

Cambridge Audio Azur 751R AV Receiver

By: Dennis Burger, September 23, 2013

HTR Product Rating

Performance

5 Stars

Value

4 Stars

Overall

4.5 Stars



Even if you're not in the market for a new receiver, purely as a fan of AV tech, you owe it to yourself to find a Cambridge Azur 751R receiver and - if you can lift this meaty beast without herniating a disc - take a quick gander at its hindquarters. Marvel at what seems like an anachronism in this age of downright desolate receiver back panels: the 751R is so densely packed with ins and outs, control ports, switches, and even a massive (but whisper-quiet) cooling fan that there's hardly a square inch of anodized black metal to be found between its radio antenna connections and its AC power port.

The back of the 751R is so densely packed with connectivity, in fact, that it may be a few beats before you notice the presence of another anachronistic inclusion and one notable omission when contrasted with the bulk of today's big-box AV receiver offerings: this thing has S-video inputs ... and no Ethernet port! These are merely the first and most obvious clues that the Azur 751R isn't cut from the same cookie-cutter mold as the bulk of its competition - the first inkling that Cambridge is aiming for a different sort of consumer, with a different sort of taste, who is drawn more to pure audio performance than streaming Internet features and smartphone app control.

The second inkling comes by way of a glance through the beautifully milled ventilation slots on the top of the receiver to the colossal custom toroidal transformer that pretty much hogs the entire front left quadrant of the interior of the 751R, as well as the thick heat sink and fan mechanism that runs

down its center from front to back. Those two elements also contribute to much of the Azur 751R's 40-pound heft, despite its relatively modest size.

The third big clue that this definitely isn't your typical mass-market family room receiver requires a bit of digging into the manual or spec sheet, where you'll discover that the 751R boasts Anagram Technologies Adaptive Time Filtering, which upsamples incoming digital audio signals and applies jitter suppression before passing the results along to the receiver's DACs.

Oh, and that USB port you overlooked on the back because either you were overwhelmed by all the other connections or you assumed that, given the lack of an Ethernet port, it was probably just reserved for firmware updates? Yeah, that's actually an asynchronous audio input, with support for both USB Audio Class 1.0 and 2.0, which makes the Azur 751R not only a beast of an AV receiver, but also a high-quality 24-bit/192kHz DAC for Mac, Windows XP, Vista, 7 and (if you sacrifice three chickens under the light of a harvest moon while vowing to deliver your firstborn child into the arms of Cthulhu) Windows 8 machines. That isn't a knock against Cambridge Audio, by the way; rather, it's a knock against Microsoft, which decided that native drivers for USB Audio Class 2.0 (not to be confused with USB 2.0, by the way; one is an audio standard, the other is a port standard) wasn't worth the effort in recent operating systems. Cambridge goes a long way toward rectifying that oversight by offering its own USB Audio 2.0 drivers, which can be installed to Windows 8 in Windows 7 compatibility mode, along with a handy guide covering all the ups and downs, ins and outs of high-fidelity computer audio playback. Cambridge has also assured me that in the coming months they will have a new USB 2.0 driver that will work natively with Windows 8 and eliminate all that nonsense.



The Hookup

Another interesting (although certainly not unwelcome) throwback is the Azur 751R's positively retrotastic graphical onscreen interface, which lacks all of the transparent overlays and pastel colors of most modern receivers, but features a nice, intuitive layout that provides logical access to the unit's wealth of audio, video, and input options.

Given the density of the back panel, hooking up the Azur 751R is certainly a little more time-consuming than I've become accustomed to as of late. Since I did all of my testing in my secondary

media room, not the main home theater, I only needed three of its five HDMI inputs for my OPPO BDP-93 Blu-ray player, Dish Network Joey Whole-Home DVR Client, and Xbox 360. I used five of its seven five-way speaker binding posts for the Monitor Audio MASS speaker system in that room at the moment; the other two can be configured as either rear or height speakers (neither of which I used). The binding posts are a little chintzy for a receiver at this price level, but are nicely color-coded. Oddly, they're plugged from the back, so if you want to use banana-plug-terminated speaker cables (I do), you'll find yourself digging those little plugs out for the better part of a minute, but that's not a major complaint. Finally, I used just one of the two main subwoofer outputs. I ignored the 751R's generous three IR output ports, preferring to use my Control4 system for such tasks, but I did take advantage of one of its two DC trigger outputs to handle power commands for the Monitor Audio MASS subwoofer.

