

LUXMAN

A Powerful Majesty!

*Giants of the earth,
the ancient forests vibrate with the power of simplicity.
The rings of each tree tell a story
of time's passage.
The intimate history of a majestic evergreen
towering high above the earth.
Nature's power and beauty
— untamed, simple and pure —
magnificently reproduced by Luxman.
Audio that conveys the essence of nature.*

STATUS SERIES

DUAL β -CIRCUIT/S Stereo Amplifiers

C-O2/M-O2



*© Heinz Henkel
Archiv Michael Otto*

LUX CORPORATION

The Luxman photo gallery

<http://luxman.fotopic.net>



Audio Quality that fulfills the Dream.

The name of LUXMAN for audio excellence is no accident.

Our single-minded pursuit of perfection has been exclusively devoted to the audio field and no other.

Nor did our preeminent position come about overnight.

The Lux R&D program has repeatedly brought the audiophile ever closer to every music lover's dream.

Over these five decades one Lux circuit design development after another has left a lasting impact on the industry — like effective utilization of

Neural Network, Beta Tuning, Auto-Tuning, Duo-Beta Circuit, Duo-Beta Circuit/S and C.A.T. (Computer Analyzed Tuning) System, just to name a few.

Today, Lux's lead as the definitive Audio Maker derives not only from our tireless attention to quality and craftsmanship. Our State-of-the-Art excellence extends to more than individual products. It is part and parcel of Lux challenge — to close the gap between concert hall or jazz house live sound and in-the-living-room real-as-life reproduction.

The challenge, of course, is never-ending.

We know that, and so do our product users.

And they also know that, while we persist in the pursuit of tomorrow, the Lux products they are enjoying today represent the most advanced audio technology currently available.

High-Speed, Single-Stage Separates



Duo-Beta Single-Stage Pre-Amplifier

C-02

Pure Class "A" Operation

It is universally known that the class "A" amplification eliminates the crossover distortion, resulting in purest sound reproduction having superb treble and bass response. Such an ideal configuration is now employed in this new pre-amplifier, and both of the distortion and coloration associated with conventional amplifiers are totally banished at the cost of expensive structure.



High-Quality MC Transformer

The exclusive MC transformer featuring non-oxigen copper windings provides distortion-free sound full of speedy auditory sensation thanks to low inner resistance.

It is difficult to design a high quality MC step-up transformer with large

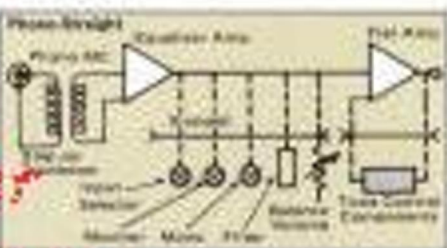
step-up ratio. In the case of the C-02, the first priority is placed on the performance quality, and the ratio between the primary and secondary windings is kept at the minimum acceptable level, 1:10. On the other hand, the insufficient portion of input sensitivity is procured by special device of variable gain at the equalizer. In this way, both of the high quality and high input sensitivity are now made compatible.

All types of MC cartridge available in the marketplace can be directly connected for playback of disc thanks to the convenient design.



Exclusive Disc Playback Circuit

The "Phono-Straight" function provided enables to reproduce discs in preference to other programme sources. The simplest circuit is formed, from cartridge to output terminal, bypassing input selector, filter, balancer and unnecessary wirings.



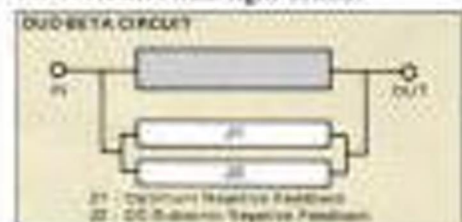
Two Features

Two tape monitor circuits for dubbing, warm-up and operation indicators to show warm-up condition, lavish application of audio capacitors, gold-plated terminals to reduce contact resistance, etc.

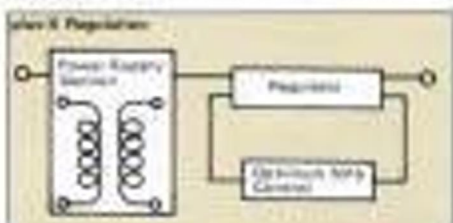
Well-Known Duo-Beta Circuit/S denoted by "Optimum Nfb Amount", "Plus-X"

Application of Optimum Amount of Nfb

Lux's innovative circuitry "Duo- β " meant skilful utilization of 2 kinds of Nfb. First to design such an amp having inherently good characteristics in the "open-loop" condition, and then to apply an optimum amount of Nfb to its best advantage in combination with the DC servo circuit. Such a minimum necessary amount of Nfb contributes soft sound reproduction in the mid-to-treble range, while the DC servo ensures bass-tight sound.



