Harbeth Monitor 30.1 Loudspeaker

Ravishing!

Paul Seydor

Alan Shaw's Harbeth Monitor 30.1, which has been released in time to celebrate the company's thirty-fifth anniversary as a manufacturer of high-quality loudspeakers, is the best compact two-way speaker system I have ever heard, regardless of type, cost, or complexity. By this I mean, of course, that it does a better job of doing the things that are most important to me when it comes to the reproduction of music in the home: tonal neutrality, timbral accuracy, cohesiveness, low distortion, and that elusive impression of vitality which makes recorded music come alive. The speaker is an updated version of the Monitor 30, a studio monitor intended for professional applications where high accuracy in a not large enclosure is required. I say "not large" to indicate that the speaker is not a sub-compact, being three to four times the size of mini-monitors like the fabled LS3/5a or Harbeth's own P3ES yet somewhat smaller than the standard two-cubic-feet of speakers like Spendor's SP1/2 or Harbeth's own Super HL5. The size was in fact dictated *a priori*, part of the brief to develop a drop-in replacement for the BBC's Rogers LS5/9, which became unavailable in the late nineties. As befits its monitor status, the 30.1 boasts high neutrality, superb resolution, and a matching of drivers with respect to coherence and sonic character that is equaled by only a small handful of multiple-driver dynamic loudspeakers in my experience. Speaking with a single voice in a way reminiscent of Quad ESLs, it is also of similar seriously low coloration and distortion, high transparency, and musical authority. The Monitor 30.1 is at once a never-ending joy to listen to and highly revealing, its supremely natural tonal balance neither accentuating the unpleasant qualities of bad recordings nor enhancing the pleasant qualities of good ones. This is one speaker for which the cliché rings completely true: You can listen to it without fatigue for literally hours on end.

That said, let me hasten to add that the 30.1 is not a speaker for everyone, nor is it all things to all music. In common with all other compact (and smaller) speakers, it will not, unassisted, reproduce the bottom octave at levels to match the rest of the range, it's practically flat to only about 60Hz, and its specified 3dB point is 50Hz. This means that while it actually does reproduce the 32Hz organ pedal point at the beginning of *Also Sprach Zarathustra*, it will do so only at reduced amplitude (thus power) with respect to the rest of the range. Room reinforcement will provide some additional strength, but only some, not least because optimal performance requires placement away from boundaries. Dynamically it's very robust—amazingly so when you consider the size of both the cabinet and midrange/woofer—capable of clean, unstrained levels much too loud for me to listen to comfortably for very long in my plus-2500-cubic-foot (21' x 15' x 8') room. But I wouldn't—nor, I suspect, would its designer—recommend it for very large spaces, say, baronial living rooms or the like. But this still leaves a wide spectrum of settings in which its loudness limitations are effectively nonexistent; and because the response of the drivers integrates so seamlessly and so quickly beyond the plane of the baffle, the 30.1 can be used in very small rooms where proximate seating might be unavoidable. Indeed, few speakers in my experience appear to be this satisfactorily adaptable to so wide a variety of environments.

Now that I've written an introduction that sounds like a conclusion, allow me to introduce the design and to elaborate upon its performance. The 30.1 is a front-ported two-way with a specified frequency response of 50Hz–20kHz +/-3dB in free space. Its tweeter is a 25mm soft-domed SEAS unit, while the eight-inch midrange/woofer is manufactured in house and made from Harbeth's RADIAL compound, about which more anon. Sensitivity is a low 85dB with a minimum recommended power of 25 watts, though considerably more—I alternated between a Quad 909 at 140 watts a side and a Croft-designed Carver AV705x at 225 watts a side—is advised in anything but a small room. Ideally the 30.1 should be stand-mounted away from walls, with the tweeters around ear height (the Canadian company Skylan makes a dedicated aftermarket stand, available direct or through FidelisAV, Harbeth's U.S. importer).

