PRODUCT review

CINEMA™ HT

Paradigm®

# "I was amazed ... big, open sound ... great definition ... PERFECTLY INTEGRATED ..."

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by Joe Hageman

*" ... if you want a – home theater speaker system that'll also do justice to your music collection, it'll be hard to beat Paradigm®'s Cinema™ system."*

REVIEWER'S CHOICE AWARD

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If you think a great-sounding home theater speaker system has to cost a lot, let me introduce you to the Cinema™ system from Paradigm®. Like other first-rate systems, this one maintains a perfect tonal balance by using the same excellent drivers throughout, so side-to-side and front-to-back pans sound seamless. The satellite speakers are small enough to blend into almost any décor and can be stand or wall mounted. And the powerhouse subwoofer will rock any average-size living room. All together, these speakers help recreate a dramatic theater experience in your own home – less the gum on the seats and the $5 package of licorice.

When entry-level DVD players hit the $199 mark, I thought I'd seen everything. But then the prices of digital surround receivers started dropping faster than MP3.com's stock after its legal troubles began, and it's now possible to buy one for less than $300. How manufacturers are hitting these prices and actually making money, I'll probably never understand. But all of you budget-minded home theater enthusiasts out there should be thankful.

As if $199 DVD players and $299 A/V receivers aren't enough, Paradigm® Electronics swoops in with a compact home theater speaker system for a remarkably low price! You might expect the system to be slapped together to meet a hot price, but nothing could be further from the truth—the Paradigm® Cinema™ system is an honest-to-goodness home theater speaker package ("home cinema" for you Canadians) built with high standards, not just low prices, in mind.

*"By looks alone, it's fairly evident that Paradigm® put a lot of thought into the design and construction of the Cinema™ system."*

The system comprises four matching Cinema™ speakers for the left/right front and surround channels, a horizontally oriented Cinema™ CC center speaker, and a PDR-8 powered subwoofer. (The sub was already available as part of the Paradigm® line before the Cinema™ system was conceived.) The satellite speakers all use the same tweeters and woofers, but the Cinema™ CC center speaker has two woofers, one on either side of the tweeter. All five satellites are magnetically shielded and have binding posts that accept bare wire, spade lugs, or banana plugs.

For the price, you might expect the system to be made up of standard-issue black particleboard boxes, but all of the Cinema™ satellites are made of an attractive and rigid composite plastic with non-parallel side walls. The left/right

Cinema™ CC

**HIGH POINTS**
Big, open sound from small speakers. Powerful subwoofer mates well with satellites. Extremely affordable.

**LOW POINT**
Not well suited for large rooms.

front speakers can be placed on optional stands or mounted on the wall using the keyhole slots on the back. By looks alone, it's fairly evident that Paradigm® put a lot of thought into the design and construction of the Cinema™ system.

The PDR-8 subwoofer has a 90-watt amplifier built in. Its back panel contains a volume control, a phase switch, spring-clip speaker-level inputs, and a crossover control that's adjustable between 50 and 150 Hz. A wider range of finishes is available for the sub than for the satellites, but the black ash with black grille matches them well enough.

*"Conventional wisdom suggests that given the tiny woofers in the satellites, there should be an audible gap in the upper-bass region before the subwoofer kicks in, but I'll be damned if I could actually hear one. … perfectly integrated … lots of punch … great definition …"*

To evaluate the performance of the Cinema™ system I hooked the speakers up to my A/V receiver as Paradigm® recommends, using the speaker-level inputs on the sub and the sub's crossover. I placed the front satellites on stands about 18 inches out from the wall to either side of my TV, with the Cinema™ CC on top of it. The surround speakers were about 7 feet off the ground on shelves at either side of my listening position. I placed the subwoofer near the right front corner, about 2 feet from the side wall. After playing around with the crossover control for a while, I found that the six speakers blended best in my room with the 100-Hz setting.

Conventional wisdom suggests that given the tiny woofers in the satellites, there should be an audible gap in the upper-bass region before the subwoofer kicks in, but I'll be damned if I could actually hear one. On the bass-heavy track "Falling" from Olive's *Extra Virgin* CD (RCA), the satellites were perfectly integrated with the sub, which reached well into the upper bass. It reached well into the lower bass, too, reproducing the lowest notes of "Falling" with lots of punch and (surprisingly) great definition for a relatively small driver and amplifier.

