

LUXMAN

STEREO POWER AMPLIFIER
M-700u



Longing dream comes true— Flagship pedigree of exquisite sound



M-700u, a power amplifier, is a new middle range model that inherits our powerful drive circuit including the latest version, ODNF 4.0 circuit whose distortion characteristics and S/N performance have been significantly improved and with which the top-end model, M-900u, has been equipped and also including 4-parallel push-pull structure with 3-stage Darlington to pursue Luxman's development philosophy for power amplifiers, "satisfying both high drivability and sound quality of high density".

The output from 120 W/8Ω to up to 840 W/1Ω instantaneously exploits the full potential of speaker characteristics under any load conditions.

M-700u is a new-generation stereo power amplifier that combines richly expressive sound and high power without losing the music dynamism.



High-power 4-parallel module, ODNF circuit, version 4.0

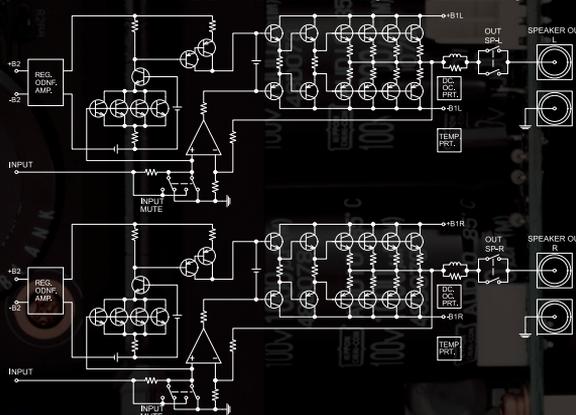
A powerful drive circuit is necessary to amplify sound signals from a control amplifier with high fidelity and to exploit the performance of various speakers. M-700u has achieved the output of up to 840 W + 840 W (1Ω) instantaneously from the rated output of 120 W + 120 W (8Ω) and 210 W + 210 W (4Ω). Speakers can be driven with its sufficient power under any load conditions. Moreover, the BLT mode allows the user to use the unit as a monaural amplifier with the rated output of 420 W (8Ω). A 4-parallel push-pull structure with 3-stage Darlington is used in this circuit to acquire such high power. The latest version, ODNF 4.0 circuit, that has achieved primary slew rate speed indicating the startup performance by feeding back only distortion components, ultra-wide bandwidth, and low level of distortion is adopted for the amplifier circuit, which is inherited from M-900u, our top-end model. Precise reproduction of a small sound signal has enhanced the elaborate sound expression and the expressive capability of tranquillity. Setting up to 6 W with which sound range can be practically and sufficiently acquired to the Class A operation range, it has made its high power consistent with sound expression of high density.

* ODNF is an abbreviation for "Only Distortion Negative Feedback".



High-power amplifier with 4-parallel module, ODNF circuit, version 4.0

M-700u BLOCK DIAGRAM(POWER AMP)



Large-capacity power supply circuit

M-700u is equipped with high-performance EI type power transformer whose rated capacity is as much as 550 VA with a reputation for its tone quality full of dynamism including bass range perseverance to support overwhelmingly powerful power supply unit. A high level of regulation ability that is unshakable by any load fluctuation has been achieved.



Large-capacity EI-type power transformer

Low impedance transmission

In order to transmit the powerful drive force generated by the large-scale output circuit without any loss, super-thick wires for major current systems and large-capacity speaker relays with low resistance in which 4 contacts are connected in parallel are equipped. Transmission of thoroughly low impedance has been achieved, and 350 of the damping factor has been accomplished.



Low-resistance speaker relay

Large-capacity block condenser

The combination of block capacitor with high-capacity of 80,000μF (10,000μF x 8) whose right and left channels are independent and a power transformer configures high-inertia power supply that offers both instantaneous force and a sense of stability. This unit supports the performance of M-700u from the bottom and delivers the sound dynamism amazingly.



Custom-built large-capacity block capacitor

Large type of needle-type meter

A large-scale needle-type meter is adopted to provide not only audible but also physical sensation for the lively feeling of the music. The electric bulb color of the LED illumination is the result of our persistence in dignity and visibility. This meter can be switched in 3 steps with use of the switch on the front panel as follows: Operation ON/Light ON → Operation ON/Light OFF → Operation OFF/Light OFF.



Needle-type meter with electric bulb-colored illumination

Gradation cast-iron leg

A loopless chassis structure is used for the cabinet to eliminate increased ground impedance and the effect of generated magnetic field. Gradation cast-iron insulator legs are attached to prevent resonance thanks to its characteristics of that the metallic structure becomes smaller from the center to the periphery of the leg.



Gradation cast-iron insulator leg

Specially selected custom parts

M-700u consists of original custom parts, considering the sound quality as the first priority, such as resistances, capacitors, even all wires, which have been generated from Luxman's highly advanced know-how and sensibility accumulated in producing audio products for a long time. Those parts have contributed to realize rich tone that Luxman has pursued.

