



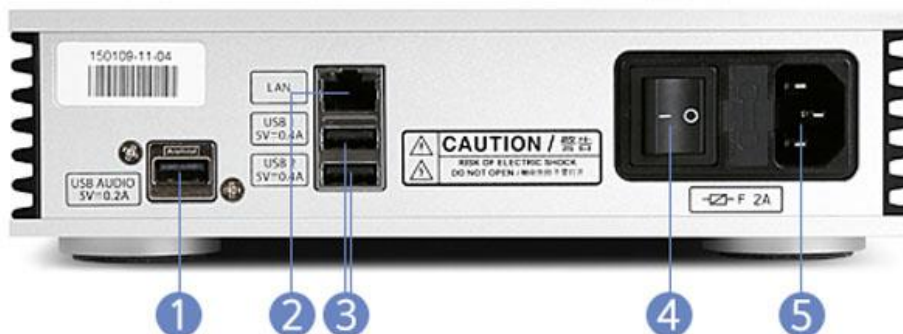
Aurender N100H Caching Network Streamer

By Michael Lavorgna



2TB + NAS

The Aurender N100H houses 2TBs of internal storage while also offering the ability to play music from network attached storage (NAS) and USB storage. In addition to developing their own iOS Conductor app for remote control, Aurender also offers their free AMM (Aurender Media Manager) software for Mac and PC which essentially reads the contents of attached storage making it available in the Aurender app as if it was stored internally, metadata and all. This is a huge improvement over older versions where external storage was only available via Folder view. Since the N100H caches locally-stored, USB-stored, and NAS-based music in its 120GB solid-state drive (SSD) prior to playback, you can outgrow those 2TBs without performance concerns. The N100H can play just about any file you care to run through it at PCM resolutions up to 32-bit/384kHz and DSD128. Aurender have trickled down some of the technology from their flagship W20 Music Server including "a dedicated USB Audio Class 2.0 output...designed to deliver an exceptionally transparent audio signal free of noise, and is shielded from outside electronic interference." The N100H also includes a linear power supply for the CPU circuit and audio output circuit. The internal drive is a single 2TB 2.5" Western Digital HDD so you'll want to back up your library to USB storage or NAS.



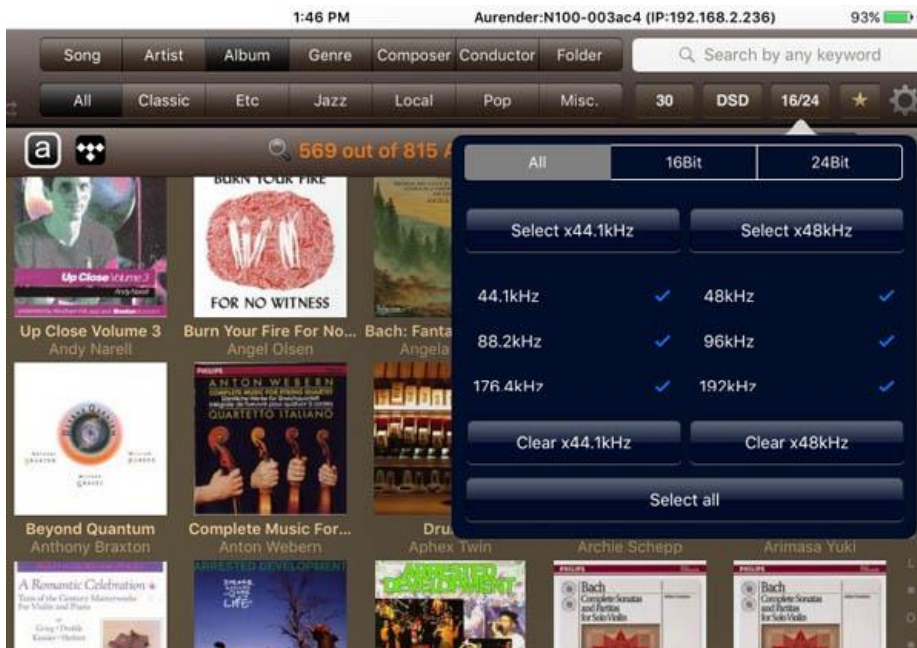
The half-width sized N100H is to my eyes a handsome beast with its defeat-able 3in. AMOLED display, machined aluminum body and black side-mounted finned heat sinks. The front panel also includes the on/off button and four additional flush mounted buttons for basic playback functions. The simple rear panel houses the Gigabit Ethernet input, USB Audio out, and 2x USB for attaching USB storage. An IEC inlet finishes things off. For owners of non-USB DACs, Aurender offers their UC100 USB - S/PDIF converter (\$699).



