

“... the speakers’ ability to integrate with one another was **ASTONISHING**...”

Reprinted with permission from

**HOME**  
**Theater**

*“Paradigm has taken the guesswork out of piecing together a well-integrated home theater speaker system ... very dynamic and detailed sound that belies its relatively small price tag.”*

by Joe Hageman

Speakers, speakers, speakers. There are so many speakers out there to choose from (with more popping up almost daily, it seems) that even I get confused at times. Should you go high-end or trust that teenager at the local discount store when he claims that the speaker package he’s selling is “as good as it gets”? I truly feel sorry for the consumer who just wants to purchase a speaker system that is affordable *and* sounds good—with so much to choose from, this isn’t an easy endeavor. I get e-mails all the time from readers who are frustrated because they can’t seem to piece together a matching speaker system they can afford. Well, even the most jaded and confused shopper should be pleased by this system from Canada-based Paradigm Electronics, which costs so little and includes tower speakers, bipole/dipole surrounds, and a rockin’ subwoofer.

Paradigm doesn’t make a point of packaging speaker systems together. Instead, they leave it up to you to decide what

**The New Phantom**  
*(Improved over version reviewed for even better sound.)*

speakers are right for you and your budget. The center and surround speakers, for instance, could easily be matched with a different pair of main speakers within the Paradigm line, or the towers could be matched with a larger center speaker if you so desire. But after hearing this system as is, I’d say that Paradigm has taken the guesswork out of piecing together a well-integrated home theater speaker system.

The Paradigm speaker system I received consists of the Phantom tower speakers, the CC-170 center speaker, the ADP-170 bipole/dipole surround speakers, and the PDR-12 subwoofer. The Phantom tower speaker incorporates two 6-1/2-inch poly-cone woofers, crossed over to a 3/4-inch ceramic/metal, composite-dome



tweeter. The woofers are mounted in a ported enclosure. With a quick rap of the knuckles on the speaker's cabinet, it's pretty evident that there isn't a lot of internal bracing in these speakers (but that didn't seem to matter much, as we'll see later). The Phantom is available in rosenut, light cherry, or black ash, all for the same price. For a tower speaker, it's fairly small in stature, standing only a little over 32 inches (without spikes). The grille is nonremovable.

*"... lots of detail ... great delineation of instruments ... overall relaxed sound ... soundstage was immense and enveloping ..."*

The CC-170 center speaker uses two 5-1/2-inch poly-cone woofers, paired with a 3/4-inch ceramic/metal, composite-dome tweeter. The two woofers vent through a rear port. The CC-170 is a magnetically shielded, horizontal speaker, designed to sit atop your television and comes only in black.

*"... impressive dynamic capabilities ... each speaker did its job with precision, with no one speaker dominating the others."*



CC-170

*"The more-diffused soundfield that was created by the ADP-170 surrounds was a definite benefit to rear channel effects ... high-frequency extension is outstanding ... a particularly crisp-sounding surround speaker."*

The ADP-170 is a typical bipole/dipole speaker design in that it uses two opposing woofers and tweeters to create a more-diffused soundfield. The 5-1/2-inch woofers are the same ones found in the CC-170, and the two tweeters are the same as found in the CC-170 and Phantom. Using the same tweeter in all of the speakers is smart design because, in theory, the tonal characteristics of each speaker will be the same. All of the speakers (sans the sub) come equipped with five-way binding posts.

The PDR-12 subwoofer is a 110-watt powered subwoofer with a 12-inch woofer that vents out of two 4-inch ports located on the back. Also located on the back are a line-level input, gain control, and speaker-level inputs via spring clips for connecting the subwoofer in a sub/sat configuration. I would like to have seen speaker-level outputs, too, which make it much easier to hook up your system in this fashion. Just like the Phantoms, the PDR-12 has a nonremovable grille, and it's available in the same finishes.

The Paradigm system reproduced stereo CDs very cleanly, with lots of detail and great delineation of instruments. Vocals had a touch of sibilance and sounded a little exaggerated in ambience, but the size of the soundstage and the overall relaxed sound of the speakers more than made up for their minor flaws. On recordings with a lot of high-frequency detail, I noticed that the tweeter in the Phantoms sounded a little rolled off, but not to the point of sounding dull—the slight rolloff actually helped, making

music less fatiguing to listen to, especially at high volumes. The size of the stereo soundstage was immense and enveloping, and the subwoofer did a wonderful job of belting out low frequencies with precision and definition. The PDR-12 was a great match with the Phantoms, with the Phantoms filling in the upperbass information and the subwoofer doing the rest.