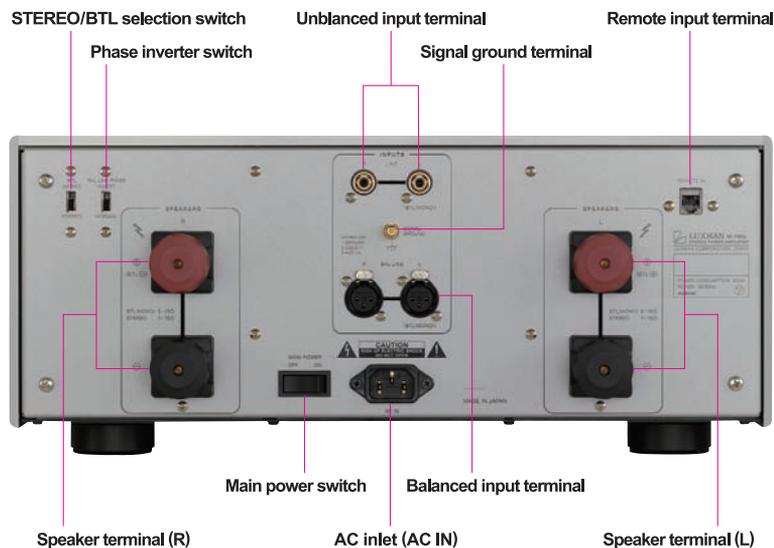
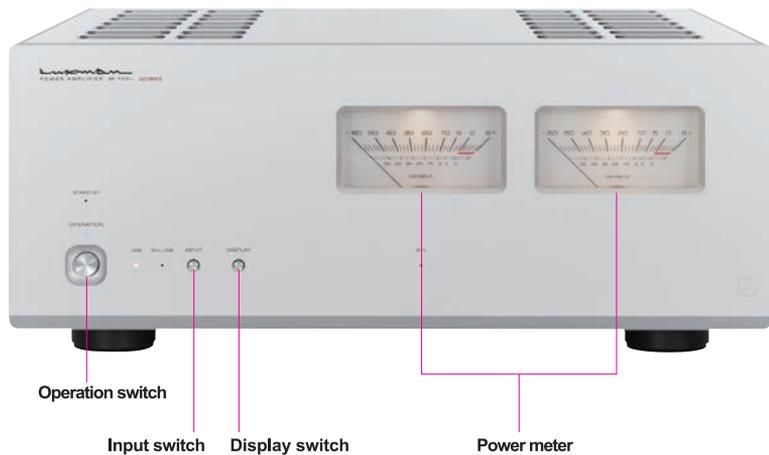


Original custom parts

Beeline construction

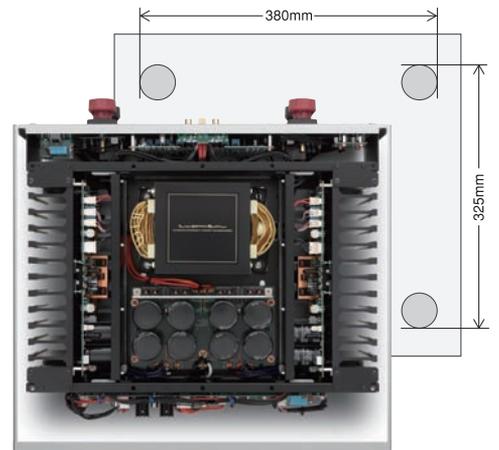
The beeline construction is adopted, which makes the internal configuration of the power amplifier reasonable and also makes the wiring route shortest. The traditional wiring pattern of the substrate with use of copper foil of approx. 100μm in thickness allows highly pure signal transmission to be achieved.

M-700u STEREO POWER AMPLIFIER



SPECIFICATIONS

Rated output	120W + 120W (8Ω)/at stereo 210W + 210W (4Ω)/at stereo 420W (8Ω)/at monaural
Instantaneous max. output	840W + 840W (1Ω)/at stereo 1,680W (2Ω)/at monaural
Input sensitivity	1.1V/120W (8Ω) GAIN 29.0dB
Input impedance	Unbalanced 51kΩ Balanced 34kΩ
Frequency response	20Hz to 20kHz (+0, -0.1dB) 1Hz to 130kHz (+0, -3.0 dB)
Total harmonic distortion rate	0.009% or less (1kHz/8Ω) 0.1% or less (20Hz to 20kHz/8Ω)
S/N ratio (IHF-A)	115dB
Amplification circuit	ODNF 4.0
Output configuration	Bipolar 4-parallel push-pull
Power transformer	EI type 550VA
Damping factor	350
Power consumption	370W 110W (under no signal) 0.4W (at standby)
External dimensions	440(W) x 190(H) x 427(D) mm front side knob of 2mm and rear side terminal of 38 mm included in depth
Net weight	27.5kg
Accessories	Dedicated remote cable Power cable
Speaker terminal Supported Y-4ug terminal dimension	Width of part a: 14mm or less Width of part b: 7mm or more 
	* Connection may not be performed depending on the shape of the Y-4ug terminal.



Control amplifier inheriting the philosophy and performance from the top-end models

CONTROL AMPLIFIER C-700u



SPECIFICATIONS

Input sensitivity/ Input impedance	Unbalanced 250mV/46kΩ Balanced 250mV/67kΩ
Output/Input impedance	Unbalanced rating 1V/90Ω, max. 11V Balanced rating 1V/600Ω, max. 11.5V
Frequency response	20Hz to 20kHz (+0, -0.1dB) 5Hz to 120kHz (+0, -3.0dB)
Total harmonic distortion	Unbalanced 0.007% (20Hz to 20kHz) Balanced 0.010% (20Hz to 20kHz)
S/N ratio (IHF-A)	Unbalanced 125dB Balanced 122dB
Volume adjustment	New LECUA1000
Amplification circuit	ODNF 4.0
Max. change amount of tone control	BASS: ±8dB at 100Hz TREBLE: ±8dB at 10kHz

Remote control functions	• Operation • Dimmer • Input selector • Output mode • Balanced phase selection • Record output • External pre-input • Line straight • Loudness • Volume up/down • Mute • Zoom
Power consumption	28W 2.0W (at standby)
External dimensions	440(W) x 130(H) x 430(D) mm front side knob of 17mm and rear side terminal of 14 mm included in depth
Net weight	14.6 kg
Accessories	Remote control (RA-22) Power cable

LUXMAN

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Safety Cautions

To ensure correct use of this product, read the "Owner's Manual" prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents.

*Design and specifications are subject to change without notice.