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## ENTHRALLING

## LISTENING

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... these speakers share far more than their clean good looks. ... above par ... you can't go wrong here. . . . that's the beauty of it."

Neil Gader

ave you ever been to one of those restaurants where menu choices are limited and the expression "no substitutions" is emblazoned just below the list of entrees? The experience can be nearly as irksome as trying to assemble a multi-channel speaker system. But that may change after listening to what the good people at Paradigm have been cooking up. The Paradigm Monitor Series is a line-up that would make a peoplepleasing restaurateur proud and give a sauce chef fits. There are seven models alone for the left/right pair, various surround and center channel options, and a mind-numbing choice of eight subwoofers. The possible system permutations are enough to give even the doughtiest audiophile a headache. But Paradigm, working closely with its dealer network, believes that they have a recipe to please every audio palette, from the largest sonic gluttons to the lightest of eaters.

Mini Monitor

"The sonic character of this system was articulate and clean ... fine dialog articulation and vocal clarity ..."

The Mini Monitor 5.1 music and home theater system that Paradigm assembled for this article was optimized for my dedicated but rather small listening room, which is roughly 1,800 cubic feet. The system consisted of a pair of Mini Monitors for the left and right channels, the CC-350 center channel, a pair of ADP-350 dipole surround speakers and the PS-1000 powered subwoofer. A quick glance down the specification list made clear that these speakers share far more than their clean

good looks. Their internals, impedance, and crossover points are identical, a good indicator that channel-to-channel cohesiveness would be above par. The Mini Monitors are a two-way, bass-reflex design utilizing a 1-inch ferro-fluidcooled titanium dome tweeter and a 6.5-inch injection-molded co-polymer polypropylene cone mid/bass driver. The crossover point is specified at 1.8 kHz. In-room sensitivity is 89 dB. They are not shielded but, given the modest size of the single midbass driver, there should be no problem with proximity to a television monitor unless you nail them to its sides. The CC-350 is shielded, since it will normally reside directly atop a 27" or larger monitor. A keen observer will notice that the baffle is angled slightly back, probably to aid dispersion when it is placed below a monitor and nearer to the floor. That same observer will see that the CC-350 contains not only the same tweeter as the Mini Monitor but also a matching pair of its mid/bass transducers. Sensitivity is slightly higher at 90 dB. Venting for this LCR array is via rear firing ports. Imagine the Mini Monitor as Siamese twins, drivers back to back, sans port and naturally wired out of phase to reduce localization and to increase spatiality. All in an enclosure only slightly deeper than the Mini Monitor's. Crossover frequency remains the same, as does its 8 ohm impedance rating. There's an unpre-tentious single set of 5-way type binding posts provided. Bi-amp fiends and speaker-wire addicts will have to find their fix elsewhere.



# "This sub was a good choice ... It had plenty of output and even more importantly made that output seem effortless."

The low-frequency assignment was handled by the PS-1000 powered subwoofer. It's a medium sized sub with a single 10-inch polypropylene cone driver and a high-current 130-watt RMS amplifier. Paradigm has created a dualcavity cabinet or DCBS (dual-cavity bass shaping). Essentially, a bandpass enclosure where the woofer, in a smaller chamber, fires into a larger ported chamber (three ports in the PS-1000); the advantages we are told to expect are lower distortion, increased sensitivity, and often improved low-frequency extension. Among its other features are an auto sensing on/off circuit with soft clipping, both line-level and speaker-level inputs and variable phase alignment. The line level allows use of the sub's own high-pass 18-dB-per octave roll-off outputs that trim the lows at 80 dB. And there is a low pass variable cut-off between 50-150 Hz.

"... the Mini Monitors/
PS-1000 tandem reproduced much of the grandiose weight and shimmering air within the vast hall."

#### **APPETIZER IN TWO CHANNELS**

As always, I began my evaluations in "purist" mode; two-channel stereo using either the High End integrated amplifier from Australia, the Plinius 8150, or two-fifths of the intimidating Rotel RMB-1095 THX Ultra five-channel amp coupled to the Placette Audio remote volume control. The front-end duties were handled by the Myryad MC100 CD player coupled to the Musical Design

HDCD digital to audio converter. I listened to LPs on a Sota/SME rig. Cabling was by Kimber, Wireworld, and Nordost.