As a designer and manufacturer, Alan Shaw follows in the footsteps of the British Broadcasting Corporation, where in

the sixties and seventies BBC engineers conducted quite a lot of research into speaker design and performance toward developing a range of monitors capable of accurately revealing what was being broadcast. Their primary interest was in voice and music, largely classical, and their investigations involved intensive research on everything from drivers and crossovers to cone materials and enclosures, careful experimentation by both measurement and listening, and meticulous record keeping—all practices Shaw observes to this day. (I refer interested readers to my interview with Shaw in the June/July 2009 issue of TAS, where he discusses his working methods in great detail.) Inspired by Dudley Harwood, the founder of Harbeth and a pioneer in the use of polypropylene for drivers, Shaw's company developed a new synthetic compound, which he calls RADIAL (the acronym derives from "Research And Development Into Advanced Loudspeakers"), a material claimed to retain polypropylene's smoothness without its dulling effect and suppression of detail, Bextrene's consistency without its colorations, and none of the vagaries of paper. All Harbeth woofers and midrange drivers are now made from RADIAL. Apart from this—a big "apart," I should add, as when it comes to vanishingly low coloration, there really is something quite special about that material, at least to judge from all the Harbeths I've heard—neither Shaw nor his company is particularly "innovative." Instead, he draws upon a combination of tried-and-true principles that he implements with rare care, knowledge, and sophistication. He also believes—"passionately," he likes to put it—in the use of computer models to simulate loudspeaker behavior and performance. Of course, critical listening plays an indispensable role, as it did at the BBC, where, according to Shaw, "the designers were in the unique position of being able to walk between the studio and the control room and hear for themselves the differences between the live and the reproduced sound." Shaw once told me that his daughter's voice, the sound of which he obviously knows very well, constitutes some of his most reliable source material. "It's absolutely crucial that the loudspeaker can reproduce the human voice convincingly," he argues.

"For me, speech/vocal quality is the real arbiter because the human voice-box just doesn't produce the sort of colorations that speakers do. It's soft, wet, highly damped tissue and it can't produce spitty, gritty, beaky, wiry, quacky, hollow sound—all those are speaker colorations. Because of its emotional content, music is less revealing of coloration than speech and voice. If you get speech right, the rest falls pretty much into place."

It should hardly come as a surprise, then, that the glory of Harbeth speakers is a near peerless midrange. When it comes to the Monitor 30.1 there's no sense using a lesser word: it's simply ravishing in its warmth, richness, vividness, and beauty. The principal reasons are two. First is the RADIAL material itself, second is how unusually flat across the entire midrange the 30.1s are, notably free from the usual irregularities you find in most speakers. But more is needed than a merely flat midrange. Equally important is that this flatness extends down through the transition from the lower midrange to the upper bass, the two octaves or so from around 300Hz to around 100Hz. If this region has a dip, trough, or cancellation, music is robbed of body, warmth, and the ability to render timbre properly. Yet an astonishing number of speakers exhibit these infelicitous characteristics, including many that are very, very expensive, especially floorstanders and other designs that don't take account of the floorbounce (i.e., a cancellation in the frequency response owing to the first reflection off the floor). The result is an excessively lean balance that robs most instruments and all vocals of their fundamentals. Speakers like this can sound really punchy and "rhythmic" (or "pacey," to use that awful coinage so beloved of our British brethren), but with respect to accuracy and the sound of real instruments and voices, they are also wrong.

The most common complaint by my wife—no audiophile but a fervent music lover—of so many speakers she hear is, "There's no depth," by which Danielle means not imaging depth, but depth of tone in singers she is familiar with. (It's why she typically asks me to bring the Quads back out as soon as possible once I'm through evaluating other speakers.) Sinatra is one of her acid tests, a particularly good one because if the "wood" (i.e., the lower range) in his very distinctive voice is missing or reduced, then the head tone is accentuated and the nasality is subtly emphasized. But any baritone will do—hell, so will a tenor like Placido Domingo, whose voice has darkened and deepened such that he is essaying baritone roles these days, like Simon Boccanegra.

But the real kicker is that even women's voices cannot be correctly reproduced if this critical area of the frequency spectrum is deficient. The range of a true contralto voice starts at around 200Hz, that of a soprano around 250Hz. Doris Day, whose *Hooray for Hollywood* album often figures in my evaluations, has an exceptionally clear and light voice, but over too many speakers her timbre often comes out too light and it is robbed of a difficult to define but immediately audible impression of color and body. However, listen to her over a speaker flat throughout the midrange, as the 30.1 is, and you'll hear that real substance grounds all that lightness. Even more a singer like Ella Fitzgerald: On "Do Nothing till You Hear it from Me" (*The Duke Ellington Songbook, II*) she sounds some startlingly low chest tones. If a

SPECS & PRICING

Type: Two-way vented
Frequency response: 50Hz–20kHz +/-3dB free space, 1m with grille on
Impedance: 6 ohms
Sensitivity: 85dB 1W/1m, 25Wpc minimum power recommended
Power handling: 150W program
Dimensions: 11" x 19" x 10.5"
Finish: Cherry, tiger ebony, eucalyptus, maple, rosewood, gun grey, arctic white, jet black
Weight: 30 lbs. each

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speaker isn't up to reproducing these correctly, the voice just isn't right.

