

ULTIMATE HIGH FIDELITY STEREO COMPONENT

MODEL R-1120

LUXMAN

1120

AM/FM STEREO TUNER-AMPLIFIER

The long awaited advent of super-powered "tuner-amplifier" from Luxman!!

- # Giant power output; 120W minimum continuous per channel into 8 ohms loads, 20 - 20,000Hz, both channels driven with no more than 0.03% total harmonic distortion.
- # Truly useful and equally eye-catching LED peak indicators allow easy reading of instantaneous output power level.
- # 3 pairs of speaker terminals, one of which is specially designed for exclusive use with such low-impedance loudspeakers as electrostatic loudspeaker which have been gaining remarkable popularity among discerning audiophiles.



Audio Section

The pre amp section employs an equalizer amp composed of a 3-stage direct-coupled circuit of PNP transistors, a 2-stage direct-coupled flat amp of PNP and NPN transistors, a buffer circuit of NPN transistors, and a control amp composed of a 2-stage direct-coupled circuit with PNP transistors. Throughout the entire circuitry, specially selected low-noise transistors are featured, and a constant voltage supply circuit at the power supply section ensures stable performance. Special circuitry is provided to obtain a large amount of gain at each stage, and the large amounts of Negative Feedback applied realize ultra low distortion and wide bandwidth.

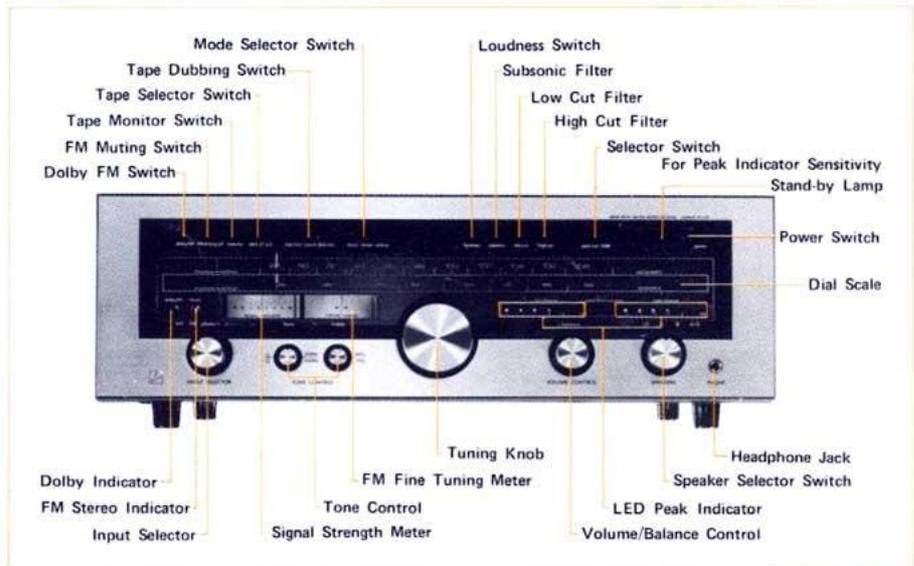
In the main amp section, a differential amp features a low-noise pair of transistors of uniform characteristics, which suppresses the DC drift to the minimum level. A constant current drive system is arranged at the loads of pre-driver stage, which not only improves the load condition in the treble range but realizes stable, undistorted power output.

To prevent accidental failure, a power limiter circuit to protect power transistors from excessive current, and a time-delay muting circuit to safeguard speaker system from DC drift are incorporated.

An exclusive terminal is provided for operation of such speakers as electrostatic ones which have extreme, low impedance at the ultra bass range. Furthermore, the LED peak indicator is provided with an on-off switch and its sensitivity is interchangeable between 0dB and -12dB.

FM Section

Our exclusive "Closed Loop Lock Tuning System" is featured not only to reduce remarkably the amount of frequency drift at the local oscillator, but to lock the receiving frequency accurately at the transmission frequency of an FM station.



Unlike conventional AFC circuitry, the frequency lock is limited to $\pm 100\text{kHz}$ to prevent the receiving frequency from merging into that of the adjacent channel.

A superb $1.8\mu\text{V}$ sensitivity is attained thanks to a quality 4-gang tuning capacitor at the front end, which interacts with the dual gate MOS FET to ensure good overload and spurious characteristics.

Excellent band pass response is obtained by means of linear phase ceramic and block filters, which are superb in group delay time characteristics and sharp skirt selectivity. Good limiting and low distortion are attained by means of a quadrature IC and distortion-free discriminator

transformer.

