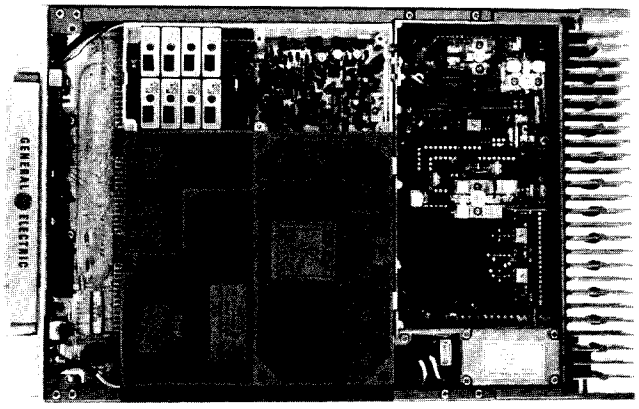
MOBILE RADIO

MASTR® II MAINTENANCE MANUAL

138-174 MHz, 40-WATT TRANSMITTER (with Phase Lock Loop Exciter)



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GENERAL ELECTRIC

Maintenance Manual LBI30756
(DF3156, THIS SHEET ONLY)

138-174 MHz 40-WATT MASTR II TRANSMITTER (with Phase Lock Loop Exciter)

SPECIFICATIONS*

Power Output	40-Watts (Adjustable from 10 to 40 Watts)
Crystal Multiplication Factor	12
Frequency Stability	
5C-ICOM with EC-ICOM	±0.0005%
2C-ICOMS	±0.0002% 200hz @ 100 mhz
Spurious and Harmonic Emission (Per EIA RS-152-B, Para. 4)	At least 85 dB below full rated power output.
Modulation	Adjustable from 0 to ±5 kHz swing with instantaneous modulation limiting.
Audio Sensitivity	65 to 125 Millivolts (Mobile) 10 to 120 Millivolts (Station)
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%
Deviation Symmetry	0.5 kHz maximum
Maximum Frequency Spread	
138-155 MHz	17 MHz
148-174 MHz	24 MHz
Duty Cycle	Continuous
RF Output Impedance	50 ohms
Temperature Range (OUTSIDE CABINET)	-40°C to +70°C (Mobile) -30°C to +60°C (Station)

* 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 supplies to the MASTR 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 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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