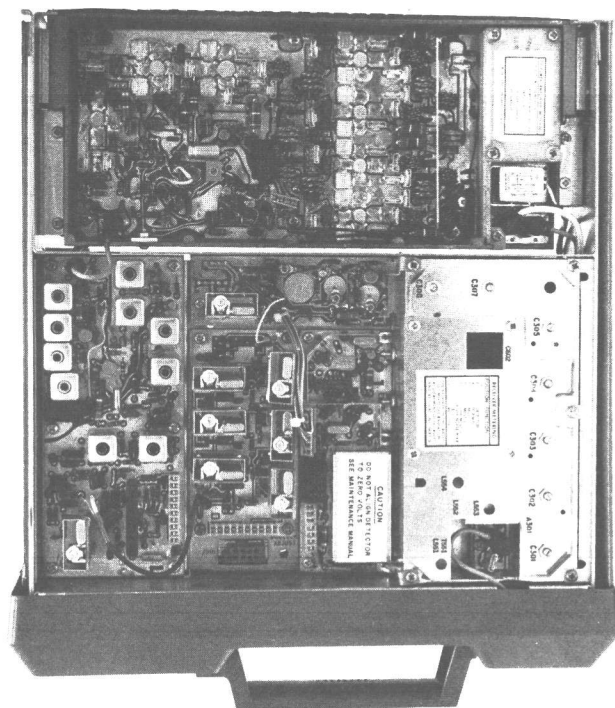


# MASTR<sup>®</sup> *Executive II* MAINTENANCE MANUAL

138 - 174 MHz, 100-WATT TRANSMITTER

Maintenance Manual LBI30280A  
(DF3163, THIS SHEET ONLY)



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138 - 174 MHz, 100-WATT  
MASTR EXECUTIVE II TRANSMITTER

## SPECIFICATIONS\*

Power Output (EIA):	100 Watts (Adjustable from 30 to 100 Watts)	
Crystal Multiplication Factor	12	
Frequency Stability	$\pm 0.0005\%$	
Spurious and Harmonic Emission:		
(Per EIA RS-152-B, Para. 4)		
138-155 MHz	At least 75 dB below maximum rated power output.	
150.8-174 MHz	At least 80 dB below maximum rated power output.	
Modulation	Adjustable from 0 to $\pm 5$ kHz swing with instantaneous modulation limiting.	
Modulation Sensitivity	75 to 120 Millivolts	
Audio Frequency Characteristics	Within +1 to -3 dB of a 6-dB/octave pre-emphasis from 300 to 3000 Hz per EIA standards. Post limiter filter per FCC and EIA.	
Distortion	Less than 3% (1000 Hz) Less than 5% (300 to 3000 Hz)	
Deviation Symmetry	0.5 kHz maximum	
Maximum Frequency Spread:		
	Full Specifications	1 dB Degradation
138-155 MHz	1.8 MHz	2.25 MHz
150.8-174 MHz	2.0 MHz	2.5 MHz
Duty Cycle	EIA 20% Intermittent	
RF Output Impedance	50 ohms	

\* These specifications are intended primarily for the use of the serviceman. Refer to the appropriate Specification Sheet for the complete specifications.

## WARNING

Although the highest DC voltage supplied to the transmitter is +12 VDC, high currents may be drawn under short circuit conditions. These currents can possibly heat metal objects such as tools, rings, watchbands, etc., enough to cause burns. Be careful when working near energized circuits!

High-level RF energy in the transmitter Power Amplifier assembly can cause RF burns upon contact. Keep away from these circuits when the transmitter is energized!