

10 LAB TEST REPORTS ON NEW EQUIPMENT

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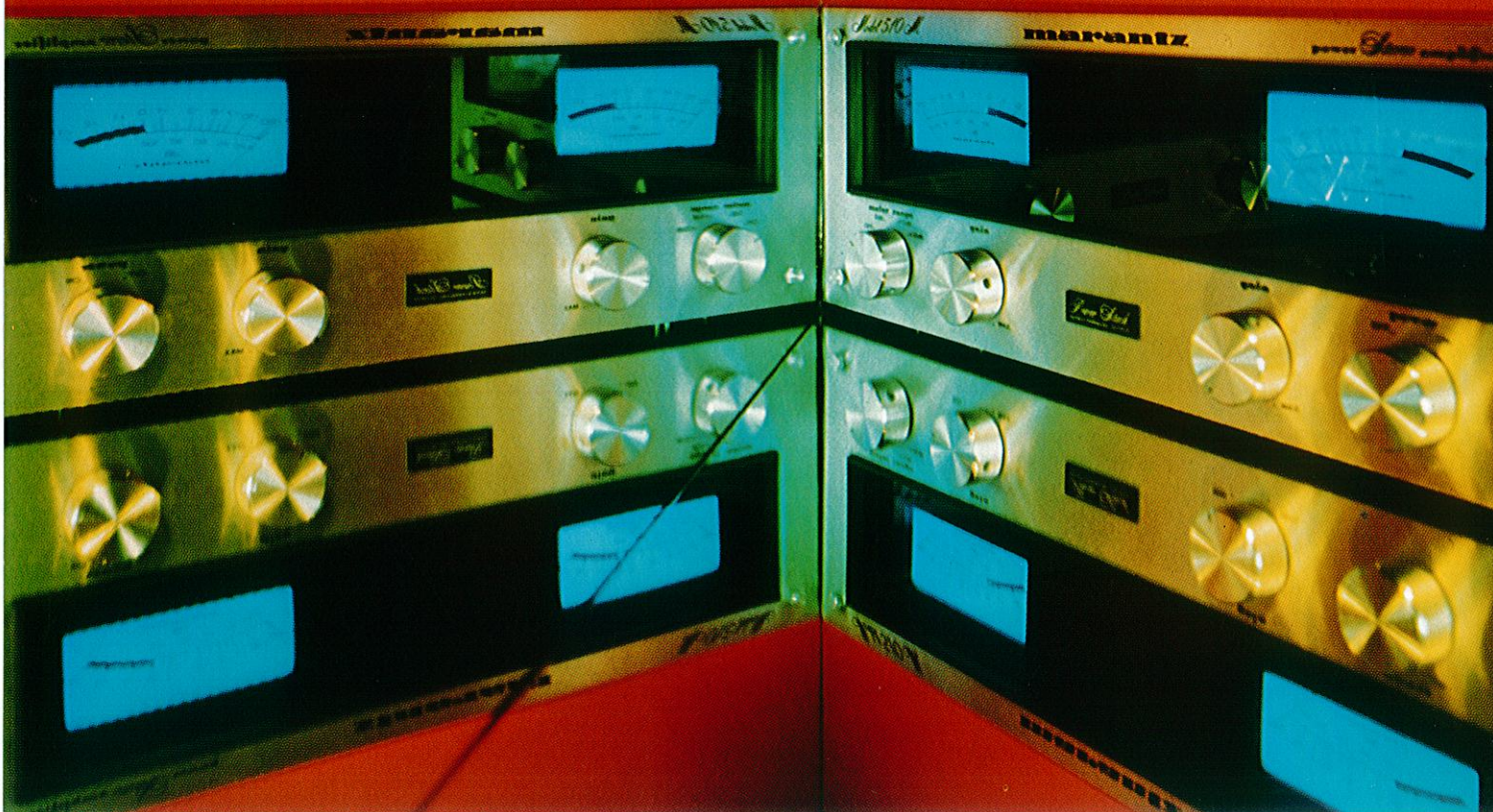
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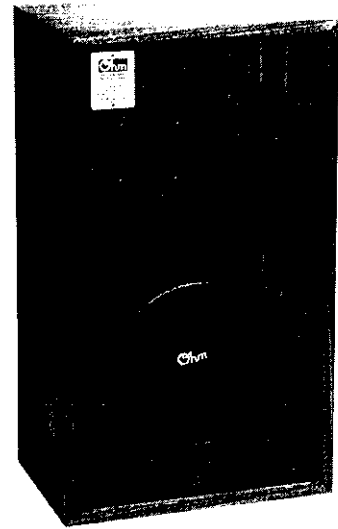
INSIDE: Ohm C2 Review.

