### Web: https://antipodes.audio; www.eliteaudiouk.com

AUDIO

#### NETWORK AUDIO LIBRARY

## Antipodes Audio Oladra

The premier 'server/player/reclocker' from New Zealand brand Antipodes Audio boasts a host of proprietary technology and supports up to 24TB of user-installed SSD storage Review: **Andrew Everard** Lab: **Paul Miller** 

etwork audio is a significant growth area in hi-fi, helped along by network-connected transports and servers, designed to be used into offboard DACs. We used to call these devices 'network bridges', interposed between the home network, and any storage devices thereon, and an audio system. Nowadays they've grown beyond that basic functionality, being able to access music stored internally or via directly connected drives. Meanwhile, the 'network connectivity' is used to access online streaming services, and offer remote control via a tablet or smartphone app.

Each of these transport devices has its own spin on what's being attempted, and the claimed benefits of their proprietary technology – think Auralic [HFN Jun '23], Aurender [HFN Jul '23], Innuos [HFN Jan '20], Melco [HFN Apr '22] and others. Joining this rarefied club is the £25,000 flagship Oladra from Antipodes – it hails from New Zealand, is offered in either silver or black finishes and is described by its manufacturer as a 'Server-Player-Reclocker'.

#### SWOOPING STYLE

Based in Otaki, some 70km north of Wellington on the eastern coast of New Zealand's North Island, Antipodes began life in 2004 as a manufacturer of high-end audio cables 'based on our own proprietary open-lattice pure silver and pure gold wire'. 2011 saw the brand offering a music storage/server range which, some 12 years later, now kicks off with the shoebox-sized S30 music server, at £3500, to which the user can add an S60 PSU and S20 reclocker, at £2200 and £2700, respectively.

While Antipodes' S and K series models are conventional 'box-shaped' designs, the top-of-the-range Oladra is housed in full-width (445mm) casework, with a swoopy, organic-looking aesthetic that's fully

RIGHT: Modular mini-PCIe form factor PC with 960GB SSD storage/cache includes screened switchmode PSU [blue box] with three local regulation PCBs [1x near left; 2x far right], three SATA bays [top] and Spartan 6 DSP [top right] revealed in the silver finish and just a little disguised in the matt black pictured here. In either colourway, it looks rather slick.

The Oladra is a network transport, able to play online music services via the user's Internet connection, but also has a trio of 2.5in SSD storage slots in the rear panel, each ready for a drive of up to 8TB. So, spend an extra £1200 or so on three high-quality drives, such as Samsung's 870 QVO, and you have a unit capable of hosting the most substantial of music libraries.

Content can be copied to these drives once they're designated as music storage, all of which is done via the Oladra's control interface [see boxout, p55] running on a computer on the same network. It's also possible to connect a CD-ROM drive to one of the unit's three rear-panel USB ports (these can also accommodate external USB drives if desired) and use that to rip discs to the storage. It's worth noting here that

CD ripping is perhaps better described as painstaking rather than swift, the company opting for accuracy rather than speed.

Already got a music library on a NAS? No need to copy its contents to the Oladra as the control interface allows these storage options to be pooled together, appearing to the user as a single library. However, with no dedicated app, the Oladra must be 'driven' via browser software running on a PC or, more ideally, a tablet.

#### DUAL DESIGN

If that doesn't appeal, then the Oladra can be employed as a Roon server/ player, as well as supporting other player apps including Squeezelite, NAA and MPD – that's all part of Antipodes' design here, which employs separate computer 'engines' and control interfaces for its server and player functions. The former runs on what the company calls its 'V7H







high-power computing engine', which has 64GB of RAM, and a proprietary internal link to the player section.

The company reasons that reduced computer power is needed for playback, so the 'V7X engine' in this department is a lower specification processor with 8GB of RAM, feeding both the direct USB audio output and a galvanically isolated reclocking section that

services the conventional digital outputs. This uses an FPGA-managed, temperature-compensated clock, and is fed by a high-quality power supply employing 'Graphene super-capacitor smoothing'. Discrete line drivers are used

for the digital outputs, which run to S/PDIF (RCA & BNC), I<sup>2</sup>S (RI45 & HDMI) and AES3 (3-pin XLR) outputs [see p57].

Within Antipodes' setup menus, presets are provided for various playback routes – for example Roon users need only select the 'Roon (Auto)' setting – but all of these are user-customisable. Owners of DSD libraries and suitable DACs should be aware that the default handling of these files is

via DoP (DSD over PCM frames), but again this can be bypassed to 'Native'.

