

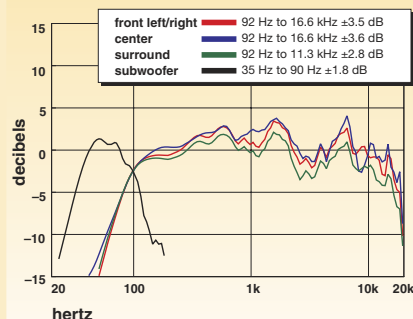
# SOUND & VISION

From "The Walls Are Alive" in September 2004 S&V.  
 © 2004 by Hachette Filipacchi Media, U.S., Inc.  
 All rights reserved.

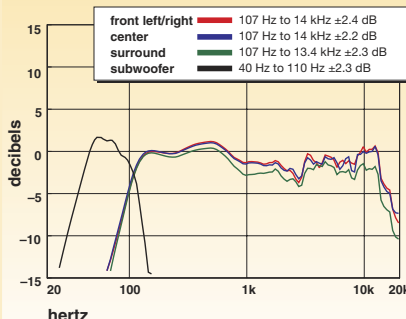
## IN THE LAB

	KEF KHT 9000 ACE WITH PSW 2150 SUB	M&K SOUND MP-150 WITH MX-700 SUB	THIEL AUDIO VIEWPOINT/SCS3/SS2
<b>Sensitivity</b> (SPL at 1 meter with 2.8-volt pink-noise input) front left/right/center, surround	87 dB	89 dB	89, 88 dB
<b>Impedance</b> (minimum/nominal) front left/right/center surround	3.6/6 ohms same	2.8/7 ohms same	2.9/4 ohms 3.8/4 ohms
<b>Bass limits</b> (lowest frequency and maximum SPL with limit of 10% distortion at 2 meters in a large room) front left/right/center surround subwoofer	80 Hz at 92 dB same as above 25 Hz at 94 dB 105 dB 111 dB at 62 Hz 95%	80 Hz at 83 dB same as above 20 Hz at 72 dB 100 dB 110 dB at 62 Hz 91%	62 Hz at 63 dB 62 Hz at 70 dB 16 Hz at 74 dB 103 dB 110 dB at 62 Hz 94%

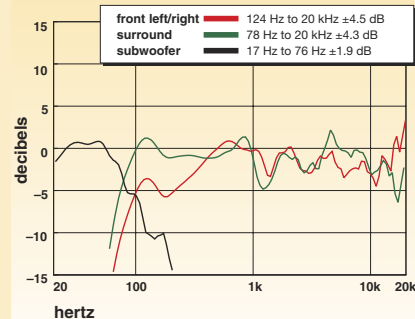
### KEF



### M&K



### THIEL



All of the response curves in the graph are weighted to reflect how sound arrives at a listener's ears with normal speaker placement. The bass limits for all three subwoofers were measured with them set to maximum bandwidth 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).

Because the KEF system uses identical speakers for all main channels, our graph curves simply represent the weightings and axial measurements used at each channel position. The KHT 9000 ACE had extremely uniform response at any radiating angle, whether oriented horizontally or vertically, so the three traces are quite similar, with a falling low-frequency response and a series of small peaks centered at 575 Hz and 1.6, 6.5, and 15 kHz. The PSW 2150 subwoofer had limited upper bandwidth (the crossover is marked from 40 to 140 Hz, yet it measured only up to 90 Hz) but remarkably capable dynamic performance in the 25- to 62-Hz range.

The M&K system also uses identical satellites for each main channel. The MP-150 had wonderfully uniform response at any radiating angle, with a flat bass-to-treble balance, a mild elevation between 300 and 600 Hz, and a

mild depression from 800 Hz to 3 kHz. On the other hand, the speaker had limited low-frequency dynamic capability. The MX-700 subwoofer had only moderate SPL capability but very good extension for such a small enclosure. As with many small subs, it played loudest in the upper part of its bandwidth. The actual crossover frequencies were about 15 Hz lower than dial markings on the upper two-thirds of the crossover dial and 5 to 10 Hz higher below that. There was virtually no interaction between the crossover control and the output level.

The Thiel ViewPoint front left/right speaker had falling low-frequency capability, with an overall uptilted bass-to-treble balance and some unevenness above 500 Hz. Directivity was well controlled, with only a moderate amount of lobing at very wide listening angles. The SCS3 surround had stronger bass but also a fair degree of unevenness above 800 Hz. The SS2 sub was measured driven through the PX 02 passive crossover, which supplies a 76-Hz crossover point and a nominal 12-dB-per-octave slope. The SS2 produced a healthy 106 dB SPL or more at all frequencies in the 32- to 62-Hz region and had impressively extended low-frequency capability.

— Tom Noursaine