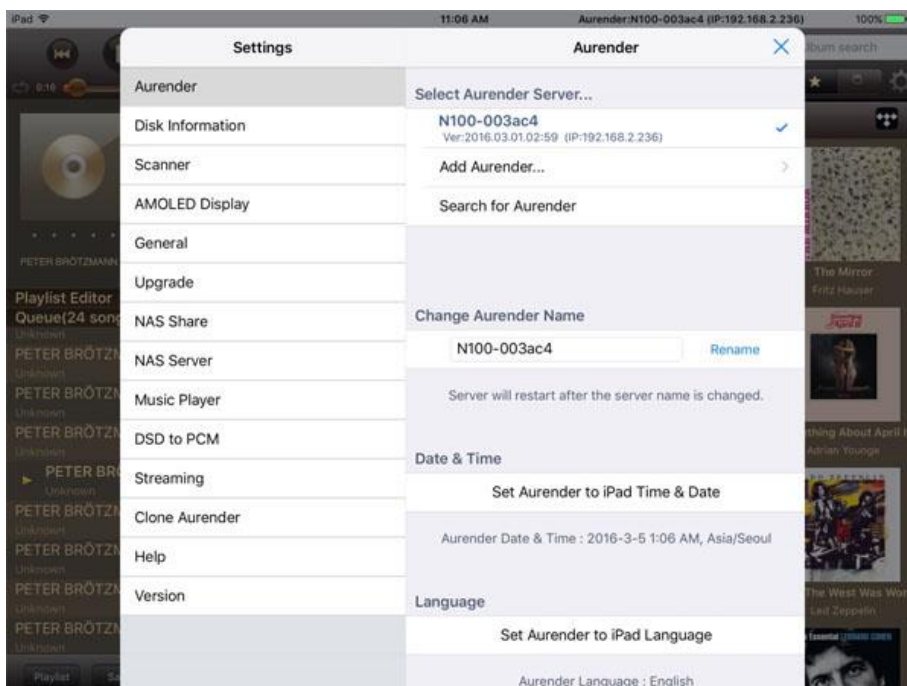
Aurender Conductor App

The interface to our music is a key ingredient in the overall listening to music for pleasure experience. A crappy app makes moving through your music library akin to wading through knee deep snow with swim fins. Thankfully, the Aurender app is to my mind one of the better apps out there along with Auralic's Lightning DS app, both taking second place to Roon. Again, this is a personal preference thing but Roon's ability to seamlessly integrate Tidal is for me a huge plus as are other features including Roon Radio and the rich metadata linking.

That being said, the Conductor App offers what one wants from a control app including the ability to view your collection by Song, Artist, Album, Genre, Composer, and Conductor and a search feature that is very nicely done and fast. Aurender delivers the N100H with a number of folders for specific music genres including Classic, Etc, Jazz, Local, Pop, and Misc. and there are corresponding selections in the Conductor app to view your music according to these genres.



Additional views can be accessed by either tapping on, or holding your finger over, the 4 far right options on the menu bar. These include viewing new music you added to the N100H (in last 1, 3, 7, 15, 30, or 45 days), DSD (64x DSD, 128x DSD, non-DSD), PCM see image above for options), and Favorites (filter options by number of stars). While Tidal is not integrated with stored or NAS-based music, it is only a tap away. When viewing Tidal, the menu options change to Tidal's choices—Discovery, New, Recommended, Rising, Top 20, and Favorites (indicated by a yellow star). As with browsing my music, flipping around Tidal was nice and fast. Stepping back to the hardware side, Aurender sticks the entire Tidal-sourced track into RAM prior to playback. For Playlist makers, you can commingle Tidal tracks with music from your own library in the same Playlist. "Share with friends" is another cool feature built into the Conductor App; just tap and hold your finger over a Tidal Playlist, Album, bio, track, etc and you'll get a pop up window with a number of playback options as well as "Share with friends".



There are also a number of Settings accessible from within the app which you can see in the above image. NAS Server is where you want to go to add your NAS to the N100H. Firmware upgrades are just a tap away with the app auto-scanning for new versions. If you own more than one Aurender, you can Clone the contents from one to another including Playlists and Rating information. Nice.

Sitting in my red Eames LCW with my iPad mini in hand, I found that the Conductor App was just fine in use. I'm a meat and potatoes kinda guy when it comes to listening to music, preferring to listen to albums at a time, so I'm not a Playlist maker. If you are a Playlist maker, Conductor will accommodate your needs. I also delve into Tidal's deep library daily and the Aurender app obliged nicely.