You don't necessarily have to agree with Shaw that getting voices right gets everything else right, but it's surely true that if voices don't sound right, not much else will either. This is because the fundamentals of most instruments fall where voices do—middle C, after all, occurs at 261Hz. Take pianos—at one point during the evaluations, a close friend and seasoned audiophile, who happens also to be one of the finest studio musicians in Los Angeles, dropped by with a new recording of piano music by Sebastian Currier, a composer I'd never heard of before [Naxos 8.559638]. The piano sound is incredibly immediate and close enough that the effect is to put the instrument in the room, which it does quite effectively, with breathtaking transparency, presence, and a really huge dynamic range. Yet there is nothing harsh or edgy about the sonics or soft or mushy either; as rendered by the 30.1s, it sound just "Right!" my buddy exclaimed (which made me laugh because exactly that adjective recurs countless times in my notes).

My wife and I recently had the good fortune to acquire a six-foot Bluthner, the smallest grand suitable for performing venues. The entire lower spectrum of this magnificent instrument is a wonder to hear (not for nothing was Bluthner Rachmaninoff's piano of choice). Even though the 30.1 falls short in the lowest octave, it is so neutral throughout midrange and upper bass that it goes some distance toward doing this sound justice. Yet I've heard speakers several times its size and multitudes its price that don't, though they will play a whole lot louder and project a bigger image.

Still, this compact speaker continually surprises me with how really big it can sound. A sufficiently powered pair in a normal-sized room will scale many solo instruments and small ensembles like trios, quartets, and vocal groups to virtually lifelike size and they come close enough with chamber ensembles suitable for baroque or classical music. And for full orchestras? Well, one of the first things I put on when the Monitor 30.1s arrived is a recording, again brought over by a good friend and experienced audiophile, of Bruckner's Ninth Symphony conducted by Guilini leading the Vienna Philharmonic [DG]. This beautiful recording—of a magnificently played performance, the strings notably sweet, the brass mellow, the winds mellifluous, with terrific dynamic range—offers a cohesive orchestral sound that allows a good bit of the hall into the mix. Now, as most of you (I hope) know, orchestral music doesn't get much bigger than Bruckner, with its augmented brass, roaring tympani, and repeated waves of extended, massive climaxes. We were slackjawed by how tremendously the 30.1s reproduced this recording.

Then, out of curiosity, I pulled Bernstein's with the same orchestra in the same venue on the same label off the shelf. Wow. You'd swear you were hearing wholly different pieces of music. Bernstein's is more closely miked, but what is really stunning is difference in interpretive vision: Guilini's, Bruno Walter's, all old-world melancholy alternating with old-world grandeur, Bernstein's hardly less lyrical, but with an urgent intensity and a high, tragic drama, the dynamic window of the interpretation considerably wider, more powerful, and almost frightening in the impact of the big moments, qualities the speakers readily revealed in the playing itself. Listen to the sustained climax near the end of the first movement, the way the trumpet soars above the full orchestra and then gives way to the horns. Or take the scherzo—by far Bruckner's greatest, in my opinion—here feral, ferocious, and terrifying, the passages of massed brass against tympani impressive in their weight, menace, and sheer piledriving force that you can feel in your stomach. I must single out the reproduction of the trombones, which really do in their depth and "blattiness" sound like real trombones. Or go to the last movement and listen through the first big climax to the quiet passage that follows it and note how truthful the dynamic contrasts from very soft to very loud are rendered with finesse and precision. Once my friend and I had recovered from the comparison we had to keep reminding ourselves, one, that this almost shockingly powerful performance was recorded in concert scant months before Bernstein's death when he was already very sick from the illness that would kill him, and, two, that a pair of speakers 19" x 11" x 10.5" could handle such demanding material at such levels without evident strain.

