

MASTR II MAINTENANCE MANUAL

138-174 MHz DUAL FRONT END OPTION 9201 (matching IF Freq.) OPTION 9202 (non-matching IF Freq.)

(Noise Blanker version is LBI-30023)

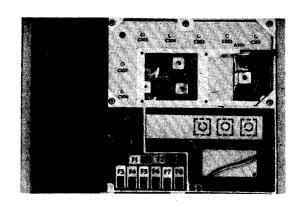


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DESCRIPTION AND MAINTENANCE	LBI3011 (DF1110)
RF AMPLIFIER ASSEMBLY AND MIXER/IF BOARD	LBI 4980 (DF1107)
OSCILLATOR/MULTIPLIER BOARD	LBI 4984 (DF1106)
RF STEERING SWITCH, MIXER/IF SWITCH/ 2ND CONVERTER	LBI30038

SPECIFICATIONS*

SENSITIVITY

DFE

12-dB SINAD 20-dB Quieting

Receiver

SELECTIVITY

EIA Two-Signal Method 20 dB Quieting Method

INTERMODULATION (EIA)

SPURIOUS RESPONSE

MODULATION ACCEPTANCE

FREQUENCY STABILITY

5C-ICOM with EC-ICOM 5C-ICOM or EC-ICOM

2C-ICOMS

MAXIMUM FREQUENCY SEPARATION (Multi-Frequency Units)

138-155 MHz 150.8-174 MHz

RF INPUT IMPEDANCE

CURRENT DRAIN (TYPICAL)

With Pre-Ampl

0.2 μV 0.275 μV Without Pre-Ampl

0.385 μV

0.550 μV

Sensitivity degraded not more than 1 dB from standard receiver specifications

-100 dB

-100 dB

-80 dΒ

-100 dB

±7 kHz (narrow-band)

 $\pm 0.0005\%$ (-40°C to +70°C)

 $\pm 0.0002\%$ (0°C to +55°C)

 $\pm 0.0002\%$ (-40°C to +70°C)

Full Specifications

3 dB Degradation

.900 MHz

1.60 MHz

1.0 MHz 1.80 MHz

50 ohms

Non-matching IF's - 90 mA Matching IF's - 65 mA

*These specifications are intended primarily for the use of the serviceman. Refer to the appropriate Specification Sheet for the complete specifications.

COMBINATION NOMENCLATURE

1st Digit	2nd Digit	3rd Digit	4th Digit
Frequency Capability	Options	Frequency Range	Oscillator Stability
A 1-Freq.	S Standard	56 138-155 MHz	±5 PPM (±0.0005%)
D 2-Freq.	UHS	66 150.8-174 MHz	±2 PPM
E 3-Freq.			(±0.0002%)
F 4-Freq.			
G			
5-Freq.			
6-Freq.			
7-Freq.			

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.

 $\begin{array}{l} \hbox{High-level RF energy in the transmitter Power Amplifier assembly can cause RF burns.} \\ \hbox{KEEP AWAY FROM THESE CIRCUITS WHEN THE TRANSMITTER IS ENERGIZED!} \end{array}$

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