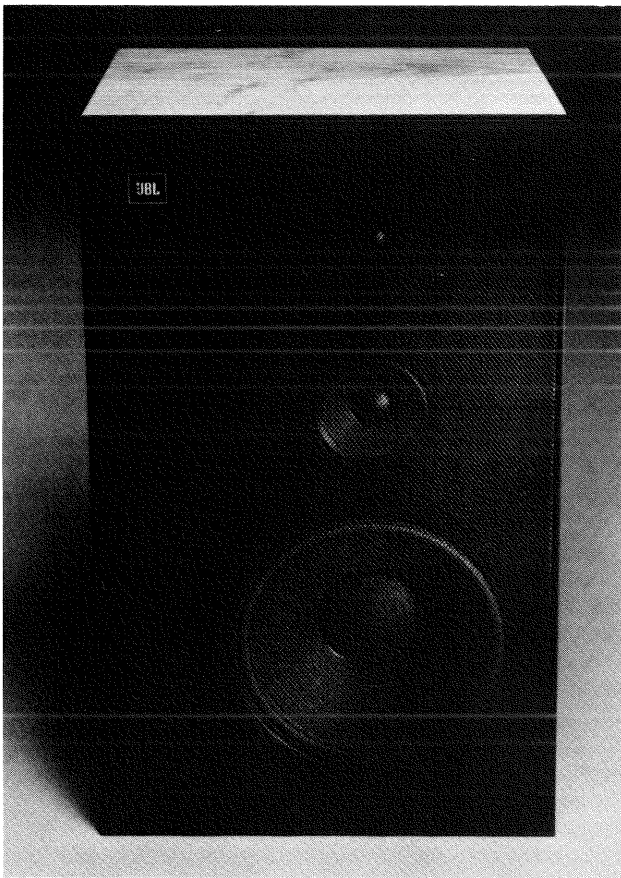


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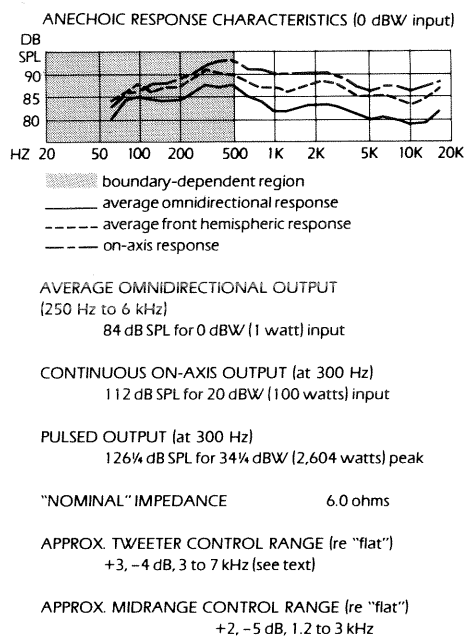
HIGH FIDELITY

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A Bookshelf Speaker With a Heritage

JBL Model L-110 loudspeaker system in walnut-veneer cabinet. Dimensions: 14¼ by 23½ inches (front), 11¼ inches deep. Price: \$410. Warranty: "limited," five years parts and labor. Manufacturer: James B. Lansing Sound, Inc., 8500 Balboa Blvd., Northridge, Calif. 91329.

In basic outline, the L-110 is a classic JBL "bookshelf" model (though, typical of the genus it personifies, it will fit on few bookshelves). It is a three-way system with a vented woofer enclosure, a cone midrange, and a dome tweeter. Its personality is warm and appealing, and its sound finely delineated. Yet it is not a rehash of old ideas. The bottom-end "bloom" (to put it kindly) that once was typical of vented models, particularly in this size, has been tightened up, and the response flattened out by contrast to the "presence bump" that some once deemed characteristic of the "West Coast sound." It is, in a word, a modern speaker with a sense of tradition.



JBL rates it at 8 ohms, and indeed the measured values stay very close to this figure from below 100 Hz to beyond 20 kHz (implying good transfer characteristics even with a fussy amplifier), and the CBS nominal rating (6 ohms) is the minimum value at any frequency in the audio band. Thus many amps will not take paralleled pairs of L-110s amiss, though the combined impedance will fall to 3 ohms at some frequencies. The relatively high efficiency puts no premium on amplifier power, yet the speaker handled both the 20-dBW (100-watt) continuous tone and the full power the test amplifier could deliver to it (over 2½ kilowatts peak) in the pulse test—for an ear-shattering 126¼ dB SPL in the latter—without serious distortion, measurable loss of input/output linearity, or other sign of distress. The output-power rating of the driving amplifier is of very little importance, given this combination of sensitivity and ruggedness (though JBL warns against serious underpowering because of the tweeter-threatening harmonics that a clipped drive generates).

Distortion at more reasonable levels is very well controlled, and the less annoying second harmonic predominates at its maxima. When the lab drove the L-110 to 100 dB SPL at 300 Hz, the third harmonic remained under 1% from 60 Hz up, while the second generally remained below 1% from 75 Hz up; both average well below 0.5% throughout the midbass, midrange, and treble. With the drive at 0 dBW, all the figures fall even farther. The 300-Hz pulses are very well reproduced; at 3 kHz, the scope trace shows a series of low-level "echoes" that may, indeed, represent reflections from the grille trim but that are not pronounced enough to warrant concern.

Response was measured in the CBS anechoic chamber with the tweeter and midrange controls at their midpoints—the standard setting when the manufacturer indicates no "normal" or "flat" position, and JBL's suggestion as a starting point from which departures can be made for "most pleasing overall results." The test yielded a distinct lower-midrange emphasis (the "humps" centered at around 400 Hz), but for which omnidirectional response would be within about ± 3 dB to beyond both frequency limits for the curves. Increasing both controls raises the entire upper range by a few dB without adding more than a fraction of a dB in the 400-Hz range, and much of our listening was conducted with them two-thirds to three-quarters of the way up. Decreasing the treble from its midpoint, incidentally, introduces a severe high-end roll-off and makes the L-110 sound very old-fashioned indeed.

On the basis of the curves, the bass appears a little weak by contrast to the upper ranges and might prompt setting the speakers on the floor to get the woofers near a surface to which they can couple. JBL recommends a vertical placement, with the woofers down, but the manual makes no other specific recommendations. With the L-110s raised off the floor (and vertical), however, we considered the bass excellent. There still is a little extra gutsiness to the sound, even in this position, that can be considered either attractive or a bit exaggerated, depending on the listener's taste. Below 63 Hz (where our curves end) the rolloff is more gradual than it is just above, and the bass therefore is more solid and extended than you might assume from the bottom end of the curves.

Dispersion is exceptionally good, which keeps the tonal balance consistent over a wide listening area. The stereo image, which we judged to be good, also holds up well as you move about in the room. These properties usually are regarded as desiderata of speaker design in this country (though not elsewhere, as witness two other reports in this issue), as are the open, airy quality of the sound and even what we have called its gutsiness. JBL has built on the values that have made its speakers so successful in the past and given us, in the L-110, a contemporary model that surely will delight a great many listeners.