AES/EBU XLR sockets that can be used singly or in dual mode, S/PDIF (in either BNC and RCA form), or USB that will support DoP (DSD over PCM). Which connection you choose is going to depend on your system and cabling. Personally, I much prefer the dual AES method, which I am told is the first time this has been offered on a music server. However, all are extremely good, each showing subtle differences that are easily distinguishable. Another reason for taking advantage of the dual AES cabling option is that some higher end D/A converters need this connection method to support sample rates over 96 kHz. The W20 also has a completely separate audio board, and the internal 'room' for this is, as you might expect, of the very highest quality.

Getting musical files onto the Aurender is usually a simple job, one best done on a computer by using drag and drop methods, although I also ripped quite a few CDs onto it by using
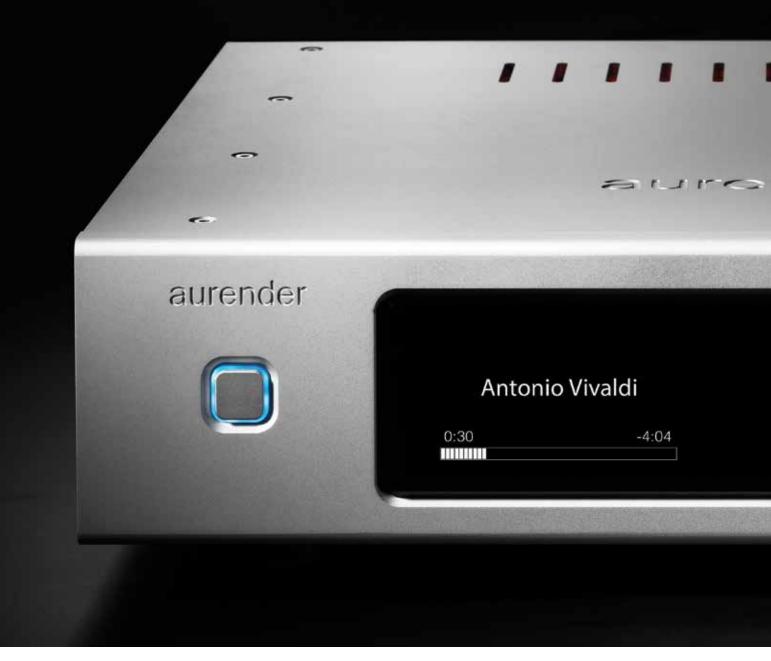
"I see the W20 as a computer transport, or you could call it a server. It is not a one-box solution as there is no on-board DAC, but there is the ability to clock the unit externally and I did this through the Vivaldi clock. In fact, there is a USB-RS232 dongle that is made specifically for dCS clocks."

a simple and inexpensive Samsung disc reader. Obviously this will only copy in 16 bit 44.1kHz, but you can load the Aurender with files of any digital resolution from your computer.

The W20 came with close to 800 albums pre-loaded and I ripped a lot more on through the disc reader during my time with it. Just hook it into your router for access to the metadata and control of the machine. All you need then is an iPad for the Aurender app that is such a critical part of the machine's function. There is no separate remote control, just the app, but it allows you to take a look at everything, and through it you will be automatically informed as and when updates are available. It is also here that the beauty of the machine's usability can be made or broken. You can control and monitor all the W20's working parameters, such as monitoring the individual drives, adjusting the time needed by the DAC to adjust to new sample rates, set for fade in/fade out, enable the dual AES/EBU outputs, etc. ▶

There are different types of sort features, but I preferred the 'by album' setting where I could scroll through the covers, selecting the odd track here and there. If I wanted to make a playlist though, the more music you install, the more you may want to change this feature to a compact list, especially for browsing. You can search alphabetically by artist or album, but bear in mind that you could have 15,000 covers or more on the W20's list. You can sort by genre or even resolution and dCS, who supplied the W20, had pre-loaded the machine with plenty of standard and hi-def music files adjacent to each other, so I could compare a standard resolution with the DSD version instantly, if I was so inclined. It brings into sharp focus just how absolutely vital the format of the app itself is. With such a comprehensive machine able to store so many files at so many different resolutions, it would have been so easy to make the

interface rather annoying and over-complex, but after a period of adjustment you can get where you want to be quickly and playlists too are very intuitive to assemble and name. The only thing I would criticise is the alpha list to the right of the window that enables you to quickly locate an album or artist depending on how you have preconfigured the search parameters. In lower light levels, I think the letters should be quite a bit bigger and certainly much brighter (or perhaps a different colour) to make them easier to see and access.

