

“... **SPECTACULAR** ...

... exceeded my expectations for speakers
at anywhere near the price.”

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... exquisitely detailed ...
amazingly coherent ...
excellent sense of depth
and layering ... unlimited
dynamics ... realism was
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taken to the next level
and beyond.”*



by Roger Kanno

The new Reference Signature line is Paradigm Electronics' attempt to go beyond anything they've produced in the past: to deliver the ultimate in performance while retaining their long-held reputation for providing excellent value for money. And for "statement" products, the Reference Signatures are offered at surprisingly affordable prices.

For this review, Paradigm provided their top-of-the-line S8 floorstanding speaker for the left and right mains; the larger of their two center-channel models, the C5; the ADP surround speaker; and the Signature Servo subwoofer.

THEY'VE GOT THE LOOK

The Reference Signatures look a lot like Paradigm's Reference Studio line, but any similarities are superficial. According to Paradigm, other than the external appearance of the bass and midrange drivers, the tweeters' die-cast waveguides, and the complement and layout of the drive-units,

just about every aspect of the design and construction of the Signatures is a total revamping of the Studios.

Some of the highlights include: Gold-Anodized Pure-Aluminum (G-PAL) dome tweeters; Aperiodic Resonance Breakup Fins on the interior back wall of the tweeter chambers, to break up internal resonances (the midrange chambers are similarly designed); extensive use of heatsinks to increase power handling and reliability; extremely powerful neodymium and ceramic-ferrite magnets; and G-PAL phase plugs in the midrange drivers. Paradigm claims that their crossovers use high-quality components with silver-plated, oxygen-free copper wiring. It all adds up to speakers that rely on



not just a few key technologies or innovations, but in which every facet of the design has been carefully engineered and tested.

Each 4-foot-tall, floorstanding Reference Signature S8 weighs 100 pounds. Its 1" G-PAL tweeter is at the very top of the front baffle; below it is a 7" Mica-Loaded-Polymer (MLP) midrange cone, and below that, in a vertical row, are four 7" mineral-filled polypropylene bass cones, close enough to each other that the edges of their chassis touch. The front port is directly below the bottom bass driver; the rear port is slightly higher, above the recessed panel that contains the four large binding posts. The S8's front baffle is only 8-1/2" wide, and its rear panel is even narrower because the sides of the 20-1/2"-deep cabinet curve gently inward.

"... incredibly clear and detailed ... piano — was rich and solid ... voice had a smokey, sultry quality while remaining finely detailed and sounding totally natural ... image was also tight and precise ..."

The Reference Signature C5 is one of the most substantial center-channel speakers I have ever encountered. Weighing 81 pounds, it's wider (37-1/2") than most direct-view CRTs, and is quite deep as well (17-1/2"). It has a complex driver array: the same 1" G-PAL tweeter used in all Signature speakers is vertically aligned above the smaller 4" MLP midrange driver used in the ADP. To either side of these is a 7" MLP midrange driver, these flanked in turn by a pair of 7" mineral-filled polypropylene bass cones, for a total of six drive-units. The C5 has two rear ports and the same high-quality binding posts for biamping or biwiring as the other Reference Signatures.



Signature C5

The Reference Signature ADP surround speaker has two 1" G-PAL tweeters, two 4" MLP midrange drivers mounted on opposite sides of its sealed cabinet, and an 8" mineral-filled polypropylene cone on the speaker's inner side, pointed toward the listener. Four large gold-plated binding posts are provided for biwiring or biamping. Like their other Adaptive Dipole surround speakers, the Signature ADP is designed to act as a dipole at higher frequencies and (to reinforce the bass) as a bipole at lower frequencies.

"Each voice was exquisitely detailed, pristinely reproduced in each channel ... ADP surrounds and C5 center were on a par with the spectacular S8s ... gave the wonderfully recorded vocals a spine-tingling quality ... seamless 360-degree soundstage ... moved effortlessly from front to rear without ever changing timbre."

