

## EQUIPMENT REVIEW

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## Acoustic Energy Radiance 3 Loudspeakers



Acoustic Energy's Radiance 3 is fairly petite as floorstanding loudspeakers go -- only 36"H x 9"W x 11.7"D (920mm x 230mm x 297mm), and weighing a manageable 35 pounds. It has a lovely radiused enclosure of braced, 15mm-thick MDF. The two I was sent were finished in a fine Natural Ash -- blond veneer, real wood. The speaker is also available in what AE calls Antique Ash, which reminds me of the dark finish some American retailers call wenge. The grille is held in place by hidden magnets, so the front panel is unmarred by attachments. The speaker costs \$3000 USD per pair.

The Radiance 3 is a three-way, reflex-loaded speaker with two 6.2" low-frequency drivers and a 5.1" midrange, all with cones of pressed aluminum alloy. The tweeter is a 1.5" ring radiator set into a special DXT lens that its creator, Denmark's Mike Thomas, says "optimizes directivity by carefully arranged diffraction edges in the surface of the drive unit. The edges are placed precisely in certain distances from the cone." Thus, the "DXT resolves several key issues regarding loudspeaker design, including uneven power response and limited dispersion at high frequencies." Each range of drivers (bass, mid, treble) is separately ported. The speakers are set up for biwiring, which came in handy. They're rated to handle 200W peak program power, and their claimed frequency response is 40Hz-45kHz, +/-3dB. The crossover frequencies are 650Hz and 4kHz. The claimed sensitivity is 90dB at 2.83V/W/m, the nominal impedance 8 ohms.

The Radiance 3's tall, narrow shape would make it unstable were it not for its outrigger feet and the very well-designed and -made spikes, which are included. As set up in my listening room, they were extremely stable -- an appreciated situation, given the occasional presence of a very active two-year-old granddaughter! For further stability, the speaker's lowest section can be loaded with dry sand.

Unlike many speaker makers, Acoustic Energy provides a fairly informative owner's manual. Yes, some of it is a bit promotional, but there's enough of value to recommend it. One thing I liked was that speaker-placement suggestions were offered for both two-channel and surround-sound arrays: for stereo, AE recommends that the Radiance 3s be placed 0.5' to 2' from the front wall, 1.25' to 2.5' from the sidewalls, and 8' to 11.5' apart, with no more than 15 degrees of toe-in.

## System

During most of the review period, the Radiance 3s were connected to my main system. Sources are my Dual CS-5000 turntable with Shure M97Xe cartridge, Sony CDP-X303ES CD player, and Magnum Dynalab Etude tuner. Part of the time I used Blue Circle Audio's GDC integrated amplifier, but for all serious listening, the speakers were powered by my reference Linn Majik 1P integrated amplifier via 14-gauge AR cable. Interconnects are Linn (CD) and Straight Wire (tuner). Power comes from a dedicated circuit operating through a PS Audio Soloist in-wall power conditioner and surge suppressor. My listening room is 17'L x 11'W x 7'H, done in drywall, with wall treatments and cork flooring, most of the latter covered by a 12'L x 9'W rug. I primarily compared the Radiance 3s with my NEAR 50 ME II tower speakers.

I set up the Radiance 3s in incomplete accordance with AE's recommendations. While they ended up just shy of 2' from the front wall and more than 2.5' from the sidewalls, I found they worked best in my rather small listening room when only about 6' apart.

## Sound

I have a good friend whose ears I trust nearly as much as my own, though they're attuned to different qualities of reproduction (one of the reasons I like hearing his opinion). He's been an unsung collaborator throughout my 15 years of audio reviewing. In all that time, I'd never reviewed equipment for which he requested multiple listening sessions -- until the Radiance 3. In fact, he and I spent not one but *three* lengthy listening sessions, for which he supplied much of the music.

My friend's speakers of choice are JBL 4312 broadcast monitors, which he listens to at close range -- about 4' from his chair. He listens for deep bass, and lots of detail in the mids and highs. By his and my estimations, the Radiance 3's bass was not quite in the same class as either my NEAR 50 ME IIs or his JBL 4312s. That's not to say that the Radiance 3 was bass-shy. In fact, if the recording had deep bass, the AEs stood up and performed. It seemed that my bud and I had both grown accustomed to a bit of unnatural bass boost from our speakers of choice. He suggested that I add a subwoofer, but I was happy with the Radiance 3s as they were.

