Digital Focus

Aurender A10 Caching Network Music Server/Player

As Future-Proof as It Gets

Andrew Quint

It's a safe bet that, for most, the future of digital music playback will be disk-less. There will be streaming, probably downloads, and files derived from long-ago-relegated-to-the-attic compact-disc collections. LPs will still flourish because of the enduring sonic appeal of vinyl and the purely tactile gratification of playing records. But do you know anyone who will lament the passing of the compact disc as a marvel of industrial design? Twenty years from now, will Brooklyn hipsters seek out vintage machines on which to play the Weezer CDs they find at yard sales? I don't think so.

The Aurender A10 is designated by its manufacturer as a "caching network music server/player with analog outputs," which is meant to emphasize that the product is a one-box solution for "modern" digital playback. And it's true: The A10 can be connected to a power amplifier and speakers, and you're good to go. But it's also true that the A10 can be included in an audio system with digital components both upstream and downstream without the unit's modernity and good value at all diminished.

The Aurender A10 meets the world as a sleek but substantial (22.5 lbs.) component in a beautifully machined aluminum chassis. On its front panel, from left to right, are a square power button (it flashes when the A10 is powering up or down), a 3" AMOLED screen, a group of four buttons to control playback, and a hefty rotary volume-control knob that brings up both numerical and meter-like graphic representations of the level set by turning the dial. A modest-sized remote (6-3/4" x 1-3/8" x 9/16") with surprising heft duplicates the functions on the front panel, plus allowing muting and choice of digital input. In back, there's a standard IEC receptacle for the power cord, a rocker switch that makes the front panel power switch operational, an optical digital input, a USB output, and both unbalanced (2Vrms) RCA and balanced (4Vrms) XLR analog outputs. Inside, the digital electronics are on one side of the chassis, the DACs and analog output stage on the other, to help protect the converters and other sensitive circuitry from electronic noise. Power supplies are robust, with four toroidal transformers individually supporting key components of the computer's architecture. Measured jitter is low, below 100fs, thanks to a clock generator based on field-programmable gate arrays (FPGAs). A pair of the well-regarded AK4490 VERITA chips accomplishes digital-to-analog conversion. Also inside are a

120GB solid-state drive that caches music for playback and a regular 4TB storage drive.

Long after you've forgotten the model number of the DAC chipset and the capacity of the SSD, what will likely impress you most about the A10 from an engineering standpoint is the Aurender Conductor app. If you've heard that this is an exceptionally well designed and user-friendly music management tool, you've heard right. [*I'm also a big fan of the Conductor app. —RH*] I won't methodically detail the routine operation of the app—such descriptions eat up a lot of column inches and paradoxically make using the software seem more complicated than it really is—but can affirm that getting the server/player up and running is straightforward, especially if you use the Quick Start Guide that comes in the box with the A10. The app only runs fully on an iPad. For some time, Aurender has offered a "Lite" Android version for use with smartphones. (It will work on an Android tablet, but the user interface is optimized for a phone.) Aurender warns upfront that the functionality of its Android app is quite limited, with no streaming support—it's really intended for use as a "secondary remote." Bottom line: If you get an Aurender, you need an iPad. With both the app and the A10 itself, it's easy to stay up to date with

software versions and to correct any deficiency immediately.

The Conductor comes preconfigured for setup with either Tidal or Qobuz. (The latter is not available in the U.S. without a "gray-area" work-around.) With a streaming subscription established, the seamless integration of two sources of music—your own curated collection and the vast holdings of Tidal or Qobuz—is what makes the Aurender such a powerful engine with which to explore the complete range of musical expression. The user can fluently navigate from files stored locally (on the A10's 4TB hard drive, an external hard drive, or a NAS) to streamed content, making playlists that move effortlessly between those two repositories of music. To the user, it *feels* like the Tidal files live on the server or your NAS but, of course, there's just a link established so that the Aurender can retrieve that material when one requests it.

There are three features of the Conductor app that especially impressed me. First is the AMM (Aurender Media Manager) software, downloadable for both iOS and Windows-based systems. If you already have a slew of albums on a NAS, AMM will lead you through the process of scanning those stored files and then creating a "combined music database," a single library that in-

Specs & Pricing

Type: Caching network music server/player

Formats supported: PCM up to 32-bit/384 kHz; DSD64, DSD128, DoP mode; MQA full decoder

Outputs: Digital, USB 2.0; Analog, unbalanced (RCA) and balanced (XLR)

Drive capacity: SSD for system and cache, 120GB; music storage, 4TB

Streaming services: Tidal, Qobuz

Dimensions: 16.93" x 2.2" x 13.9"

Weight: 22.5 lbs.

