

Loudspeaker Focus



Davone Audio Reference One Loudspeaker

Contender

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I can tell you exactly when my admiration for Davone Audio's Reference One loudspeaker turned to love. It was a Friday spring evening and my beloved Phillies had just lost a game in extra innings, one that they should have won, and I was stewing about it. Adding insult to injury, this catastrophe unfolded two time zones to the west—it was 11:30 p.m. in Philadelphia, and I was agitated. How could I expect to get to sleep in this frame of mind?

Perhaps some music would help. For several weeks, I'd been listening to the Danish manufacturer Davone's flagship product

daily and had developed an impression of the speaker as a capable, well-balanced transducer. I put on Glenn Gould's 1959 recording of J.S. Bach's Partita No. 1 in B-flat major, BWV 825, and by the time I was halfway through the opening Praeludium, my mood had improved considerably. I'd found comfort

thanks to Bach, Gould, Columbia Records, and, in no small way, the Davone R1s. Here was a loudspeaker that delivered the musical goods and got out of the way. Six movements later, I headed upstairs, brushed my teeth, and slept like a baby.

If the Davone brand rings a bell for you, let's make sure it's the *right* bell. There's a well-regarded speaker company located in Brooklyn, Devore Fidelity, that names its products after subhuman primates. They sound fine but, from a visual standpoint, you'd never mistake their utilitarian appearance for that of anything Davone has produced over its 17-year existence under the direction of founder and engineer/designer Paul Schenkel. Davone's look is decidedly Danish, with an emphasis on organic shapes and materials and meticulous craftsmanship. The Rhythm, Schenkel's very first product for Davone, attracted attention from outside the audio world for its uncanny (and unintentional) resemblance to the uniform insignia from a certain iconic 1960s television show. Subsequent models evoked flowers, flames, and small whimsical creatures, their soft curves fashioned from bent wood. Most Davone loudspeakers have been modest in size and *svelte* in proportions; even the more substantial Grande, Davone's previous top-of-the-line model, featured design elements that brought to mind fine furniture. The Reference One is better described as *zagtig*. Form follows function.

Davone Audio's Reference One is an unapologetically large loudspeaker, standing 38.2" tall and weighing in at

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Davone's first speaker, the Rithm.

about 93 pounds. The cabinet is constructed from 25mm-thick, form-pressed wood, internally braced with sturdy plywood elements. The R1 is a bass-reflex design; unusually, the port is located on the speaker's top surface, covered by a cool-looking metal grille [see sidebar]. Looking down through the grille, the port channel extends much of the distance to the bottom of the speaker, where elements of the crossover are visible. Any box loudspeaker will generate internal resonances, and Schenkel has engineered into the R1 a number of "countermeasures" to address them. These include chamfering the baffle edge behind the midrange driver and employing two Helmholtz absorbers within the cabinet—one to absorb the top-to-bottom standing wave and the other to ameliorate the port resonance.

The front baffle leans slightly backward and holds the R1's three drivers. A 1" beryllium tweeter, with a first breakup mode of 40kHz, is mounted flush with the baffle which is said to result in a wider off-axis response; the rounded, diffraction-killing edges of the R1 are of importance in this regard, as well. The 4.5" midrange cone features a TeXtreme® diaphragm fashioned from a unique double carbon-fiber tape made by a Swedish company, Oxicon. This material requires the addition of considerably less resin to create a flat surface and thus is much stiffer than a traditional fiber weave. Davone says that by varying the cone's thickness and stiffness, the "metamodal membrane's" breakup modes are distributed among a number of resonance frequencies, increasing the driver's useable frequency range. The 10" woofer is a monster, sporting a large double magnet mounted in a stiff aluminum chassis—the mechanical deflection of 22mm is quite high for a 10" driver.

All but the bottom of the speaker, which presents a gorgeous quarter-cut walnut veneer to the world, is covered with Euro-

pean-sourced leather, your choice of black or white, including the front baffle rings that surround the midrange and bass drivers. In an email, Schenkel explained that "the acoustic function of leather with a relatively hard surface is negligible. It is not applied around the R1's tweeter rim because any little edge is [acoustically] noticeable. The ring around the midrange driver improves the tweeter response."