The key for him was that the mid- and high-frequency detail produced by the Radiance 3 was nothing short of miraculous. What amazed me was that there was nothing shrill about the sound -- a marked contrast to his JBLs, which break up with some high-frequency material. And the AEs' placement of instruments and voices on the soundstage was simply fabulous.

My favorite types of pop music are Motown, soul, and funk. I recently picked up a great album called *Pure Funk* (CD, Polygram 314 558 299-2), a compilation of great soul and funk tracks from the 1970s. One of the first cuts I sampled was "Theme from *Shaft*," by Isaac Hayes. While I would have enjoyed slightly more bottom end, Hayes's voice, and the hi-hat, cymbals, and tambourine, were incredibly tight. Through many other speakers, the cymbals sound smeared, but with the AEs they were just as tight as they should be.

Another cut from *Pure Funk* that I've always enjoyed is LTD's "(Every Time I Turn Around) Back in Love Again." With this tune, it struck me what a "whole" sound the Radiance 3s reproduced. Again, they perhaps lacked the deepest bass extension, but what was there sounded precise. And, again, the soundstaging of voices and instruments was fabulous: tightly focused, well defined, and solidly placed. Plosives and transients (of which this song has many) were well reproduced, without smear or imprecision. I just wanted to get up and dance -- in my really bad, nerdy way.



I pulled myself away from funk and went on to another of my favorites: jazz. John Pizzarelli's "Rhythm Is Our Business," from his *Our Love Is Here to Stay* (CD, RCA 67501-2), features the entire Don Sebesky Orchestra, which really swings! This disc showed that if the source recording had bass, the AEs could reproduce it. The song is a sort of call-and-response in which Pizzarelli sings in turn about various soloists in the band, and each then responds with a chorus on his instrument. One of the most impressive was the trumpeter, who sounded as if he were in my room. I've never heard this solo sound so "live." In fact, the Radiance 3s brought this track to life as have no other speakers I've had in this room. It was amazing.

After all the hoo-hah of Pizzarelli and the Sebesky guys, I tried something a bit more mellow -- and bassy. I've always loved Fourplay's "Bali Run," from *Fourplay* (CD, Warner Bros. 26656-2). The five-string bass used on this album goes much deeper than the typical bass guitar -- down to about 32Hz -- and this track offered further proof that if the source had bass, the Radiance 3 could reproduce it. Two things that really impressed me were the width and depth of the soundstage; a third was the speaker's exceptional reproduction of transients.

As I was considering bass reproduction, I pulled out Amy Grant's *Heart in Motion* (CD, A&M 75021 5321-2) and played "Good for Me." This song has bass! The bottom E (the lowest note) of the four-string bass guitar has a frequency of 41.2Hz -- right around the bottom of the Radiance 3's claimed response. All I can say is that there was no lack of bass with this track. And Grant's voice was reproduced in fine fashion -- just as I imagine she sounds in real life.

Then I asked myself, *What is the most sensual song I know of?* The answer: "Fever," as sung by Peggy Lee. I grabbed *The Best of Peggy Lee* (CD, Capitol CDP 8 21204 2) and loaded it into the CD player. If you're not familiar with this classic recording, I recommend looking it up. It's just Lee, a bassist, a drummer, and a guy snapping his fingers (he was the guitarist hired for the date, but they decided not to have him play for this take). The original Willie John lyrics are enhanced with great additions by Lee. The song was recorded in the fabled Capitol Studios at Hollywood and Vine, in L.A., in the early days of stereo: Lee is front and center, the snapping fingers just below, the bass and drums just behind. Bass extension? Not a problem -- it sounded very natural and full. The overall reproduction of this recording was the best I've ever heard.

