LBI-31841A

GE Mobile Communications

MASTR® II 16 PLUS®

850-870 MHz,
35 WATT TRANSMITTER

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DESCRIPTION AND MAINTENANCE LBI-31843
EXCITER LBI-31800
POWER AMPLIFIER LBI-30857
(DF3174)

Maintenance Manual

SPECIFICATIONS *

POWER OUTPUT	35 Watts rf (adjustable from 7 to 35 watts)
FCC FILING	KT-260-A2
FREQUENCY STABILITY	+/-0.0001% @ -22 to +140°F (-30 to +60°C)
SPURIOUS AND HARMONIC EMISSION (per EIA RS-152-B, par. 4)	-13 dBm below rated output (minimum) for conducted, -13 dBm below rated output (minimum) for radiated
MODULATION	Adjustable from 0 to +/-5 kHz swing with instantaneous modulation limiting.
MODULATION SENSITIVITY	50 to 115 mV
MODULATING FREQUENCY RANGE (audio)	300 Hz to 3 kHz
MODULATION DEVIATION (Voice/Tone)	3.75 kHz
AUDIO FREQUENCY CHARACTERISTICS	From +1 to -3 dB of a 6 dB per octave pre-emphasis over 300 Hz to 3 kHz (per EIA standards). Post limiter filter per FCC and EIA.
AUDIO DISTORTION	Less than 3%
DEVIATION SYMMETRY	0.5 kHz maximum
TRANSMITTER DUTY CYCLE	Continuous
RF OUTPUT IMPEDANCE	50-Ohms, nonreactive at PA output connector.
RF HIGH-SPEED DATA	9600 baud
RF HIGH-SPEED DATA DEVIATION	3.00 kHz
RF LOW-SPEED DATA RATE	150 bps
RF LOW-SPEED DATA DEVIATION	0.75 kHz

* These specifications are intended primarily for use during maintenance. Refer to the appropriate specification sheet for complete specifications.

WARNING

Although the highest dc voltage supplied to the transmitter is +24 Vdc, high currents 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 can cause rf burns upon contact. Keep away from these circuits when the transmitter is energized.