

SOUND & VISION

From test report on the Infinity TSS-1100 home theater speaker system in the December 2004 S&V. © 2004 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)
 all satellites 87 dB

Impedance (minimum/nominal)
 all satellites 4.1/6 ohms

Bass limits (lowest frequency and maximum

SPL with limit of 10% distortion at 2 meters in a large room)
 all satellites 100 Hz at 69 dB
 subwoofer 25 Hz at 88 dB SPL
 103 dB average SPL from 25 to 62 Hz
 112 dB maximum SPL at 62 Hz
 bandwidth uniformity 92%

All of the curves in the frequency-response graph are weighted to reflect how sound arrives at a listener's ears with normal speaker placement. The curve for the left/right front channel reflects response of the SAT-1100 speaker averaged over a $\pm 30^\circ$ window, with double weight at 30° (the most typical listening angle). The center-channel curve reflects response of the center speaker placed horizontally and averaged over $\pm 45^\circ$, with double weight directly on-axis with the primary listener. And the surround-channel curve shows the response of the SAT-1100 placed vertically and averaged over $\pm 60^\circ$.

The SAT-1100 had falling low-frequency capability and some roughness around 1 kHz but tightly controlled horizontal directivity. The TSS-1100 Center, basically a horizontally arrayed SAT-1100, had a similar shape but moderate off-axis lobing at listening angles wider than 15° .

The TSS-1100 Subwoofer's bass limits were measured with it 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). Even though the subwoofer had rapidly falling dynamic capability below 50 Hz, it was still able to deliver 103 to 104 dB at 32 and 40 Hz. There was a minimal (2-dB) interaction between the level and crossover controls over the full range of the crossover dial, but most of the crossover action happened in the upper half of the dial rotation. — Tom Nousaine

