

## Floor-Standing 3-Way Speaker

### Infinity "Interlude" IL40

Infinity Systems, Inc., a Harman International Company, 250 Crossways Park Drive, Woodbury, NY 11797. Voice: (800) 553-3332. Web: [www.infinitysystems.com](http://www.infinitysystems.com). "Interlude" IL40 floor-standing 3-way loudspeaker system, \$998.00 the pair. Tested samples on loan from manufacturer.

This is the speaker I praised, preliminarily and somewhat tentatively, in the last issue. That was based on a brief audition of a preproduction version, without any test data or protracted listening. I was sufficiently enthusiastic to want to say *something* without having to wait for a review sample. The production version reviewed here may or may not be totally identical to that early sample; we'll never know. In any event, this is the real thing, the actual test of the production speaker.

All of the new Infinity speaker systems, including this one, feature a proprietary diaphragm technology called

C.M.M.D. (Ceramic Metal Matrix Diaphragm). The diaphragm sandwiches a layer of aluminum between two layers of ceramic, achieving great rigidity and low internal resonances. This is basically what's new and different about these speakers. Harman International, Infinity's parent company, has a huge advantage over smaller manufacturers with their in-house driver manufacturing facility. At least 50% of the quality of a loudspeaker system resides in the drivers.

The outstanding characteristic of the Infinity "Interlude" IL40 is its flat response—forward, sideways, up, and down. The 1-meter MLS (quasi-anechoic) response on the axis of either the tweeter or the midrange driver (it makes absolutely no difference!) is  $\pm 3$  dB across the entire audio band, right up to 20 kHz, just as it says in the specs. What's more, 45° off the tweeter axis, horizontally, the response is even slightly

flatter ( $\pm 2.5$  dB) up to 11 kHz, where it falls off. At 45° off the tweeter axis vertically (above the speaker), the response is still  $\pm 2.25$  dB up to 11 kHz, except at 3 kHz, where there's a suckout of a couple of dB more. This degree of flatness is unusual even in very high-priced loudspeakers; at \$499 per side it is unheard of. The vented box is tuned to 36 Hz, very loosely (low Q), with the maximum response from the port at 43 Hz. I could not obtain a good summed response—the woofer is in front and the vent is in the back—but I could see essentially flat output down to at least 44 Hz.

The impedance of the IL40 is somewhat peculiar, probably because of the complex and highly corrected crossover network. Magnitude above the box frequencies varies from 2.7 ohms to 7.5 ohms—it never reaches the nominal 8 ohms. At the box frequencies it's sky-high (40 ohms at 23 Hz). Phase varies over an unusually wide range, from

## Manufacturer's Specifications

Type: 3-way, floor-standing, vented-box system

Drivers: 8" cone woofer, 4" cone midrange, 1" dome tweeter, all with Ceramic Metal Matrix Diaphragms

Crossover Frequencies: 600 Hz and 2.5 kHz, 24 dB/octave

Rated Frequency Response: 38 Hz to 22 kHz,  $\pm 3$  dB

Rated Sensitivity: 89 dB at 1 meter, 2.83 V rms applied

Rated Impedance: 8 ohms, nominal

Rated Power Handling: 175 watts

Dimensions: 40" (height) x 10" (width) x 11½" (depth) = 1016 mm x 254 mm x 292 mm

Weight: 41 lbs. (18.6 kg) each



-68° (at 62 Hz) to +39° (at 480 Hz)—not a particularly suitable load for a loosey-goosey amplifier. I only spot-checked the distortion with the nearfield spectrum of an 80 Hz tone at a 1-meter SPL of 102 dB (that's really loud!), and it satisfied me—second harmonic 1.4%, third harmonic 0.35%, higher harmonics totally negligible. (It could only go lower at higher frequencies, and at lower frequencies it's all vent output.) It is a very clean speaker.

In the listening tests the IL40 proved to be more neutral, balanced, and transparent than any other speaker under \$1000 the pair that I can recall. I don't know at what price point the competition begins to catch up with it because there have been too many speakers in and out of our lab in the last few years, but it could be quite a bit higher. Basically I found nothing wrong with it except perhaps a very slightly loose, boxy bass, which may even have been room interaction. Only when I switched to my reference Waveform Mach 17's was I reminded that there exists a further degree of refinement in loudspeakers. If the Interlude IL40 is at all typical of the Floyd-Toole-inspired line of Infinity and JBL speakers introduced recently, we can look forward to some very favorable reviews in coming issues.

—*Peter Aczel*