

DETAILS PRODUCT Aurender N200 ORIGIN South Korea TYPE Network-enabled media storage device/streamer WEIGHT 9kg DIMENSIONS (WXHXD) 330 x 96 x 355mm FEATURES 240GB SSD for caching playback Two slots for 2.5in HDD or SSDs Outputs: coaxial; USB-A 2.0 Inputs: Ethernet; 2x USB-A 3.0

Padood Ltd, UK

All's well that ends well

In its basic form this digital streamer/network bridge is governed by the Conductor app, but add optional SSD storage and the N2OO turns into an excellent fully fledged music library

usic storage: it can be a thorny subject, not least because those network products offering internal capacity for your library tend either to have fixed, non-expandable storage or offer the option of dealer-installed drives. The cost of such storage is usually high, too – okay, not 'adding capacity at time of ordering your new Apple computer high', where an extra Terabyte can cost you £400, but still at prices to have you looking at HDDs on the likes of Amazon and scratching your head in bewilderment.

Not so with the Aurender N200, available in silver or black at £6,700. As supplied it has no storage capacity aside from the 240GB NVMe SSD used for caching music for playback, of which more later. Instead, two slots on the rear take 2.5in HDDs or SSDs, installed by the user to suit their needs. And that's a good thing for two reasons: one is that you can buy your own drives at sensible prices - think just over £100 for a 1TB Samsung SSD, less if you go for the likes of a Seagate Barracuda HDD - and the other is that Aurender has made it simple to install the storage.

In fact, armed with a Samsung SSD, we are so surprised with the speed and ease of installation that we decide to take it out again and time the process at less than a minute to fit it once more. Switch off the N200, undo two thumbscrews on the rear panel, slide out the tray, drop in the drive - the N200 will take any 2.5in storage up to 7mm thick - then slide the tray in and do up the screws. Power up again and job done - the N200 will format the storage if required, and you're good to play. No tools, no fiddling with tiny screws you'll inevitably drop - that's all there is to it. Easy peasy.

Refined design

Clearly the Korean designers of this music streamer/server have got things thoroughly thought through, and in the N200 they've further refined a design found in the £19,000 A30 CD ripper/player/server. The N200 may be half the price of that monster high-end unit, but it gives away little apart from an optical disc-drive. Its design and audio capability have been substantially revised for this relatively compact model, from the mainboard processor

to the PSU, which even has its own uninterruptible super capacitor provision – allowing an orderly shutdown in case the mains fails. However, Aurender's N200 isn't quite the complete one-stop shop. For a start it has no built-in digital-toanalogue conversion, and so needs to be hooked up with either a suitable DAC - it has outputs on USB and coaxial S/PDIF - or an amp/preamp with onboard conversion. And while it comes with a simple quartet of front-panel controls, operation via the Aurender Conductor app is much slicker and also makes over-air firmware updates a breeze.

At the heart of the N200 is a new low-power Intel quad-core processor, low-noise linear power supply and increased system memory for smoother operation. The rear-panel Ethernet connection, adjacent to two further USB ports to which external storage can be added, is double-isolated to keep network noise at bay, and the whole thing is poured into a high-quality machined aluminium housing with a large, clear display.

Aurender's player is built around the principle of caching music on its way

to the output, using that 240GB internal SSD to avoid any glitches or drop-outs whether playing from (your) internal hard-drives, external USB storage or online services such as Qobuz and Tidal, both of which are supported here. In fact, once music is summoned from internal or external drives to the cache, the 'supplying' drive is idled to optimise performance.

We've already mentioned that the N200's linear PSU is backed up by a super capacitor UPS to cover any mains failures. Having had more than one device of this kind 'bricked' by a power outage in the past, that seems like a sensible provision, along with the gentle shutdown procedure the unit executes when turning it off. This is, after all, a computer at heart.

Installing a Samsung SSD is so quick and simple it takes less than a minute to fit

You could, of course, use the N200 simply as a means of accessing streaming services, where it sounds very good indeed, even if £6,700 is quite a lot of expense just to listen to your playlists on Qobuz or Tidal (for which MQA decoding is available as an extra-cost download add-on).

However, like all its products, the N200 isn't Roon-compatible, Aurender saying that: "Roon is a very CPU-demanding piece of software, and our servers are intentionally designed to be minimalistic where processing is concerned". The company believes this is: "a big reason why your Aurender sounds so good", adding its own playback software is custom engineered and tailored to its hardware. You can, however, 'cast' to the player from a Roon installation, though this is via AirPlay and so really only designed for casual listening.



Aurender Inc and Melco are largely responsible for stablishing the 'NAS niche' for audiophiles. Digita output-only music libraries now Include the £1,500 Roon Nucleus + (HFC 439), the £4 600 Auralic Arles G2.1 (HFC 469), plus the very high-end £9,495 MU1 from Grimm Audio. Two-box solutions with outboard PSUs include the £9,000 N10/2-S38 (HFC 88) from Melco and £11,400 Statement from Innuos These audio-specific storage/server solutions are worth investigating if you've already nvested in a top-flight USB or

S/PDIF-connected



The intention here is that you use the N200's optional internal storage capacity to house your complete music library. A couple of 2TB drives should give you plenty of space for 15,000+ albums in CD-quality FLAC, or almost 2,000 in 24-bit/192kHz, and they can be loaded to those drives by simple copying from USB storage. Alternatively you can access the N200 over a local network and drag content to it from your NAS library – this can be slow, but works in the background while you listen.

Otherwise, there is a no-fuss 'copy from NAS' routine built into the player, but this is designed to transfer an entire library, and some 30TB of music isn't about to go onto the smaller-capacity drives we have installed in the N200!