The sonic character of this system was articulate and clean from the upper bass on up. Just a little dry and then warmer and less defined as it descended into the midbass regions. There is usable response into the mid-50 cycle range, but it is already rolling off. The mids were lightly recessed in comparison to some forwardsounding monitors. You'd be sitting back perhaps three or four rows from a deadon natural perspective in a concert hall. This imbues the Mini Monitor with a laid-back, relaxed personality and probably adds an iota of depth and dimensionality to orchestral performances that a more forward presentation wouldn't convey. The treble was relatively smooth, but in relation to the mids, it possessed a hint of forward energy that made for fine dialog articulation and vocal clarity, but at other times would undercut the seamless transition between transducers. The small ported enclosure indicated good cabinet rigidity and build quality, but the port sometimes suggested a slight one-note midbass signature when driven full range at loud levels. It integrated easily with the PS-1000, which was low-pass filtering at about 90-100 Hz. This sub was a good choice for my small listening space. It had plenty of output and even more importantly made that output seem effortless. A smaller subwoofer would probably have been adequate, but I've found that having a reservoir of untapped output is preferable to driving a speaker at or near its limit.

I listened first to my current vocal fave, Shelby Lynne, the Alabama-raised rock/ country fusion singer who has been making some kind of comeback since riding west out of Nashville. She sang the smoky, 3 AM bar closer, "Black Light Blue" [I Am Shelby Lynne; Island], which the Paradigms conveyed in a deep pocket of the soundstage. The guitar had good body, the acoustic bass was warm though a bit soft in definition. The string section

brought in for the session (a rarity nowadays) was not overly etched by the tweeter although it was a bit more out front than I am accustomed to. On massive orchestral barn-burners, like Mussorgsky's Pictures at an Exhibition [Met Orchestra/ Levine DG], the Mini Monitors/PS-1000 tandem reproduced much of the grandiose weight and shimmering air within the vast hall. Although scale was diminished, it was not miniaturized. The set-up created a credible soundstage, with perceivable depth and superior width. When the brasses joined the violins, they seemed to possess a little more sheen in the lower treble than do my neutral reference loudspeakers, but they did not verge on overly metallic or nasty. Imaging was average, with instruments sounding less than fully planted on the stage, individuality smearing together at times. This impression disappeared in full system 5.1 regalia.

"... I felt the dynamics and added weight of the potent CC-350 from all three seating positions on my eight-foot couch... no discernible dropoffs ... dialog articulation remained steady. ... Equally impressive were the system's spatial abilities ..."

The PS-1000 subwoofer seemed less cutting-edge in comparison to the Mini Monitor. For example, its ability to delineate electric bass guitar and



ADP-350

kick-drum timbres was imprecise. While capable of good extension and thumping output, it lacked the combination of pitch definition and tightness that is required of High End subs. On the other hand, its performance gave every indication that it would be more than up to the task for home theater.

" ... the sub showed not only good extension and intimations of reality, it also integrated beautifully with the speakers ..."

After favorably reviewing another system for The Absolute Sound, I have kept a pair of these similarly priced speakers for comparisons like this. They made for an interesting contrast. The relentless ostinato during the third movement of the Shostakovich Eighth Symphony [LSO/Previn; EMI ASD-2917] revealed the more forward approach of the other speakers. The celli and basses reported in with a slightly fuller harmonic and richer lower midrange sound. But the forwardness in the upper middle range would often veer towards brightness and edginess in the lower treble. The Paradigm seemed to have better control over its port, although the bass was not nearly as extended. The other speakers get a shocking amount of fairly realistic punch out of a modest enclosure. Still, if they generally had more body, they were also the peakier of the two; the Paradigm comported itself in a generally more civilized though subjectively less visceral fashion. All in all, two-channel stereo yielded competent results.

