

MX SERIES

The evolution of 40+ years of experience

SIMPLICITY • RELIABILITY • MODULARITY • SERVICEABILITY

MX-1 V

1 Watt VHF Transmitter / Translator



***A Digital Transmitter
with Analog Front End***

DTV COMPATIBLE

***FREQUENCY AGILE
INPUT AND OUTPUT***

***AMPLIFIER FIELD TESTED
FOR DIGITAL SERVICE***

***BROADBAND,
CLASS AB AMPLIFIER***

***ADJACENT CHANNEL
OPERATION CAPABLE***

***LINEAR POWER SUPPLY
PROVEN RELIABILITY***

***FIELD TUNABLE
OUTPUT FILTERS***

LARCAN

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The evolution of 40+ years of experience

SIMPLICITY • RELIABILITY • MODULARITY • SERVICEABILITY

MX-1V SPECIFICATIONS

THE **MX Series** IS THE NEW STANDARD IN BROADCAST TRANSMITTERS. DESIGNED UPON THE PRINCIPLES OF

- SIMPLICITY
- RELIABILITY
- MODULARITY
- SERVICEABILITY

THEY ARE BUILT TO LAST. PERIOD.

BROADBAND DESIGN

WITH STATE-OF-THE-ART BROADBAND AMPLIFIERS, AND A FREQUENCY AGILE FRONT END, CHANNEL CHANGES COULDN'T BE EASIER. MINOR FIELD TUNING OF THE OUTPUT FILTER IS ALL THAT IS REQUIRED.

LINEAR

POWER SUPPLY

RESPONSIBLE FOR PROVIDING DEPENDABLE, UNINTERRUPTED SERVICE WITH MINIMAL MAINTENANCE REQUIREMENTS AND MAXIMUM SURGE PROTECTION - TO KEEP YOU ON THE AIR.

FIELD TESTED FOR DIGITAL

THE AMPLIFIERS COME FROM THE LARCAN FIELD-TESTED GENERATION OF DTV TRANSMITTERS, WHICH MAKES THE **MX Series** THE EQUIPMENT OF CHOICE FOR THE FUTURE.

NTSC

OUTPUT

Power: 1 Watt, peak visual
10% Aural

Frequency: Low Band VHF;
Channels 2-6 (54-88MHz)
High Band VHF
Channels 7-13 (174-216MHz)

Output Connector: BNC

INPUT

Input Frequency: baseband, comp. NTSC video

Input Level: 0.5 to 1.5 Vp-p

Input Connector: 75 ohm, type "F"

PERFORMANCE

Response: ± 1.5 dB between carriers

Frequency Stability: $\pm 0.02\%$ over temperature range
High stability option available

Harmonic Radiation: -60dBc

Spurious Products: -50dBc

Three Tone IMD: > -52dBc

VIDEO

Differential Phase: $\leq 3^\circ$

Differential Gain: $\leq 5\%$

2T K-factor: $\leq 2.5\%$

Group Delay: Per FCC specification

ICPM: $\leq 2^\circ$

AM Noise: ≥ -50 dBc

AUDIO

Distortion: $\leq 1\%$ (0.2% typ.) 50Hz to 15kHz

Hum and Noise: 55dB below 25kHz deviation

Response: ± 1.0 dB, 50Hz to 15kHz

GENERAL

Power Requirement 95VA at 95 to 130VAC,
50/60Hz

Dimensions: 5-1/4" x 19" x 10-1/2"
(H x W x D) (133mm x 483mm x 267mm)

Temperature Range: 0 to 45° C, recommended.
Tested at -30° to +50° C.

Options: CCIR Channels and IF Frequencies. Channel 3 or 4 IF for USA Applications. 4.5MHz Aural Subcarrier Input, Dual Input Automatic Switching.

TRANSMITTER

TRANSLATOR

1 Watt, peak visual
10% Aural

Low Band VHF;
Channels 2-6 (54-88MHz)
High Band VHF
Channels 7-13 (174-216MHz)

BNC
75 ohm, type 'F'

All VHF and UHF channels

1 mV, +/-20dB
(<1dB output change for 40dB
input change)

75 ohm, type "F"

± 1.5 dB between carriers

$\pm 0.02\%$ over temperature range
High stability option available

-60dBc

-50dBc

> -52dBc

$\leq 3^\circ$

$\leq 5\%$

$\leq 2.5\%$

± 30 ns maximum

$\leq 2^\circ$

≥ -50 dBc

$\leq 1\%$ (0.2% typ.) 50Hz to 15kHz

55dB below 25kHz deviation

± 1.0 dB, 50Hz to 15kHz

95VA at 95 to 130VAC,
50/60Hz

5-1/4" x 19" x 10-1/2"
(133mm x 483mm x 267mm)

0 to 45° C, recommended.
Tested at -30° to +50° C.

Due to continuous product improvements, specifications subject to change without notice.

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