So far, most of what I'd listened to had been recordings of small groups, which is mostly what I play when I'm listening for pleasure. So I grabbed something completely different: J.S. Bach's Little Fugue in G Minor, from *The Fantastic Stokowski*, with the late Erich Kunzel leading the Cincinnati Pops Orchestra (CD, Telarc CD-80338). Bach originally wrote it for the organ; Leopold Stokowski arranged it for full orchestra about the time he was music director of the Cincinnati Symphony (c. 1910). The arrangement begins very simply -- just a single oboe carrying the theme -- but as the piece progresses, more and more of the orchestral sections join in in a long crescendo that ends in a magnificent climax with the entire orchestra, including what is (often derisively) known in the biz as "the Telarc bass drum." Yes, that bass drum is *big* -- but the Radiance 3s reproduced the sound of my hometown's Music Hall better than any other speakers I've ever heard! The reproduction of this recording, through the Blue Circle Audio GDC and the Radiance 3s, was, hands down, the best I've heard. With the Linn, there was a little less boom on the bass drum, but not so much that I'd throw the Linn out of my system.

When, one evening, Henry Mancini's theme for the film *Charade* happened into my CD player (via *Henry Mancini: All Time Greatest Hits*, RCA 8321-2-R), what immediately struck me was the width and depth of the orchestra. The width of the soundstage actually extended beyond the edges of the speakers -- especially the bongos, which consistently were positioned in free space to the left of the left speaker. This remastering is pretty good, considering that the recording was made in 1963. There's no discernible tape hiss, nor does tape saturation (distortion) rear its ugly head.

I played a couple of LP cuts that I thought might show whether the Radiance 3s really had it all together. The first was "One Fine Morning," from Lighthouse's eponymous album (Evolution LP 3007). Lighthouse was something of a Canadian Blood, Sweat & Tears -- a rock band that included some very good brass players -- and "One Fine Morning" is a medley of their US hits. I've always liked it for its tight, fast, driving pace. The trumpet is featured, and the Radiance 3s reproduced the instrument as well as any speakers I've ever had in my system -- perhaps better. It was tight and brilliant, but not harsh. I ended up playing the cut several times, hearing details I'd never noticed before.

Finally, I pulled out "You Got Me Hummin'," by Cold Blood, a late-'60s San Francisco group. Think Janis Joplin meets Average White Band. Their eponymous LP (San Francisco SD 200) features a number of great blues songs, but "You Got Me Hummin'" just really gets me goin'. Lead singer Lydia Pense could stand up to the fabled Joplin anytime, anyplace. Again, the trumpets and saxes sounded just as tight as could be, and this cut offered proof that bass in equals bass out. The bass line, as reproduced on the Radiance 3s, was worthy of "the greatest bass player of all time," Motown's James Jamerson. Once again, I had to get up and dance my geeky dance.

## Comparison

Right out of the gate, my NEAR 50 ME IIs have more deep bass -- but with an 8" woofer in a reflex cabinet 48" high, they should. I've heard reasonable amounts of solid-sounding bass out of them down to 30Hz. The Radiance 3s were absolutely solid down to 40Hz, with a slow rolloff beyond that; they put out some response as low as 31.5Hz, but at a couple dB less than the NEARs. The real difference was in the mids and highs, where the NEARs sounded absolutely honky compared to the AEs. Mids through the AEs sounded simply neutral; through the NEARs, they sounded forced. Highs with the NEARs were fair, but not NEARly so detailed and realistic as with the Radiance 3s. In defense of the NEARs, the room they're now in is the smallest I've ever asked them to deal with, and I think that's a problem for them. But in the same room, the AE Radiance 3s shone.

## Conclusion

As you've probably gathered, I really enjoyed having the Acoustic Energy Radiance 3s in my system. Their sound was as crisp and detailed as I might want, but never shrill or overpowering. When bass was called for, they stepped up and produced. And they look attractive -- my wife likes them better than anything else I've had in my listening room.

I suspect that, without a subwoofer, the Radiance 3s would not be great in a huge room. And if your electronics tend to a dry, crisp sound, the AEs aren't for you. Nor, at \$3000/pair, are they cheap (although I've heard speakers at that price or more that I don't find as good). But if you have a moderate space to fill with sound and your system leans toward the mellow, I can't think of a set of speakers that could be more satisfactory.

Throughout the review period for this product, I mentally wrote the following letter:

Dear Acoustic Energy,

As you know, I'm reviewing your Radiance 3 floorstanding speaker. While I know there's a standard reviewing period, it's imperative that I keep them a bit longer -- say, four or five years. They require that I relisten to my entire collection of music at least once. Or twice. Would that be OK with you?

Best regards,

Thom

I didn't send the letter, but it pretty much sums up my reaction to the Radiance 3s. For my purposes, they're just that good.

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