*"The CC-170 center speaker did a fantastic job of reproducing dialogue — actors' voices sounded very natural ... showed no signs of chestiness or sibilance ..."*

The Paradigm speaker system fared even better on DVD movies, where it displayed its impressive dynamic capabilities. On the Dolby Digital soundtrack from the *Grosse Pointe Blank* DVD, the Paradigm speakers' ability to integrate with one another was astonishing—each speaker did its job with precision, with no one speaker dominating the others. The more-diffused soundfield that was created by the ADP-170 surrounds was a definite benefit to rear-channel effects, such as bullets whizzing by, or an F-14 fighter plane flying overhead. Only when I switched to Dolby Digital music did I miss having a pair of direct-radiators behind me.

The PDR-12 subwoofer shook my sound room like a subwoofer should. Things got even more dynamic when I put on my DTS DVD demo of the *Titanic* trailer. Even at the highest volume levels, the Paradigm combo didn't audibly distort. Instead, it produced a very dynamic and detailed sound that belies its relatively small price tag. The CC-170 center speaker did a fantastic job of reproducing dialogue—actors' voices sounded very natural, and the CC-170 showed no signs of chestiness or sibilance like so many inexpensive center speakers do. The slight rolloff of the Phantom's tweeter also helped to tame overly bright movie soundtracks. This was evidenced on the very aggressively mixed *Tomorrow*

Never Dies DVD. Usually I scramble for the control when the mayhem begins, but the Paradigm system seemed to calm things down without sacrificing detail or dynamics.

*“ ... a rockin’ subwoofer ... exceptionally well-engineered ... The PDR-12 sub measures  $\pm 3$  dB from 24 to 98 Hz. ... That’s outstanding bass extension for such an affordable sub.”*

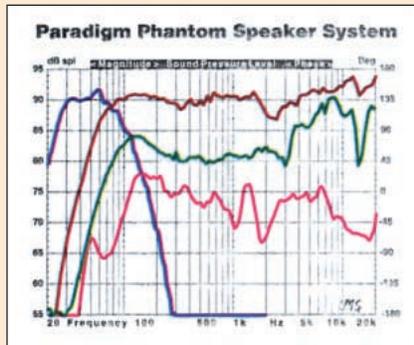
I’ll be the first to admit many sub/sat systems with smaller main speakers sound great, but it was nice change of pace to see a pair of tower speakers in such a relatively inexpensive speaker system. To me, the benefits you get with tower speakers—all other things being equal—are a bigger, more-enveloping sound and better integration with the subwoofer. The Phantoms were certainly no exception.

With so many speakers to choose from, I know it’s hard to focus your attention and pick one system; however, this new speaker system from Paradigm should cast any doubt from your mind. It’s a very good-sounding, attractive, and affordable speaker system that I could easily recommend to anyone looking for the thrill that a home theater has to offer.

ADP-170



#### HT LABS MEASURES: PARADIGM PHANTOM SPEAKERS



This chart shows the quasi-anechoic (with close-miking of woofers), on-axis frequency response of the Phantom (top trace), the CC-170 (middle trace), and the PDR-12 (left trace); with averaged in-room measurement of the ADP-170 (bottom trace). We measured all speakers at a base level of 90 decibels; then scaled the curves to fit this chart.

Response of the Phantom measures  $\pm 3.55$  dB from 60 hertz to 20 kilohertz. (We rate -3 dB bass response at 55 Hz.) Off-axis response is excellent—at 30 degrees horizontally, the speaker actually measures flatter, with a slight treble rolloff instead of the slight treble rise seen in the on-axis response. A-weighted sensitivity horizon slight treble rolloff instead of the slight treble rise seen in the on-axis response. A-weighted sensitivity measures 89 dB (1 watt/1 meter). We were unable to measure impedance of this speaker system due to a malfunction in our measurement cables.

Response of the CC-170 measures  $\pm 5.6$  dB from 76 Hz to 20 kHz. This rather unflat measurement is due largely to a sharp rise in treble, the midrange response, at  $\pm 1.57$  dB from 186 to 3,380 Hz, is exceptionally smooth. (The -3 dB bass response measures 70 Hz) Off-axis response at 30 degrees horizontally shows a two-octave-wide dip that maxes out at about -16 dB, centered at 1.2 kHz. Sensitivity measures 91 dB.

The ADP-170 measures  $\pm 5.56$  dB from 81 Hz to 20 kHz. This is very smooth in-room response for a bipole/dipole surround, and the high-frequency exten-

sion is outstanding—this should be a particularly crisp-sounding surround speaker. The -3 dB bass response is about 100 Hz, and sensitivity measures 89 dB.

The PDR-12 sub measures  $\pm 3$  dB from 24 to 98 Hz. That’s outstanding bass extension for such an affordable sub. Overall, these are very good measurements—the Phantom, ADP-170, and PDR-12 are exceptionally well-engineered for budget speakers. – JH/BB



PDR-12

#### HIGHLIGHTS

- A very well-integrated home theater speaker package
- Takes the guesswork out of choosing a home theater speaker system