

LUXMAN

Frequency Synthesized Stereo Tuner-Amplifier

A New, Precision-Look AM/FM Tuner-Amplifier Featuring the Most Up-to-Date FM Frequency Synthesizer Techniques to Meet Today's Congestion of FM Stations!!

R-2050



LUX CORPORATION, JAPAN

An easy-to-read electronic digital readout displays the exact tuning frequency in 50kHz increments for FM and 1kHz for AM reception.

The R-2050 Offers an Ample 55W per Channel, Both Channels Driven into 8 ohms, with Total Harmonic Distortion No More Than 0.05%.

FM Section

With the Digital Frequency Synthesizer System, a frequency synthesizer composed by P.L.L. (Phase Locked Loop) circuit constitutes an integral part of oscillator circuit, where the receiving frequency is directly determined by a digital code. Therefore, both of unprecedented tuning accuracy and unconditional frequency stability are now procured at the same time. Permanent memory storage is possible for 6 FM or AM stations and the receiving frequency is displayed in a digital mode.

The frontend is composed by 4 varactors, where MOS FETs are placed at the RF and mixer stages to ensure good input overload characteristics, and after the low-distortion local oscillator a buffer amp plays an important role to improve such inter-

ference characteristics as IF rejection, image ratio, spurious response, etc.

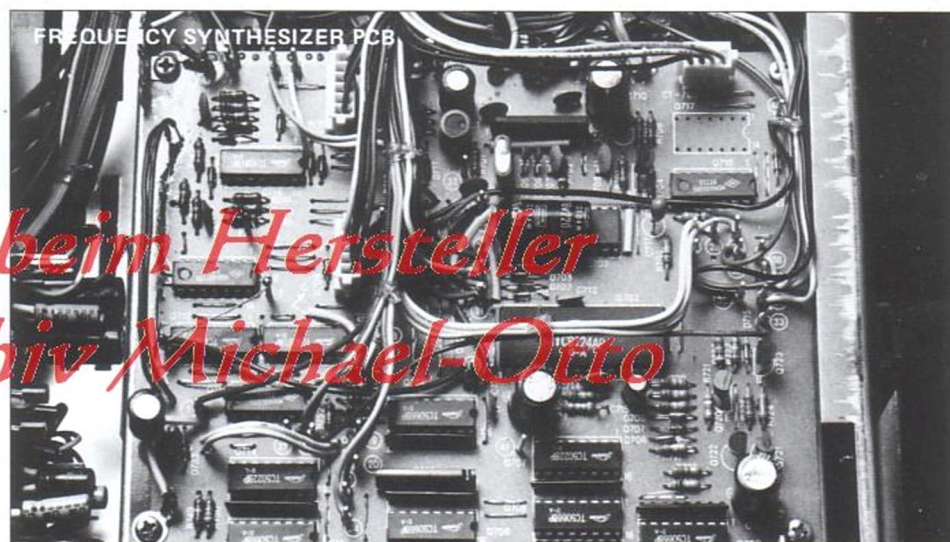
The IF stage is so designed as to be low in distortion. To ensure high selectivity, and low distortion narrow bandwidth filters and 1 pair of wide bandwidth filter are arranged. At the FM detector stage a new quadrature IC is combined with a special detector transformer to further reduce distortion and at the same time to provide good Signal-to-Noise ratio and wide bandwidth.

The MPX stage composed by specially selected P.L.L. IC's and low-pass filters offers superb separation characteristics especially in the treble range.

One of the most important features

of Frequency Synthesizer System is the tuning by means of digital memory storage, and pure electronic memory circuitry makes it possible to store your desired stations permanently. Unlike mechanical memory function which tends to be affected by ambient fluctuation, this system offers truly unconditional, stable tuning.

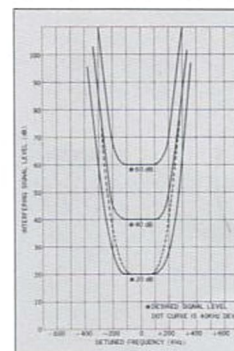
While the auto-tuning function is very convenient, when you want to tune in to a station whose broadcasting frequency is unknown. The receiving frequency shifts upwards or downwards while the tuning-key is depressed. Once the hands are off from the key, the tuning function ceases.



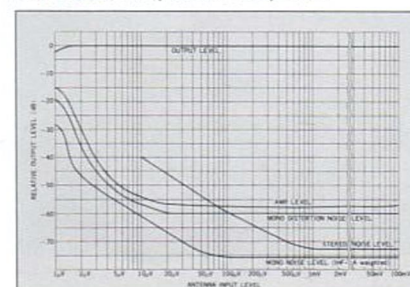
DIGITAL DISPLAY



FM Channel Selectivity



FM Distortion, Noise Response



Pre Amp Section

The equalizer stage features a monolithic IC specially developed for high voltage low-noise pre-amp. The inherent high input overload capability ensures wider input dynamic range. The input stage is composed by differential amps, and the output stage employs push-pull configuration, which makes it possible to drive even into low output loads.

The independent recording selector enables you to listen to disc while recording FM broadcasting or vice versa. Naturally dubbing is possible from one tape to another.

