

 **MOBILE RADIO**

MASTR[®] *Executive II* MAINTENANCE MANUAL

29.7-50 MHz, 50-WATT TRANSMITTER

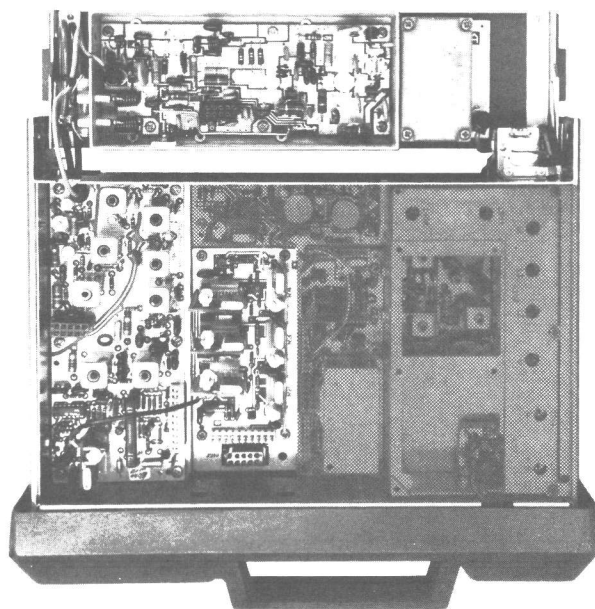


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DESCRIPTION AND MAINTENANCE	LBI30104 (DF3163)
EXCITER	LBI30045 (DF3165)
POWER AMPLIFIER	LBI30046 (DF3173)

SPECIFICATIONS*

POWER OUTPUT	Adjustable from 15 to 50 Watts	
CRYSTAL MULTIPLICATION FACTOR	3	
FREQUENCY STABILITY	$\pm 0.0005\%$	
SPURIOUS AND HARMONIC EMISSION	85 dB (minimum)	
MODULATION	Adjustable from 0 to ± 5 kHz swing with instantaneous modulation limiting	
MODULATION SENSITIVITY		
Mobile	75 to 120 Millivolts	
Station	10 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 5% (300 to 3000 Hz)	
DEVIATION SYMMETRY	0.5 kHz maximum	
MAXIMUM FREQUENCY SPREAD:	Full Specifications	1 dB Degradation
29.7-36 MHz	0.2 MHz	0.4 MHz
36-42 MHz	0.24 MHz	0.24 MHz
42-50 MHz	0.28 MHz	0.54 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 in MASTR Executive II 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 12 Volt 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!

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