The back panel's small, silk-screened labeling also made hookup a bit of a struggle for these old eyes. As such, I initially plugged my subwoofer into the Zone 2 sub out, which is situated right above the binding posts, whereas the actual main zone subwoofer pre-outs are located near the upper right hand cover of the back panel. Needless to say, that didn't work, a fact that became apparent as soon as I tried to run the Audyssey 2EQ setup program. No, that's not a typo. This \$2,999 receiver - with all its incredible Class AB amplification, its awesome power supply, its high-resolution up-sampling and 192/24 DAC support - includes the sort of cheap, ineffectual room correction that most manufacturers have abandoned even on their most budget-oriented models. Not only is 2EO by far the lowestresolution room correction system that Audyssey offers, it also features absolutely no correction for the subwoofer, which is actually the piece of equipment that most requires room correction. It's also far less effective at getting even the essential speaker settings correct. After running 2EO in my system, moving the included microphone to three locations and letting it run its calculations, the only thing it managed to get correct was the number of speakers in my system (after I plugged the sub into the correct output, that is). Distances were drastically off. Levels were completely out of whack, And, worst of all, it miscalculated the appropriate crossover point between the MASS satellites and sub to an astonishing degree. Monitor Audio recommends an 80Hz crossover for the MASS system, and although it's technically kinda-sorta capable of that, a 90- to 100Hz crossover point results in a much more seamless blend. Audyssey 2EQ, on the other hand, seemed to think that the front channels were cable of reaching down to 60Hz and the surrounds (same speakers, mind you) to an absolutely subterranean 40Hz. If this were a receiver marketed toward a newbie general audience, this would be unforgiveable. Oddly, though, it ends up not really mattering much, because I imagine anyone in the market for a receiver of this caliber has every intention of pulling out the SPL meter and measuring tape and adjusting everything manually. I hope so, anyway ... because setting basic speaker parameters isn't the only area where 2EQ does more harm than good (more on this in a moment).

Thankfully, a receiver like the Cambridge Audio Azur 751R, when paired with a good set of speakers, doesn't need room correction, except for perhaps a bit at the bottom end. With my regular Anthem MRX 700 receiver, I'm in the habit of only applying Anthem Room Correction on the bottom 200Hz or so of the signal. Without that option in the Cambridge receiver, I spent the better part of an hour repositioning the Monitor Audio MASS subwoofer to combat a few nasty nodes. Incidentally, for a day or two, I also played around with a Sunfire ATMOS XT Series Subwoofer in the system, making use of its integrated room correction system and microphone to achieve much the same effect so, if you're in the market for the Cambridge receiver and haven't decided on a sub, the Sunfire or something like it may be a good option, especially if you don't have a lot of flexibility in terms of sub placement.

Performance

I started off my testing, as usual, with **Spears & Munsil's High Definition Benchmark Blu-ray**, not really expecting much, since Cambridge doesn't really trumpet the video processing capabilities of the Azur 751R. But it should, because in every test but one, the receiver equaled or exceeded the 1080p upscaling capabilities of my OPPO BDP-93, knocking practically every test (including the 2:2 deinterlacing test, which many receivers fail miserably) out of the water. Only a few weird artifacts in the white ring on the Jaggies test kept it from getting perfect marks, and it should be noted that those artifacts weren't in evidence on any actual real-world video material. So, for all practical purposes, the video processing of the 751R should be considered virtually flawless.

But trust me when I say that no one is going to buy this receiver for its video processing capabilities, despite its prowess in that regard. The audio is what matters here and, despite my grumblings about the setup woes involved with trying to use Audyssey 2EQ, once I settled down with some actual demo material, all was forgiven.