Trying a number of DACs we have to hand with the N200, we finally settle on iFi Audio's Neo iDSD (*HFC* 482) as the 'bridge' between its USB output and our Naim amplification.

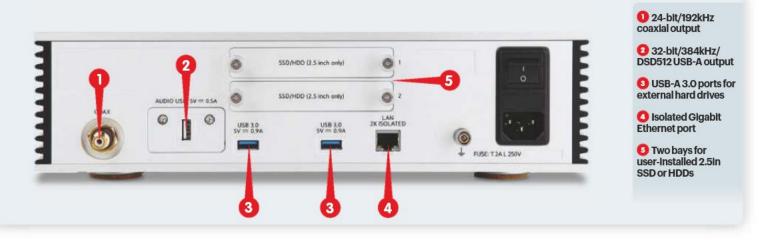
As with the drive installation, setup is fast and simple, and with music playing in very short order it's soon clear that Aurender's approach to network player design is paying off.

Sound quality

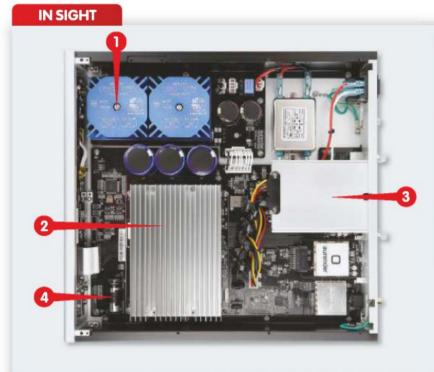
It certainly makes iFi Audio's classy little DAC work to the best of its considerable abilities, even when streaming hi-res content from Qobuz. Pink Floyd's *Hey Hey Rise Up* single, in 24-bit/96kHz, is superbly presented with a deep, dramatic opening that gives way to Nick Mason's powerful drumming and Dave Gilmour's soaring, soulful guitar.

With that single track we're almost convinced by the viability of streaming as a music source, the N200's handling levelling the playing field between this method and the download we'd previously purchased. Mind you, it also puts on a rewarding show with a BBC Radio live concert recording in 320kbps/m4a, delivering

CONNECTIONS



JULY 2022 H-FiChoice 29



Multiple linear
PSUs with separate
feeds for the main
CPU and digital audio
processing

2 Intel Quad Core-CPU (under heatsink) with 240GB NVMe cache for music playback

Optional SSD/ HDD storage

Super capacitor serves as a UPS

and definition of the sound here – even in the complexity of the Variation 33 fugue, with notes tumbling over each other – is truly quite breathtaking.

This characteristic is also readily apparent in another fugue, the massive piece concluding Benjamin Britten's Young Person's Guide To The Orchestra in the Michael Stern/

delivery reveals even the slightest touch of finger on key as well as the

the writing. Meanwhile, the speed

overall complexities and intricacies of

even on repeated listening.

Through the Aurender/iFi Audio combination the instruments sound wonderfully well shaped, and the drama of the crashing finale is of a

Kansas City Symphony Britten's Orchestra recording. This is one of our habitual go-to pieces for review testing and remains hugely enjoyable

Hey Hey Rise Up is superbly presented with a deep and dramatic opening

quality likely to have you cranking the volume up so that you can listen to it all over again.

Conclusion

That combination of speed and full-fat sound also serves well a wide range of different music, from the exuberant jazz of the McCoy Tyner/Freddie Hubbard Quartet on their Live At Fabrik Hamburg 1986 set to the full-on blast of The Red Hot Chilli Peppers' The Heavy Wing from their 12th and latest LP, Unlimited Love. Whatever type of music floats your boat, the marvellously minimal time you'll need to spend getting used to the way Aurender's N200 goes about things will no doubt be very richly rewarded indeed ●

TAKING CONTROL

The way to control the N200 is using the free Aurender Conductor app running on an iPad or Android device – the 'lite' version for iPhone is less satisfactory, but the full version will give you complete control over the unit, from streaming your favourite subscription services to organising a library stored on (optional) internal drives. Making use of that SSD/HDD option is the slickest way to do things, as is setting your music up in playlists, but be careful not to use the 'Consume' mode if you want to revisit your selections, as this will delete tracks from the playlists – not your

storage! – as they're played. Once setup, with all copying handled via the Conductor interface, the app makes the N200 a breeze to use, the unit even updating automatically as new music is added. Cover artwork is displayed clearly and can be zoomed up to fullscreen if required; multiple playlists can be saved; and it's almost impossible to get lost in the app, however hard you may try. Plus as a final hint, go into the settings and enable the Critical Listening Mode: this kills the unit's frontpanel display and background functions, saving resources for optimal sound quality.

the dynamics and detail in splendid fashion, and giving a real sense of the concert hall ambience in the first part of Bach's St Matthew Passion.

But enough not-so-casual listening during setup and familiarisation: with the piano and electronica of the splendid soundtrack from John Carpenter's *The Fog*, the N200 makes those deep chords and ambient effects chilling and ominous, with a real sense of menace.

The same holds true for the live version of Nick Cave's Where The Wild

Roses Grow from Kylie Minogue's The Abbey Road Sessions set, made all the more disturbing by the simple accompaniment and the contrast between Minogue's sweet voice and Cave's sonorous growl. Mind you, on this album Minogue can even tingle with her slow-burn, string-accompanied take on her big pop chart banger I Should Be So Lucky when played through this system!

Just as powerful is Mitsuko Uchida's recording of Beethoven's *Diabelli* Variations in which the N200's acute

Four buttons for menu and playback are on the right, but the app controls the N200 better



