

Review Aurender A20 Reference Analog Output Network Player



Lately I am experiencing a renaissance of system building regarding the source. I have turned my attention to streaming and file playback devices and have noticed the progress Aurender is making. Many fine HiFi shops carry it. After a positive experience at AXPONA, where no less than 20 units from the company were in use, I felt confident that it would be a fine choice for a review. This article will focus on the Aurender A20 Network Player.

I am on an approximately five-year cycle regarding upgrading my digital front end. My journey in file playback started with a Mac Mini running the up-conversion software HQ Player. It seemed a good-sounding source at the time because I was inexperienced and the streamer/server was not yet a mainstream source. It did not take too long, however, to conclude that sonically it was woefully short of the ideal digital source.

Next, I checked out the Wolf Audio Red Wolf Server. It was far more capable and better sounding. It lifted the digital performance as I hoped it would, but I was not thrilled about the J Play software. I found that combination of software and hardware to be more involved in terms of handling settings than I wanted. The Red Wolf/J Play combo seemed more suitable to techies and those who were heavily into video. I opted to keep looking for something with a simpler interface.

The digital front end I have been using since 2018 is the Small Green Computer sonicTransporter and the SONORE Signature Rendu SE with systemOptique and linear power supply. Compared with the one-box simplicity of the A20, the sonicTransporter/Signature Rendu SE combo is more involved. Since that time, the optical converter has been incorporated into the Signature Rendu, thus simplifying the setup. But one is still left with two components that interface. I have appreciated the sound quality and the customer service of SGC/SONORE.

The sonicTransporter and Signature Rendu SE combination has offered me quite a bit of pleasure. It appears that there have been tweaks to the SGC/SONORE setup as opposed to an entire overhaul. In the past year or two, twice I sought an additional review unit while new units with upgrades were being introduced. I interpreted (not to put words into the makers' mouths) what I was told, the differences might not seem profound enough to me. Without overstepping my boundaries regarding confidentiality, I believe another Dagogo reviewer is seeking current versions of that equipment for review.

Comparing the SMG/SONORE components and the A20 should consider the relative price of those setups. The A20 is \$15,000 versus the current rough equivalent of my setup, the sonicTransporter i5 Gen3 with CD Ripper (\$1925) and Signature Rendu SE, which is a single enclosure opticalRendu and linear power supply (\$4,950), together totaling \$6,875. But the A20 includes both a DAC and pre-amp functionality, and it all comes in one box.

At AXPONA 2023 I was able to finalize my plan for this review. Ari Margolis, Aurender America's Director of Sales and Business Development, assisted me in selecting the A20. The A20 is an integrated streamer, server, DAC, and preamplifier in one chassis. Its design is based on the ideal of a high quality, complete digital source solution and is nearly the entire system sans amplifier and speakers. I struggled to decide whether I wished to have a CD ripping function as well and contacted Ari to switch the review to the A30, which is the same as the A20 but with a CD player/ripper. My logic was that I had a great deal of older and esoteric music that I thought would not be found on streaming services. At least it was not found when I first started streaming several years ago using Tidal's upper tier service.

But to my delight, as I conducted searches on Tidal and Qobuz, it seems that most of the music I like is now available! Consequently, my plan to laboriously rip all my older discs is on hold. I called Ari and said I would continue with the A20 review. He suggested that afterward I could proceed to the N20, an upper end streamer/server that has better sound quality holistically than the A20 but without the analog outputs. It is more limited than the A20 in terms of the systems I can build with it but is a step up from the A20 as regards its streaming and file playback. My experience has been that generally with a superior source the systems that can be built will be more pleasing. My goal in assessment of the N20 would be to compare systems built with it versus systems with the A20 to determine how much component integration (i.e. preamp and DAC, as found in the A20) and system flexibility versus a higher caliber of source (N20 as streamer only) contributes to superior sound.

As the review period for the A20 winds to a close and I put the finishing touches on this article, have CDs as a music medium become dead to me? I still have the nifty Musical Fidelity CDT-1 CD Transport which comes in handy in a pinch. When the internet is down, I can spin discs to hold me over. As a certainty, none of my previous setups with all the DACs mentioned below and the MF transport approached the quality level of the A20. I did not get digital sound quality this good in the past with Redbook no matter what configuration of gear I tried with all my speakers. In my world, if Redbook is not already dead, it's on life support.

Not only is the A20's streaming the best digital source I have used, but I also have little desire to opt for a source that when played presents approximately 50% of tunes I don't want to hear and would likely skip. Having built two massive playlists for instrumentals and vocals, that is the music I want to hear. Years ago, when I used vinyl, I had to suffer through some of the cuts if I didn't want to move the needle on the turntable continuously. Likewise, I don't feel like having to piece together my listening session by excising tracks from CDs. What a trying time we live in when such hardships present themselves to audiophiles! But convenience is king and if I can have a perfect selection of music, I will have it! A streamer/server gives that to me, and a CD player does not. Consequently, it will sit unloved unless necessity dictates it is put into service.

Disdain of specialty streamer/servers

Some will say that streamer/servers are mere computers and will be suspicious about my descriptions of them having different sound characteristics. Skeptics rail against the suggestion that one such product can sound different from another. Long ago I grew weary of such arguments. An audiophile either builds rigs and learns how things sound, or they do not. I stopped wasting my time arguing with people who want to joust rhetorically and typically won't spend their money regardless of the conclusion. There are two types of audiophiles, those who want better, compare, and spend their money, and those who don't. I write for those who do comparisons with intent to better their audio system, not for those who argue with no intent to act.

With time I am being pulled toward the one box solution. I have had plenty of doodads, add-ons, multi-box solutions, and I'm tired of it. In this age of synchronicity of all things digital, I want a simple and powerful source and I'm no longer inclined to compromise. That takes me out of the orbit of SGC/SONORE. Aurender seems to take the call for simplicity and superb sound seriously. They obviously are putting their skin in the game by creating an ecosystem from which music is played so that they can control the process from user interface to output from the unit.