New Life in Four Channel

SQ, CD-4, and QS: A Wrap-up of Advances



Ohm's C-2 Bookshelf System Has Bass Galore



The Equipment: Ohm C-2, a bookshelf speaker system, in walnut-finished enclosure. Dimensions: 14 by 9¾ by 25 inches. Price: under \$250. Warranty: "limited," five years parts and labor. Manufacturer: Ohm Acoustics Corp., 241 Taaffe Place, Brooklyn, N.Y. 11205.

Comment: The days when bookshelf loudspeakers flexed their nonexistent muscles and rattled their drivers in search of those last octaves of bass—and all to no avail—are far behind us. But it still comes as a bit of a shock to find a bookshelf model that, while substantially deprived of room-boundary reinforcement, actually can overdo things at the low end. The Ohm C-2 is just such a loudspeaker, and its overrobust bass output fortunately is very easy to tame.

The sound of the C-2 resembles that of a much larger system, in dynamic range as well as bass output. The CBS labs found that it can produce a 300-Hz steady-state tone at 108 dB SPL 1 meter on axis, using an electrical input of 20 dBW (100 watts), without excessive distortion. The onset of distortion is gradual, so that more is present at lower levels than with some other loudspeakers, but this is scarcely audible when music is played. The system does phenomenally well at 80 Hz, reaching 100 dB SPL with distortion quite low.

Pulsed input at 300 Hz gives results entirely consistent with the steady-state behavior: A peak output of 114½ dB is produced from a peak input of 26½ dBW (450 watts), with the test amplifier the first to throw in the towel. The average SPL of nearly 86 dB turned out with a 0-dBW (1-watt) input in the range from 250 to 6,000 Hz is indicative of efficiency somewhat above average.

At its nominal rating point the C-2 is a rarity indeed—a real 8-ohm speaker. Impedance is higher than 8 ohms through most of the midrange and treble frequencies and approaches 4 ohms only at 20 kHz, a region in which little musical energy is usually present. Two of these speakers in parallel would seem to be a relatively safe load for a typical solid-state amplifier.

In the anechoic chamber, the average omnidirectional frequency response of the Ohm C-2 is within ±5 dB, re 82¼ dB SPL, from just below 50 Hz to just beyond 16 kHz, and the region from 1 kHz up is particularly flat. Tested with one-third-octave bands of pink noise in a normal listening room, the low-frequency output falls away between 30 and 40 Hz—just about where Ohm claims it will. The three-position switch on the back of the unit that controls high-frequency output (marked for 0, -3, -6 dB) is unusually accurate, giving a close approximation of 3 dB per step from about 2 to 18 kHz. High-frequency dispersion will set no records but holds up well to a little more than 30 degrees off axis. (The manufacturer's setup instructions appear to take this into account in recommending that a pair of speakers used for stereo be angled in slightly and that the listeners be seated well between them.)

We found no difficulty in setting up a pair of C-2s. The binding posts accept bared wires or spade lugs easily, and the recommended banana plugs best of all. Located on a shelf and at least two feet from the corners of the room,

the speakers produce a sound that is clear and well detailed and—if you want it that way—loud. Transient response is crisp except for a slight tubbiness in the lower bass. For classical music we preferred to turn down the bass just a bit, which works very well since the "excess" bass contour is a good match for the usual capabilities of amplifier tone controls. (Using a rumble filter is a good idea, too.) Stereo imaging is reasonably good: Things seem to be accurately positioned from left to right, though without very much feeling of depth. This occasioned a small loss of realism in classical selections but was hardly noticed with pops.

Surely, all things considered, the design of the Ohm C-2 represents a fine achievement. Its personality is a bit forward, but it is free of vexatious habits. With classical music its performance is adequate with something to spare. And with popular music—wow!

CIRCLE 137 ON READER-SERVICE CARD

Ohm C-2 Loudspeaker Harmonic Distortion*

Output Level (dB)	Frequency			
	80 Hz		300 Hz	
	% 2nd	% 3rd	% 2nd	% 3rd
75	0.13	0.95	0.14	1.0
80	0.16	0.58	0.18	1.2
85	0.29	0.33	0.47	1.4
90	0.55	0.36	1.1	1.6
95	1.0	0.29	2.0	1.7
100	1.8	0.85	3.0	1.9
105			4.2	2.6
108			4.8	3.6

*Distortion data are taken on all tested speakers until distortion exceeds the 10% level, the output level reaches 100 dB at 80 Hz, the input power reaches 100 watts at 300 Hz, or the speaker produces the spurious output known as buzzing, whichever occurs first.