*" … the Cinema™ system sounded better than a similar sub/sat system I was testing that costs twice as much."*

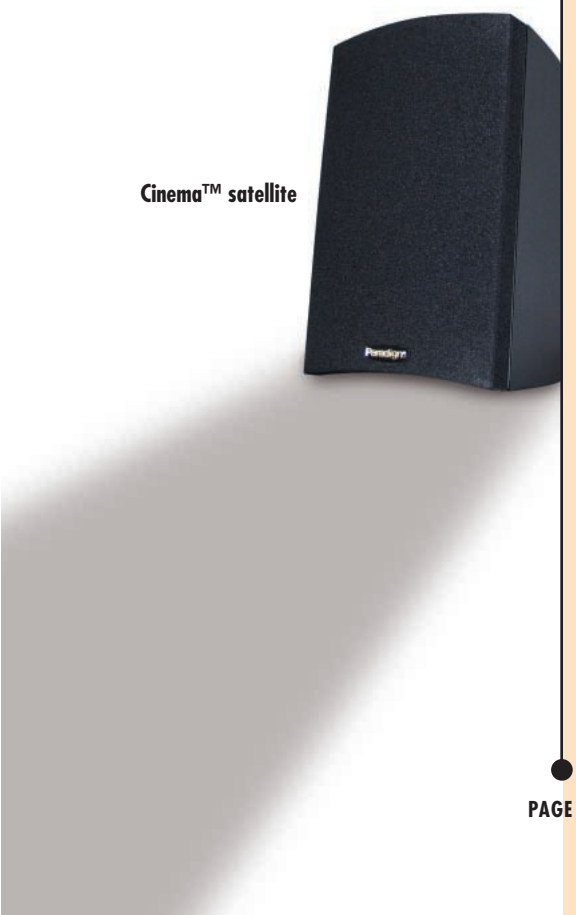
On more demanding musical recordings, like Diana Krall's CD *When I Look in Your Eyes* (Verve), the Cinema™ system sounded better than a similar sub/sat system I was testing that costs twice as much. This CD is beautifully recorded, with lots of ambience and detail, and the little Cinema™ system did justice to it. The front soundstage was wide and deep, and Krall's vocals seemed to extend above and beyond the actual positions of the front speakers.

The Cinema™ and CC satellites had great high-frequency extension but didn't sound overly bright. The PDR-8 subwoofer excelled at pitch definition and appeared to cover its assigned frequency range with ease. The satellites' midrange performance was also excellent, with both male and female vocals carrying a lot of weight and the speakers adding very little coloration to the artist's voice. Mel Tormé's vocals on *Mel Tormé Swings Shubert Alley* (Verve) sounded especially accurate and detailed played through the

Cinema™ system. I could easily live with these speakers for two-channel listening, though they sounded a little sibilant with some female vocals. But at the system's price, it's hard for me to really fault it.

*" … I was especially impressed with the Cinema™ CC's performance. Dialogue sounded very natural and extended well into the room. … Speakers as small as the Cinema™ CC typically make movie dialogue sound "smallish," and I usually have to kick up the volume – But that wasn't the case with the Paradigm® Cinema™ CC at all."*

Piping a Dolby Digital- or DTS-encoded movie DVD through a speaker system is a great test of how well it's going to hold up in the long run. Many of these DVDs are very aggressively mixed and demand a lot from all the drivers in a home theater system. An inferior set of speakers with cheap drivers will sound shrill and distorted when presented with a first-rate multichannel workout. But a superior speaker system with good drivers that can take a beating will deliver a home cinema experience exciting enough to keep you thoroughly engrossed in even a mediocre movie until the bitter end. The Cinema™ system is definitely a superior one.




**Cinema™ satellite**

Watching the DVD of *Antz*, I was especially impressed with the Cinema™ CC's performance. Dialogue sounded very natural and extended well into the room. Off-axis performance was also very good, and I noticed only a slight change in tonal balance as I moved from one end of the couch to the other. Speakers as small as the Cinema™ CC typically make movie dialogue sound "smallish," and I usually have to kick up the volume in the center channel to understand what the actors are saying. But that wasn't the case with the Paradigm® Cinema™ CC at all.

*"The PDR-8 subwoofer handled all of the thundering mayhem without a problem. I was amazed at how loud the 8-inch driver could play and still sound tight and defined. … the sub moved from the punchy rat-a-tat-tat of gun-fire to visceral explosions without skipping a beat."*

Taking things up a notch, I watched *Saving Private Ryan* and then *The Haunting*. Both of these DVD movies contain tons of LFE (low-frequency-effects) information, which puts major power demands on a subwoofer. The PDR-8 handled all of the thundering mayhem without a problem. I was amazed at how loud the 8-inch driver could play and still sound tight and defined. In *Saving Private Ryan,* the sub moved from the punchy rat-a-tat-tat of gunfire to visceral explosions without skipping a beat. I did manage to make it bottom out once, in the scene from *The Haunting* where Nell gets knocked out of her bed, but almost every sub with an 8- or 10-inch driver I've tested has bottomed out at the same spot in this movie.