#### **FIVE-CHANNEL COMFORT FOOD**

If the Paradigm sub/satellite set-up sounded a little discontinuous in the two-channel mode, it sang a vastly more fluid tune with the addition of the center channel and surrounds. Here I felt the dynamics and added weight of the potent

CC-350 from all three seating positions on my eight-foot couch. There were no discernible drop-offs in key frequencies and dialog articulation remained steady. Side/center/side transitions, such as the catamaran sequence in The Thomas Crown Affair and the criss-crossing of Chuck Yeager's X-1 during The Right Stuff, were continuous. In Bram Stoker's Dracula, the delicate transient effects of rats scuttling across the screen was horrifically high in creep factor. Equally impressive were the system's spatial abilities, when Jonathan Harker's coach makes a rapid exit from the right channel down the side wall into the right surround and out the back of my room. As for the three-dimensional soundfield—that area between and around the listening position —let's just say that it went to the bats with this disc. The screeches and the fluttering of wings in the scene when Dracula visits Harker in his chamber (he cuts himself shaving, much to the Count's delight) will make you reach for a hair net. The PS-1000 subwoofer also joined in the festivities with abandon during the Chapter 9 thunder sequence in (don't laugh) What Dreams May Come. This was where the sub showed not only good extension and intimations of reality, it also integrated beautifully with the speakers as the POV changed several times in the sequence.

"... horizontal dispersion was excellent and dialog tonal balance remained steady and dialog itself was easily understood."

On the Eagles' Seven Bridges Road track from the DTS disc, I got the sense that the center channel heightens the focus of voices—both dialog and vocals. It was a brighter sound with a stronger treble emphasis than the Mini Monitors, but it also played deeper and seemed to have the reserves necessary to meet the demands placed upon the center channel. Its horizontal dispersion was excellent and dialog tonal balance remained steady and dialog itself was easily understood.

The imaging problems I reported in twochannel listening simply went poof, as distinct guitar and multi-part harmony made for some enthralling listening.

"The ADP-350 surrounds were impressive for what they didn't do: draw unnecessary attention to themselves."

The ADP-350 surrounds were impressive for what they didn't do: draw unnecessary attention to themselves. Their sonic character meshed well with the Mini Monitors and front-to-back transitions sounded consistent in timbre. In the jet overflights in The Right Stuff, the transition from some L/Rs to companion surround channels can change from a lower treble balance, a "shhh" to a higher "sssss." The advantage of using identical drivers was clearly borne out when this balance remained constant and full. I believe they need more careful placement than other types of surrounds, which benefit from having a huge null that allows them to disappear. But once placed, the Paradigms have plenty of spread and were more than up to the task in my environs.

#### **GENERAL QUANDARY 1 & 2**

While the evenness of off-axis dispersion helps to create seamless motion across the screen, there is also the conflict over placement: Soundstage versus screen

PS-1000



width. Stereo listeners are vastly more concerned with placement to help minimize wall reflections and to create soundstage dimensionality. Hometheater viewing suggests that, since the soundstage is really limited to the width of the screen, speakers that are distanced well beyond the edges of the monitor are going to distract the viewer with sound cues that seem, to originate from outside the film image.

Another nagging problem: The viewing height of one's monitor influences the listening height of the CC-350. Not a concern in movie theaters, where the front channels are positioned comfortably behind a perforated screen. But it's a problem in smaller multi-channel set-ups in the close confines of modest listening spaces. And since one goal is to avert a "step ladder" impression of panned sound climbing from L/R tweeters positioned lower than the CC-350, this might not always match the optimum listening height for the left and right speakers for two-channel use. My situation will serve as an example. The center of my Sony 27" XBR is 33" from the floor—a good viewing height. The CC-350 sitting on top of the monitor is roughly 47" at the tweeter position. Matching the L/R tweeter heights with the center channel, while feasible and eliminates the step-ladder confusion, is not practical for stereo listening. I got good two-channel results at listening heights of between 24 and 30 inches, depending on distance from the left and right channels. Practically speaking, all one can really hope for is to minimize the distraction of the varying tweeter heights. The best way I've found is to watch riveting movies!

#### THE CLOSING TOAST

The Paradigm Mini Monitor system is one that has been optimized for the multi-channel and particularly the home-theater environment. If movies are the driving force behind a compact system 5.1 purchase, you can't go wrong here. If music is more of an emphasis, you might consider the larger and

sonically weightier Monitor 3 or 5 for the left and right channels. And that's the beauty of it. Paradigm understands that all tastes and environments are different and that priorities change. It's an enlightened approach that makes "having it your way" easier to swallow than ever.