

Marantz 150 Tuner—Successor to the 10B

The Equipment: Marantz Model 150, a stereo FM/AM tuner with Dolby de-emphasis switching, in metal case with wood-grain vinyl finish. Dimensions: 15¾ by 5¾ inches (front); 11¾ inches deep plus allowance for controls and connections. Price: \$599.95; optional WC-1 wood case, \$32.50; RA-2 rack-mount adapter, \$29.95. Warranty: three years parts and labor, shipping paid one way. Manufacturer: Marantz Co., Inc., 8150 Vineland Ave., Sun Valley, Calif. 91352.

Comment: When Marantz announced the Model 150 as the successor to the Model 10B it was setting high standards for itself, considering the predecessor's sometime pre-eminence in the tuner field. The oscilloscope built into the dial area affirms the family resemblance at first glance. (The 10B was the first model to use it.) And two faceplate features establish the 150 as belonging to a new generation: the separate front and back level adjustments for scope display of external quadriphonic inputs, and the Dolby de-emphasis switch.

The group of front-panel controls at the left is for the scope display. In addition to the knobs for external-signal level, there are two to adjust the centering of the display on the CRT. Below them are six buttons for display ON, 2 CH and 4 CH external audio inputs, AUDIO from the tuner itself, TUNING, and MULTIPATH. The various signal-display modes should be familiar enough to most readers; simply put, the audio vector display allows assessment of such factors as stereo phasing, channel separation, and stereo-image "spread." The FM-tuning mode is a little unconventional. The vertical "blip" that shows up on the CRT is somewhat easier to center than the horizontal line that appeared on the scope of the 10B and its imitators. That horizontal-line display—which shows the relationship of the received signal to the top of the IF-filter notch—has been retained both for FM MULTIPATH and for tuning AM; it shows signal strength and FM station modulation as well.

The center set of buttons is for DOLBY FM and STEREO

ONLY. The latter mutes everything but stereo reception. The former (despite its labeling, which we understand is being made more specific in later production samples) does not switch in a Dolby processor, but it does deliver correctly de-emphasized Dolby-broadcast signals to the back-panel output jacks, bypassing the output level controls to achieve "Dolby level"—580 millivolts for 50% carrier modulation. This level, specified by Dolby Labs as the standard input to a Dolby B decoder, is the reference level used on Marantz products that include the processor. With other decoders the point is moot, because access to the in-

A Footnote to the Allison One

Some readers have wondered about the apparent disagreement between our assessment of the Allison One loudspeaker (HF test reports, October 1975) and the lab-derived data presented in the report.

Since the Allison is specifically and uniquely designed to utilize properties of room-boundary coupling that increase output at some frequencies, there is an unusual disparity between performance in a listening room and that in an anechoic chamber—which, of course, intentionally suppresses boundary effects. The manufacturer's published data show, for example, that correct positioning in front of a wall increases 80-Hz output by some 6 dB, and by even more at 50 Hz and below. And the extra input power needed to drive the woofer to a given output level in the anechoic chamber drives up harmonic distortion measurements as well.

Our data are shown as measured. But listening confirms what theory predicts—that performance in a normal room is much better than the raw anechoic-chamber data would indicate to the layman.

put of the Dolby B circuit itself normally is via a variable-gain stage: a recording-level adjustment or something similar. Hence you presumably will need to align the Dolby-processor's gain control from a test signal broadcast by a Dolby-encoded station with all but Marantz processors.

At the right are buttons for AM, FM, MUTING, HI-BLEND, MONO, and AC POWER. The dial itself is reasonably large and well calibrated and has lighting indicators for DOLBY, AM, FM, MUTING, HI-BLEND, and STEREO. Marantz's now-standard Gyro-Touch tuning wheel serves as the tuning knob.

