# **Maintenance Manual**

MASTR<sup>®</sup> III MULTIPLE RECEIVER RF PACKAGE, UHF

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#### **NOTICE!**

This manual covers Ericsson and General Electric products manufactured and sold by Ericsson Inc.

#### **NOTICE!**

Repairs to this equipment should be made only by an authorized service technician or facility designated by the supplier. Any repairs, alterations or substitution of recommended parts made by the user to this equipment not approved by the manufacturer could void the user's authority to operate the equipment in addition to the manufacturer's warranty.

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### **SPECIFICATIONS\***

	UHF					
FREQUENCY RANGE (MHz):	<u>380-400</u>	403-430	<u>425-450</u>	<u>450-470</u>	<u>470-494</u>	<u>492-512</u>
RF INPUT IMPEDANCE ( $\Omega$ ):	50	50	50	50	50	50
CHANNEL SPACING (kHz):	12.5/25	12.5/25	12.5/25	12.5/25	12.5/25	12.5/25
CENCITIVITY (JD) ELA 12 JD CINIAD.	115	116	116	116	-116	116
SENSITIVITY (dBm) EIA 12 dB SINAD:	-115	-116	-116	-116		-116
	$(0.40 \mu\text{V})$	$(0.35 \mu\text{V})$				
Threshold Squelch (dBm):	-118	-119	-119	-119	-119	-119
	$(0.28  \mu V)$	$(0.25  \mu V)$				
SELECTIVITY EIA 2-Signal (dB)						
12.5 kHz:	-80	-80	-80	-80	-80	-80
25 kHz:	-90	-90	-90	-90	-90	-90
FREQUENCY STABILITY (%):	$\pm 0.0001$	±0.0001				
SIGNAL DISPLACEMENT						
BANDWIDTH (kHz):	±2	±2	±2	±2	±2	±2
INTERMODULATION (dB)						
12.5 kHz	-80	-80	-80	-80	-80	-80
25 kHz:	-85	-85	-85	-90	-90	-90
30 kHz:						
SPURIOUS & IMAGE REJECTION (dB):	-100	-100	-100	-100	-100	-100
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FREQUENCY SPREAD						
Full Specs. (MHz):	2.0	2.0	2.0	2.0	2.0	2.0
3 dB Degradation in Sensitivity (MHz):	3.0	3.0	3.0	3.0	3.0	3.0

 $AUDIO\ RESPONSE\ (de-emphasis): \qquad Within\ +2\ and\ -8\ dB\ of\ 6\ dB/octave\ (@\ Local\ Speaker),\ 300\ to\ 3000\ Hz\ per\ EIA.$ 

Within +1 and -3 dB of 6 dB/octave (@ Line Output), 300 to 3000 Hz per EIA.

AUDIO OUTPUT: 1 Watt at less than 3% distortion @ 1000 Hz, 25 kHz Channel

## **REGULATORY APPROVALS**

The following equipment authorization numbers have been granted:

COUNTRY REGULATORY APPROVAL

United States FCC AXAER-161-A (425-450 MHz)

AXAER-161-B (450-470 MHz)

Canada DOC Pending

## LBI-39115

## **MODULE NUMBERS**

TRANSMIT SYNTHESIZER	
(450-470 MHz)	19D902780G3
(425-450 MHz)	
(403-425 MHz, 410-430 MHz)	
(308-400 MHz)	
(470-494 MHz)	
(492-512 MHz)	
RECEIVE SYNTHESIZER	
(450-470 MHz, 403-425 MHz,	
410-430 MHz)	19D902781G3
(425-450 MHz, 470-494 MHz)	19D902781G7
(308-400 MHz)	
(492-512 MHz)	
RX FRONT END MODULE	
(450-470 MHz)	19D902782G3
(425-450 MHz)	
(403-425 MHz)	
(410-430 MHz)	
(380-400 MHz)	
(470-494 MHz)	
(492-512 MHz)	
IF MODULE	
	19D902783G1
(470-494 MHz, 492-512 MHz)	