On top of that, the "plus-X" circuitry was developed to provide an unconditionally stable power supply section.



Ultimate Reduction of Humidity

As amps become close to perfection, such problems are brought to light as how many of various low-level distortions can be removed. For this purpose, conventionally only the wiring method has been simplified, or the capacitors employed have been eliminated. Now Lux gave the final solution to this problem—the "single-

Stage" Amp Configuration not by reduction of componentry in number but by perfect removal of one whole stage of amp.

Total Removal of 2nd Amp Stage

So far the basic pre-amp circuitry has been standardized in the way "1st stage - 2nd stage - output stage". For example, in the equalizer such high gain as much as 110dB is obtained at the 1st and 2nd stages. In this respect, to reduce gain and distortion they employed huge amount of Nfb by means of high open-loop gain, which could not be obtained by a single-stage amplification. In the case of Lux's Duo- β concept to apply the minimum necessary Nfb to the amp offering good original characteristics, neither excessive amount of Nfb nor high open-loop gain is required. In this way, to obtain the necessary gain is

Reproduce True Sensation of Energy.



Dual Circuit Single-Stage Power Amplifier

M-02

Affluent Power Output & Exclusive Circular-Type Power Transformer

Such a high power as 150 watts per channel is easily taken out thanks to DC push-pull configuration supported by the solid power supply section featuring a newly developed circular-type transformer with 450VA capacity in combination with 15,000pF smoothing capacitors. The circular-type transformer provides better regulation than the conventional transformers. High quality coils are wound symmetrically in parallel on so-called "orient" core featuring high saturation flux density which is seamlessly solidified under low temperature with the same directivity. Now it is made possible



with even a sudden large input signal and at the same time to eliminate such magnetic leakage and flux detrimental to sonic quality. Further employed is a luxurious, high-efficiency heatsink used even for the artificial satellite.

RTL IDuo-Alpha Monaural Connection

The RTL selector switch provided makes it possible to take out an astounding monaural 320W into 8-ohm loads, and you can compose



a mammoth 320watts-per-channel stereo system with a pair of this unit or use this as a centre channel amp for 3D system.

Protection Circuitry

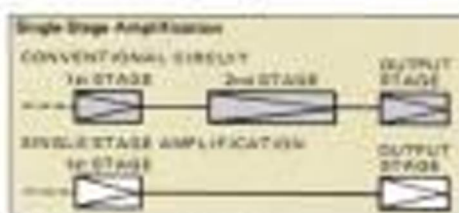
Multiple protection circuits are carefully arranged to protect your valuable speakers and the amp itself. Specifically, an electronic heat sensor controls excessive heat generation, and Lux's exclusive protection circuit safeguards the amp from possible damage caused by excessive current. On top of that, the electronic relay circuit is instantly activated to shut off the output when DC components are detected at the speaker terminals.

Other Features

Large, easy-to-read power meters with logarithmic linear scale, warm-up indicator for stable, safe operation, abundant application of special audio capacitors, gold-plated input/output connectors, etc.

Power Supply and "Single-Stage" Amp is now reinforced by "LED" Bias Current.

In the 1st stage we ventured to use high Gm, low-noise FET for head-amp at the 1st stage. In this way, we succeeded in removal of the 2nd stage to form an ideal amp having only one stage for voltage amplification.



Ample Power Supply

A slim but effective power transformer with outstanding regulation is newly designed for this high quality separates, which ensure longlasting, stabilized performance in combination with the select capacitors specially developed for this use.

Especially, the power transformer employed this time offers far better efficiency than those with the conventional EI core, which makes it possible to reproduce solid bass sound.

Unconditional Stability

"Single-Stage" amp thus created totally banishes various hums inclusive of power supply noises hitherto amplified by the 2nd stage, and at the same time ensures high stability with the highest slew rate.

LED Bias Current System

Unprecedented speedy attack and decay are given in the actual auditory feelings thanks to our unique bias current circuit employing LED's in lieu of normal diodes.

In fact, the LED provides very sharp rise and decay in the statics when compared with silicon diode, and

therefore ensures stable bias power supply. In addition, it is possible to cope with even an unexpected, sudden fluctuation due to its inherent high-speed response.



Furthermore, the inter-terminal voltage per LED is higher than that of diode in general, and to share the same voltage the smaller number of LED's will do in comparison with that of diode. Thus, the response speed as well as the decay and rise characteristics show multiple effect, providing conspicuous improvement in the auditory feelings. Unexperienced pure sound is now unveiled.

