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Aurender A10 Music Server

Written by Uday Reddy

It's hard to believe, but it's been nine years since I last regularly used the CD player in my main system. I took my first tentative steps toward computer audio in 2008, when I laboriously ripped my very large collection of CDs to lossless files stored on my iMac's 1TB internal hard drive. Originally, I used these files strictly for headphone listening, but later patched them into my main system through the addition of a Logitech Transporter ($2000 USD) and a Halide Design USB-S/PDIF bridge ($450), both since discontinued. With the advent of high-resolution downloads and third-party music players, I eventually transitioned to my current setup: a Mac Mini server running JRiver Media Center 20, streaming files from a 4TB external hard drive, paired with a Meitner MA-1 DAC ($7000) or an Oppo HA-1 DAC-preamplifier-headphone amplifier ($1200 when available).

Most of my listening is still to music streamed from my hard drive, but apart from hi-rez downloads, I don't buy much music. Unless an artist's or label's music is unavailable (talking to you, Peter Gabriel, Metallica, ECM, et al), I instead stream CD-quality music from Tidal, especially with my office Windows desktop system at work. I like the flexibility of my Mac Mini server, but it's not without problems. While I can control the Mini with my MacBook Air via screen sharing, or with my iPhone or iPad via JRemote, the Mac often, for no obvious reason, disconnects from my Wi-Fi. Also, more rarely, the music stops playing for its own mysterious reasons. Additionally, while JRiver has, in my experience, proved superior to Amarra and Audirvana, its Mac version has clearly been adapted from the original Windows version, and is incredibly complex. Unless you're very savvy with Windows and/or have a tech background, good luck. And don't get me started on JRiver's user forums . . .

As a result of this frustration and my desire for a complete from-the-ground-up design, I've been exploring dedicated music servers. Based on reviews published on the SoundStage! Network and in other publications, I've taken a long, hard look at the offerings from Aurender and Baetis Audio, among others. Offered an opportunity to review Aurender's new A10, I didn't need to be asked twice.

Design and description

Aurender's initial offerings were pure servers with no internal DAC, aimed at users who already had USB DACs -- which, according to Aurender, were usually paired with Mac Minis or laptops. However, as the market increasingly trended away from disc players, Aurender began to see the need for an all-in-one model for those who want high performance and simplicity. Hence the A10, which, in addition to server-based playback, offers the flexibility of a built-in preamplifier and DAC. Although the A10 is designed for a broader market, its design brief was that there would be no compromise of Aurender's audiophile roots: both Tidal and MQA functionality were mandated, and a high-quality preamp and DAC were essential. While clearly designed with a lower price point in mind, the A10 ($5500) contains mostly the same parts as Aurender's more expensive models, and is manufactured to the same overall high build quality. Available in a silver or black finish, the A10 is elegant and handsome in appearance, resembling Aurender's premium models. Like those higher-end models, it has a standard rack width but is substantially slimmer, measuring 16.93"W x 2.2"H x 13.9"D. Its weight is a substantial but not unwieldy 22.5 pounds.

On the faceplate are, from left to right: a backlit power button, above it an engraved Aurender logo; a 3"-wide AMOLED display; and a cluster of four buttons. Counterclockwise from upper left, these buttons are: Menu, Previous, Next, and Play/Pause. At far right is a nicely shaped volume knob with a concave surface, set in a well machined into the panel. The side panels, regardless of finish, comprise black, shallow-finned heatsinks that run the depth of the enclosure. The top panel is largely bare, but for an incised Aurender logo toward the front and screw heads along the side edges.

From left to right on the rear panel are the XLR and RCA analog outputs, an optical S/PDIF input capable of handling up to 24-bit/192kHz, a USB 2.0 output for connecting to USB DACs, a Gigabit Ethernet port for connecting to home networks and NAS devices, two USB 2.0 ports for copying files from external USB memory devices, an AC power switch, and an IEC power inlet. The bottom panel has aluminum footers at each corner, each capped with nonslip cork.

