

## 66... uncompromised performance ...

## fully cinematic levels

# ... GOOSE-BUMPINGLY BELIEVABLE."

Reprinted with permission from



www.soundandvisionmag.com

"... highly accurate ... ideally balanced ... impressive depth and transparency ... a well-knit, continuous, three-dimensional sound field ... reached fully cinematic levels and more with ease and, in doing so, remained clean and smooth."



by Daniel Kumin

ongtime devotees of S&V test reports may be getting tired of reading about Canadian speakers, especially when the review begins with a variation on this theme: "Here's another superb design from the Great White North ..." (never mind that Toronto's climate is a good deal milder than Boston's) "... a design that is accurate, balanced, detailed, and thoroughly well conceived." Sorry, but I don't make the news; I merely report it. And it's a fact that, as a body, Canada's esteemed manufacturers regularly advance the art of the loudspeaker, with each new generation achieving worthwhile gains in quality.

Perfect example: the latest generation Signature Series in Paradigm's high-end Reference line. The Toronto-area company's Signature family has been around for a few years now. Among the upgrades in the latest iteration are extensively refined beryllium-dome tweeters and cobalt-treated aluminum midwoofers, along with volume-maximizing cast-aluminum cabinets. The series also adds three new downsized models—all of which Paradigm provided us, together with its flagship Signature Servo subwoofer.

The speakers that Paradigm sent me arrived in a sexy veneer of bird's-eye maple, excellently finished and glass-smooth (cherry and black are offered, too).

For the corner speakers, Paradigm also sent its new GS-30 stands—single-pedestal, glass-bottomed pillars that match the

main bookshelf monitors quite nicely.

### **SETUP**

Unpacking the Signatures revealed a quintet of jewellike small speakers dwarfed by a hulking great beast of a subwoofer (though Paradigm also offers its more modest Seismic and UltraCube options). The S1 bookshelves, C1 center, and ADP1 surrounds are remarkably compact conventionally laid out but with little wasted baffle area. They all incorporate strongly curved bottoms and tops (and sides, save for the surrounds) that make stand-mounting via their rear-panel threaded inserts the preferred setup. Stick-on feet make the S1 and C1 more sittable—which is fortunate, since finding a short stand adaptable to the C1's bolt-up fittings may prove a challenge.

The Signature Servo subwoofer runs 75% of the cost of all the other speakers combined and looms over this array with fridge-like bulk. Its 15-inch driver fires forward, while its massive Class D power amp (Paradigm claims 4,500 watts peak) is governed by a servo-control system that monitors and corrects the cone motion to match the signal. The sub offers up



only a single-channel line-level input, in both conventional RCA-jack and balanced (XLR) forms, but has no defeat or bypass for its crossover. Consequently, after placing the sub in my usual front-wall location, I left this wide open and let my preamp processor do the crossover work.

The satellites, meanwhile, went on stands in front and on high side-wall shelves at the surround positions. After some tinkering, the S1's ended up 10 feet apart, about 3 feet from the front wall and roughly 9 feet from the prime listening position.

"... every whisper and 'sotto voce' line reproduced clearly ... good extension and smooth, controlled bottom octaves ..."

#### **MUSIC & MOVIE PERFORMANCE**

Taken on their own, with no subwoofer support, the S1's are very capable small speakers, able to deliver musical, listenable, reasonably satisfying bass on stereo playback down to perhaps 60 Hz. Because they do so with a bit less of the usual pre-rolloff response hump (around 80 Hz) that so many small two-way speakers exhibit, their response seemed just a shade "leaner" than what you may be accustomed to hearing from this type. But I mean this as a positive, because eschewing such midbass-response enhancement promotes clarity and definition on bass instruments and, I believe, contributes to smooth, balanced sub/satellite integration as well.

"Servo sub wasn't the least bit shy ... among the best I've seen ... hugely capable ... an impressive job ... seamless stitching-together of sub and satellites."

The S1's were also highly accurate above this range, and nearly entirely uncolored. While their vocal-range reproduction might lean just barely to the "cooler" or more "tight" side of the spectrum (and I do mean barely), it's ideally balanced, with nary a shade of manifest coloration or format changing emphasis on voices high or low.

On 2-channel playback, the S1's delivered impressive depth and transparency. I found it easy to hear "through" the speakers into the details of hall space or studio reverberation, and thus easy to distinguish between natural and digitally applied reverb.

