SOUND&VISION®

from test report on the B&W DM600 Series 3 home theater speakers in the April 2003 ***S&V***.

in the lab

Frequency response (at 2 meters)
front left/right.....65 Hz to 16.8 kHz ±2.3 dB
center..... 75 Hz to 19 kHz ±3.5 dB
surround.....65 Hz to 16.4 kHz ±1.9 dB
subwoofer.....42 Hz to 100 Hz ±2.2 dB

Sensitivity (SPL at 1 meter with 2.8 volts of pink-noise input)
front left/right .....90 dB
center.....88 dB
surround.....91 dB

Impedance (minimum/nominal)
front left/right.....2.8/6 ohms
center.....2.9/7 ohms
surround.....2.8/5 ohms

Bass limits (lowest frequency and maximum SPL with limit of 10% distortion at 2 meters in a large room)
front left/right.....50 Hz at 74 dB SPL
center.....62 Hz at 67 dB SPL
surround.....50 Hz at 74 dB SPL
subwoofer.....25 Hz at 81 dB SPL
97 dB average SPL from 25 to 62 Hz
106 dB maximum SPL at 62Hz

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 DM602 S3 had very flat response with tightly controlled directivity over its entire listening window. Response at 30° off-axis was nearly identical to on-axis response except that a narrow, 3-dB peak at 10 kHz was completely flattened. The DM601 S3 had the same flat shape and exceptionally well-controlled directivity. Placing the "bung" in the port of the DM602 cut its output starting at 200 Hz, which fell progressively and was down by 4 dB at 30 Hz. Plugging the port on the DM601 had no measurable effect.

All three main speakers had gently falling response above 15 kHz and a large tweeter-resonance peak above 25 kHz. The LCR60's curve had a similar overall shape on-axis except that the tweeter level was shelved at approximately +3 dB above 4 kHz. Placed horizontally, it displayed strong lobing patterns as soon as the microphone was moved off-axis. The lobing patterns varied more radically with changes in radiating angle than I usually find with similar center-channel speakers. The LCR60 has fairly controlled directivity when used horizontally, however, making it easy for all listeners with tone controls to balance the tweeter level.

The bass limits for the ASW600 subwoofer 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). The subwoofer had good extension and flat response, but the crossover control, marked with a range of 40 to 180 Hz, had action only from 60 to 100 Hz and produced a 15-dB change in level over the full rotation of the control. With the B equalization, response increased 2 dB between 30 and 75 Hz, and the high-pass filter at 25 Hz was sharpened compared with the A equalization.

— Tom Nousaine