The aesthetics of the A20 are appealing, as it is a sleek, modern looking component not evocative of the iconic, ugly, computer-like box with noisy fan. It is ultra-quiet, has a gorgeously machined cabinet, a flat-black finish with a large control wheel on the right and several navigation buttons underneath. The buttons were hard to see without glasses, but I never used them as the software and hardware remote were at my side. The large display dominates the front, and it has adjustable brightness. The rear of the unit is busy but uncluttered and is well laid out. The positioning of inputs and outputs is logical. The jacks and posts are robust, built with the same quality as the rest of the unit.

The A20 is not made to draw attention to itself unduly, especially in Aurender's Critical Listening Mode, which darkens the unit's display. In Critical Listening Mode the largely inert appearing component has its screen awoken when it is issued commands, such as volume adjustments. With a quick tap on the Volume control, a thin green LED ring surrounding the large wheel on the unit's face flashes to indicate the signal is being received. If the adjustment is more than a second or two, the display will wake up showing a virtual Volume knob moving in conjunction with the commanded volume change. After the input ceases, the display darkens once again. The machine draws appropriate attention to itself but no more.

With Aurender you are not paying for the bling experience – unless you choose to use the display continuously. That is fine for impressing a friend, but you will want it off for serious listening. The music server category has certainly been upgraded by Aurender!

Checking out the buzz (finally) about Qobuz

It is also high time I explored beyond Tidal as a streaming source. I had heard for years that Qobuz was sonically superior to Tidal's upper tier subscription. But I also heard initially that Qobuz's music offerings were limited, so I put it off.

Just weeks before the Aurender review came to fruition I received delivery of the stunningly beautiful and sonically beguiling true ribbon Clarisys Audio Minuet planar ribbon speakers, distributed by Michael Bovaird of Suncoast Audio. Knowing that the Aurender A20 review was coming, I asked whether he had music that I could use to assess the A20. He directed me to the Suncoast Audio playlist on Qobuz. Uh-oh, that would be impossible to access as I was only using Tidal. He commented that David Solomon of Qobuz might allow me a subscription for reviewing, which he graciously did. I reveal such things because I have no intent to manipulate you as a reader. I disclose such things so that you see my comments have integrity. As you read on, if you wish to disdain my assessment of Tidal vs. Qobuz, that's your prerogative. I will share with you my impressions as I compare them.

I have been paying for years for a monthly subscription to Tidal's upper tier of streaming music. However, in just the few days after setting up Qobuz, I concluded that the high resolution (indicated with "HR"; Tidal has some MQA tracks and Qobuz has some HR tracks) tracks of Qobuz are inherently superior to the apparently same tracks on Tidal. As regards the tracks that are not designated "HR" on Qobuz, the sound quality is for practical purposes equivalent to Tidal. If you don't care about HR tracks, then the question of use of Qobuz falls to content, and I am not currently prepared to address that question knowledgeably. Come back in five years and I will have that answer!

Assessment of these two streaming music services involved using a rig including the A20, the Clarisys Minuet speakers, and one of my all-time favorite amps, the Legacy Audio i.V4 Ultra, a system that with Iconoclast Cables topped out at about \$95K. I played select review demo instrumental tracks such as Acoustic Alchemy's "Who Knows" first on Tidal, then on Qobuz. You may object that the same track on Qobuz is high resolution. That is why I also played instrumental demo pieces that were not high resolution on either site – apples to apples. As I listened to the track on Tidal, I queued up the same track on Qobuz. I then began play of the same track on Qobuz, and instantly I was hearing the same piece on the alternative music service.

I compared both regular and HR tracks as heard first on Tidal, then on Qobuz. The result was clear and consistent. Non-HR tracks on Qobuz did not pass my Law of Efficacy, meaning that Qobuz offered little to no advantage sonically over Tidal when it came to non-HR tracks. Am I prepared to say that there is absolutely no difference or that no difference would be detected regardless of the caliber of the system? For instance, would I say there could be no difference detected were a person hearing the comparison on a \$500K rig, given the same settings of the A20 were used for both? No, I am not. At the level of this rig in my room, the difference was negligible. I more easily discern changes from one power cord on an amp.

In what might be a surprising finding to some, accessing the Aurender's Advanced 2 settings menu and switching from Redbook settings for digital playback to the highest setting for bit depth and sampling frequency (705.6/768kHz) resulted in bringing Tidal's standard tracks closer to those with MQA (Master Quality Authenticated). However, when maintaining that highest setting for bit rate and frequency and playing HR tracks on Qobuz, a clear advantage once again showed itself. Additional rapid-fire comparisons (for perhaps 30 seconds) of MQA tracks on Tidal to HR tracks on Qobuz firmed up my conclusion that Qobuz's HR tracks are holistically superior to any of the apparently similar tracks on Tidal. I doubt I will bother to continue playing MQA tracks on Tidal if the HR version of the same piece is available on Qobuz. I have no interest in entering debates or arguments about the provenance of recordings or the steps involved. Such discussions tend to be like quicksand, a lot of work with little real progress in terms of system advancement.

Vocals were also easily discerned as superior, with more fullness, warmth, and even more resolution, when the HR track was played on Qobuz. An example: Natalie Merchant's "I May Know the Word" was rendered as deeper, richer, more emotionally engaging as a Qobuz HR file. After conducting comparisons of upsampling and frequency settings of the A20, I concluded that none of them should be applied, at least for the Clarisys speakers. I have no bias for or against manipulating the Redbook standard, but no upsampling seemed the most pleasing.

As a result of these comparisons, I am confident that, barring an intrusion or new development, Qobuz distinguishes itself as offering superior playback HR files. If I didn't get a complimentary subscription, would I pay for that sound quality improvement? Scanning my demo list, I see enough of the HR variants of files that I would pay to hear that music rendered better. Would I drop the Tidal subscription to get that result? Not unless I was confident the vast majority my music was duplicated on Qobuz. Barring that, I would keep both. At the time of the publication of this article, I am finding a significant number of tracks that appear on Tidal do not appear on Qobuz, so at the moment I am inclined to keep using both music services. Suncoast Audio's playlists on Qobuz brought me some new demo-worthy tracks to enjoy. In the review process I used Jessica Williams' "Heather" (live), Joan Armatrading's "Down to Zero," Kenny Loggins' "Angry Eyes" (live), Lonnie Smith's "Paper Tiger," and AR Ralman's "Dacoit Duel." These represent different genres of music and the A20 adroitly handled them all. The playlist contained some harder-edged rock pieces as well as techno music, which I do not like, but including them in the assessment showed me that the Aurender is not captive to polite audiophile music but can handle any genre with equal precision and approachability. If you have Qobuz, I suggest you go to the Suncoast Audio playlists to hear a sample of music used at audio shows.