Price: $5500

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cludes the material on the NAS (with its metadata and cover art), files stored on the A10's hard drive, and streamed content that's been saved. I set AMM to work on over 200,000 music files residing on my Synology NAS. The scan took around four hours but when it was over, the Aurender's library contained over 20,000 albums. When I selected the DSD filter, the list of albums was pared down to the roughly 3500 that have been ripped from SACDs to DSF files. The cover art, work names,

movement titles, album artists, and so on were all displayed, the metadata reproduced as I had entered it with JRiver software over the past few years.

The second feature I'm especially fond of is the "Add to My Library" tab that can be selected when streaming—if a Tidal song or album strikes your fancy, you can have it listed along with your local files. The third Conductor function that deserves mention is the mechanism for getting help. When something goes wrong with a media computer, the problem is almost always software-related, the kind of issue that can be dealt with remotely. If you have trouble, you simply go to Conductor's "Settings" menu on the Con-

ductor app and click "Help." In addition to providing online access to the full Aurender User Guide, one can bring up an email screen with which to describe your issue. When "Send" is pressed, Aurender's engineers are automatically given access to your machine, so long as it's turned on and connected to the Internet. Once the problem has been addressed, the A10 owner is

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informed by email, and remote access to the Aurender is disabled. I had one occasion to use this free service during the months I had the A10, and the answer to my question came within hours.

MQA is an inflammatory subject at present, provoking a lot of hostility from some quarters. The A10 was the component that gave me the chance to do extended comparisons on a familiar system between MQA'd vs. non-MQA'd files of the same music, at the same level of resolution. Yes, I'm aware that there's a possibility that I was comparing different masterings of the selections I downloaded from HDtracks and streamed from Tidal but my consistent observation

was that the MQA'd material sounded better—with all genres, at various levels of resolution, with both analog and digital originals. That's my opinion. What I hope everyone can agree on is that high-resolution MQA files sound very much superior to the same content played back at Red Book resolution. At this time, in the United States, the only way to stream in HD is with MQA Tidal files. (You have to be pretty sneaky to get Qobuz stateside.) The MQA logo appears next to the track on the app as it's playing although the resolution information isn't displayed there. To see that, you have to look on the AMOLED screen— and good luck reading it unless you're less than a few feet

away. If this is information you simply *must* have, finding it is a bit of a nuisance.

None of the Aurender's functional elegance counts for much if it isn't associated with good sound, and the A10 sounds very good indeed. For all my listening, I didn't use a preamplifier— instead driving a pair of Pass Labs XA60.8 amplifiers directly via the A10s balanced (XLR) outputs. Loudspeakers were Magico S3 Mk IIs. With a wide range of content—local files and streamed, Red Book and higher-resolution material—music sourced from Aurender was never anything less than organically coherent, dynamically alive, and naturally detailed. The first track I listened to critically has become standard for me, the opening movement of Shostakovich's Symphony No. 15, the 2010 performance by Bernard Haitink and the Concertgebouw Orchestra; I own the SACD and have made DSF rips of both the stereo and multichannel programs. The work begins with three soft notes on orchestral bells at the back of the orchestra and from those three notes alone, I can often get a pretty good idea about the imaging capabilities, level of detail, and timbral accuracy that an electronic component or loudspeaker can deliver. Those glockenspiel notes had most of the precision, evenness of decay, and "smallness" that I'm used to hearing with my usual digital playback gear for two-channel listening: a Baetis Reference media computer (recently updated

to "3" status) sending data to a T+A DAC 8 DSD processor. In the same Shostakovich example, the subtle inflections the concertmaster applies in his solo near the end of the movement register clearly.

Tonal and textural nuance are reproduced effectively as well. Another recording that I was happy to hear for the umpteenth time was Paavo Järvi's reading of *L'histoire du soldat* from an all-Stravinsky PentaTone SACD, again ripped to DSF. The exquisite sonorities that Stravinsky created with only seven instruments at his disposal are extraordinary, and a good recording played back through the A10 lets a listener know it. There's no question that this *L'histoire* employs a cornet (as specified in the score) rather than a trumpet—the former having a mellower, more rounded tone as opposed to the latter's brassier, more incisive sound. The clarinet and bassoon that open the "Pastorale" are correctly scaled and the sonority produced by clarinet playing in its middle (or "clarion") register and bassoon in its upper range is memorable—and clearly just what the composer had in mind. Likewise, on his 1990 release *Alone with Three Giants*, pianist Marcus Roberts honors three great composer/pianists—Jelly Roll Morton, Duke Ellington, and Thelonius Monk—with solo performances of their music. Roberts plays some selections on a Steinway grand and some on a Young Chang upright, and the difference in the density and magnitude of the sound those two instruments produce is quite evident, as is the reasoning behind the artist's choice of piano for each song.