We employed a specially selected PLL MPX IC to obtain stable operation and ultra low distortion as well as good separation and S/N ratio. In addition, an exclusive IC low-pass filter helps suppress carrier leakage. Moreover a constant voltage supply circuit is used for stable performance. Dolbyized FM can be received with the insertion of an optional Dolby circuit board.

AM Section

Pleasant reception of AM broadcasting is ensured thanks to modern technology utilizing a powerful AGC circuit, a ceramic filter of high selectivity, and distortion-free detector, etc.

[AUDIO SECTION]

Power Output:	120 watts minimum continuous per channel both channels driven into 8 ohms load, from 20Hz to 20,000Hz with no more than 0.03% total harmonic distortion.
Rated I.M.:	no more than 0.03% (8 ohms, both ch driven, 60Hz : 7kHz = 4 : 1)
Frequency Response:	15Hz - 70kHz (-1dB)
Input Sensitivity:	2.6mV (phono-1/2), 160mV (tuner, aux, moni.)
Phono Overload Voltage: (at 1kHz)	160mV
Signal to Noise Ratio:	72dB (phono-1/2) 94dB (phono-1/2, IHF A weighted, 10mV) 88dB (tuner, aux, monitor) 95dB (tuner, aux, monitor, IHF A weighted)
Residual Noise:	no more than 1.3mV
Crosstalk at 1kHz:	-73dB (aux, monitor)
Tone Control:	TREBLE 2kHz, 10kHz ($\pm 13\text{dB}$) 4kHz, 10kHz ($\pm 8\text{dB}$) BASS 200Hz, 100Hz ($\pm 6\text{dB}$) 400Hz, 100Hz ($\pm 11\text{dB}$)
Filters:	Subsonic 15Hz (-12dB/oct.) Low Cut 70Hz (-12dB/oct.) High Cut 7kHz (-12dB/oct.)
Loudness Control (VR: -30dB):	100Hz +10dB 10kHz +7dB
Peak Indicators:	0, -6, -9, -12, -15, -18dB
Additional Features:	Loudness Control, Peak Indicators, Speaker Switch, Headphone Jack, Tape Dubbing Switch, etc.

[FM SECTION]

	[mono]	[stereo]
IHF usable sensitivity at 98MHz 400Hz, 100% mod.:	10.3dBf (1.8 μV)	17.2dBf (4.0 μV)

50dB Quieting Sensitivity:	14.1dBf (2.8 μV)	36.8dBf (38 μV)
Selectivity at 98MHz, 100μV $\pm 400\text{kHz}$:	80dB 74dB	70dB
Frequency Response at 98MHz, 1mV:	50Hz - 10kHz +0.2, -0.5dB 20Hz - 15kHz +0.2, -1.5dB	+0.2, -1.5dB +0.2, -1.5dB
Distortion at 65dBf:	100Hz 0.1% 1kHz 0.3% 6kHz 0.4%	0.2% 0.2% 0.4%
Capture Ratio at 65dBf:	1.3dB	
Image Response Ratio:	80dB	
IF Response Ratio:	85dB	
AM Suppression Ratio:	55dB	
Stereo Separation:	100Hz - 1kHz - 6kHz -	45dB 48dB 42dB
Subcarrier Product Ratio:	-	60dB
SCA Rejection:	-	60dB
Muting Range:	50kHz	

[AM SECTION]

IHF usable sensitivity at 1000kHz, 400Hz, 30% mod.:	200 $\mu\text{V}/\text{m}$
Image Ratio at 1000kHz, EXT. ANT.:	75dB
IF Rejection at 100kHz, EXT. ANT.:	80dB
S/N at 1000kHz, 10mV, 400Hz, 30% mod.:	52dB
Distortion at 1000kHz, 10mV, 400Hz, 30% mod.:	0.5%
Output Level at 1000kHz, 3mV/m, 400Hz, 30% mod.:	0.15V
Selectivity at 1000kHz:	32dB

[GENERAL]

Power Consumption:	500W (at full power, 8-ohm) 120V 5.5A (CSA rated)
Dimensions:	490(W) x 415(D) x 180(H)mm 19-5/16" x 16-7/32" x 7-3/32"
Weight:	Net 17kgs (37.4 lbs) Gross 19kgs (41.8 lbs)

Specifications and appearance design are subject to change without notice.

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