Pretty much the same held true for multichannel music. The ADP1, which is no bigger than an S1 turned sideways, is an update of Paradigm's longstanding surround-speaker design, and it's one of the best compact dipoles available. Messiaen's massive Turanigalîla Symphony isn't going to show up between Mozart's Eine kleine Nachtmusik and Beethoven's Pathètique Sonata on too many Easy Listening classical playlists, but it's a "modern" masterpiece nonetheless. The performance by Riccardo Chailly and the Royal Concertgebouw Orchestra on a Decca SACD vividly conveys this train-wreck meeting of the 19th and 20th centuries, with far more palpable surround than on most other classical productions. Via the Paradigm suite, everything remained goosebumpingly believable: the wrap-around effect of the huge orchestra, the pitchedpercussion ensemble, the piano (this is as much piano concerto as "symphony"), and the hovering ondes martenot (an early electronic instrument, the classic wailing oscillator of 1930's horror movies). And even the most brass-intensive climaxes remained pure-sounding and clear at a fully concert hall level. Great stuff.

In an abrupt switch of gears, I slipped the DVD of *The Good Shepherd* into my player. This is the inverse of a sonic spectacular, but the Signature speakers worked every bit as well in communicating the vacuum-like world and auditory landscape of Edward Wilson (Matt Damon), with every whisper and "sotto voce" line reproduced clearly. In the rare instances when Wilson leaves his office to experience a tiny bit of the real world outside—as in the ringing-bells scene in a Congo city square—the Paradigms' ease in creating a well-knit, continuous, three-dimensional sound field was all the more dramatic.

But to stage a genuine home-theater workout, I turned to the bang-up sound track of *The Incredibles*, which proved to be meat-and-potatoes for the Paradigms. With my 150-watt 5-channel amp, they reached fully cinematic levels and more with ease and, in doing so, remained clean and smooth. And when the deepest bass was present,

the Servo sub wasn't the least bit shy about exciting room-rattles I didn't know I still had.

"... nary a shade of manifest coloration or format changing emphasis on voices high or low ... very capable small speakers ... I found it easy to hear 'through' the speakers into the details of hall space or studio reverberation."

The C1 center was generally a very good match for the S1's on voices, and I never once heard discontinuity in left-center right pans or full-frontal soundscapes. In direct comparisons, some male voices sounded very slightly crisper and more revealing when reproduced by the S1's monaurally, but the center proved excellently even-handed, with very little tonal shift when heard off-axis.

"The C1 was generally a very good match for the S1's ...
I never once heard discontinuity in left-center right pans or full-frontal soundscapes ... excellently even-handed ..."

As befits its size, the Signature Servo subwoofer proved hugely capable. It played at least as loud and clean as my long-term sub (a high-dollar 12-incher) and possibly even a Hz or two deeper. It also did an impressive job of integrating with the S1's on exposed stereo material like jazz upright bass and piano, yielding a seamless stitching-together of sub and satellites. And it did so without any of the looseness I sometimes detect when combining a big sub and smaller







sats—even with the higher crossover frequency I settled on (90 Hz) to bring out the best from the S1's in my room. Some of the credit is very likely due to the S1's good extension and smooth, controlled bottom octaves — which allow the actual crossover action to be just as engineered, rather than rolling off more quickly or peakily. But any way you slice it, this is a lot of subwoofer.

"... everything remained goosebumpingly believable: the wraparound effect of the huge orchestra — the pitched-percussion — the piano — even the most brass intensive climaxes remained pure-sounding and clear at a fully concert-hall level."

#### **Snapshot**

Compact and attractive satellites mated with a powerful, high-performance sub prove an excellent combination.

#### Plus

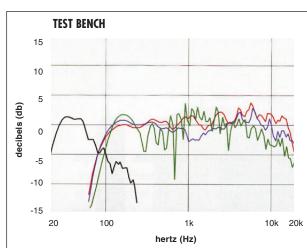
- Very fine, accurate, well-integrated sound
- Handsome, compact, nicely finished
- Powerful, truly extended subwoofer

#### Minus

• Sub may be too big for some rooms

#### **BOTTOM LINE**

Pairing so large a sub with such compact speakers may seem odd, but it makes perfect sense if you require small speakers and uncompromised performance. Paradigm's Reference Signature proves it can be done highly effectively, and with real style.



L/R: 90 Hz to 18.1 kHz  $\pm$ 3.4 dB Center: 90 Hz to 19.6 kHz  $\pm$ 3.1 dB Surround: 104 Hz to 9 kHz  $\pm$ 5.0 dB Subwoofer: 24 Hz to 75 Hz  $\pm$ 2.2 dB

Full lab results at: soundandvisionmag.com/paradigmsig

Measurements (without grilles) revealed essentially smooth bass-to-treble balance for the S1, while the C1 showed a 3-dB depression from 900 Hz to 2.1 kHz and some small peaks above that. Placing the grille on either speaker effected a steep but narrow 10-dB notch at 12 kHz and a 7-dB peak at 9.3 kHz; neither is likely to be detectable. The sub is among the best I've seen. It will deliver 109 dB at every frequency above 25 Hz and 20 Hz with less than 10% distortion.

- Tom Nousaine