PHANTOM • CC-270
ADP-170 • PDR-12

Paradigm®

"... PURE JOY... my highest recommendation."

Reprinted with permission from

HomeTheater sound
PART OF THE SoundStage! Network

"The Paradigm System has so many impressive attributes ... purity of midrange ... superb imaging ... excelled in surround envelopment ... seamless timbre matching ... pants-flapping bass ... exceptional performance all around ..."

SoundStage! Network Reviewers' CHOICE 2002 soundstagenetwork.com

by Vince Hanada

Paradigm is one of *the* largest speaker manufacturers in the world, which you may have already known. What you may not know is that they rely heavily on their modern, comprehensive testing facilities. This Canadian company spends a lot of time and effort in research and development—testing speakers, individual drivers, and crossover components, all of which are made in its Mississauga, Ontario facility. The result of all this research and development is a mind-boggling array of home-theater speakers and subwoofers, spanning all price ranges. Whatever your budget is, chances are, Paradigm has a home-theater system for you.

Paradigm has completely revamped their popular Performance speaker line. The system that Paradigm sent *Home Theater & Sound* is the System Three. As you will see, *performance* is an appropriate description for this system.

INTRODUCING THE SYSTEM

Opening up this Paradigm system was pure joy. Each main speaker came in solid, corrugated cardboard with its own unpacking instructions! Although this may not seem like a big deal, Paradigm should be commended for easing the sometimes-painful hassle of unpacking tall, unwieldy speakers.

Phantom

Once removed, the tallest box revealed one great-looking speaker—the Phantom. With a narrow front baffle of 7-3/4″ and 37″ in height, the Phantom's elegant proportions did not dominate my medium-sized room. The fit and finish are superb—my samples came in light-cherry laminate, among the best that I have ever seen. The removable front grille is attractively styled with a curved bottom. Behind the grille is a dark-gray front baffle

where the drivers are mounted. The Phantom, like all Paradigm speakers, is designed to work best with the grilles on. This is a good idea if you have kids running around with scissors (which is not a good thing for numerous reasons!). The bad thing is that you may be tempted to leave the grilles off, since the drivers are so attractive.

"… this is an excellent subwoofer … The PDR-12 shook my floor … filled my family room with sub-35-Hz bass, without overhang or boominess … puts many more expensive subwoofers that I have heard to shame."

A 1″ ceramic/metal composite-dome (CMC) tweeter sits near the top of the front baffle. Directly below the tweeter are two 6-1/2″ metallescent polymer-cone (MPC) woofers. As I learned from Paradigm, "metallescent" means that the polymer cone is embedded with metal pigments to give the driver low mass with high stiffness, resulting in greater midrange clarity over standard polypropylene woofers. Below the lower 6-1/2″ woofer is a large 3″-diameter front port, allowing easy placement near rear walls. The Paradigm Phantom has a single set of gold-plated binding posts in the back. According to Paradigm, the rated sensitivity is 91 dB "in-room" with impedance "compatible with 8 ohms." With these specifications, you'd think these speakers would be easy loads to drive with modest amplification. With my 60Wpc Outlaw Model 1050 receiver, this was indeed my experience.

The center-channel in the Paradigm System is the CC-270, the largest of three center-channel speakers in the Performance line. The CC-270 is big, nearly spanning the width of my 32″ TV. The speaker's downward-sloping top is finished in a matte-black finish, called "black graphite" by Paradigm. The drivers are the same as in the Paradigm Phantom, with two 6-1/2″ metallescent polymer-cone woofers on either side of a 1″ ceramic/metal composite-dome tweeter. Around back is a single set of gold-plated binding posts and a 2-1/2″-diameter port.

CC-270

"Another terrific performer … is the CC-270 … Nicole Kidman's surprisingly good singing voice sounded beautiful through the center speaker. … the CC-270 conveyed the subtleties of her voice effortlessly."

The ADP-170 performs surround duties in the Paradigm System. This speaker is a bit of a departure for Paradigm, with a slight wedge shape rather than the rectangular box shape of their other surround speakers. On each angled baffle is a 3/4″ CMC tweeter and a 5-1/2″ MPC woofer. ADP stands for "adapted dipole." It differs from a conventional dipole by operating out of phase (like a conventional dipole speaker) above the crossover frequency of 2 kHz, and operating in phase below the crossover frequency (like a bipole speaker). What this design achieves is a speaker that produces a diffuse soundfield with better bass response than a conventional dipole speaker, since the woofers operate in phase.

Paradigm supplied the PDR-12 subwoofer with this system. This subwoofer looks compact from the front, though it is quite deep. The finish on the subwoofer was black ash. The PDR-12 automatically turns on when a signal is detected, and an amber-colored LED below the Paradigm logo on the non-removable front grille lights up when a signal is detected. Around back, the PDR-12 has controls for subwoofer volume level and crossover frequency. It has a mono line-level input, and left and right speaker-level inputs

ADP-170

and outputs. The speaker connections are spring clips so make sure you use small-diameter speaker wire if you are using these connections. The PDR-12 contains an amplifier rated for 110W nominal and 330W peak output. The driver is a single forward-firing 12″ carbon-fiber-reinforced composite-cone woofer. Two large 3″ ports vent the PDR-12.