More reference tracks. Joni's Mitchell's voice on "Little Green" from 1971's *Blue* has the youthful purity that was so riveting early in her career, possessing just the right character for the singer's slightly husky chest notes as well her more girlish head tones. The syncopated hitch to Mitchell's voice that creates a rhythmic counterpoint to the guitar accompaniment is very apparent. Throughout my favorite set of the 15 Shostakovich string quartets, the series of SACDs from the Mandelring Quartet on the Audite label, the ingenious construction of these masterworks is on full display. With the A10 in service, one marvels at the way the four voices come together to become something considerably more than the sum of its parts. "Never Weather Beaten Sail," as performed by the dozen young singers of the early music vocal ensemble Stile Antico and heard on a rip from a Harmonia Mundi SACD, reveals the flawless blend and responsiveness to text that made such a powerful impression on the two occasions I've heard these artists live.

Very dynamic music was handled confidently—the drama of the opening pages of Puccini's *Turandot* (Decca's recording with Sutherland and Pavarotti) or the cacophonous beginning to the title track on Steely Dan's *Everything Must Go*. I finished several listening sessions with the MQA'd version of Billy Idol's "White Wedding," theoretically to check on midbass dynamics, but mostly just because it was fun to listen to "White Wedding" with the Aurender crunching the numbers.

Could the sound of the A10 be improved upon? Definitely. If you own any of a number of *über* DACs—products from Berkeley, dCS, etc.—your investment will not go to waste, should the Aurender find a home in your system thanks to its

carefully shielded USB 2.0 output. The AK4490 chipset in the A10 is an excellent performer but the "double symmetrical circuit" that involves eight 32-bit Burr-Brown converters in my T+A DAC 8 DSD is at another level entirely, with obvious improvements in transparency, spatiality, and both micro- and macro-dynamics. The T+A is a bargain at $3995 but still increases the cost of a digital file playback system by 75% over the A10 itself for, what, a 25% improvement in sonics? The A10 as a stand-alone product is a damn good value.

There's a potential stealth benefit to owning an Aurender A10, and it has to do with the unheralded optical digital input on the rear panel. As silver discs become less and less relevant to many listeners, it's harder for many audiophile consumers to get terribly enthusiastic about spending a lot on a new CD player. Yet those sound-conscious music lovers want to continue to explore their CD/SACD collections, even as they ramp up their commitment to HD downloads and streaming for musical nourishment. Well, if your long-in-the-tooth disc player has an optical output, with the A10 around you could find yourself with a world-class disc-playing system on your hands. I used a $30 generic optical cable to connect an Oppo BDP-93 to the A10 and the result was impressive with all musical styles, at least as good as hooking the Oppo transport up to my Anthem D2v pre-pro. Aurender's set-up diagram ("Typical System Configuration") doesn't even acknowledge the *possibility* of connecting a disc player to

the A10 via its optical input. It's as if the company feels that supporting disc playback is embarrassingly primitive, at odds with the promotional copy that describes the A10 as "the perfect solution for those replacing CD players." For many audiophiles, the move to files and streaming will be incremental. They probably won't take the time or expense to rip and tag the hundreds or thousands of silver discs they own but will still want to enjoy that music when the mood strikes. The ability of the A10 to accept a digital datastream from a disc transport and see it through beautifully to analog will be a huge selling point for many listeners.

No audio product, especially a digital one, is "future-proof." But one can imagine that the Aurender A10 is what digital playback will look like in ten or fifteen years for a consumer who values superior build-quality and good sound but would like to avoid as many boxes and cables as possible. We can conjecture that this consumer has held on to his CDs and is gladly accepting the dust-covered collections of friends who no longer have the capacity to play them. He streams, of course, doesn't download all that much anymore—nobody does—but has a sizable collection of HD files that he amassed in his early years in computer audio. Maybe MQA is flourishing and our forward-looking audiophile is admired for being an early adopter. The Aurender A10 he bought back in 2017 is looking more and more like the smartest audio purchase he ever made. **tas**