

MASTR[®] II MAINTENANCE MANUAL

66-88 MHz, 25 WATT TRANSMITTER
MOBILE AND STATION

Maintenance Manual LBI 30616
(DF 3155, THIS SHEET ONLY)

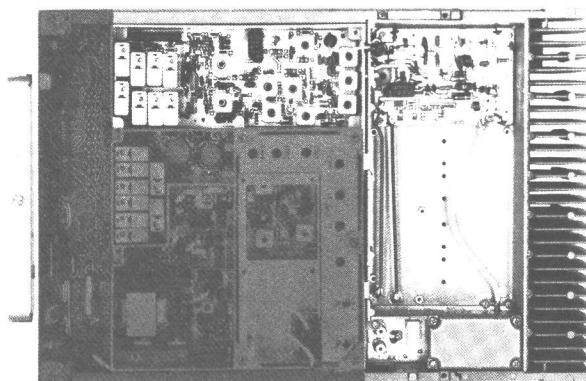


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DESCRIPTION AND MAINTENANCE	LBI30617 (DF3155)
EXCITER	LBI30618 (DF3165)
POWER AMPLIFIER	LBI30619 (DF3166)

**66-88 MHz 25-WATT MASTR II TRANSMITTER
(MOBILE AND STATION)**

SPECIFICATIONS*

Power Output	25 Watts (Adjustable from 8 to 25 Watts)				
Crystal Multiplication Factor	6				
Frequency Stability					
5C-ICOM with EC-ICOM	$\pm 0.0005\%$ (-40°C to $+70^{\circ}\text{C}$)				
5C-ICOM or EC-ICOM	$\pm 0.0002\%$ (0°C to $+55^{\circ}\text{C}$)				
2C-ICOMS	$\pm 0.0002\%$ (-40°C to $+70^{\circ}\text{C}$)				
Spurious and Harmonic Emission	At least 85 dB below full rated power output.				
Modulation	Adjustable from 0 to ± 5 kHz swing with instantaneous modulation limiting.				
Modulation Sensitivity	75 to 120 Millivolts (Mobile) 10 to 120 Millivolts (Station)				
Audio Frequency Characteristics	Within ± 1 dB 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:					
66-88 MHz	<table> <tr> <td>Full Specifications</td><td>1 dB Degradation</td></tr> <tr> <td>1.0 MHz</td><td>1.5 MHz</td></tr> </table>	Full Specifications	1 dB Degradation	1.0 MHz	1.5 MHz
Full Specifications	1 dB Degradation				
1.0 MHz	1.5 MHz				
Duty Cycle	EIA 20% Intermittent (Mobile & Station) Continuous (Station)				
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!