For this review, I copied over most of my music library onto the N100H while also streaming from my Synology NAS. The system included my Ayre AX-5 Twenty integrated amp, DeVore Fidelity X speakers, and a few DACs including the Auralic Vega, PS Audio DirectStream Junior, and the dCS Rossini.

While everything worked without a hitch for the review period, it's worth noting that Aurender offers remote technical support right from within the app which "allows their engineers to quickly diagnose and fix problems over the Internet." Nice.



Isn't It Rich

I already spilled some beans on the Aurender in comparison to the Sonore Signature Rendu (see review) although we're really talking about red beans and black beans: the Aurender offers USB output only while the Sonore is S/PDIF out only (Coax & I2S). While hi-fi religious wars still rage over USB vs. S/PDIF, reality has already settled the case for people who own DACs; if you want to connect

a music server/streamer to your DAC via USB, the Aurender makes sense in terms of this particular comparison. In other words, there's no real contest. If you find yourself diggin' the Aurender brand, their N10 and W20 offer S/PDIF outputs (see their Comparison Chart) as well as models with greater internal storage capacity like the previously reviewed X100L (see review). You'll also see the N100 on that chart which is the N100H minus the internal storage. The "H" adds \$200 to the N100's price which strikes me as \$200 well spent. The N100H is a pleasure to use and its sonic performance in-system provides a nice, meaty, and full sound, dare I say on the warm side of the sonic spectrum. If I can think of a server that would act as the Aurender's sonic foil, it would be the Melco N1A (see review) which still strikes me as one helluva nicely priced and solid-performing package. This would also place the Melco on the 'cool' side of that same sonic spectrum but I'd add that the Melco appears to offer up a cleaner, crisper sound. If it helps, think of a big dial that reads "Aurender" on one end and "Melco" on the other; turning the dial toward "Melco" puts the sound picture into finer focus while losing some of that nice, meaty, and full sound.



While we're in the comparative ballpark, I also leashed up the Auralic Aries mini (\$549) to the dCS Rossini via USB just to see what I would hear. Playing Miles Davis' Jack Johnson, Billy Cobham's kit became smaller and thinner with the cymbals sounding more splashy when the mini took over serving duties. The band overall sounded less full-bodied and less...funky. Of course this not a very relevant comparison price-wise but I think it helps put the Aurender's performance in a greater context. Stepping up the price ladder, I also connected up the Bluesound Vault 2 (\$1199), which also houses 2TB of internal storage. The Vault 2 offers S/PDIF output (Toslink & Coax), no USB, so take



that into account. Using the dCS Rossini DAC, the Bluesound also sounded less full bodied as compared to the Aurender; Sturgill Simpson's heavy voice was less physically present with the Bluesound and the rest of the band also sounded more light weight. I'll be doing a full review of the Bluesound Vault 2 as well as the Auralic Aries mini where I'll get into the strong points of both devices. On a purely sonic scale, with price, connectivity and cable concerns aside, the N100H leads this small pack with its ability to deliver a rich and meaty physicality to music. For me this equals more fun and more engaging music.

I spent a month or more listening to the N100H and its combined strengths add up to a compelling proposition for those looking for a music server with 2TBs of internal storage to connect to their USB DAC. I did not hear a difference worth mentioning when playing back from internal storage or from my NAS so expansion beyond 2TBs is certainly an option, albeit at additional cost. The Conductor App is, in my experience, one of the better apps out there but falls short of Roon/Tidal's seamless integration, the N100H's overall build quality and industrial design are very much to my liking, and the sound quality is certainly a clear and important improvement over my MacBook Pro (I'm getting tired of typing that line).

It's also worth noting that while we can certainly describe the differences between music servers as subtle, especially when A/B'ing, listening over time can turn subtle into important.

Update

On March 2nd, Aurender came out with version 4.5.58 of their system software. This update adds the ability to stream from your Qobuz account and "Smart Copy" which allows you to copy files from your NAS or USB storage to the Aurender from within the app, no computer required. There were also some bug fixes included.



Aren't We A Pair?

The list of available purpose-built music servers seemingly grows by the day. Beyond the obvious consideration of price point, other items for a shopping checklist should include output options, file type and resolution support, the control app's user friendliness, streaming services support, internal storage size, build quality and industrial design, and sound quality. The Aurender N100H checks off everything on that list for me with one exception and one caveat; I want at least 4TB of internal storage and sound quality is a matter of personal preference. If I've been at all successful in describing the sound of my system with the Aurender N100H in it, you should have an idea of whether or not to put one on your audition list. I'd recommend you do.