The obsolescence of separates

The days when HiFi enthusiasts' systems were comprised of separates, the old term for dedicated components, have passed for all but the most well-heeled or nostalgia minded listeners (but then again, a review of an N20 is in the works). Over the years, I have found CD players that are as good as some transports and DACs, integrated amps that are as good as some preamps and amps, and now, server/streamers that are as good as some separate file servers, streamers, DACs, and preamps. Note that I am saying some, as opposed to all, since it would be expected that as one elevates the quality of dedicated components there will be improvements in sound quality as well. At the recent High-End Munich 2023 show, Clarisys Speakers were shown with Soullution electronics. I would anticipate that if such fine gear was fronted by an N20, the result would be substantially better than if an A20 with Soullution amps were used with the Clarisys speakers. But the proof of it would be an actual comparison.

Aurender gear is made for audiophiles by audiophiles, and it is obvious. One example of the purpose-built nature of the A20 is the handheld remote. This hardware remote control is tailored to provide an enhanced listening experience as opposed to simply duplicating functions. It is the type of remote you pick up when your intent is to play a queued list of music and perhaps change the volume. Most endearing is the spriteliness of its volume control, which allows rapid adjustment to differences in the recording level of tracks. It hearkens back to a time when one listened to music, as opposed to staring at a screen. Kudos to Aurender for not enslaving the owner to the slower Conductor app's volume control.

As regards an in-depth report on every detail of the Conductor App's functionality as compared to other software interfaces, don't look to me for that. To give you some idea of where I slot technological complexity in my life, I am driving my fifth Toyota Camry LE, which does not have all the upper end features. I pair my phone to the car only to make phone calls and occasionally have a text played back. I don't have to see a map on my dashboard every time I drive. I actively seek to reduce what I consider time sucking details in electronics versus introducing them. I view electronics creep as a form of handing one's life to a machine versus living it freely.

Consequently, I do not care so much if this or that software feature is different between platforms as much as if I can access the music I want, can play it intuitively, and it sounds excellent. I am far more concerned about the playback settings than what I consider peripheral features. If all this makes me a technological troglodyte, so be it. Then again, I'm not exhausting myself trying to turn analog into cutting edge technology. I tend to work with the components and cables to build systems, and that won't change simply because the server changes. My perspective is that the software serves the server, and the server serves the audio system, not vice versa. In other words, my bottom line is the sound quality, not the ability to manipulate metadata. Audiophiles may have different and conflicting priorities, so if that is not your priority, then weigh my comments accordingly

Considering the all-in-one solution

When building systems, you can pursue digital source separates, such as server/streamer, DAC, and preamplifier. Or you can use the A20 for all those functions.

Aurender does offer some separates at the top of its line, with dedicated word clocks and the two-chassis N30SA, which is described as a "Statement Source for the finest HiFi systems." Which system configuration would be the best with the A20, adding an outboard component or using the entirety of its functionality? No one can tell you the outcome apart from doing a comparison, and it pays to continue to do comparisons over longer periods of time. Usually, when comparing different setups within a family of equipment, assessing the sound quality to be expected is straightforward. But when comparing various systems from different manufacturers, nothing can be predetermined apart from actual comparison.

Even though my first file server, the stock Apple Mac Mini with HQ Player software, was limited, it was eye opening when a Chicago audiophile who owned a two-tower, purpose-built file server (one tower stored the files and the other played them) brought it to my room

with intent to demonstrate upscale digital sound. It didn't. As difficult as it was to admit, the owner said there was not as much difference between his involved digital front end and my budget front end. Seeing all the work that owner did for not that significant improvement, I resolved not to build a music file server. I concluded the HiFi server had not yet come of age. Now, many years later, with products like Aurender's A20, the server/streamer has come of age for a person who wants to interact with a component, not a computer.

Am I saying the cheap gear sounds like the expensive stuff? No, I am not. I am saying the home-built stuff may sound no better than the inexpensive store-bought stuff. I have heard and appreciated using purpose built computerized HiFi components that have followed a consistent trajectory of upward performance over the years.

Fun with settings

The A20 has several user-adjustable settings that are found in the Settings menu under the option "Advanced 2." The owner can adjust settings pertaining to upsampling, the handling of DSD, and Critical Listening Mode. Initially, due to mistaking the screen On/Off setting as the control for critical listening, I was unimpressed when I turned the screen off. I thought it was such an insipid difference I could not be bothered by it. In addition, when the screen was left on, it never turned off. I had presumed that it would be illuminated the entire time I was using the unit, then after perhaps a half hour, or some other user-defined period, it would turn off. But the unit offers no such capability. I was thinking that to be a nuisance for no sonic advantage.

I contacted Aurender Support and told them of the inconvenience. The support team at Aurender is as responsive as Ari, and they indicated that the Critical Listening Mode is distinct from the On/Off screen function and turns off not only the screen, but all unnecessary circuits to improve the sound. Within seconds after activating Critical Listening Mode the screen went dark and I heard the difference instantly. How can shutting down non-critical circuitry improve the playback? I don't know, but it works clearly! Now I could appreciate the blank screen and did not fight it, for the sonic benefit was worthwhile. In addition, the unit sat with a dark screen after my listening session. It allowed me to leave the unit on continuously without worrying that the display was left on without purpose. What started as an inconvenience, with benefit of education and experience, has become a welcomed feature! Now all I need do to get the music started is turn on the outboard amp and queue up the music on my Samsung tablet using the Aurender Conductor app.