The A10 can accept, via USB, PCM up to 32/384, and DSD64 and DSD128 via DoP. The DAC chipset is Aurender's implementation of AKM's AK4490, which handles PCM and DSD in their native forms. The DAC chip has also been tailored for MQA decoding, and is designed to operate in dual-mono configuration, supported by Aurender's dual-mono linear power supplies. The A10 contains 4TB of internal hard-disk storage and, for uninterrupted playback, a 120GB solid-state drive. Supplied with the A10 is a nicely machined remote control of aluminum that replicates the functions on the A10's front panel, and adds buttons for Mute and Input selection. The Aurender's total harmonic distortion is specified as 0.00013%, its dynamic range as 128dB, and its stereo crosstalk as better than -135dB, 20Hz-20kHz. All Aurender models are paired with the dedicated Aurender Conductor iPad app, widely acknowledged for its intuitive operation. The app was developed by Aurender for managing large music libraries with fast browsing and searches. All Aurender servers and players fully support Tidal streaming, MQA decoding, and Internet Radio, all integrated into the Conductor app.

However, Aurender states that, for several reasons, Roon can't be incorporated into their current hardware platform. Whereas Aurender's servers contain everything necessary to serve, stream, store, and manage digital content, Roon is software that requires a computer with a powerful processor, external media storage, and audio end points. And, while very flexible, Roon requires a lot of user effort to implement. Aurender believes that the key to their servers' simplicity, stability, and reliability is the indivisible relationship between their audio-optimized Linux OS-based software and their hardware, which were designed to work together seamlessly, with no variables to cause disruption. Aurender believes that, in optimizing its own operation, even a well-designed computer-based server is constantly performing "housekeeping" operations that have nothing to do with playing music but can have negative audible consequences. While Aurender admits that Roon offers features not yet available with their own app, Conductor is frequently updated with improvements, and to incorporate features that have proven popular in Roon.

Setup

The Aurender A10's user manual is a model of clarity and simplicity, with easy-to-understand instructions, pictures, and diagrams. Once I'd unpacked the A10, I proceeded step by step to connect it to my Wi-Fi router and external hard drive. I then downloaded the Conductor app from Apple's App Store, and attempted to pair it with the A10. Here I ran into problems. No matter how many times I tried, Conductor couldn't find the A10. Aurender's John-Paul Lizars speculated that my review sample, which had been shipped straight from the factory in South Korea, may have been damaged en route, and arranged to have a fully functioning unit from Aurender's office in Anaheim, California, dropped off at my place, just a 45-minute drive away.

When the second sample arrived, I once again went through the setup procedure, only to run into the same problem. Figuring that the problem was on my end, I got on the phone with Aurender tech support. After a remote interrogation showed that the unit was functioning properly, I was asked how I'd connected it. I explained that, after connecting the A10 to my Wi-Fi router with a CAT 6 Ethernet cable and connecting my USB hard drive, I'd plugged the A10 into my power conditioner. I was then asked to disconnect the A10

from the conditioner and plug it directly into the AC outlet. As soon as I did, the A10 began to automatically update its OS to the most recent version. However, after this was completed, and even though Conductor recognized the A10, no USB-connected device appeared in the app. While I was able to stream Tidal, none of the music on my external drive was copied to the A10. Hmmm . . .

At this point, tech support asked what sort of hard drive I was using. When I mentioned that it was a USB-powered Seagate, I was asked if I had any other drives available. Well, my backup drive is a wall-wart-powered Seagate; once this was connected, all was well, and all of my music was copied to the A10. Whew!

Although the setup wasn't without its minor hiccups, once the A10 was up and running, I had no further problems, and it performed flawlessly.