#### 🗗 READY FOR ANYTHING

'I experienced

the massive

power of this

space-rock!'

So, how well does the Oladra work? As with so many of these digital output network players, it's tempting to say, 'very nicely, thanks', and leave it at that, so dependent is the sound quality on the DAC with which

> the unit is used. However, the more I tried this Oladra with a variety of DACs, including the little Chord Mojo 2 [HFN Apr '22], the even smaller AudioQuest DragonFly Cobalt [HFN Oct '19] and – getting more sensible – with the iFi Audio

Neo iDSD Performance Edition and the onboard DAC stage in the Naim NSC222 network player/preamp, the more I came to appreciate one of PM's lab findings [see p57] with transports of this kind. And that's the simple observation that, the less ambitious the DAC in use may be, the more effective the signal-handling in the transport becomes in getting the best overall sound quality.

ABOVE: Nothing to see here except for the swooping curves of the heavyweight casework... The large disc [far right] is simply a power on / off button with an LED indicator [far left]

Now I wouldn't suggest this £25,000 server/player and a 'thumb DAC' like the DragonFly Cobalt – yours for £299, or £100 less from Amazon at the time of writing – is an obvious pairing, but in my listening it was certainly able to perform to a very high standard, the Oladra seeming to wring-out the last drops of performance.

#### DIGGING FOR DETAIL

I suspect that comparing the unit with the Aurender, Melco and other transports reviewed in HFN would be a matter of how each performs with specific DACs, but the fact remains that this Kiwi contender brings a sense of clarity and cleanness, digging out detail that can go AWOL with simpler set-ups. The simplest source being an electrically noisy computer, of course...

# Accessed to Access

#### OLADRA CONTROL

With no dedicated app, the Oladra must be operated via a web browser interface, accessed via the 'My Antipodes'

tab on www.antipodes.audio. That done, the screen will show any Antipodes unit(s) on your network, separated into server and player functions. Via the 'Solution Dashboard' provided, it's then possible to check for any updates, set-up storage – internal and/or external – allocate music to it, and bring

network, internal and USB storage together as one single library. Once I'd got the hang of configuring the inserted SSD drive for music storage, all this was pretty intuitive, as was setting up the various playback parameters – not least because the Antipodes software people have done all the work, and created simple presets for almost anything you might want to do. Being browser-based means all this is platformagnostic, so it doesn't matter if you're setting up the Oladra on a PC or Mac. However, it would be a wise investment to add on the cost of a tablet – think about £300 for a current iPad – and run the browser interface on that for a more convenient user-experience. Or you could just use Roon for music playback, again on a tablet or smartphone.

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ABOVE: Ethernet I/O ports [right] are joined by three bays for outboard SATA drives [top]. Outputs are on USB-A (768kHz/32-bit; DSD512), two coax/AES3 (192kHz/24-bit; DoP to DSD64), opt (96kHz/24-blt) and I25 on HDMI/RI45 (384kHz/32-blt; DSD512)

What's more, you don't have to delve into your tried-and-tested audiophile recordings to reveal this, so just for once yes, Keith can go. Instead, even with a track like the version of 'A Drop Of Nelson's Blood' opening the original cast album of the Fisherman's Friends musical [Island 4837064], the Oladra brings drama to the storm sound effects and snippets of the Shipping Forecast at the start of the track. and to the striking separation of the voices in the harmonies.

The same sense of vivid rendition of voices and instruments is clear in the live album from Faith Folk & Anarchy - the 'supergroup' of Steve Knightley, Martyn Joseph and Tom Robinson - recently released as a Bandcamp download. This has both consummate musicianship and real performance presence, especially in the version of Robinson's 'War Baby', and a gloriously strippedback '2-4-6-8 Motorway', which is given an almost Latin treatment accompanied only by claps and acoustic guitar. It's tinglesome stuff.

#### THUNDERSTRUCK

Mind you, this clarity is also afforded to dense recordings, and they don't come much more solid than Hawkwind's 1977-79 retrospective box set Days Of The Underground [Atomhenge ATOMCD 10 10 50], which neatly coincides with the period when I joined all the other ex-military greatcoats in the Hammersmith Odeon to experience the massive power of the band's space-rock. From the relentless thunder of 'Brainstorm' to the then 'new stuff', such as the tracks from 1977's Quark, Strangeness And Charm, the Oladra does a fine job of allowing a listen-in experience to the complexities of the tracks despite that gloriously unstoppable chugging rhythm section.

