

# SOUND & VISION

From test report on the Paradigm Cinema 110 Compact Theater speaker system in the April 2005 S&V. © 2005 by Hachette Filipacchi Media, U.S., Inc. All rights reserved.

## in the lab

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

front left/right/center ..... 86 dB  
surround ..... 84 dB

**Impedance** (minimum/nominal)

front left/right/center ..... 7.7/12 ohm  
surround ..... 4.3/6 ohm

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

front left/right/center ..... 80 Hz at 80 dB  
surround ..... 125 Hz at 68 dB  
subwoofer..... 25 Hz at 78 dB SPL  
96 dB average SPL from 25 to 62 Hz  
103 dB maximum SPL at 62 Hz  
bandwidth uniformity 93%

All graph curves are weighted to reflect how sound arrives at a listener's ears with normal speaker placement. Because the Cinema 110 L/R and 110 C are essentially the same speaker oriented differently, their curves bear strong similarities. Both show limited bass and smooth even response except for the top octave. The center speaker had only moderate lobing between 1 and 3 kHz at angles of  $\pm 22.5^\circ$  and wider, which means that listeners at either end of a normal couch should hear pretty much the same as listeners in the center. The quasi-dipole Cinema ADP displayed the comb filtering and sensitivity to listening angle that are common to such speakers, meaning that it should provide a relatively diffuse sound, but its sensitivity and low-frequency capability were limited.

The Cinema 110 subwoofer's bass limits were measured with it set to maximum band-

width and placed in the optimal corner of a 7,500-cubic-foot room. In a smaller room users can expect 2 to 3 Hz deeper extension and up to 3 dB higher sound-pressure level (SPL).

— Tom Nousaine

