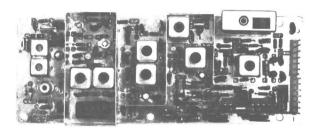
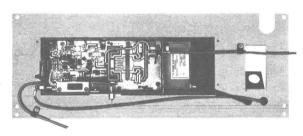
MASTR[®]II MAINTENANCE MANUAL

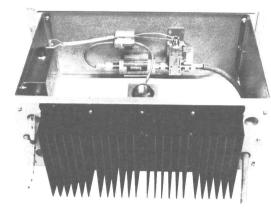
851-870 MHz, 90-WATT TRANSMITTER



EXCITER



DRIVER



POWER AMPLIFIER

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| SPECIFICATIONS | ii |
|-----------------------------|----------------------|
| DESCRIPTION AND MAINTENANCE | LBI30487 (DF3158) |
| EXCITER | LBI30488 (DF3165) |
| POWER AMPLIFIER DRIVER | LBI30486 (DF3174) |
| POWER AMPLIFIER | LBI30445 (DF3174) |

SPECIFICATIONS*

Power Output

90 Watts (Adjustable from 30 Watts to rated

power output.)

Crystal Multiplication Factor

Frequency Stability

 ± 0.0001 (-30°C to +60°C Ambient)

Spurious and Harmonic Emission

At least 63 dB below full rated power output.

Modulation

Adjustable from 0 to ±5 kHz swing with instan-

taneous modulation limiting.

Modulation Sensitivity

75 to 120 Millivolts

Audio Frequency Characteristics

Within +1 dB to -3 dB of a 6 dB/octave preemphasis from 300 to 3000 Hz per EIA standards.

Post limiter filter per FCC and EIA.

Distortion

Less than 3%

Deviation Symmetry

0.5 kHz maximum

Duty Cycle

Continuous

RF Output Impedance

50 Ohms

— 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!

High-level RF energy in the transmitter Power Amplifier assembly can cause RF burns. KEEP AWAY FROM THESE CIRCUITS WHEN THE TRANSMITTER IS ENERGIZED!

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