I do not want to overstate this. When it comes to big orchestral and choral music, the 30.1s do not bring ensembles into your room and they do not project them to life size (or more than life size, if that happens to be your bag). What they do is provide an uncommonly transparent window onto the concert hall. Within the terms of that metaphor, very few loudspeakers of any size or price in my experience are able to reproduce so convincing a simulacrum of an orchestra, albeit at reduced size and amplitude, and even fewer with as much faithfulness to the sound of real voices and instruments. It is in this context that the deep-bass limitations I noted at the outset should be viewed. The Monitor 30.1 is a very honest speaker inasmuch as Shaw has resorted to no trickery with respect to crossover manipulation in order to tease out more bass than it can produce. The driver responds as low as is consistent with its specifications, the port, and the enclosure size, and thereafter rolls off smoothly. If the 30.1 has a naturally warm and full sound, which it does, and if it never, ever sounds thin or anemic, which it doesn't, this is because it remains flat in the warmth region. And that, finally, is all that's really necessary to do a satisfactory job on much orchestral music.

To be sure, bigger speakers with a bigger woofers, like Harbeth's own monitor 40.1, will reap considerable rewards when it comes to bass drums, pipe organs, tubas, and so forth, and their large baffles will project greater weight and force from the likes of string basses and tympani, qualities that will be especially welcome in larger rooms. That kind of projection these Harbeths will not manage nor will they provide anything like the sense of real bottom-end weight and deep, deep foundation. But I've never heard any compact speaker that can or does do these things. If you demand them—and they certainly constitute a reasonable demand—you should pass over the 30.1 for something larger or more extended or else investigate a subwoofer. (One good candidate would be RELs, as they seem to match up especially well with speakers in the BBC mode; I would also take a good listen to those from HSU Research.)

If I've been concentrating on a specific area of reproduction in this review, it is because it's an issue I've been wanting to address for some time now, and the 30.1, so outstanding in the midrange, has provided an occasion to do so. But the speaker is similarly outstanding throughout the rest of its range. The original 30

exhibited a mild trough in the presence region, which has been so substantially reduced in the new version that you really have to listen for it and even then it's evident only rarely. The sound in the topmost octave is smooth and natural with only a very slight bit of extra "texture," for want of a better word, on exhibit in the 8–10kHz region. The only reason this "texture" is occasionally perceivable at all is that the slight residue of remaining presence "politeness" subtly accents the return to flat around 8–10k. But it is so benign that most of the time on most music it is not noticeable at all, and there is absolutely no edginess, snap, crackle, pop, tizz, or sizz, instead an entirely natural presentation of the way percussion instruments, cymbals, hi-hats, bells, etc. really do sound when you hear them live. One cut I often use is Christy Baron's "Mercy Street" cover from her *Steppin'* [Chesky, SACD] because it features, along with several other high-pitched percussion instruments (like bells), a rain stick. I happen to have a collection of rain sticks, and while none sounds quite like any other, this one as reproduced by the 30.1s sounds recognizably plausible. And these speakers do ambience superlatively (as does every Harbeth I've heard). As I am writing this I am listening to a program of Christmas carols sung by the Huddersfield Choral Society (it's the Christmas season), a large chorus accompanied by an orchestra and organ in a big hall. The presentation is uncannily realistic, with the chorus and orchestra occupying the entire soundstage from side to side, the chorus extending behind the orchestra, the vastness of the space convincingly reproduced.

As for resolution, perhaps the most revealing test I know is the *a cappella* introduction to title track track on Jacintha's *Autumn Leaves* [Groove Note SACD]. I attended these sessions, where the lid on the piano was closed and damped with blankets and the singer, wearing headphones so she could hear the pianist playing notes to help her stay in tune, was placed in an isolation booth. Despite these heroic efforts, tiny amounts of the piano still bled through her headphones and made their way onto her vocal tracks. All of these are extremely low in level, a few, including one near the beginning, close to inaudbility. Yet the 30.1s revealed every single one without requiring earsplitting levels to do so. Better resolution than this you can rarely get.

Hardly inexpensive at $6000 a pair, the Monitor 30.1 is so beautifully voiced, balanced, and natural sounding as to make it one of the most completely satisfying speaker systems I've ever used. To give you some idea of just how much I like it, most of the time when I review or otherwise evaluate speakers I can't wait to get them out of the house and return to my Quad 2805s or 57s. The occasion of this review is the first time in I can't remember when that I'm perfectly happy to keep listening to the speakers under evaluation. I don't know how much longer the 30.1s will be allowed to remain here now that I've finished, but I fully intend to keep them up and running until the deliveryman knocks at the door. And he can bloody well wait while I box them up! **tas**