And it sounds similarly delicious with the latest Bob Dylan outing, Shadow Kingdom [Columbia] Legacy/Sony 19658767492], which sounds suitably chaotic and rough and ready, but very live - just as it should - from 'I'll Be Your Baby Tonight' to 'It's All Over Now, Baby Blue'. Antipodes' Oladra, especially with the excellent iFi Audio DAC in harness, just grabs and holds the attention, as it does with the soundportrait that is Veneziana [ACT ACT 9971-2], Iiro Rantala's latest live release with members of the Berlin Philharmonic, full of self-composed tracks evoking the spirit of the sinking city, and with a lovely, lush mix of jazz and classical stylings.

And when you do unleash the Oladra on a full symphony orchestra? Well, it sounds deep, full, and close-detailed, with wonderful soundstaging and focus on the Dallas Symphony Orchestra/Litton 2002 release of the Carpenter completion of Mahler's 10th [Delos DE3295]. The combination of fluidity and drama makes for a magnificent sound, more than up to the level of any amplification with which you may choose to use it. ()

#### HI-FI NEWS VERDICT

This is another of those products to which it's all but impossible to assign a sonic signature, so our sound quality score is indicative of the way it will allow a DAC seemingly any DAC, based on the listening here - to achieve its full potential. The lack of a dedicated control app will disappoint some, but use the Oladra with Roon, for example, and those guibbles vanish, leaving an excellent music store/digital transport solution.

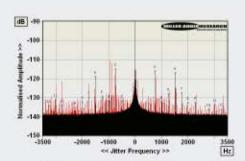
Sound Quality: 88%



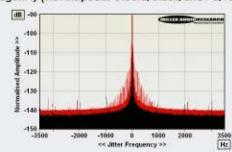
#### ANTIPODES AUDIO OLADRA

Because the Antipodes Oladra, like music library/reclocker/server solutions from Melco, Aurender, Auralic, Innuos and others, is a data storage and delivery device, any technical or subjective uplift in performance – over a conventional NAS or PC/Mac USB solution - is best inferred via an attached, third-party streaming player or DAC. Identifying any reduction in jitter or circulating RF interference from the Oladra also depends on the USB sink's jitter suppression and/or galvanic isolation, so a USB DAC with excellent data recovery/reclocking may not express a significant difference. Similarly, any DAC with its own 'baked-in' sources of jitter will not be improved by pristine digital data from an outboard source. Ironically, it is the more rudimentary USB hub-powered DAC/headphone amp solutions, like AudioQuest's original DragonFly DAC [HFN Mar '14], that provide us with the best indicator of incoming data integrity and noise on the +5V supply. In this instance while there's a useful reduction in correlated jitter over USB from 300psec (desktop PC) to 120psec (Oldara) it's the almost wholesale suppression of circulating interference (spuriae), and improvement in A-wtd S/N from 94dB to 104dB, that will exert the subjective impact [see Graph 1].

A similar 'cleaning up' was also observed with iFi Audio's NEO iDSD [HFN Mar '21] where the 550psec of ±33/66/99Hz sidebands collapsed to just 10psec [see Graph 2] with the Oladra as USB source. Despite this ~2dB reduction in uncorrelated jitter/ quantisation noise no change was seen in the NEO iDSD's 4.29V peak output, minimum 0.00015% THD (re. 1kHz/-10dBFs) or 109.7dB A-wtd S/N ratio. Other USB DACs tested, including the Mytek Brooklyn [HFN Aug '17] and dCS Vivaldi One APEX, have sufficient galvanic isolation/onboard reclocking that very little difference in jitter was observed between the test PC and Oldara USB sources. Minor variations of just ±1-2psec - within the limit of measurement - were detected despite an ostensibly greater visible reduction in the finest spuriae. Every little helps... PM



ABOVE: 48kHz/24-bit jitter spectra from AudioQuest's DragonFly (via Antipodes Oladra, black; and PC, red)



ABOVE: 48kHz/24-bit jitter spectra from iFi Audio's NEO iDSD DAC (via Antipodes Oladra, black; PC, red)

#### HI-FI NEWS SPECIFICATIONS

Digital input/outputs	2x Ethernet: 2x USB-A 3.0
Digital outputs	1x USB-A; 3x S/PDIF: 1xAES3; 2xIPS
Digital jitter (AQ DragonFly)	120psec (300psec via PC USB)
Digital jitter (ifi Audio NEO iDSD)	10psec (550psec via PC USB)
Digital jitter (Mytek Brooklyn)	8psec (8psec via PC USB)
Power consumption	20W (1W standby)
Dimensions (WHD) / Weight	445x80x400mm / 21kg