There was another niggling issue that developed when I switched from using the WireWorld Starlight Ethernet Cable to a prototype Clarity Cable Ethernet (I am unsure whether it was ever brought to market), which was sonically superior. However, the data rate seemed to be squelched with the Clarity Cable Ethernet cable. Loading of tracks slowed down and, in some cases, loading of tracks failed. It seems irrational to say, but the sound quality of music played on the A20 is distinctly superior with the Clarity Ethernet cable, and the difference is like switching the A20 to Critical Listening Mode. Were the difference not so great, I would not put up with the slowness. I do not fault the A20 in this, but the prototype cable. But I will still use it because, however it goes about it, the sound is distinctly better when it is being used.

This anomaly shows that if the Aurender unit that one is using is operating slowly, the cause may be the Ethernet cable. That an Ethernet cable can cause a streaming device to sound different is no surprise to me, as I did my comparisons of WireWorld Ethernet cables with the Small Green Computer and SONORE setup and they were affected, too. What seems strange in this instance is that the data rate seems squelched, yet the sound has improved. This is one of the mysteries of the universe which, if the sound is significantly better, I will let stand.

Got a preamp, or a DAC, or both? System options.

The beauty of the A20 is that it is a nearly complete system sans amp. Aurender has just revealed the AP20, which, aside from the streaming music service or files to be played, is the entire system. The simple schematic of the AP20 on the Aurender site shows one component, the AP20, and a line representing speaker cables running directly from it to the speakers, nice and simple! However, the AP20 eschews the disc drive found in the A30. During the review period I have been utilizing both the A20's XLR and RCA line level outputs, the XLR going to the Legacy Audio i.V4 Ultra Amplifier. At the amp, I split the signal using Audio Sensibility XLR Y-cables to achieve input for four channels of the amp, which allows for passive bi-amping of speakers having two sets of speaker posts.

At the same time, the A20's RCA outputs are sent to the Perlisten D212s Subwoofers. These smart subs have their own 3,000-watt amps inside, because you can never get enough clean power to a subwoofer. I can control the level of the subs and the mains with the A20's volume control. Not all system configurations are improved by integrating more features into a multi-function component. One must assess the unique subset of functions and how they impact system development.

The following is written apart from hands on experience with the AP20. In many instances the addition of an external amp can be advantageous versus an integrated amp – hobbyists know it as the integrated versus separates debate. Is it more conducive to achieving the best sound to integrate the source and amplifier or to leave them separate?

When Legacy Audio devised the Whisper DSW (Doug Schroeder Whisper Speaker, which has 12 pairs of binding posts, allowing the speaker to be entirely passive, hybrid active bass and passive M/T through the Legacy Wavelet DAC/Preamp/Processor, or entirely active using the Wavelet), I requested that the speaker not include internal class D amplification. Newer versions of the Whisper typically have internal class D amps, but I rejected that configuration in favor of outboard amplification. Consequently, I must use external amps and speaker cables, but it also allows significantly more flexibility in contouring the sound and an option of upgrading the amps should a breakthrough in amp technology occur. See my several articles about the Legacy Whisper speaker in its various iterations if you wish to read about an actual comparison of performance of active versus passive speaker systems. Claims of active speakers' universal superiority should be qualified, but that doesn't make for good marketing.

I suspect the situation is similar with the new AP20. I don't doubt the integrated class D Purifi amplification is splendid and perhaps would be more desirable sonically than the Legacy amps – perhaps. No one can say without a direct comparison. But over time as technology marches on, everything about the AP20 would age and all its functions would become less desirable. This happens to all components, so the observation is not put forth against Aurender, but to weigh the advantages and disadvantages of an all-in-one component.

If I were to demo the AP20 and were smitten by its charms, I might be tempted to make it my go-to system in a box. But that would mean opening the potential that if any one part of its functionality failed (streamer, preamp, DAC, amp) I would need to consider changing it entirely or getting a supplemental component. Experienced audiophiles are aware of such contingencies, but newer enthusiasts need to consider such things long term. Up to this point, I find the universal component versus separates debate has never been resolved; one can technologically and sonically leapfrog the other over time. Perhaps Aurender will allow me to satisfy my curiosity with a review of the AP20 to see if they are as deft with amplification as with streamers!

The A20's dedicated USB output for audio supports up to 32 bit/384kHz, DSD 128 (DOP), and DSD 512 (native). This is an excellent resource should you wish to explore using an external DAC. The A20's DAC is tidy sounding and audiophiles may find it thoroughly gratifying. I suspect that tube lovers would find faults with its sounding; but I am not interested in the all too typical tube bloated and distorted sound with overemphasis on bass, so take that into consideration. Persons who have an external DAC or integrated DAC, will likely want to explore the USB output of the A20.

Can the A20's performance be improved by adding another component such as a DAC? It may. Can it get cleaner? No, but it can gain more fullness and color, a sense of different flavoring. All cinnamon buns are not alike, and you can enjoy one from bakery A as well as one from bakery B. Likewise, DACs and system configurations. Whether reviewing or not, I swap out three DACs (one dedicated and the others integrated) with regularity because no one can tell you precisely what will result or how you will like it. When variety of experiences is a critical aspect of system building, a small fleet of DACs allows for many different expressions that the ears enjoy.

Consequently, when I added the COS Engineering D1 DAC to the A20 by use of the USB audio output, it introduced both external attenuation and an outboard DAC. I was given a warning by the display of the A20 that fixed volume via the USB Audio output requires attenuation (volume control) elsewhere in the system. The A20's warning system is a terrific feature that can help the inexperienced and hasty owner avoid damage to their system. Kudos to Aurender for including it! In this system configuration I used the COS D1's built in preamp to manage the listening level.

If adding an outboard DAC or amplifier seems like too much bother, then you are likely the type of audiophile who would adore the A20 (requires outboard amp) or AP20 (includes amplification) as your ideal solution. Less is more might be your guiding principle and if so, based on my experience with the A20, I feel justified to say that the Aurender team has well-executed products with integrated functions. In my use, the A20's integrated streamer/server + DAC + preamp combo is executed at a high level that I am convinced would require expensive separates to definitively surpass it. If you doubt that, feel free to acquire an A20 and some lesser priced separates and conduct your own testing.