"… seamless timbre matching between the CC-270 and the main Phantom speakers. … Jim Carey's voice sounded identical as it pops from the left front speaker to the center-channel."

HOME-THEATER PERFORMANCE

Since the Paradigm Phantom has a compact footprint, I was able to place the speakers in the positions that typically work best in my family room. With slight toe-in adjustments, I have found that the following placement works best, and this case was no exception. The front left and right speakers were placed 9′ away from my listening seat, at 30-degree angles relative to the center of the TV, while the surrounds were 6′ away, 90 degrees relative to the center of my TV. The center-channel was placed on top of my 32″ direct-view TV, and the subwoofer sat adjacent to the front left speaker.

The Paradigm System has so many impressive attributes, but I'll start with the one that stood out most for me: superb imaging. I'm not talking just about imaging between the front speakers, but imaging between the front

and surround speakers. This was clearly evident to me while watching the DVD *Kiss of the Dragon*. This Jet Li film is an extremely violent martial arts showcase, but it has good sound that I find quite useful for evaluating audio gear. In chapter 10, an undercover agent is walking in and out of a room, and his voice is easy to follow between the left front Phantom and the left rear ADP-170. Impressively, as the voice moved from left front to the left rear, the tonality did not shift, a difficult achievement given the position of each speaker. Another example of this side imaging occurs in chapter 9 of *Rush Hour 2*. There is a subtle tinkling sound to the right side of the soundstage, between the right front and right rear speakers. The Paradigm system pulled off this sonic feat, which drew me into the scene.

"… superb imaging … voice is easy to follow between the left front Phantom and the left rear ADP-170. Impressively, as the voice moved from left front to the left rear, the tonality did not shift, a difficult achievement … The Paradigm system pulled off this sonic feat …"

The Paradigm System showed off another cool trick: rear-channel imaging. This one occurred during chapter 18 from *Kiss of the Dragon*. In a scene with bullets flying, I could hear distinct bullet shells hitting the floor, *directly behind me*. This was *without* a center surround active. Very impressive!

PDR-12

"The Paradigm System also excelled in surround envelopment … provided a good sense of the room's space … expressed nicely by all five of the speakers."

The Paradigm System also excelled in surround envelopment. In chapter 10 from *Rush Hour 2*, Alan King is opening a new casino. The Paradigm system provided a good sense of the room's space, with the reverberation of the room expressed nicely by all five of the speakers. In chapter 15 of *Fight Club*, the scene shifts from the bar on the main floor to the stark, basement fight club. The Paradigm System portrayed these diverse environments with ease, from the relatively dead walls of the bar to the reverberant walls of the basement.

"The Paradigm System showed off another cool trick: rear-channel imaging. …In a scene with bullets flying, I could hear distinct bullet shells hitting the floor, 'directly behind me'. This was 'without' a center surround active. Very impressive!"

Another terrific performer in the Paradigm System is the center-channel CC-270. Throughout the DVD *Moulin Rouge*, Nicole Kidman's surprisingly good singing voice sounded beautiful through the center speaker. Whether Kidman sang softly or loudly, the CC-270 conveyed the subtleties of her voice effortlessly. Male voices, such as George Clooney (actually Dan Tyminski) singing in *O Brother, Where Art Thou?* did not exhibit any chestiness or hollowness, which are annoying traits I often hear in other center-channel speakers.

There was seamless timbre matching between the CC-270 and the main Phantom speakers. Listening to chapter 2 from *Man on the Moon*, Jim Carey's voice sounded identical as it pops from the left front speaker to the center-channel. Another example of this is in chapter 6 of *Memento*, where a phone ring jumps from the left front speaker to the center-channel. The ringing sounded *identical* in both the CC-270 and the Phantom.

"The fit and finish are superb … among the best that I have ever seen."

The Paradigm System had exceptional performance all around, including the all-important subwoofer. Paradigm has kept the PDR-12 for years, and hasn't found the need to upgrade it. After my audition, I can see why—this is an excellent subwoofer! With its 12″ driver and two huge rear-firing ports, the PDR-12 provides pants-flapping bass that played louder in my medium-sized room than even I could bear. In chapter 20 of *Star Wars Episode 1: The Phantom Menace*, the LFE channel gets a workout during the pod-racing scene. The PDR-12 shook my floor as the pod racers screamed around the course. Another room-shaking scene is in chapter 13 from *Dinosaur*. In the first chapter, the T-Rex chases and catches a much smaller dinosaur. His (I'm *assuming* the T-Rex is a male) foot stomps filled my family room with sub-35-Hz bass, without overhang or boominess. The performance of the Paradigm PDR-12 puts many more expensive subwoofers that I've heard to shame.

CONCLUSION

The Paradigm System excels in many areas, such as purity of midrange, surround envelopment, and deep bass that you can feel. From its great looks to its great sound, there is little to fault with this system. Although you could spend much more and *may* get better performance, the Paradigm System offers great sound at a remarkable list price. If your room is medium sized, you may question your need to spend more, as I did. The Paradigm System gets my highest recommendation.