The back panel has the usual ferrite-rod AM antenna plus spring-loaded connections for external antennas: AM and either 300- or 75-ohm FM lead-ins. There is an antenna-attenuator switch for use in areas with very high signal strengths to prevent front-end overload, a QUADRADIAL OUTPUT pin jack (for a quadriphonic adapter), and a muting sensitivity adjustment. The outputs (pin jacks for left

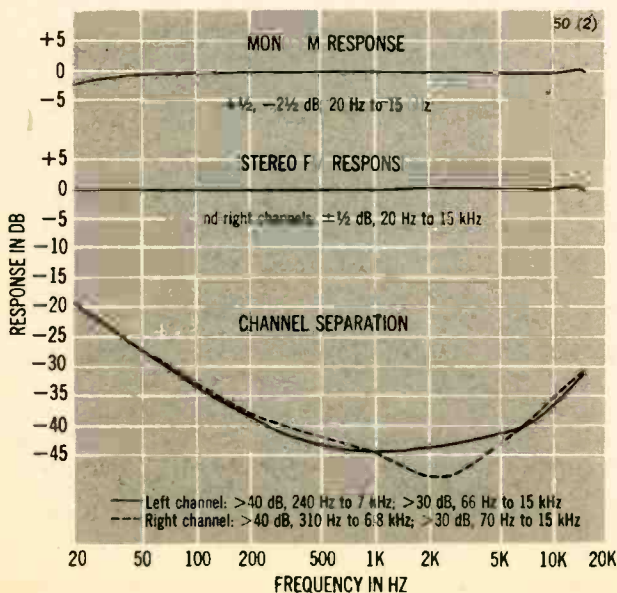
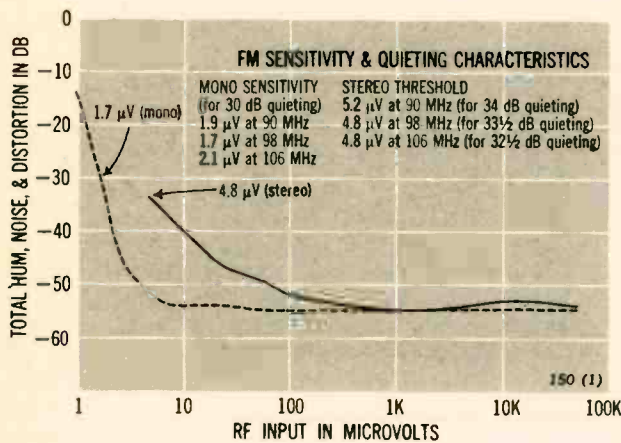
and right signals) have separate screwdriver level adjustments that, as noted above, affect output only when the DOLBY FM switch is off. Four pin jacks are provided for quadriphonic (or stereo) audio signals, from the system's control center, for evaluation on the front-panel scope; screwdriver adjustments for scope brightness and focus are nearby. There also are two back-panel AC convenience outlets, one of them switched by the front-panel POWER button.

Though an oscilloscope display is by no means a standard feature of today's audio systems, we find it extremely useful in many situations, both for achieving optimum FM reception and in analyzing the properties of audio signals. This alone, then, is a valuable feature of the tuner and one whose importance is frequently underestimated, in our opinion.

And just as the added scope modes increase the 150's utility and bring it up to date by comparison to the 10B, so its performance matches or surpasses that of the older model. Mono sensitivity has been slightly improved; mono quieting is much more rapid for low signal strengths and notably greater for higher signal strengths. Harmonic distortion measures comparably low. Stereo performance of the 150 is excellent in these respects. (We added these stereo tests long after reporting on the 10B.) Capture ratio, suppression of subcarrier and pilot frequencies, and channel separation are far better. IM distortion and ultimate signal-to-noise ratio are not quite as good, and frequency response is a hair less flat.

This is an excellent tuner that materially outperforms its predecessor. In the context of today's best tuner performance, it doesn't achieve the pre-eminence of the 10B but offers much better value. When we tested it ten years ago the 10B was, at \$600, extremely expensive; at the same price (well, a nickel less) the 150 costs about \$2,000 less than the most expensive of today's tuners—despite its added features and performance. That has to be reckoned a significant achievement.

CIRCLE 144 ON READER-SERVICE CARD



Marantz Model 150 Additional Data

Capture ratio	1 dB		
Alternate-channel selectivity	89 dB		
S/N ratio	75 dB		
THD	Mono	L ch	R ch
80 Hz	0.35%	0.21%	0.19%
1 kHz	0.16%	0.14%	0.11%
10 kHz	0.16%	0.48%	0.56%
IM distortion	0.28%		
19-kHz pilot	-60 dB		
38-kHz subcarrier	better than -74 dB		