Once the Aurender is in use, the storage HDs go to sleep after the files have been moved to the 240GB SSD, and there are no moving parts to add noise or vibration during the playback process. It is incredibly quiet mechanically and sonically, with black backdrops to any music you chose. You can listen for anything that might indicate you are streaming

The Four Seasons

16bit   44.1kHz   FLAC

from stored files but I doubt you will find it. The Aurender just runs with the program. Playlists are rolled out smoothly with only the occasional light click from the machine if a sample-rate change is called for and the transition from track to track across different albums is remarkably smooth. Overall I would have to say that sound quality is incredibly good and quite easily the best I have heard with streamed music.

There is virtually no detectable loss of bandwidth and the rhythmic flow of the music is superb, especially considering that I had the Vivaldi transport sitting next to the W20 for quick comparison. The Aurender is full-bodied, weighty, and fast, with almost equal resolution to the transport. I say 'almost' because I still find that the straight CD playback, within this system, shows more depth and transparency. But I should reiterate here that there are very, very few source components

that can go toe to toe with a clocked Vivaldi system. Personally, I haven't heard any, but the caveat here indicates that there is an increasing amount of equipment out there that I haven't used at home yet.

The W20 doesn't soften bass or render it less pitch accurate, and it maintains impressive focus from top to bottom. Higher resolution files can sound sound thrilling –full of micro detail, very precise tempo wise, and possessed of a quality of dynamic 'life' that I have found missing from lesser streaming systems. The 24-bit/96khz version of Herbie Hancock's *The Joni Letters* [Verve] was absolutely stunning. The increased resolution changed the character of the piano much more than I was expecting. This hi-def version really lived up to its billing here and doesn't suffer from what Alan Sircom described as "The numbers game". The standard version in comparison ▶

emphasises the hammer and has a slightly less tonally pure and colourful harmonic character where the hi-def certainly has more space, grace, and stability about the way the piano sustains through chords to the decay. One of my favourite tracks, 'Solitude', just sounds so inward and contemplative and, I have to say, more expressive on the Aurender through the Vivaldi DAC than when the DAC is fed directly from the CD. The spaces and intervals are more relaxed and this of course brings the phrasing into much sharper focus. Great musicians employ the blackness and treat it with respect. 'Solitude' is absolutely reliant on the sense of colour, ease, and reflective expression within that quiet, expansive place. It works magnificently.

The Aurender does not have any sense of being musically mechanical either. Of all the streamers I have heard, there has so often been that feeling that the music was being squeezed out through a clocked buffer, and that the flow was somehow inhibited and rather unnatural. But, in my experience, the Aurender sets a new standard here, and I think this must bode really well for the future of file-storage as long as this degree of musical excellence is maintained. But, I was more than impressed with some of the standard resolution from old recordings that I last heard on vinyl back in the 80's and in this way the W20 shares a certain new regenerative and sparkling focus with the Vivaldi. King Crimson's *Larks Tongues In Aspic* [Discipline] was an album that I knew well when I used to worship at the alter of Robert Fripp and his excruciatingly physical 'guitar mechanics' approach. Yes, Robert could be extremely metronomic and had a way with repetitive phrasing through arpeggios that transfixed me back then, but he was also capable of the most beautifully lyrical moments. The Aurender just wrings every drop of music from this ripped disc, and I am amazed how fresh and colourful it sounds. In a sense, it brings everything the W20 absolutely excels at into sharp focus. Is it as good as the Vivaldi transport? Almost, but look toward low-level detail and the way in which the dCS can discriminate threads and instrumental mutterings for the answer to that one, especially at low frequencies where the Vivaldi is so very, very articulate.

The Aurender W20 is a technologically superb piece of electronics and is quite easily the best of its kind that I have heard, although new models from many manufacturers are coming thick and fast now. Despite this, its real value to me lies in the way it plays music without so many of the irritating issues I have noted before. Aurender has clearly gone to great lengths to ensure that nothing gets in the way of its most important purpose. It fulfils the role of a single or second source brilliantly without actually playing second fiddle to anything. It is a truly exceptional product. Expensive but very highly recommended. ✛

TECHNICAL SPECIFICATIONS

Type: Computer music server.
HDD Capacity: 3TB x 2 or 8Tb -2 x 4.
SSD: 240Gb, upgradeable to 2x SSD's, 4GB RAM
Digital Outputs: Coaxial, Optical, 2 x AES/EBU, BNC, USB port
Word Clock input: NC
Control System: Via Aurender custom iPad App.
Audio Power Supply: LiFePO4 (LFP) Battery.
HDD Isolation: Solid aluminium enclosure with rubber damping.
Dimensions: 106x370x430 (HxWxD).
Weight: 9kg
Colour: Silver or black.
Price: £13,000

Manufacturer: Aurender
URL: www.Aurender.com

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Tel: +44(0)1954 233950