As I said in my review of the **Denon AVR-X3000**, there are two approaches to selecting demo material for reviews. Although I can see the value of using the latest releases, I prefer to take the more boring, redundant approach of sticking to the same handful of discs that I know well. So my apologies if you don't want to read about my impressions of Blue Man Group's Audio DVD-Audio disc (Virgin) again, but believe me when I say that I've never heard it sound like this through any receiver - not even the Anthem MRX 700. In fact, I'll no doubt draw my fair share of hostile comments for saying this, but the only system I've auditioned at home that renders tracks like "Rods and Cones" and "Mandelgroove" with as much dynamic range, detail and gusto of the sort delivered via the 751R is my Anthem D2v/A5 setup in the home theater.

Moving on to Fleetwood Mac's Rumours (WEA) on DVD-Audio, again, I found myself positively staggered not only by the oodles of dynamic range, but by the outright precision with which the receiver hangs distinct elements of the mix in the air. I'm really not sure whether to chalk this up to the Anagram Technologies ATF upsampling, the incredible power reserves of the unit (Cambridge is one of the few receiver manufacturers to rate power output with all channels driven, so that's certainly part of it), or some mix of both. But no matter: anyone who says that all receivers sound the same has never heard the Cambridge Audio Azur 751R. And anyone who has heard the 751R and still contends that all receivers sound the same is quite frankly deaf. I'm not saying it blows away this room's reference Anthem MRX 700; I'm merely saying that the receivers sound strikingly different, with the Anthem delivering - via the same speakers, mind you - a more "big theater" sound, whereas the Cambridge is more capable of aiming a stray guitar note at the third button from the top of your shirt and missing by no more than a half-inch.

Just for kicks, I decided to dig into the receiver's menus to engage both of the EQ curves available with 2EQ - Audyssey and Flat - and both absolutely laid waste to everything that is so wonderful about the 751R's sound. The front soundstage collapsed from a big bombastic bubble into a thin shell of its former self. The delicious midrange thinned to the point of snapping with both curves, and Flat introduced a brittle, sickly high end that sent me scrambling through the menus once again to turn it off. Anyone who spends the money on such an unabashedly high-performance receiver and engages either of the 2EQ curves should be forbidden by law from buying anything but Bose ever again.

In complete defiance of conventional AV receiver wisdom, the 751R also sounds incredible in stereo. In truth, its 170 watts of output in stereo mode turned out to be a little too powerful when trying to drive a pair of the Monitor Audio MASS satellites alone to appreciable volume. I temporarily borrowed a pair of Paradigm Studio 100s from the main theater so that I could crank the Man of Steel: Original Motion Picture Soundtrack (WaterTower Music) to the high heavens in two-channel mode for a bit. And crank it I did. I often find myself dialing back on the volume of most audio gear long before the point of pain, but the combination of the 751R and the Studio 100s turned out to be a dangerous mix, if only because the sound never really reached the sort of edgy, rough point that warns you you're pushing the system too hard.

This CD is also, by far, one of the most dynamic I've heard in ages, with whisper-quiet passages that quickly explode in a thunderous release of bass and a deep, rich soundstage that the 751R rendered beautifully, except when I tried Audyssey's 2EQ curves once again to gauge their effect on stereo material. Track 8, "Terraforming," devolved from a huffy, holographic audio wonderland to a flat mess, and 2EQ even seemed to sap some of its dynamics out of the mix. With the 2EQ curves turned back off, I honestly had to walk up to the front panel a couple of times just to convince myself that no Dolby Pro Logic II or DTS Neo:6 processing was engaged in the process. Thankfully, the lovely but simple remote does include direct access to all stereo and surround modes via separate buttons, although a word of warning is in order here. Press the Stereo Modes button once, and it puts the receiver in pure two-channel mode. You have to press it again to get to Stereo+Subwoofer, no matter how you have your crossovers set.

A similar issue occurs with the headphone amp. Plug in a set of phones, and the 751R automatically engages Dolby Headphone mode. Even though I've never particularly dug Dolby Headphone, I like the implementation here. It's subtle but effective. And you can press Stereo Modes with headphones plugged in to activate a pure two-channel, unprocessed signal. Do be careful if you press Surround Modes to engage Dolby Headphone processing again, though; press it too many times, and the receiver turns on DPLII or Neo:6 processing, with an incredible bass and gain boost that nearly wrecked my HiFiMan HE-400 cans.