Ari was matter of fact about an external DAC potentially sounding better than the internal AKM 4497 Dual Mono chipset. When I hooked up the D1 DAC, the display of the A20 informed me that the DAC was not DSD compatible, so that functionality was automatically turned off. I have had the D1 for a while, and that notification reminded me that all gear ages and becomes technologically obsolete over time. If I want the theoretical ultimate result, I must upgrade the external DAC. Or I could switch to another DAC on hand, such as the much less expensive Eastern Electric Minimax Tube DAC Supreme, which has DSD functionality but typically does not sound better than the COS D1. This is an example of the vanity of trying to select the better DAC based on functionality alone. Unless actual comparisons are done, you are guessing which would sound better in any given system. Only when several iterations of several systems with several speakers have occurred can one say definitively that DAC A is superior to DAC B and that the user in most cases can be assured of superior performance.

The addition of the D1 DAC, which was \$9K at the time of my review, resulted in some refinement, a touch of warmth, a smidgen more openness, a dollop more ease than the A20's onboard DAC. The new arrangement seemed to benefit most from a shift in the gain structure of the system. Total gain seemed to have increased and as a result the Clarisys Minuet speakers were made to sound bolder and more revealing. But such things can go both ways. Just as easily there might have been losses or unpleasant results. One never knows but must try the combination. Among the most impressive changes that came through this setup was a boost to the Perlisten D212s subwoofers.

The RCA and XLR output of the D1 DAC is evidently higher than the Aurender A20's, so the subs gained a good dose of authority even though I had them moderated, and I liked the change.

Does such discussion bother you? Are you thinking you cannot be bothered? If you abhor the idea of such fiddling, then rest assured the A20 is a HiFi reductionist's pleasure, a super, simplified HiFi solution. If you must have variety, then the A20 gives you a wonderful platform to extend systems to your satisfaction, along with a fallback built-in preamp and DAC should an outboard one fail. The bedrock of the A20 is the streamer/server, and since Aurender offers stand-alone units, both types of audiophiles win! If both your source and DAC are bare bones and could stand upgrading, then I think you would be quite pleased by the performance of the A20.

Strange things

One might think that quite expensive equipment would consistently outperform less expensive equipment, but that is not so. The DACs used for this review range in price; the Eastern Electric Minimax Tube DAC Junior (the company no longer exists) at the time of review in 2015 was \$850; the Minimax Tube DAC Supreme was \$1,350; the first version of the COS Engineering D1 DAC was \$9K; and the Exogal Comet DAC in 2015 (also out of business) was \$3,500 with the regulated Plus Power Supply. The Ion PowerDAC was \$4,000 and the combo was \$7,350.

It would be expected that the DAC costing \$9K would trounce all the others in every system, but it is not so. It is not possible to tell in any given system comprised of different ancillary equipment, cables, and speakers which DAC will sound best. It is unnerving, as the expectation is that as one puts more money into a component, the sound quality should be preferably superior. But that is not assured. The only way to determine whether the component is absolutely advantageous is to try it in several iterations of systems in comparison with other products. In comparison to the other two DACs, usually the COS D1 comes out on top, but not always. In this instance, the Exogal Comet was the best external DAC with the A20.

When I added the Exogal Ion PowerDAC in place of the Legacy Audio i.V4 Ultra, it elevated the Comet's performance further, as might be expected since the Comet and Ion were designed to be optimal together. The music became richer and tonally warmer without sounding bloated like a bad tube amp. The thought struck me that the combo of an Aurender N20 streamer and the Exogal stack would make for a powerful and more compact system for persons looking to economize on space. Be assured that combo will be explored in the forthcoming review of the N20. The quality of the sound did not lack. In fact, it was the grandest experience with the Exogal components to date. I was quite happy that I had not sold them, and I could see myself using a setup like this in retirement – small but very capable.

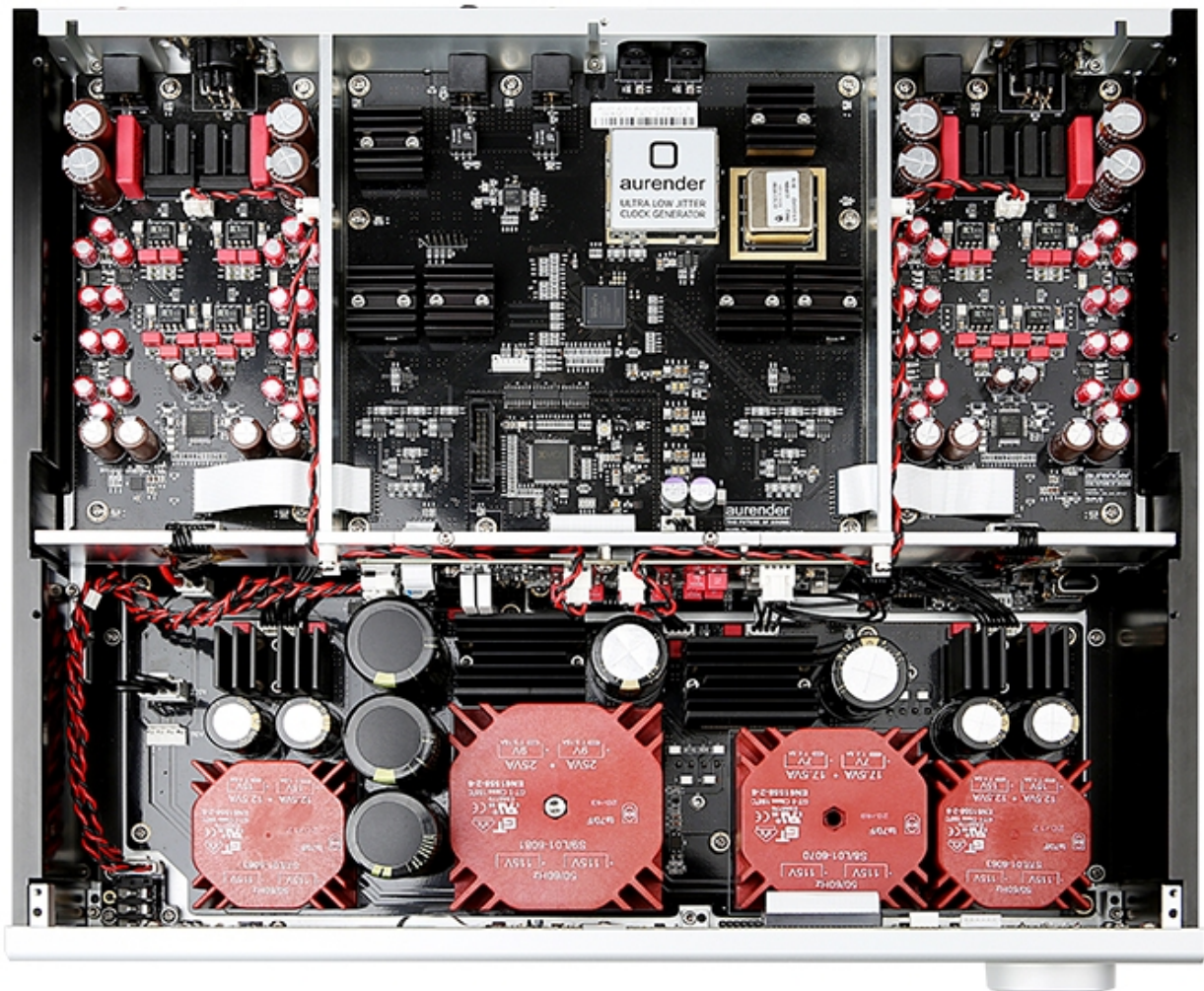
From this setup I learned that the A20 had a range of tonality that could vary significantly with outboard DACs and preamps. I enjoyed the additional warmth and fullness of older favorites such as Paula Cole's "Where Have All the Cowboys Gone," or Beth Nielsen Chapman's "No System for Love."