The servo-controlled Reference Signature Servo subwoofer has a sealed, relatively compact enclosure that curves slightly inward from front to back. The 107-pound sub is remarkably solid. Its high-excursion, 15" cone looks like a larger version of the drivers used in Paradigm's Seismic subs, and is driven by a 1200W Ultra-Class-D amplifier. The connections consist of single mono unbalanced (RCA) and balanced (XLR) inputs and a DC trigger. Adjustments include a level control, continuously variable phase from 0 to 180 degrees, a high-pass filter adjustable from 35 Hz to 150 Hz, and a Bass Contour, which boosts the bass centered at 60 Hz and is adjustable from 0 to 6 dB.

All Signature Reference models have removable grilles and are available in high-gloss finishes of wood veneer (at added cost), or the less glossy standard finish of cherry veneer. These speakers appear to be extremely well designed, while providing outstanding build quality, gorgeous looks, and high-quality

finishes that wouldn't be out of place on speakers costing several times as much.

SETUP

Setting up the Reference Signature system was relatively easy; it required little adjustment to achieve optimal performance. Although the S8s are quite large, they didn't seem oversensitive to room placement, so long as I gave them enough space. I placed them a couple of feet from the rear and side walls and toed them in slightly. Due to its large size, the C5 center-channel was placed on an 18"-high Premier J-18C stand provided by Paradigm. The ADPs ended up on 4' stands in the usual positions for surrounds in my room: to the sides and slightly behind the listening position. And to achieve the best bass integration, I put the Servo along a side wall, a little farther forward of where I usually place subs.

"Signaturo Servo — took control of my listening room with absolute authority ... never ceased to amaze me with its low-frequency extension, lack of distortion and sheer quantity of output ... complex bass rhythms — were reproduced with incredible pitch definition and clarity, even at ridiculously high levels ..."

REFERENCE SIGNATURE SOUND

The sound of the Paradigm Reference Signature speaker system was spectacular. Not only were there few if any shortcomings, but in many areas of performance it exceeded my expectations for speakers at anywhere near the price.

Take, for instance, the DTS soundtrack of *Saving Private Ryan*. The Signatures' clear and open sound and seemingly unlimited dynamics gave me a renewed sense of admiration for this often punishing but finely crafted soundtrack. The sounds of machine guns and ejected shell casings in the early scenes on the Normandy beach were so cleanly reproduced that the sense of realism was startling. There was an excellent sense

of depth and layering in all directions; far-off voices were easily discernible in all channels even as explosions repeatedly shook the room. In the final battle scene, as the Germans close in on Captain Miller and his men, the bass from the rumbling tanks totally engulfed the room while remaining tight and responsive, never boomy or excessive.

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The integration of the Signature system was amazingly coherent reproducing my reference disc for multichannel music, the DTS CD of *Boyz II Men's II* [Motown/DTS 71021-51001-2-8]. Each voice was exquisitely detailed, pristinely reproduced in each channel. In fact, the ADP surrounds and C5 center were on a par with the spectacular S8s. The system gave the wonderfully recorded vocals a spine-tingling quality no matter what channel they emanated from. A perfect example of the seamless 360-degree soundstage was the shaker on "I'll Make Love to You," which moved effortlessly from front to rear without ever changing timbre.



Signature ADP

Although I've described the Signature system as sounding incredibly clear and detailed,

it did not sound lean or bright in any way. The piano on the SACD of Diana Krall's *The Girl in the Other Room* [Verve B0002293-36] was rich and solid, and her voice had a smoky, sultry quality while remaining finely detailed and sounding totally natural. Christian McBride's bass in "Temptation" was deep, the body of the instrument resonating warmly, but its image was also tight and precise, slightly back in the soundstage.

"... extremely neutral in the best possible sense ... transparent yet musical ... power handling and dynamics to easily reproduce even the most extreme movie soundtrack ... could play incredibly loud without strain ..."

