

# MAINTENANCE MANUAL

30-50 MHz MONITOR RECEIVER (WITH NOISE BLANKER)

**Maintenance Manual LBI 30682 A**  
(DF1120, THIS SHEET ONLY)



## TABLE OF CONTENTS

|                                            |                      |
|--------------------------------------------|----------------------|
| SPECIFICATIONS .....                       | ii                   |
| SYSTEM BOARD & ASSOCIATED ASSEMBLIES ..... | LBI30665<br>(DF4101) |
| MAINTENANCE .....                          | LBI30683<br>(DF1120) |
| RF ASSEMBLY & MIXER/IF/NOISE BLANKER ..... | LBI4991<br>(DF1107)  |
| OSCILLATOR/MULTIPLIER .....                | LBI30160<br>(DF1106) |
| IF-DETECTOR .....                          | LBI30049<br>(DF1105) |

**30-50 MHz MONITOR RECEIVER  
(WITH NOISE BLANKER)**

## SPECIFICATIONS\*

|                                   |                                            |                  |
|-----------------------------------|--------------------------------------------|------------------|
| DIMENSIONS                        |                                            |                  |
| Height                            | 3.5 inches ( 8.89 cm)                      |                  |
| Width                             | 8.4 inches (21.34 cm)                      |                  |
| Depth                             | 10.6 inches (26.92 cm)                     |                  |
| WEIGHT                            |                                            |                  |
|                                   | 9.25 pounds (4.2 Kg)                       |                  |
| INPUT POWER                       |                                            |                  |
|                                   | 15 Watts                                   |                  |
| INPUT VOLTAGE                     |                                            |                  |
|                                   | 121/242 VAC, 50/60 Hz                      |                  |
| REGULATED DC VOLTAGES             |                                            |                  |
|                                   | 15 VDC @ 0.8 Amperes                       |                  |
|                                   | 10.0 VDC @ 0.250 Amperes                   |                  |
| CURRENT DRAIN (@ 121 VDC)         |                                            |                  |
| Standby                           | 0.05 Amperes                               |                  |
| Receive                           | 0.12 Amperes                               |                  |
| AUDIO OUTPUT (to 3.2-ohm Speaker) |                                            |                  |
|                                   | 3 Watts at less than 5% distortion         |                  |
| SENSITIVITY                       |                                            |                  |
| 12-dB SINAD (Method)              | 0.25 uV                                    |                  |
| 20-dB Quieting Method             | 0.35 uV                                    |                  |
| SELECTIVITY                       |                                            |                  |
| EIA Two-Signal Method             | -95 dB (adjacent channel, 20 kHz Channels) |                  |
| SPURIOUS RESPONSE                 |                                            |                  |
|                                   | -100 dB                                    |                  |
| FREQUENCY STABILITY               |                                            |                  |
|                                   | 0.0005%                                    |                  |
| MODULATION ACCEPTANCE             |                                            |                  |
|                                   | ±6.5 kHz                                   |                  |
| SQUELCH SENSITIVITY               |                                            |                  |
| Fixed Squelch                     | 6 dB SINAD                                 |                  |
| INTERMODULATION (EIA)             |                                            |                  |
|                                   | -80 dB                                     |                  |
| TEMPERATURE RANGE                 |                                            |                  |
|                                   | -30°C to +60°C (-22°F to +140°F)           |                  |
| MAXIMUM FREQUENCY SEPARATION      |                                            |                  |
| (Multi-Frequency Units)           | Full Specifications                        | 3 dB Degradation |
| 30-36 MHz                         | .120 MHz                                   | .340 MHz         |
| 36-42 MHz                         | .160 MHz                                   | .400 MHz         |
| 42-50 MHz                         | .360 MHz                                   | .640 MHz         |
| 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

No one should be permitted to handle any portion of the equipment that is supplied with high voltage; or to connect any external apparatus to the units while the units are supplied with power. KEEP AWAY FROM LIVE CIRCUITS!