

the same unit, of course, while driving prerecorded cassettes less than a half-tone sharp), but it is unaffected by line voltage over our test range. And other data are generally comparable to figures that CBS Labs has measured for Dolby decks in the \$300 class.

The main question raised by this unit, however, is how ANRS compares with Dolby. Taking our cue from the CD-1667 manual's statement that ANRS is to be used in playing Dolby cassettes, we tried recording a variety of music—orchestra, solo guitar, voice and piano, and so on—both on the CD-1667 and on a Dolby deck, then played the recordings back on both interchangeably, looking particularly for the sort of level contrasts and transients that dramatize any tendency toward "breathing" in such equipment. As long as levels and equalization were kept "correct" little difference could be de-

tected between the two processing systems. (In playing a chromium dioxide cassette made on the Advent 201—and therefore improperly equalized for playback on the JVC or the Dolby deck we used—we were able to detect some breathing in the ANRS but not in the Dolby; this test was hardly cricket, however.) With other program material on commercially processed Dolby cassettes—the Columbia *Appalachian Spring*, for instance—or recorded from our own discs and tapes the sound is first rate through the ANRS circuit, and sound quality is comparably fine (though with greater hiss of course) with ANRS turned off. For those who would like a Dolby deck but balk at the \$300 price that has become common for such units, JVC offers an interesting alternative.

CIRCLE 144 ON READER-SERVICE CARD



Infinity's \$139 System

The Equipment: Infinity Model 1001, a full-range speaker system in enclosure. Dimensions: 25 by 14½ by 12¼ inches. Price: \$139. Manufacturer: Infinity Systems, Inc., 20940 Knapp St., Chatsworth, Calif. 91311.

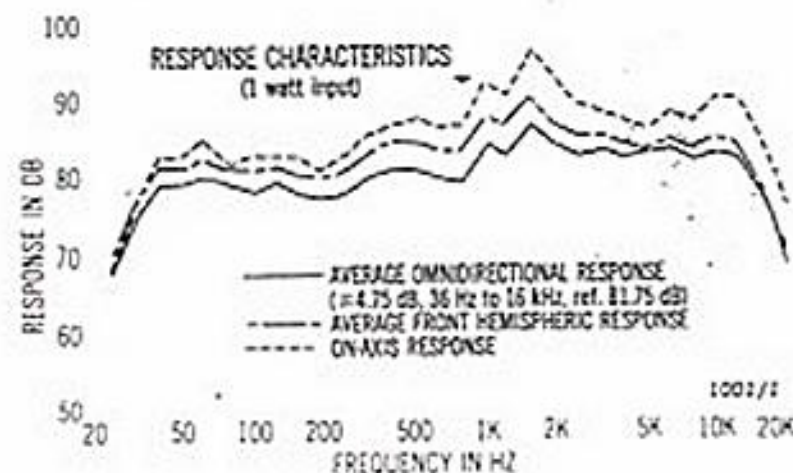
Comment: Infinity Systems, which made its initial impact on the high fidelity world with a superperforming speaker system (the \$1,995 Servo-Statik I; HF test report, June 1970), has been readying lower-priced models aimed at a wider audience. The 1001 is the "second up" in the company's new line. A two-way system, it includes a 12-inch woofer and a pair of 2½-inch cone tweeters housed with 1,300-Hz dividing network in a neatly styled walnut enclosure with a black grille. The enclosure is stuffed with sound-absorbent material and includes an auxiliary opening on the front baffle that functions as what Infinity calls a "terminated line." The manufacturer claims—and our tests confirm—that this design makes for a smooth impedance curve, inherently good damping, and a bass line that is clean and deep but not "fat" (i.e., without a prominent mid-bass peak).

The tweeters are arranged so that one faces front while the other radiates from the rear of the cabinet. This setup results in a dipole effect that achieves a broad dispersion pattern while maintaining a fairly constant energy output through the midrange and highs; it also helps create an agreeable ambient effect by allowing the rear tweeter to bounce its output off the back

wall and into the listening area. To achieve these benefits requires placing the 1001 at least 1½ inches away from the wall behind it, with 6 inches being the recommended optimum distance. When jammed flush against the wall the highs lose some of their "air" and "space."

Connections are made at the rear to polarity-coded binding posts that will accept banana plugs or ordinary stripped wire. Above the connectors is a tweeters-level control. Infinity rates the 1001 for an impedance of 6 ohms. In CBS Labs' tests the nominal impedance, following the bass rise, was measured as 7.5 ohms. Across the audible range the impedance curve remains unusually level, never exceeding 15 ohms. Aside from desirable amplifier-signal loading, this characteristic also indicates that the 1001 would be completely safe to connect in parallel pairs across a single output.

Although the manufacturer recommends 20 watts to



Infinity 1001 Speaker Harmonic Distortion

Output Level (dB)	Frequency			
	60Hz		300 Hz	
	% 2nd	% 3rd	% 2nd	% 3rd
70	0.23	0.19	0.17	0.27
75	0.24	0.12	0.14	0.32
80	0.38	0.11	0.17	0.36
85	0.67	0.11	0.14	0.40
90	1.2	0.11	0.17	0.55
95	1.9	0.11	0.22	0.80
100			0.32	8.0

*Distortion data are taken on all tested speakers until distortion exceeds the 10 per cent level or the speaker produces the sound output known as "buzzing" whenever occurs first.

drive it, the 1001 is hardly an inefficient system; it needed only 4 watts to produce an output level of 94 dB at 1 meter on axis. The higher power recommendation represents "proper feeding" rather than minimal sustenance for the system. The 1001 took 50 watts of steady state power before buzzing, at an output level of 102 dB. With pulsed power it handled average levels of 180.2 watts (360.5 watts peak) before distorting significantly, and produced an output of 110.5 dB. These data indicate the system's ability to furnish ample dynamic range in normal room installations. Response to pulse test signals was exemplary, showing excellent transient recovery. Over-all frequency response is more linear than usual for a speaker system in this price class. Turning the tweeter level control to maximum brings up the high end, from about 4 kHz to 12 kHz, by about 2 dB from "flat"; reducing the control's setting to minimum lowers the high end above 4 kHz by about 10 dB.

In listening tests we found the highs to be very well

dispersed, with scarcely any evidence of beaming to beyond 10 kHz. A 12-kHz tone was clearly audible all about the 1001, with tones higher in frequency becoming progressively more directive. The bass holds up firmly down to the system's rated response limit. Some doubling becomes evident, at very loud levels, at about 57 Hz and increases gradually as frequency is lowered, with fundamental bass still evident down to 30 Hz.

With the tweeter level control set to or perhaps a crack below its indicated flat position, a pair of 1001s can fill a larger-than-average room with well-balanced, clean sound. In a much smaller room we preferred a setting about two calibrations below flat. The stereo presentation in either instance is very satisfactory, broad and natural. The 1001s negotiated even the most demanding orchestral material with ease, conveying a sense of excitement not often experienced with systems in this price range.

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