The Signature system was extremely neutral in the best possible sense of the word, with a transparent yet musical sound, as well as the power handling and dynamics to easily reproduce even the most extreme movie soundtrack. And while the Signatures could play incredibly loud without strain, they didn't seem to be a particularly difficult load—my amplifier played them as loudly as I could stand.

"... with the Signature Servo it was difficult to discern any fault with the bass, which sounded louder, deeper, more articulate, and devoid of any noticeable distortion ... limitless capabilities and absolute control."

Also contributing to the system's tremendous sense of power was the Signature Servo subwoofer, which took control of my listening room with absolute authority. Even though it's relatively small, the Servo never ceased to amaze me with its low-frequency extension, lack of distortion, and sheer quantity of output. The complex bass rhythms of the DVD-Audio disc of the *Blue Man*

Group's Audio [Virgin 4 77893 9] were reproduced with incredible pitch definition and clarity, even at ridiculously high levels—and the "Heartbeat" test tracks from *Dr. Chesky's 5.1 Surround Show* [Chesky CHDVD272], also on DVD-A, were downright scary. The 50 Hz tone was incredibly loud yet controlled, while the 20 Hz tone was just as "loud" but extremely visceral, more felt than heard. The almost complete lack of audible distortion was remarkable.

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A UNIQUE SIGNATURE

I recently had a Paradigm Reference Studio home-theater speaker system in my listening room, and although it sounded quite good, it was easily outperformed by the Reference Signature array—hardly surprising, considering the difference in price. The Signatures had all of the same characteristics as the Studios—amazing timbral accuracy, wide dynamics, smooth frequency response, etc.—but everything was taken to the next level and beyond.

"... sounds that accompany the holographic images — seemed to track the images exactly as they moved across my monitor's screen."

For instance, the bass from the Seismic 12 subwoofer that I'd used with the Studio system was astoundingly deep and powerful, but had a slight overhang and a touch of boominess that are not unusual for a sub of even this high a caliber. However, with the Signature Servo, it was difficult to discern any fault with the bass, which seemed louder, deeper, more articulate, and devoid of any noticeable distortion. The Signature Servo was even better than my massive reference subwoofer, which, like the Seismic 12, couldn't match the Servo's seemingly limitless capabilities and absolute control.

Two systems I've recently reviewed presented images very well, but neither could match the Signatures in this regard. With the Signature system, the sounds that accompany the holographic video images that Tom Cruise manipulates in chapter 7 of *Minority Report* seemed to track the images exactly as they moved across my monitor's screen. Only my longtime reference speakers were able to image as accurately as the Signatures—but in nearly every other area of performance, the S8s surpassed even these.

"... fidelity was second to none ... from the ADPs, the vocals — were even more involving, with a clear, sparkling quality that perfectly matched the pristine sound of the S8 and C5."

Although the Signature ADP surround lacks the user-selectable settings found on some surround speakers, the pair of them had no trouble integrating with the rest of the Signature system in my room, and their fidelity was second to none. Coming from the ADPs, the vocals on the *Boyz II Men* DTS CD were even more involving, with a clear, sparkling quality that perfectly matched the pristine sound of the S8s and C5.

"... extremely well designed ... outstanding build quality ... gorgeous looks ... high-quality finishes that wouldn't be out of place on speakers costing several times as much."



Signature Servo

"Paradigm's Reference Signature S8, C5, ADP and Servo redefine high-end multichannel sound at a reasonable price."

CONCLUSION

Paradigm's Reference Signature S8, C5, ADP, and Servo redefine high-end multichannel sound at a reasonable price. The price for the system is a lot of money no matter how you look at it, but many manufacturers will charge you that much or more for just a pair of reference stereo speakers. For that price, Paradigm provides two state-of-the-art main speakers as well as a center-channel, surrounds, and subwoofer that are equally remarkable. If you're thinking of spending this much on a multichannel speaker system, you should consider the Paradigm Signatures; if you were thinking of spending less but can stretch your budget to accommodate the Signatures, you might find that you can afford to own better speakers than you ever imagined possible.