Conducting

The integration between the Conductor app and the Aurender A10 was seamless. I could easily switch between the different modes of playback: the library on my hard drive, Tidal, and Internet Radio. Conductor is clearly labeled, and very easy for a new user -- or even someone new to music servers of any kind -- to figure out. Whenever I review a new product, I try to see how far I can get without reading the owner's manual. The Conductor's operation is quite intuitive; within minutes of starting, I had its basic operation largely figured out. More details are available in the user guide, which is filled with useful tips. Even creating custom playlists is painlessly easy. The flexibility of the Conductor app let me stream individual albums, and create custom playlists by favorite artists or playlists of favorite tracks from my hard-drive library. When using Tidal, I had access to my previously assembled favorites and playlists as well as Tidal's entire catalog, and was able to create my own custom playlists.

Listening

Because Tidal supports MQA and I have a Tidal subscription, I was able to stream MQA-encoded tracks as well as the regular "Red Book" CD tracks. With "Red Book" alone, I've found Tidal to be a tremendous value, and MQA ups the ante. I've heard plenty of people complain about the $19.99/month cost of a Tidal subscription (as opposed to $9.99/month for a standard subscription, with resolution topping out at 320kbps MP3s), but I'd easily spend at least that much each month on CDs or downloads. While Internet Radio was compressed, it was great to be able to stream broadcasts without having to use a separate app, as I'd previously had to do. In fact, my only complaint about Internet Radio is that few of my favorite local stations are represented, something I hope will soon be rectified.

This second A10 was a previously used unit, which meant that no break-in should have been necessary. Nonetheless, for the first 30 minutes or so of operation, it sounded a bit thin and cool. Once it had fully warmed up, the sound was more fully fleshed out and warmer in tone, but just to be sure, before doing any serious listening I burned in the A10 with the "Full Glide Tone" from Cardas and Ayre Acoustics' Irrational, But Efficacious! System Enhancement Disc, Version 1.2. Because I use an integrated amplifier with no

preamp bypass, I was unable to evaluate the A10's preamp stage; my comments about its musicality focus solely on its DAC function.

The A10 had a Goldilocks sound -- which I mean in the best possible way. Neither too relaxed nor too polite nor too in-your-face, the sound was completely natural and transparent, letting me focus on the music rather than the components. Soundstages were focused and broad, but not in a hyperreal fashion; this was especially noticeable with well-recorded live events.

Regardless of the type of music I listened to, the A10 performed wonderfully. Unlike some other components I've reviewed, it didn't seem to favor one genre over another. Wall-of-sound hard rock sounded just as good as the quietest jazz piano trio or full orchestra.

Speaking of wall-of-sound rock, I came across the Black Crowes' Amorica (16-bit/44.1kHz AIFF, American), and realized that I hadn't heard it in years. This album announces itself with "Gone," a furious, ass-kicking kiss-off, its first 1:48 minutes characterized by the dueling rhythm- and lead-guitar riffs of Rich Robinson and Marc Ford, overlaid with Chris Robinson's lead vocal and Steve Gorman's rock-steady drumming. When Johnny Colt's bass kicks in at 1:49, this already forceful track is kicked up to the nth degree. To my mind, the hardest things for components to reproduce, regardless of genre, are rhythmically dense tracks, which can become almost thick and congealed, with subtle details lost in the hash. While Amorica is suitably crunchy and rhythmic, there was no harshness or flab -- more than any other hard rock I listened to, it underscored how well the A10 could handle this type of music.

With acoustic music, the A10 sounded fluid and dynamic, with natural ebb and flow, and substantial momentum and heft when called for. Pianist Keith Jarrett has long been a favorite artist of mine -- I have all of his live solo and trio recordings. At the Blue Note: The Complete Recordings (16/44.1 AIFF, ECM), a six-CD set by his Standards Trio, is one of his best, and has been in almost constant rotation in my system for the last 15 years. Musically and sonically, it's one of my prized recordings, and the playing and improvising of Jarrett, bassist Gary Peacock, and drummer Jack DeJohnette are joys to hear. Although virtually all of the tunes are jazz standards, these three virtuosos' ability to improvise dramatically alters

each familiar tune without turning it into a sonic mess. The A10 opened a window on their telepathic communication, revealing the deft, subtle adjustments they make on the fly. Track 1 on disc 1, Dave Brubeck's "In Your Own Sweet Way," begins as a typical Keith Jarrett take on this beautiful song, but about 11 minutes in, the trio segues to and locks in on a jaunty, upbeat groove for the track's remaining seven minutes. The A10 conveyed this transition as well as has any DAC in recent memory.

