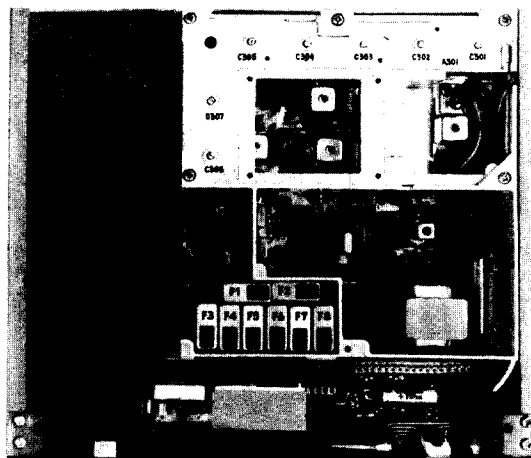


# MASTR<sup>®</sup> II MAINTENANCE MANUAL

138-174 MHz RECEIVER

**Maintenance Manual LBI30027A**  
(DF1101, THIS SHEET ONLY)  
(Supersedes LBI4561)



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138-174 MHz OSC/MULT 19D423241G1-4, MIF 19C320153G1,2  
STD. RECEIVER RF ASM 19D416693G1,2, IFAS 19D417707G1, G2

## SPECIFICATIONS\*

Audio Output (to 8-ohm Speaker	12 Watts at less than 3% distortion	
Sensitivity	<u>With Pre-Ampl</u>	<u>Without Pre-Ampl</u>
12-dB SINAD (EIA Method)	0.175 $\mu$ V	0.35 $\mu$ V
20-dB Quieting Method	0.25 $\mu$ V	0.50 $\mu$ V
SELECTIVITY		
EIA Two-Signal Method	-95 dB	-100 dB
20-dB Quieting Method		-100 dB
Spurious Response	-95 dB	-100 dB
Intermodulation (EIA)	-80 dB	-85 dB
Frequency Stability		
5C-ICOM with EC-ICOM	$\pm 0.0005\%$ ( $-40^{\circ}\text{C}$ to $+70^{\circ}\text{C}$ )	
5C-ICOM or EC-ICOM	$\pm 0.0002\%$ ( $0^{\circ}\text{C}$ to $+55^{\circ}\text{C}$ )	
2C-ICOMS	$\pm 0.0002\%$ ( $-40^{\circ}\text{C}$ to $+70^{\circ}\text{C}$ )	
Modulation Acceptance	$\pm 7$ kHz (narrow-band)	
Squelch Sensitivity		
Critical Squelch	0.2 $\mu$ V	
Maximum Squelch	Greater than 20 dB quieting (less than 1.5 $\mu$ V)	
Maximum Frequency Separation	<u>Full Specifications</u>	<u>3 dB Degradation</u>
138-155 MHz	.900 MHz	1.60 MHz
150.8-174 MHz	1.0 MHz	1.80 MHz
Frequency Response	Within +1 and -8 dB of a standard 6-dB per octave de-emphasis curve from 300 to 3000 Hz (1000-Hz reference)	
RF Input 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 the MASTR II receiver is +12 Volts DC, high current 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. KEEP AWAY FROM THESE CIRCUITS WHEN THE TRANSMITTER IS ENERGIZED!