SOUND&VISION

from test report on the Denon AVR-3805 digital surround receiver in the July/August ***S&V***.

in the lab

DOLBY DIGITAL PERFORMANCE

Output at clipping (1 kHz, 8 ohms)
1 channel driven.....151 W (21.75 dBW)
2 channels driven.....139 W (21.5 dBW)
5 channels driven.....107 W (20 dBW)
7 channels driven.....93 W (19.75 dBW)

Distortion at 1 watt
(THD+N, 1 kHz, 8 ohms).....0.028%

Noise level (A-wtd, 16-bit signal).....–75.9 dB

Excess noise (with sine tone)
16-bit (EN16).....0 dB

Frequency response
20 Hz to 20 kHz +0, –0.26 dB

MULTICHANNEL ANALOG PERFORMANCE

Distortion (THD+N, 1 kHz, 8 ohms)....0.0075%

Noise level (A-wtd).....–89.4 dB

Frequency response
20 Hz to 100 kHz +0, –2.8 dB

BASS MANAGEMENT

Subwoofer-output frequency response
(crossover set to 80 Hz)
21 dB/octave rolloff above –6-dB point of 80 Hz

High-pass-filter frequency response
(crossover set to 80 Hz)
12 dB/octave rolloff below –3-dB point of 80 Hz

Maximum unclipped subwoofer output
(all trims at 0 dB).....9.4 volts

Subwoofer distortion (from 6-channel, 30-Hz, 0-dBFS signal; subwoofer trim set to 0, dialogue normalization 27).....0.07%

Denon's AVR-3805 did unusually well on the test bench. While the power figures were very good — and adequate for all but the very largest rooms — what immediately stood out were the exceptional results on the noise-related tests. For example, when reproducing Dolby Digital test signals that were 24-bit resolution before encoding, the receiver's equivalent background noise was around 18.5 bits — some 15 dB lower than its nearly perfect CD noise levels (CD figures omitted here for space) and even better than many DVD-Audio and SACD players!

Bass management operated correctly with all digital inputs and signal formats as well as with all stereo analog sources (when the receiver was in stereo mode or had an ambience-processing mode for stereo sources selected). While the typical lack of bass management and distance compensation on the multichannel analog input is a minus, if you can use the receiver's Denon Link connection for DVD-Audio or SACD signals from a Denon Link player, you won't need such processing on the analog input. — *D.R.*