While MQA's implementation and digital rights management have been controversial, the demos I've heard at retailers and audio shows have been impressive. But while MQA-encoded albums have been available from Tidal since the beginning of the year, until the A10 arrived, I hadn't had a chance to hear any through my own system. The nice thing about Tidal is that, with most MQA titles, the original, usually remastered version is also available for streaming. In such instances -- e.g., the Led Zeppelin catalog -- the 24/48 MQA tracks had a more tactile quality than the 16/44.1 "Red Book" tracks. In the MQA version of "Good Times, Bad Times," from Led Zeppelin (16/44.1 FLAC, Atlantic/Tidal), John Bonham's hi-hat had a crisper edge and John Paul Jones's bass lines were more fluid, in ways comparable to the 24/96 version of this recording from HDtracks. The Aurender was capable of displaying these differences easily.

Sometime in 1989, a friend gave me a cassette bootleg of the Grateful Dead's 5/8/77 concert in Barton Hall, at Cornell University. I still have that tape -- the show was so good that I wore it out with constant playing. In the years since I've been able to stream the entire show from hosting sites on the Web, but still yearned for a high-quality soundboard mix. Late in the review period, the concert was at last officially released. Though it's available as a 24/192 download, I opted to stream the 24/192 MQA version from Tidal. Whoa! Hearing this show at last in high-quality sound was a thrill I'll remember for a long time. It left me completely satisfied, despite my not having sprung for the downloaded version. Long after the last note had faded to silence, I was still smiling.

Comparison

While I can easily hear differences between integrated amplifiers, it's getting harder for me to hear any between DACs. I'm confident that this is due less to my aging ears than to the fact that digital technology has evolved to the point that distorting digital artifacts are now largely filtered out by DACs of higher and higher quality at lower and lower prices.

DACs still have their own sonic signatures, but the Aurender A10 sounded remarkably similar to my Meitner MA-1 ($7000), with a warm, natural tone devoid of glare or hardness. The Meitner still has the edge, with a more spacious sound and larger soundstaging, but the differences are subtle. Keep in mind that the A10 costs $1500 less than the MA-1 and contains a preamp. I could and did run the A10's USB output into the Meitner DAC, but I didn't feel I gained so much in return that I felt compelled to stick with that combo.

The most obvious comparison would be with Simaudio's Moon Neo ACE DAC-streamer-integrated amplifier ($3500), which I reviewed last November on SoundStage! Hi-Fi. The Neo ACE has features the Aurender A10 doesn't, most notably its power amp, headphone output, and phono sections, and comes with the option of adding Simaudio's Moon Intelligent Network Device (MiND), which is similar in function to Aurender's Conductor app. As I said in my review of the Moon Neo ACE, "if you listen more to amplified music, particularly rock, you'll probably prefer the Simaudio." While I didn't have it on hand for comparison, I stand by that assertion. But if your taste in music is more catholic, then you'll probably be better served by the A10, thereby justifying its higher price and fewer options.

Conclusions

The Aurender A10 is a fantastic product that brings Aurender's already proven and well-regarded server technology to a broader market, while including a high-quality preamp and DAC. Except for the lower price, there's nothing budget about this component.

I could perhaps wish for the inclusion of home networking and/or satellite radio connectivity, but that's about it -- and I'd easily forgo both if either meant a compromise in the A10's sound quality. My wife and I are in the process of building a new home, a project that will take at least another two years. Because of this, when it comes to new toys, wifey has hubby on a very short leash. Fortunately, my patience will be rewarded with a custom listening room that will include a home theater. I'll continue to bide my time, but my already long wish list is now one item longer.

. . . Uday Reddy