Paul Schenkel was tight-lipped regarding his crossover design. "The crossover slope and topology are not specified because I do not think that is information useful for a customer," he told me. "A crossover just needs to be exactly right for the drivers used and the cabinet, and we find these through endless listening, aided by measurements." Fair enough. I can accept that Schenkel doesn't want to reveal state secrets. He did allow that the crossover frequencies are "close to" 200 and 2kHz. Around back, near floor level, is a single pair of WBT NextGen binding posts. Carpet-piercing metal spikes, four per side, screw into threads on the R1's bottom surface.

For a month of critical listening, I employed familiar associated gear, including Tidal Ferios monoblock amplifiers and analog wires from Siltech's Legend series. Digital sources—Sony's X1100ES universal player and a Baetis Reference 3 server—provided data to a Tidal Contros DAC/preamp. I played LPs with a Vertere MG-1/SG-1 turntable/arm combination that sent its signal to a Pass Labs XP-27 phonostage and then on to the amplifiers via the analog bypass circuit of

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my Anthem AVM70 processor.

As with most loudspeakers, patience and perseverance with setup yielded significant rewards. Final positioning of the Reference Ones in my 15' x 15' listening space (a hallway off to one side obviates standing wave issues) had them 22" from the room's diffuser-enhanced front wall, 8½' apart center-to-center, and 9½' from the sweet spot. What mattered more than usual was the degree of toe-in, perhaps a consequence of the R1's broad treble dispersion. Adjustments of a half-inch or less had a meaningful impact on the potentially at-odds metrics of soundstage width and image focus. This may be a good thing, as it offers the possibility of responding to the inevitable sonic idiosyncrasies of most real world rooms. Once you've found the ideal orientation, you won't want to lose it. (A comment on the R1's spiking system is warranted. To accept their spikes, Davone supplies dimpled metal discs that have felt glued to the bottom surface. This protects against any damage to wood floors, but it's surprisingly easy to dislodge the speakers from their intended position if you bump into them even gently, undoing all that meticulous work you did to get the toe-

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in just so. Do yourself a favor: Invest \$30 in a couple of sets of after-market (felt-free) disks that will stay put.)

In terms of tonal balance, the Reference One can be characterized as having a very slight and appealing warmth. Imagine a component with a rotary dial that allows the listener to adjust the tonality of any loudspeaker on a 101-point scale, where zero is molasses-like tube sound and 100 the ear-scorching sizzle of early transistor gear. (Hopefully, neither extreme exists in actual commercial products, but you never know.) A setting of 50 would be perfectly neutral. With the R1, this imaginary dial is set at around 45, which is welcome for many recordings, early digital in particular. Understand that this doesn't represent a "coloration"—the nature of the recording remains intact. In fact, the Davone speakers do an excellent job of replicating the "house sound" of various record labels of yore. From the bracing immediacy of 1950s and 60s Mercurys to the billowing spaciousness of Telarc's work in Atlanta and Cincinnati to the dry-as-a-bone acoustic of the Leinsdorf/LA Phil studio recordings produced by Sheffield Lab during their heyday, the Reference Ones do not editorialize.

The beryllium tweeter takes the highs well out past the upper limits of anyone's hearing—anyone that doesn't require a leash to take a walk in the park, at least—and there's an ease and airiness to the Reference One's top end that wears very well. Harmonics, as produced by a bowed orchestral instrument or a guitar (wind instruments and the human voice can produce the effect, as well), are an excellent test of a loudspeaker's treble performance. Reproducing those notes requires not just treble extension but also the capacity to render high-frequency texture. For much of Alexander Borodin's eight-minute tone poem *In the Steppes of Central Asia*, several stands of first violins play a sustained E7 harmonic (a frequency of approximately 2637Hz) to help represent, musically, the vast emptiness of that part of the world. Through the R1s, the sound has the thin, fragile quality that the composer certainly had in mind for this highly programmatic music. Likewise, when Nils Lofgren, beginning at 3:20 into his live version of "Keith Don't Go"—overplayed at audio shows, but nonethe-



less an astonishing virtuosic display—pops out flawless harmonics on his electrified Takamine guitar in the midst of a flurry of "natural" notes, the bell-like tones emerge from the Reference One as impressively as they most certainly registered in 1997 for the appreciative audience at Wolftrap.

