

LUXMAN M-300

Duo-Beta Plus-X Power Amplifier

Luxman's Duo-Beta Circuitry, first introduced in 1979, was acclaimed by audio critics and audiophiles alike as a milestone in the art of negative feedback (NFB) design. This unique approach to lowering total harmonic distortion (THD) is discreetly applied in Luxman components across the audible band as well as in the subsonic range (0 to 5 Hz). The benefits of Duo-Beta Circuitry are instantly audible.

Now, with the M-300 power amplifier, Luxman engineers have taken their NFB concepts one step further, and applied them to power supply design. This innovative application of negative feedback is called Plus-X, and it accomplishes a great deal.

Plus-X provides a constant and stable flow of power to all circuit components. It maintains low impedance at low frequencies for tight, clean bass response. At the same time, it maintains high impedance at high frequencies for smooth, extended response to beyond the limits of hearing. And the dramatic reduction in distortion is instantly apparent.

The M-300 is, literally, two amplifiers in one. With the mere flick of a switch, you can listen to the ultra-low distortion of a *pure* Class A amplifier with 40 Watts per channel. Or, if you require more dynamic headroom, the M-300 may be operated in Class AB with 150 Watts per channel.

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LUXMAN M-300 Duo-Beta Plus-X Power Amplifier Specifications

Power Output/Class A Mode:

40 Watts per channel minimum continuous, both channels driven into 8 Ohm load at any frequency from 20 Hz to 20,000 Hz with no more than 0.005% total harmonic distortion

Power Output/Class AB Mode:

150 Watts per channel minimum continuous, both channels driven into 8 Ohm load at any frequency from 20 Hz to 20,000 Hz with no more than 0.008% total harmonic distortion.

Rated IM/Class A Mode:
Not to exceed 0.005%

Rated IM/Class AB Mode:
Not to exceed 0.008%

Slew Rates:
Class A: 180V/ μ S. Class AB: 200V/ μ S

Rise Time:
0.06 μ S

Frequency Response:
10 Hz to 100,00 Hz, -1 dB (Class A and Class AB)

Input Sensitivities:

Class A: 450 mV.
Class AB: 900 mV.

Input Impedance:

50,000 Ohms, Class A or Class AB

Signal-to-Noise Ratio (IHF-A weighted):

Class A: better than 115 dB
Class AB: better than 120 dB

Residual Noise:

30 μ V, Class A and Class AB

Damping Factor:

120 (at 1 KHz, 8 Ohms in Class A or Class AB)

Protection Circuit:

Speaker protection by DC-drift sensing circuit. Amplifier protected by current sensing circuit

Power Consumption:

7 amps, 120 Volts

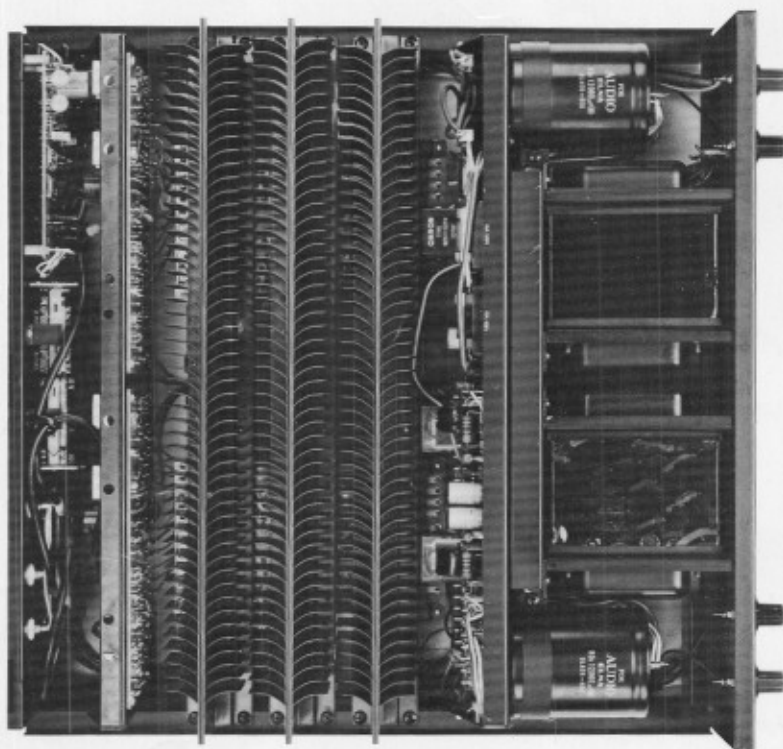
Dimensions:

478mm wide (19.1") X 214mm high (8.6") X 484mm deep (19.4")

Weight:

Net: 30 kilograms (66 lbs)
Gross: 32 kilograms (70.4 lbs)

Specifications and design subject to change without notice.



Plus-X feedback circuit in the power supply stabilizes the flow of power to all circuit components, maintains low impedance for low frequencies, and high impedance for high frequencies.

Luxman-designed protection circuits for both amplifier and speakers.

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