



"... an effortless rendition to any quality music ...

THE S6 REALLY EXCELS ..

refined and sophisticated sound with loads of body ...?

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by Robert Smith

W hen a long-established loudspeaker manufacturer such as Canadian company Paradigm, comes up with a statement series of loudspeakers labeled "Reference Signature" you know that every bit of knowledge, experience and expertise that the company can muster has been endowed upon it.

Paradigm has one of the most modern and advanced loudspeaker manufacturing facilities in the world, with all its research and development, anechoic testing, plastic injection-molding, driver construction and cabinet assembly, conducted in-house under the one roof, in its high-tech facility in Mississauga, Ontario.

Quality sound reproduction has always been a high priority for Paradigm and I have always had a quiet admiration for its products with my brief exposure to the brand over the years, but now I have a chance to see what they really can come up with, reviewing one of the products from its flagship range—the Paradigm Reference Signature S6.

A four driver, 3-way floorstander, the review pair certainly looked splendid in a real Cherry wood veneer. They are also available in Natural Birdseye Maple or Piano Black finishes. The quality of the woodwork and the finish make a fine piece of furniture, with the graceful curvature of the sides giving the cabinet a slimmer form as well as technically aiding the reduction of unwanted internal and external resonances. The cabinet is internally backed with a single vertical "H" beam giving the cabinet enormous strength, with the ol' knuckle test proving that very conclusively. The cabinet is fitted with four outboard pods at its base for added stability, they can be fitted with either rubber pads or spikes depending on the floor surface, effectively "earthing" the cabinet to the floor, giving the speaker better control in the low-frequency region.

With the grilles off, the driver array looks very businesslike, giving you the impression that this loudspeaker has something to say even before you hear it. Paradigm designed and constructed all its drivers in-house and it has been making loudspeakers for 25 years, so you can be assured that the drivers used for its

Reference models come with a fair bit of technical innovation. The tweeter is a very rigid, 25-mm pure-beryllium dome unit, ferro-fluid cooled and damped, driven by strong dual super-neodymium magnet assemblies mounted on a die-cast heatsink chassis, then backed by a damping chamber



fitted with aperiodic resonance breakup fins internally and heatsink fins externally. Very impressive indeed.

The 178-mm midrange driver is another highly developed unit, built specifically for the series. It features a light, rigid, cobalt-infused purealuminum cone with a stiff Nomex suspension and butyl-rubber surround helping damp resonance effects and keeping distortion to a minimum. The lightweight 38-mm voice coil on the driver is ferro-fluid cooled and damped, to increase power handling and the entire rear of the driver is enclosed by a solid die-cast asymmetrically tapered dual-channel, resonance reducing chamber which acts as a heatsink to further increase power handling of the driver.

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Two 178-mm mineral-filled polypropylene coned drivers are utilized for bass duty—they feature 38-mm high-power, low-mass voice coils with absolutely massive ceramic magnets, almost the size of the cones themselves, rigidly mounted in a die-cast alloy heatsink chassis. Below this sits a sizable 85-mm flared port, tuning the enclosure to a lower frequency than the speakers can do on their own, augmenting the low-frequency output of the loudspeaker. All of the drivers and the port are tightly integrated on the loudspeakers baffle and are fitted with Paradigm's IMS/Shock-Mount system to isolate the drivers from the cabinet; the drivers are also magnetically shielded.

Paradigm also makes its own crossover assemblies and in this case they are third-order electro-acoustic at 1.9 kHz for the tweeter, and second-order electro-acoustic at 350 Hz for the midrange. It uses high-power air-cored and iron-cored inductors together with polypropylene capacitors on separate assemblies to minimize interaction between components and of course, the cabinet is wired with Paradigm's heavy gauge OFC spiral stranded wiring.

"... top-end of the S6 is never in your face ... detailed and sweet ... very delicate ... lovely sheen ..."

With the drivers standing proud of the baffle, Paradigm has designed the grilles to be left on, with the design of the grille frame mitigating diffraction effects that might occur from the edge of the river frames. Power handling is quoted as being 200 watts and suitable for amplifiers up to 400 watts, so loudness should not be a problem. Paradigm also quotes 50 Hz – 45 kHz on-axis frequency response, with a low frequency extension to 28 Hz, so we should be in for quite a treat with those sorts of wide bandwidth specs. The loudspeakers were already run-in, so let's see how all this technology and beauty sounds.

Music from my Cayin CDT-17A CD player was fed though the superb Xindak XA8200 preamplifier, then on to my ME1400 power amplifier using fully balanced lead configuration and the Paradigms were biwired.

"... very powerful in the bottom end ... agile and articulate ... bass lines are easily followed ... the character of the instrument showing through for the full bass spectrum ... low-frequency wallop and dynamics ... simply spectacular ... some of the best that I have heard from an enclosure this size."

The first CD I tried on the system was Handel's *Messiah*, a 1982 recording conducted by John Eliot Gardiner. It blew me away, I liked it so much I listened to the two-disc album twice, with the S6 providing all the rams and grandeur that this large scale recording has to offer. The S6 really excels with this genre of music, providing clear insight into the recording from the solo vocalist, to the massed choir, to the period instruments; you can easily play these speakers loud without them losing grip of the situation.

The Signature S6's are very powerful in the bottom end, at the same time, very agile and articulate; bass lines are easily followed and the

character of the instrument showing though for the full bass spectrum. Drums were equally powerfully reproduced—"Mars," an amazing acoustic drum improvisation track by Dean Peer on a Turtle Records sampler, showed what these loudspeakers can really do with regards to low-frequency wallop and dynamics. They are simply spectacular and this is some of the best that I have heard from an enclosure this size.

"... clear insight into the recording ... can easily play these speakers loud without them losing grip of the situation."

Midrange is another endearing feature of the S6. Vocals had a very natural presence, nicely imaged and focused behind the speaker. The loudspeakers themselves seemed to disappear completely, leaving you with just the music in a well-composed soundstage, without distractions; a good sign that the speakers are free from midrange coloration and are well matched with regard to driver sensitivity.

The top-end on the S6 is never in your face; detailed and sweet, it has a very delicate touch with a lovely sheen, but maybe, just slightly attenuated. To my ears, a few more dB of lift would subjectively balance it better with the bottom end. I found that having the Reference Signature S6 speakers pointed directly toward the listening position so the tweeter was directly on axis with my ears preferable to having the speakers firing down the room.

In conclusion, Paradigm has certainly done its homework with this Reference Signature S6 loudspeaker with superb cabinetry combined with state-of-the-art technology. All criteria for relaxed and fulfilling music enjoyment have been addressed and thoroughly deserve the Reference Signature label. They thrive on powerful and revealing first-class electronics, giving you an effortless rendition to any quality music you care to listen to: delicate, pure and powerful would be the hallmarks of this design. Paradigm also manufactures notable amplifier/processor electronics under the Anthem brands, so home theater as well as 2-channel, is a high priority for the company's direction. Partnered with the Signature Series' companion surrounds, centre and subwoofer, a truly awesome high-end home theater system could be set up that would just blow you, your friends and your neighbors away.

If you have been looking for a loudspeaker system that provides a refined and sophisticated sound with loads of body, this is the sort of speaker you're after. They communicate well with a variety of styles of music and it is a fine effort by Paradigm to produce a high-end loudspeaker that could challenge much more expensive contenders in the marketplace. I am sure they will find many followers in Australia, as they have found in Canada and the USA. Have a listen to the Paradigm Reference Signature S6. "... they communicate well with a variety of styles of music ... a fine effort by Paradigm to produce a high-end loudspeaker that could challenge much more expensive contenders ..."