

anywhere in the audio range—and that excludes a lot of speakers. It's a pity, especially since the Futterman isn't upset by capacitive loads at all and would be really nice with electrostatic speakers if it weren't for the extremely low-impedance upper range of the latter. But that's the nature of an output-transformerless tube amplifier.

Incidentally, the Futterman uses lots of feedback, proving that if you design an open loop with as little delay from front to back as this one, you can get away with it. Tubes make it easy. The resulting steady-state distortion figures are decently low without being a threat in the DB Systems kind of numbers game.

We must come back to that utterly transparent sound, though; veteran audio cynics listen to it with their jaws several notches lower than the code permits. It's ironic that this should be happening in a world from which the power tubes Julius Futterman is using will surely disappear in a few years, since the only commercial demand for them is as replacements in ancient TV sets.

Kenwood L-07M

Kenwood, PO Box 6213, Carson, CA 90749. L-07M mono power amplifier, \$450 (stereo pair, \$900). Tested #620130 and #650042, on loan from dealer.

This is one of the new family of Kenwood components making a bid for the sophisticated audiophile's dollar, but not very persuasively if you ask us. To our ears it sounds horrible. Mushy, edgy, fuzzy, totally degraded—words fail us.

On the test bench the L-07M comfortably puts out 150 watts into 8 ohms, but when it clips it does so with hair-trigger abruptness and extraordinary violence. There's no transition between ultralow distortion and 100% garbage. With 2 microfarads across an 8-ohm load resistor, square waves show 140% overshoot and totally undamped ringing. Obviously the amplifier has been designed for super specs with huge amounts of feedback. That makes for good reading, Kenwood, but bad listening.

Some people have kind words to say about the L-07M as a bass amplifier in biamped systems (it's DC coupled and all that jazz). After hearing it full-range, we too are quite certain that it sounds better topless.

Rappaport AMP-1

A.S. Rappaport Co., Inc., Box 52, 530 Main Street, Armonk, NY 10504. Model AMP-1 stereo power amplifier, \$1800. Three-year warranty. Tested two prototype samples, on loan from manufacturer.

As we go to press, there are only four samples extant of this, the world's first no-feedback transistor power amplifier, two of which have passed through our hands and one of which we still have on loan. We hesitate to make sweeping predictions about the production version of the Rappaport AMP-1 based on this experience, even though we're told that the circuitry of our present updated sample is final and that the production model has no place to go but up in performance as a result of even better parts and better physical construction. We'll report on that when we have one; the unit is scheduled to be in full production before the end of 1978.

Meanwhile we can only judge what we have on hand, and that's very impressive indeed. In a carefully controlled A-B listening comparison of a single AMP-1 with two bridged Mark Levinson ML-2's per side (that's four chassis at \$2000 each), the AMP-1 was unanimously preferred by a group of rather sophisticated auditioners as clearer, more detailed, more solid, more lifelike overall. That doesn't mean that we now declare the AMP-1 to be "better" than the ML-2. First of all, only dynamic speakers were used, no suitable electrostatic having been available at the time we had all amplifiers on loan. Nor had our reference ribbon tweeter, the Pyramid T-1, arrived yet. It's possible, though not probable, that through speakers with even higher resolving power the results would have been different. Furthermore, quite aside from sonic considerations, the Mark Levinson amplifier is built like a battleship out of the best parts money can buy and at the same time is completely modularized, so that evolutionary improvements can, and will, be implemented right in the field. The Rappaport, on the other hand, is very much an *ad hoc* design, the "hoc" being the best achievable sound today and never mind tomorrow.

Actually, when it comes to sheer sound quality, we prefer the latest Futterman over the AMP-1 by a small but decisive margin (see the