Expensive electronics and affordable speakers

To see how well the A20 complemented an affordable speaker system, I swapped the King III electrostatic speakers for the Wharfedale Opus 2-M2, a large bookshelf speaker. The elevated performance characteristics of the A20 carried over to these speakers, which suggested that as an upgrade source it should improve any genre of speaker system.

It took quite a bit of fiddling with the Perlisten D212s subwoofers' settings to get them to blend correctly with the A20 and the Exogal combo because the output from the RCA outs of the Comet was so high relative to the A20's XLR output that I had to dial back the subs dramatically or else they overran the Wharfedale speakers. When I achieved the balance I wanted, I was surprised by the robustness of the Wharfedale and Perlisten pairing.

The A20's USB output is evidently high quality, as it was the best I had heard from the Comet and Ion. For many years the claim has been made that if one uses exceptional electronics ahead of smaller speakers, the result is better than larger speakers with lesser electronics. Such claims without reference to actual systems are theoretical propositions. One must compare systems to determine which of those propositions is true. I will say, however, that when subwoofers are employed, the A20 can give smaller speakers a performance level beyond expectation. No amount of money put into the front end can change some of the telltale signs of a small speaker. (The reader will see that confirmed below, when I switched out the Wharfedale speakers for the PureAudioProject Trio15 10" Coaxial Speakers.) Particular sounds in the mix will always emanate from a bookshelf speaker in a way that exposes the limitations of its size. It cannot completely fool the ears into perceiving it as a larger floor standing speaker. Still, would I suggest that those who have put considerable money into their monitor speakers and have a modest digital source would benefit from an Aurender upgrade? I certainly would! I do not hesitate to recommend it and may strengthen that opinion after hearing the N20.



Adjusting the settings for superior results

One of the advantages of the A20 is the potential to adjust several settings to improve performance with any given set of ancillary gear. Specifically, for the USB digital output, the user can manually turn on or off DSD processing in the “Native” DSD output setting for an outboard DAC, as it also automatically turns off DSD if the external DAC does not support it. Per Ari Margolis of Aurender USA, “Even with the ‘Use Native DSD’ setting turned OFF, the system still outputs DSD in the DoP (DSD over PCM) format, which is absolutely not equivalent to ‘turning off DSD.’ oP is not synonymous with DSD to PCM conversion or transcoding. DoP is the standard protocol for transmitting unaltered DSD signals to compatible DACs.”

Upsampling can be adjusted manually, too. I tended to turn all Upsampling off, but I recommend that you try several, if not all, the settings provided to find what best suits your ears. Again, per Ari, upsampling applies only to A20’s internal DAC settings and not the USB digital output.

Aurender units with two options for user selectable voltage provide a secret weapon, an advantage not normally found in digital sources. Usually, a preamp’s output is set, and the user simply must work with it. Years ago, I found a substantial difference in the performance of DACs that allow rolling in discrete opamps. I also found the Gold Note PA-1175 MkII amplifier to have a nifty Damping Factor feature, which was a bonus for that amp. Similarly, the A20’s selectable output voltage is a highly advantageous feature. It can make the difference between a combo of gear that sounds okay or one that sounds splendid.

The user chooses the output voltage that best matches the input sensitivity of the amplifier. The RCA output can be set to either 2.0Vrms or 2.7Vrms, and the XLR output can be set to either 4.0Vrms or 5.4Vrms. Notice that the XLR output is double that of the RCA, which is typical. When I ran the RCA and XLR outputs concurrently to power different devices, there was no discernible variance such that the devices could not be handled by one source of attenuation, be it the A20’s volume control or external attenuation.

The presence of the selectable output voltage is not a minor point when considering the integrated functionality of the A20. While there may be advantages to owning a separate dedicated preamp, it may not outperform the A20’s preamplifier stage, and the selectable output

is a significant reason why. The influence of altering the voltage output is considerable and should not be underestimated. It allows the A20 to operate as though one had two distinct preamps. One setting will assuredly match better than the other with any outboard amp. However, you may find that you adore the result of both settings with your favorite amp(s), which means you win twice!

To get a sense of what the output voltage feature does, think back to a time when you heard a comparison between two models of amplifier from the same manufacturer, perhaps a 100wpc model and a 200wpc model. If the amps were designed according to a similar topology and were made well, you should have experienced more control, depth and solidity to the images, higher resolution, more pronounced macrodynamics, perceptually quicker transients, and better tautness and deepness with the bass as the primary characteristics of the higher-powered amp. Putting those characteristics together often moves buyers to opt for the higher-power amplifier. All things being equal, I always opt for the higher-powered amplifier.