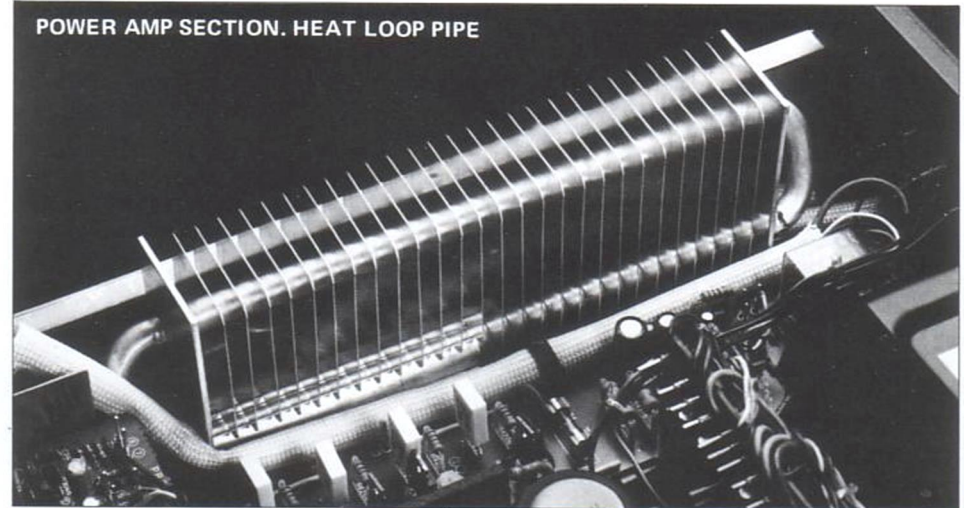
Subsonic and high-cut filters are effective to remove unwanted motor rumble, disc scratch noise and tape hiss, etc. A loudness control effectively compensate for tonal quality at low listening level. LUX's original NF type tone controls allow you to create your favorite sound.

Power Amp Section

The pre-driver stage uses 2-stage differential IC, and specially selected mould type transistors at the driver and output stages offer low distortion and wider frequency response. Specially designed pipecentered heat-sink provides high efficiency in heat

dissipation, thus ensuring unconditional, stable operation of the output stage.

A time-delay muting circuit removes thump noises to safeguard your precious speakers from accidental breakage, and at the same time plays the role of protector of power amp.



POWER AMP SECTION. HEAT LOOP PIPE



R-2050

FREQUENCY SYNTHESIZED STEREO TUNER-AMPLIFIER

SPECIFICATIONS

[AUDIO SECTION]

RMS Output Power:	55W/55W (8 ohms, both channels driven)
Total Harmonic Distortion:	no more than 0.05% (8 ohms, 55W)
Rated I.M.	no more than 0.05%
	(8 ohms, both channels driven, 60Hz : 7kHz = 4 : 1)
Input Sensitivity:	2.1mV (phono) 150mV (aux, monitor)
Input Impedance:	50k ohms (phono) 30k ohms (aux, monitor)
Phono Overload Voltage:	110mV
Signal-to-Noise Ratio:	85dB (phono, IHF-A weighted, 10mV) 95dB (aux, monitor)
Residual Noise:	0.5mV
Tone Control:	Bass; ± 10 dB at 100Hz Treble; ± 10 dB at 10kHz
Filters:	Subsonic; 45Hz (6dB/oct.) High cut; 7kHz (6dB/oct.)
Crosstalk at 1kHz:	-70dB (aux, monitor)
Loudness Control (VR; -30dB):	+10dB at 100Hz, +7dB at 10kHz

[FM SECTION]

	[MONO]	[STEREO]
Usable Sensitivity:	10.3dBf (1.8 μ V)	
50dB Quieting Sensitivity:	15.3dBf (3.2 μ V) (50 μ sec)	
Signal-to-Noise Ratio at 65dBf:	74dB (IHF-A weighted)	
Muting Threshold:	7 μ V (at "auto" position)	
Frequency Response 30Hz to 15 kHz:	± 1 dB	
Distortion at 65dBf 100Hz:	0.15%	0.2%

1kHz:	0.12%	0.15%
6kHz:	0.25%	0.3%
Capture Ratio at 65dBf:	1.5dB	
Alternate Channel Selectivity		
± 400 kHz:	70dB	
40kHz dev. ± 300 kHz:	60dB	
Spurious Response Ratio:	90dB	
IF Response Ratio:	90dB	
Image Response Ratio:	85dB	
AM Suppression Ratio:	57dB	
Stereo Separation 100Hz:		45dB
1kHz:		45dB
10kHz:		32dB

[AM SECTION]

Usable Sensitivity at 1MHz, 400Hz 30% mod. (EXT. ANT):	20 μ V
Signal-to-Noise Ratio at 1MHz, 10mV, 400Hz 30% mod.:	48dB
Distortion at 1MHz, 10mV, 400Hz 30% mod.:	0.5%
Image Response Ratio at 1MHz:	50dB
IF Response Ratio at 1MHz:	40dB

[GENERAL]	
Power Consumption:	310W (at full power, 8 ohms)
Dimensions:	438(W) x 405(D) x 108(H) mm (17-1/4" x 15-15/16" x 4-1/4") (including legs, front & rear protrusions)
Weight:	Net 10.5kgs (23.10 lbs.) Gross 12.0kgs (26.40 lbs.)

Specifications and appearance design subject to change without notice.

AUTHORIZED DEALER



LUX CORPORATION, JAPAN

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