Given the Cambridge Audio Azur 751R's incredible performance with music, it should go without saying that movie performance is tippity-topnotch, too. Sometimes things just need to be said, though, so I popped in The Incredible Hulk (Universal) on Blu-ray and skipped to Chapter 5, in which Ed Norton goes all Hulk Smash for the first time. Again, dynamics were incredible, tonal balance was exquisite, and imaging was spot-on. I should say, to be fair, movies demonstrate the one single solitary advantage of having Audyssey 2EQ onboard, and that's Dynamic EQ and Dynamic Volume. (Okay, perhaps that's two advantages, but I wasn't expecting the Spanish Inquisition.) If you tend to watch a lot of television in the home theater or media room, or you like to watch action-packed movies late at night without sacrificing surround sound, Dynamic Volume's three settings work quite well, and Dynamic EQ keeps things tonally rich at practically any listening level.



The Downside

It may sound like I've been a little hard on the Cambridge Audio Azur 751R receiver regarding Audyssey 2EQ, but the fact of the matter is that, at this price, Cambridge should either eat the extra cost of stepping up to the vastly superior Audyssey MultEQ XT32 or be brave enough to say poo-poo to room correction entirely. 2EQ is, by any measure, worthless and wouldn't even be worth mentioning, except for the fact that it literally does more harm than good. Thank goodness you can turn off the 2EQ curves, and that's why I can't hold its inclusion against Cambridge too much. If there's a real black mark against the 751R, it's that there isn't a manual EQ onboard to effectively deal with bass nodes, which means that, as I said, you're either going to spend a lot of time fussing with the position of your subwoofer, or you'll have to buy one with built-in room correction.

As I ran into with the Monitor Audio MASS system, the receiver is also quite frankly almost too powerful for most small satellite speaker systems.

My only other legitimate beef is that the included main zone remote (wholly separate from the packed-in Zone 2 remote), while gorgeous and well-built, not only squeaks like one of my pit bull's chew toys when you press the navigation button, but it also lacks any learning or universal remote capabilities. And it isn't backlit. Granted, if you're in the market for a receiver at this price, chances are good that you're bringing your own control solution to the credenza, but I'd love to see Cambridge Audio include a remote control more in line with the more fully-featured one included with its Azur 752BD universal player (stay tuned for that review).



Comparison and Competition

At \$2,999 MSRP, the Azur 751R doesn't have a lot of competition in the standard big-box retail receiver arena. The \$3,100 **Pioneer Elite SC-79** comes to mind, and it does include a number of features that the 751R lacks, like AirPlay, network audio steaming, THX certification, and 4K video capabilities. However, it boasts nowhere near the power with all channels driven, and, to be honest, I haven't heard it. So there's that.

Anthem's \$2,000 MRX 700 is probably a better comparison, given its equally good - although very different - audio capabilities, but of course it lacks the 751R's massive power capabilities, as well as its 7.1-channel analog inputs. It does, on the other hand, sport what I consider to be the best room correction on the market.

In truth, though, I think the 751R's stiffest competition is probably Cambridge's own 651R. The two models are so similar that they share the same instruction manual. The 651R merely lacks one HDMI input, the amazing USB DAC capabilities of its big brother, and 20 to 30 watts of power, depending on whether you're driving two channels or seven. Yet it costs, on average, about \$700 less.



Conclusion

The Cambridge Audio Azur 751R delivers the sort of incredibly impactful, dynamic, richly textured and oh-so-detailed audio you would expect from really good separates, and its stereo performance, with speakers that can handle its power, is quite frankly mind-blowing. I'm not hanging the "for a receiver" caveat on that. It's just damned good.

If you're in the market for a truly amazing-sounding receiver and don't need built-in streaming features - or network connectivity of any sort, for that matter - and don't mind the lack of any useful room correction, you simply must audition this receiver. I'm not saying it's perfect, I'm merely saying that there just isn't much else on the market like it.