The output voltage feature has a similar effect as it is switched from the lower to the higher setting. It sonically magnifies the amplifier, pumping up the speakers to sound as if they were retooled to become a model higher. It is fabulous that an owner can make such adjustments. This feature is worth a lot of the asking price of an Aurender. It also protects against obsolescence should the owner decide to change amplifiers. I can envision a scenario where the enthusiast may wish to try a tube amp, but with a certain preamp having too high an output voltage it might not be ideal. With the A20's selectable output voltage, such options have a higher chance of being successful.

Which of the settings should be used in any given system? Consider the auditory effect of the output voltage akin to a dimmer switch on a lightbulb. The lower voltage would make the light dimmer, and perceptually easier on the eyes. The higher voltage output would make the light brighter, showing more detail and intensity. Likewise, the music is more laid back and less in your face with the lower voltage, and it is more intense and forward with the higher voltage. I tend to use the higher voltage setting and tune the system with other settings of the A20, i.e., working with the upsampling setting or switching a power cord or interconnects.

The question then becomes, will either of the A20's settings for the preamp allow it to outperform any given dedicated preamp? If you have read enough of my articles in the past, you will know the answer; no one can tell you. A comparison must be conducted to determine the most preferable arrangement of equipment in any given system. But the odds are better than average that with two settings, the A20 as streamer, DAC and preamp may end up the winner as opposed to using an outboard preamp and DAC or integrated DAC. Perhaps it is not surprising that I could build highly engaging systems both ways.

Bringing in the landscape system

A favorite alternative speaker system through the years has been the PureAudioProject Trio15 Speakers lofted onto custom Sound Anchor stands. Returning the Trio15 10" Coaxial to the listening room to be mated with the Perlisten subwoofers, I once again enjoyed the prodigious sound of what I call a super-monitor. Fans of big vintage JBL, Hartsfield, or Classic Audio Loudspeakers relish the ease and openness of those speakers. They have a scale and vividness that is addictive. While perhaps not on the same level as those speakers, the Trio15 10" Coaxial captures many of the same characteristics but at a much lower price.

With speakers having asymmetrical driver configuration, i.e. B/M/T or a D'Appolito configuration, raising and turning the speakers to be parallel to the ground creates unique dispersion patterns. You can see an example of it in my first attempt at landscape orientation with the Daedalus Ulysses Speakers. The primary goal in the project was to reorient the soundstage from emphasizing height to emphasizing width, which is particularly pleasing for live recordings because they sound more natural and more generously sized as to the location of the performers on the stage.

While a coaxial driver is unaffected by that reorientation, the bass drivers are affected. Elimination of the floor bounce and low propagation of the bass frequencies changes the experience of a speaker's sound quite a bit. It may seem like a strange description, but the sense of the lofted speaker is that it is heard as being more direct, like a monitor, with the wave launch emanating from ear level. Normally, the bass hangs lower and feels like a substrate to the music, but with the landscape orientation, it floats at the same height as the midrange and treble. Especially when hearing bass guitar, the higher wave launch seems more natural to my ears, and it is easier to picture the bassist playing the instrument. I understand that it won't make sense to most who have not heard the comparison. The location of the bass drivers is important, and when twin 15" woofers are heard floating 4' in the air versus bouncing a wave off the floor, one begins to appreciate the cleanness of a landscape setup even for larger speakers!

The A20 continued along its trajectory of elevated performance as a source and gave the landscape operation of the PAP Trio15 10" Coax its best sound of any system I had prepared for them. Just after setting them up, I visited with a friend who has the Volti Alura Speakers and Border Patrol amplification. That setup had better micro dynamics and depth than what I had just built, and I thought about how to improve those parameters with this particular rig. Following my protocol of trying all settings, I returned to the Upsampling setting in the Advanced2 option of the A20's Settings menu and engaged the highest non-DSD setting (705.6/768kHz), and in this instance I preferred that result. The change resulted in improved micro dynamics and depth of soundstage that I sought. It struck me as being uncannily like the friend's system I had just heard. With the Wharfedale speakers no upsampling was preferred, but with the PAP speakers the highest upsampling setting was preferred. Never presume that the same settings will optimize all speakers.

Sarah Jarosz's "Orange and Blue" and Vienna Teng's "1br/1ba" were gloriously rich with both resolution and tonal ripeness. Their strength as niche vocalists came to the fore because of the degree of information retrieval possible with the A20 and the Trio15's coaxial driver, which created a highly focused center image for their vocals. Both the midrange and bass improved with the Trio15 10" Coaxial, as might be expected. Chiefly, the midrange was fuller, more open, relaxed, and the bass had additional character to reveal nuances not easily heard from the Wharfedale's 8" driver as it was colored by the presence of cabinet resonances typical of dynamic speakers.

The A20 delivered on my expectation that, just as it offered the best performance I had heard from the King III electrostatic speakers, it would do so with all genres of speakers. The Wharfedale Opus 2-M2 Bookshelf Speakers, which are dynamic, and the Trio15 10" Coaxial, which are open baffle, also were at their best with the A20, whether using the internal DAC or an outboard DAC. None of these speaker systems showed idiosyncrasies that demanded major reworking of the system to address sonic shortcomings as a result of being paired with the A20. Often with lesser sources I have had to spend considerable time recombining components and cables to elicit sound quality that checked off all the boxes, but I did not have to finagle with the systems built using the A20. That bodes well for integration into a wide number of systems. Essentially, I recreated on a smaller scale the phenomenon that was occurring at AXOPNA and reached the conclusion that many dealers and equipment manufacturers had, that an Aurender is going to make whatever gear they use sound very good.

Digital at a higher level

Decades ago, as a novice, I read reviews and pretended my low end HiFi rig was just as good as the expensive gear. I thought reviewers were exaggerating or outright lying about sources, cables, amplification or speakers varying greatly. Becoming a reviewer and handling better gear showed me they were not lying, and I am not lying when I say that the Aurender experience is holistically superior to my previous digital streaming and file playback sources.