There's plenty of good quality bass, certainly for the great preponderance of recordings, including large-scale orchestral fare and those stripes of popular music for which low-end foundation is provided by acoustic or electric bass. Walking acoustic bass lines with well-recorded jazz are even in timbre and volume. Do you need to employ a subwoofer with the R1s, which sport a -3dB LF response specifi-

cation of 29Hz? No, but depending on your musical proclivities, you might *want* one. With the R1 alone, the bass on the title track from Jennifer Warnes' *The Hunter* is clearly produced by a synthesizer but it doesn't approach the center-of-the-earth solidity achieved when I turned on my Magico S-Sub. The most over-the-top late Romantic and twentieth-century French organ music by the likes of Franck, Messiaen, or Duruflé sounded more apocalyptic and Dr. Dre ("Keep Their Heads Ringing") more ominous with the sub engaged. Arguably, subwoofers are most effectively utilized not with small, bass-shy satellites but rather with full-range speakers that have high-quality bass of their own but can still benefit from ad-

Specs & Pricing

Type: 3-way bass reflex
Driver complement: 1" beryllium tweeter, 4.5" TeXtreme® midrange, 10" hard paper cone woofer
Frequency response: 29Hz–30kHz –3dB
Impedance: Nominal 4 ohms (3.4 ohms minimum at 26Hz; above 4 ohms from 37Hz)

Sensitivity: 87dB/2.83V/m
Dimensions: 18.5" x 38.2" x 14.6"
Weight: 93 lbs.
Price: \$21,000/pr.

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ditional support for the lowest octave of the audible frequency range and below. The Davone Reference One is certainly such a loudspeaker and if you have a quality subwoofer, don't hesitate to press that rocker switch when the music beckons.

Spatially, the R1s have a slight but consistent tendency to favor blend over detail. When jazz pianist Wayne Horvitz's right-hand melody is doubled by the guitarist in his quartet at both the be-

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ginning ("head-in") and end (head-out") of "LTMBBQ" from the album *Sweeter than the Day*, that doubling is less apparent than with my usual Magico M2s—as is the ability to identify the individual singers who comprise the small chorus Stile Antico on "Never weather-beaten sail" from their 2012 album *Tune thy Musicke to thy Hart*. Neither sonic perspective is right or wrong—it's a matter of personal preference, just as where you choose to sit in a club, church, or auditorium is at a live performance. With orchestral recordings, there's less in the way of "pin-point imaging" but more evidence of ambience and room character. Dynamics were engaging without becoming aggressive.

As my time with the Davone loudspeakers wound down, I had that kind of calibration that every audiophile needs to have periodically: I went to a concert. For my wife and me, it was the season's last subscription performance of the Philadelphia Orchestra—yes, my hometown has both a world-class orchestra and, this year at least, a contending major league baseball team—and music director Yannick Nézet-Séguin ended the program with a thrilling performance of Debussy's *La Mer*. Nézet-Séguin extracted a kaleidoscopic range of color and dynamic nuance from a symphonic ensemble that was having an especially good night, and from our Row L seats the sound was intoxicatingly rich and enveloping. No stereo system on earth can duplicate this but, on the ride home, it struck me that the sort of mood elevation I'd just experienced was not so different from what I'd felt a week previously after my late-night encounter with Glenn Gould's Bach through the Reference Ones. Davone's flagship has no consequential sonic weaknesses; it's stunning in appearance, and, at \$21,000 per pair, represents an exceptional value. If you're in the market for new speakers and this price is within your budget, take note. The R1's aren't "perfect," but neither will the Phillies win all 162 of their games this year. Both the ballclub and the loudspeaker are definitely contenders. **tas**