A well-integrated sound is even more important for a home theater speaker setup than ample bass power and overall output capabilities, and the Cinema™ system didn't disappoint me here, either. Side-to-side and front-to-back pans were virtually seamless, and the whole system sounded as if it was built especially for my 9 x 8 x 12-foot listening room.

Like any other sub/sat system, of course, Paradigm®'s Cinema™ system has its limits. For instance, while the subwoofer sounded fine in my room, it wouldn't seem nearly as powerful in larger spaces. The surrounds, which sound great if placed correctly, can become distractingly directional if you're sitting too close to them. This system is going to sound best in a modest or small size living room or home theater, with the surrounds placed above your seated position. Those caveats aside, if you want a down and dirty home theater speaker system that'll also do justice to your music collection, it'll be hard to beat Paradigm®'s Cinema™ system.

## IN THE LAB

**FREQUENCY RESPONSE** (at 2 meters)

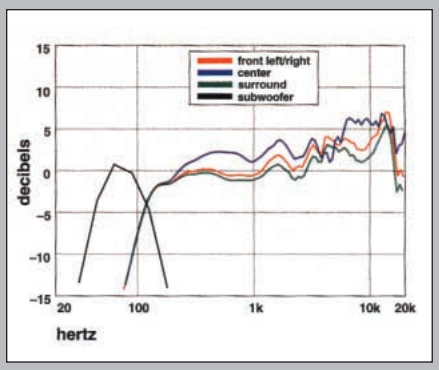
| | |
|---|---|
| front left/right | 125 Hz to 20 kHz ±5.2 dB |
| center | 125 Hz to 20 kHz ±5.0 dB |
| surround | 125 Hz to 20 kHz ±4.6 dB |
| subwoofer | 46 Hz to 115 Hz ±2.1 dB |

**SENSITIVITY** (SPL at 1 meter with 2.8 volts of pink-noise input)

| | |
|---|---|
| front left/right | 86 dB |
| center | 89 dB |
| surround | 86 dB |

**IMPEDANCE** (minimum/nominal)

| | |
|---|---|
| front left/right | 4.9/12 ohms |
| center | 8.1/10 ohms |
| surround | 4.9/12 ohms |




**BASS LIMITS** (lowest frequency and maximum SPL with limit of 10% distortion at 2 meters in a large room)

front left/right..... 80 Hz at 71 dB SPL
center..... 80 Hz at 76 dB SPL
surround ..... 80 Hz at 71 dB SPL
subwoofer ..... 25 Hz at 73 dB SPL
91.4 dB average SPL from 25 to 62 Hz
105.6 dB maximum SPL at 62 Hz

All of the response curves and measurements have been weighted to reflect the manner sound arrives at a listener's ears with normal speaker placement. The left/right front speakers were averaged over a ±30° window, with double weight given to the most common listening angle, 30°. Sound delivered to the listener's ears from surround speakers will be reflected from room surfaces, so their response was averaged over a ±60° window with double weight given to the widest off-axis angles. Because the Cinema™ system uses identical speakers for the front L/R and surround channels, the variations shown here simply reflect the different weightings. The center speaker's response was averaged over ±45°, with double weight directly on-axis, where the primary listener will sit.

Bass limits for the subwoofer were measured with it placed in the optimal corner in a 7,500-cubic-foot room and set to maximum bandwidth. In a smaller room, you can expect 2 to 3 Hz deeper extension and up to 3 dB higher sound-pressure level (SPL) from a subwoofer.

The Cinema™ and Cinema™ CC had similar response characteristics, and both had limited low-frequency capability. Each had a gently rising response curve with a shelf at high frequencies. The Cinema™'s shelf was approximately +3 dB above 3 kHz, while the Cinema™ CC had approx-imately 5 dB more output above 6 kHz than in the middle of the spectrum. Both also had above-average off-axis uniformity, though the Cinema™ CC showed the off-axis response notching common among horizontally arrayed center speakers.

The PDR-8 subwoofer had the modest output capability typical of subwoofers with small cabinets and drivers. It could deliver a true 25 Hz, but only at 73 dB SPL. On the other hand, it averaged 96 dB over the octave from 32 to 62 Hz. The crossover frequency control has markings only at each end of the dial, and the actual crossover at half rotation was 85 Hz. There was the typical interaction between the level and frequency controls, with the level falling about 10 dB between the highest and lowest crossover settings.
- Tom Nousaine