Streaming and server components are getting better over time and these systems and comparisons have shown me that the quality of digital music is much better than even five years ago. Over the years I have seen and heard advances in cables, power supplies, DACs, pre-amplification, and amplification, so why would digital sources not also advance? If the A20 is representative of what can be done for streaming music, then I am a most blessed man to live in an age where there is such an abundance of music at my fingertips and so well rendered!

What's being served?

When families go out to eat, in making a choice of which restaurant to dine at they consider such things as the amount of time they have, the style of food, and its quality. Hoping not to stretch the analogy too far, equipment manufacturers are like restaurants, sources of their own brand of a sonic meal, and the audiophile assesses how much money they wish to pay, the feature set of the models available, and the claimed sonic attributes. With a digital source like the A20 the music is literally being served, prepared by a streaming kitchen such as Qobuz or Tidal, and brought to the listener by a server, the equivalent of a waiter or waitress.

When my wife and I eat out on Friday evenings, we have several choices nearby that range from fast food to supper clubs. We can eat a patently unhealthy but quick meal, or we can have a leisurely and hopefully more nutritious supper. The names of the establishments give a clue to what is to be expected. A different experience would be expected from Taco Bell, Longhorn Steak House, or Sandra's (supper club).

In terms of the sound quality, smoothness of integration of the software and hardware, and build quality of the Aurender A20, it is like the supper club rather than the fast-food restaurant. Having owned the fast-food version of a server (the Mac Mini), and used the equivalent of a fine chain restaurant (the SMG/SONORE setup), the A20 is qualitatively different, and the experience is genuinely elevated.

When someone visits an unfamiliar restaurant for the first time, they may be pleasantly surprised or turned off by the experience. When approaching the purchase of a component, it's not fun to enter the transaction blindly. Is there some way to know beforehand what the experience will be like when purchasing a component? Only on a limited basis. There exists an enormous range of performance potential due to the combination of gear to which it is paired, and no one knows that outcome. There are very few parameters of performance that can be said to be absolute. Because the system — everything from cables to amplification — affects tonality, dynamics, and sound staging, the only characteristic that I have found to be absolute is resolution, or definition, so that is the first and foremost aspect of performance that I listen for when assessing an unfamiliar product.

Here, then, is where the A20 distinguishes itself. It simply has a high degree of information retrieval and that means more of the nuances of the performance are heard and appreciated. It means transients are sharper, images are better resolved, and the soundstage is more discernable. Because of its flexibility in setup the user has several ways to achieve pleasing coloration or tonality. A great deal of the dynamics and soundstaging of the system are controlled by the amplification.

Having used the N20 for several weeks as I embark on a follow-up review, I can answer the question definitively whether it has even more information retrieval than the A20. The answer is yes, it is a large step up in terms of broadening the Aurender experience. The A20 is Longhorn Steakhouse and the N20 is Sandra's supper club. If you are willing to pay the premium, the meal being served is upscale.

Note the following well if your goal is to improve your digital front end. Forget trying to get a server to be "musical" or to have this or that tonality. Stop trying to seek one with a good soundstage. These are all functions of the system, not just a server/streamer. Look for one thing in particular, resolution or definition. You can adjust all those other parameters through the system, but you cannot recover lost resolution in the digital source by manipulating the downstream components.

Having said that, I have found a strong correlation between a server that has higher resolution and other parameters of sound quality. As I moved through other digital sources and the resolution rose, the tonality, soundstaging, transients, dynamics – everything seemed to improve. Experiencing that through four changes of digital sources, I suspect it is a universal phenomenon. Now, with the first few weeks of experiencing the N20, along with the resolution these other characteristics have benefitted as well.

Conclusion

The A20 has a lovely balance between system setup flexibility and a high degree of resolution. As such it is a compelling choice for those who have system configurations that require flexibility in setup, or those who wish to explore with system configurations, yet achieve a distinct improvement holistically in digital playback.

Aurender products are not cheap, but neither are they cheaply made. Most importantly, they do not sound cheap. The sound I am getting in my room reminds me of some of the finest systems I have heard at shows and dealerships. I have matured as an audiophile, so today I have no delusion that my rig is at the level of SOTA (state of the art) systems and a direct comparison would likely confirm it. But one either experiences what they feel is a premium sound or not. The Aurender A20 is giving me a premium sound experience. The interface is first rate and works well with Tidal and Qobuz. It is a high-end music ecosystem experience.

Five years ago, when I heard the sonicTransporter and the Signature Rendu SE, I knew that my CD collection would be used less. Now, with the Aurender A20, I don't even think of reaching for a silver disc. The day has come that I consider CD dead and streaming to have won the war of digital sources. With this kind of sound quality there is little point in my putting serious money into an analog front end. Glancing at the albums for sale at Walmart as I passed that section on the way to the sporting goods, I noted the average price was about \$25. Can you imagine what it would cost to build a library of esoteric vinyl albums? A fortune!

The truth is that I have the money and could pursue analog, but the sound quality advantage is not worth it for me. For most real-world listeners it is not a wise investment. I'm sure all the analog-associated businesses in the industry will love me for saying such things. Don't get me started on the topic of how analog sources are given a pass by being assessed almost entirely by subjective criteria. If you are entering the hobby, do yourself a favor and do not start cheap with digital. Of course, analog will sound far better when compared to a cheap digital front end. It won't sound far better when compared to an Aurender properly set up in one's system.

Once again, I am vindicated that I did not spend tens of thousands of dollars on a turntable setup and a huge collection of media. I literally have the musical world at my beckoning and a premium digital source as a cornerstone of system building. Thank goodness that I don't have to think, "What will I do with all this (turntable setup and albums) in the future," every time I sit down to listen. I don't have to worry that my wife or kids will be saddled with all the audio stuff I thought was so important but that they don't care about. That is not an unimportant aspect of enjoyment of the hobby for someone entering their sixth decade of life. I want carefree listening in every respect, and Aurender is assuring I can obtain it.

There are well-regarded competitors to the Aurender way, and I cannot comment about them as I have not used them. What I can assert is that the Aurender A20 has upscaled my digital listening massively, and I will not surrender that upscaled streaming experience. For now, an Aurender in some form is going to be my source for both personal and reviewing purposes, maybe for the next five years!

