

SOUND & VISION

From test report on the Yamaha YSP-1 Digital Sound Projector in the May 2005 S&V. © 2005 by Hachette Filipacchi Media, U.S., Inc. All rights reserved.

in the lab

Bass limits (lowest frequency and maximum SPL with limit of 10% distortion at 2 meters in a large room)
all modes80 Hz at 81 dB

All measurements were taken at 2 meters directly in front of the YSP-1 in a large room with bare walls and an 8-foot ceiling. The speaker parameters were optimized for the space. The Stereo curve indicates the speaker's basic response characteristic, showing limited bass and reasonably uniform overall response up to 1 kHz and a 10-dB drop above that. The 3-Beam and 5-Beam curves indicate more evenly balanced response. All speaker systems designed to use reflections from room surfaces will have a downward-sloping response in the far field because treble drops off more quickly with distance than lower frequencies and also because reflected high frequencies are more easily absorbed by even hard surfaces. The typical comb filtering caused by room reflections and the interaction of multiple channels are also apparent in the graph curves.

Using surround-processing modes like Dolby Pro Logic II increased the comb-filtering effects and produced some level changes but did not change the speaker's basic response shape. Tone-control functions had little or

no apparent effect on response. The Room EQ control cut response by 1.5 dB above 3 kHz in the Live position.

The YSP-1 generated a maximum broadband sound-pressure level (SPL) of 94 dB in the Stereo mode and 3 dB less in the other Beam modes. It had limited low-frequency dynamic capability and was also susceptible to woofer overload when the volume control was turned to maximum. The low-frequency extension apparent in the Stereo and 3-Beam curves may exaggerate the system's capabilities at higher volumes. — Tom Nousaine

