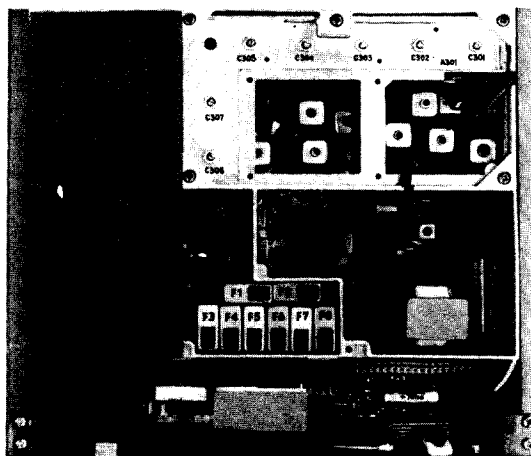


# MASTR II MAINTENANCE MANUAL

**138-174 MHz RECEIVER (WITH NOISE BLANKER)**

(Non-NB version is LBI-30027)



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**Maintenance Manual**  
(DF1110, THIS SHEET ONLY)  
(Supersedes LBI4592)

**LBI30028C**

**138-174 MHz OSC/MULT 19D423241G1-4, MIF/NB 19D416662G1,2  
RECEIVER RF ASM 19D416693G1,2 IFAS 19D417707G1,2**

## SPECIFICATIONS\*

Audio Output (to 8-ohm Speaker)	12 Watts at less than 3% distortion	
Sensitivity		
12-dB SINAD (EIA Method)	.175 $\mu$ V	
20-dB Quieting Method	.25 $\mu$ V	
SELECTIVITY		
EIA Two-Signal Method	-100 dB	
20-dB Quieting Method	-100 dB	
Spurious Response	-95 dB	
Intermodulation (EIA)	-75 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 $\pm 1$ 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 supplied to the MASTR II receiver is +12 VDC, 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 upon contact. KEEP AWAY FROM THESE CIRCUITS WHEN THE TRANSMITTER IS ENERGIZED!

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WORLD HEADQUARTERS • LYNCHBURG, VIRGINIA 24502 U.S.A.

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