M-02



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Archiv Michael-Otto*

C-02



The Luxman photo gallery

C-O2



SPECIFICATIONS / C-O2

Input Sensitivity & Impedance	PHONO MC/LOW	100 μ V	47 Ω
	PHONO MC/MID	100 μ V	100 Ω
	PHONO MC/HIGH	100 μ V	300 Ω
	PHONO MM	2mV	50k Ω
	LINE/DAD/TUNER/MONITOR	130mV	87k Ω
Revised Output Voltage & Output Impedance	REC OUT	130mV	220 Ω
	REC OUT	1V (nominal)	18V (max.) 100 Ω
Phono Overload (1kHz, RMS)	PHONO MC	12mV	
	PHONO MM	250mV	
Frequency Response	PHONO MC	20Hz~20kHz (± 0.5 dB)	
	PHONO MM	20Hz~20kHz (± 0.5 dB)	
	LINE/DAD/TUNER/MONITOR	5Hz~100kHz (± 0.5 dB)	
Total Harmonic Distortion (20Hz~20kHz, VOL, -30dB, Output 2V)	PHONO MM	no more than 0.01%	
	PHONO MC	no more than 0.007%	
	LINE/DAD/TUNER/MONITOR	no more than 0.005%	
		no more than 0.007%	
Rated LM (2V Output, SMPTE 60Hz 7kHz=4:1)			
Signal-to-Noise Ratio (1kHz, A-weighted)	PHONO MC	better than 75dB (250 μ V)	
	PHONO MM	better than 90dB (2.5mV)	
Tone Controls	LINE/DAD/TUNER/MONITOR	better than 110dB (2V)	
	BASS	20Hz~40kHz, max. variable amount, ± 8 dB	
	TREBLE	Turnover Frequency 2kHz/4kHz, max. variable amount, ± 8 dB	
Filter	LOW BOOST	+8dB at 100Hz (VOL, -30dB)	
	SUBSONIC	30Hz (± 6 dB (max.))	
Additional Features			
Dimensions			
Weight			

SPECIFICATION / G-250 Stereo Frequency Equalizer

Output Voltage	Typical 4.8 volts/RMS, 5.8 volts at flat position	Input Sensitivity	1.8 volt
Frequency Response	20Hz ~ 100kHz (± 0.5 dB) 100Hz ~ 100kHz (± 0.5 dB) 100Hz ~ 100kHz (± 0.5 dB)	Input Impedance	47k Ω (min.)
Total Harmonic Distortion	no more than 0.005% from 20Hz to 100kHz at 2.0V output	Overload Level	5.8 volts
Intermodulation Distortion	no more than 0.005%	Features	Function Switch Channel Switch, etc. Channel Switch Input Attenuator (± 6 dB) Channel Indicator
Signal-to-Noise Ratio	better than 110dB	Dimensions	45.5mm(W) x 170mm(D) x 110mm(H)
Channel Separation	better than 80dB from 20Hz to 100kHz/100kHz/100kHz/100kHz	Net	0.2kg Gross 0.4kg

* Specifications and design subject to change without notice.

M-O2



SPECIFICATIONS / M-O2

Power Output	150 watts minimum continuous per channel, both channels driven into 8 Ω load, with no more than 0.015% total harmonic distortion
Power Output at BTL (Duo-Alpha) Monaural Connection	320 watts minimum continuous, driven into 8 Ω load, with no more than 0.015% total harmonic distortion
Rated LM (8 Ω , 150W) ch. SMPTE 60Hz 7kHz=4:1	no more than 0.015%
Power Bandwidth (1kHz, -3dB, THD 0.2%)	5Hz~80kHz
Gain	29dB
Frequency Response	100Hz~100kHz (± 0.5 dB)
Signal-to-Noise Ratio (1kHz, A-weighted, input short-circuited)	better than 110dB
Input Sensitivity	1.2V
Input Impedance	47k Ω
Damping Factor (8 Ω , 1kHz)	100
Slew Rate	60V/ μ sec.
Additional Features	Warm-Up Indicator Duo-Alpha Monaural Connection Selector Switch with Indicator Input Attenuator 8 Ω Short Detecting Speaker System 8 Ω Short Circuit Current Detecting Amplifier Protection Circuit Heat Sensing Amplifier Protection Circuit
Dimensions	45.5mm(W) x 236mm(D) x 141mm(H)
Weight	Net 14.5 kg Gross 16.0 kg

* Specifications and appearance design subject to change without notice.



AUTHORIZED DEALER



LUX CORPORATION, JAPAN

OVERSEAS MARKETING DEPT.

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