

ULTIMATE HIGH FIDELITY STEREO COMPONENT

MODEL C-1000

LUXMAN 1000

CONTROL CENTER

LUXMAN's new "STATE-OF-THE-ART" control amplifier featuring the first "Touch Mute" system

*© beim Hersteller
Archiv Michael-Otto*



The result of hard labors at LUXMAN in research and development of the "ULTIMATE IN HIGH FIDELITY" is the matching control center for our main amplifier series M6000 and M4000. You will surely find all the necessary controls and features needed in today's ultimate control center for your stereo sound system.

LUXMAN spent much time in defining what makes an audio amplifier sound like it does yet many units by various makers have similar "specs" on paper but do not necessarily produce a clear or accurate sound.

Therefore, we bring you not only one of the best available in the world on paper but is audibly the best.

TECHNICAL FEATURES

By comparison we have reduced both harmonic and intermodulation distortion by at least 10 times over many comparable units, i.e., 0.007% at 2.5V and at any audio frequency from 20Hz to 20,000Hz on all output signals.

In the phono equalizer circuitry, many new philosophies have been incorporated to improve listener clarity right up to the high treble range as well as reducing the signal to noise ratio down to the critical limits.

Of course input over-load capabilities are among the highest in the audio industry at 400mV at 1 KHz and 3.5V at 20,000Hz.

Like all the active stages used throughout this control amplifier, the phono stage design was optimised to have very high stability at high frequencies in the open loop mode.

So the input stage therefore uses two cascaded pairs of transistors in the differential comparator stage (for it is well known that cascoded technology is often used in F.M. and television front ends for its superior noise and gain) with another cascaded pair following the first 2 pairs as the main work section plus a "Class A" push-pull output stage to make up a unique ideal discrete "Op-amp."

Thus we achieve an almost immeasurable 0.007% distortion at 2.5V at the tape outputs from 20Hz to 20,000Hz into a low 10K ohms impedance.

The Linear Equalizer is also incorporated into the



Touch-Mute Switch

phono amplifier which is to be used in connection with the now famous LUXMAN N.F. type tone control system.

The intermediate amplifiers also use the cascaded direct coupled circuitry to improve linearity and stability.

Likewise, all emitter-follower buffer amplifiers use constant current circuitry to ensure precise response.

All transistors used in this control center have been selected for their reliability and are all encapsulated in steel cases for absolute resistance to moisture and humidity.

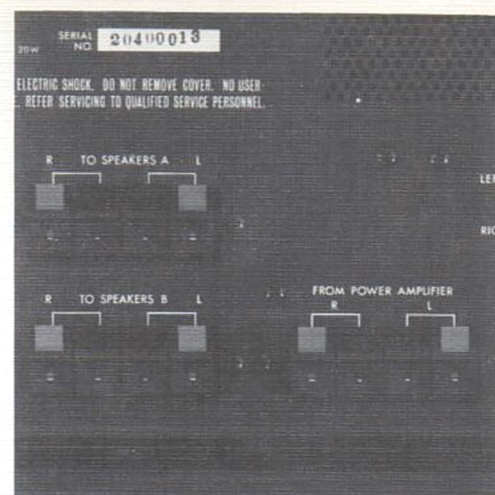
Thanks to the world first "Touch Mute" circuitry, a slight touch on the Touch-Mute ON Switch makes it possible to activate muting of the reproduced sound by 16dB.

Useful for changing records, answering the phone or anytime a brief decrease in volume is required.

TOUCH-MUTE SWITCH

Many amplifiers are equipped with Audio Muting Circuitry, where instantaneous attenuation of main volume is feasible for such occasions as answering the phone during music listening.

The usual case is to activate the ON-OFF switch mechanically but the C-1000 has adopted a new



Speaker Terminals

electronic touch-mute system.

The Touch-Mute function consists of 3 switches: Touch-Mute OFF Switch, Touch-Mute ON Switch and Touch-Mute Release Switch on the back panel. To operate this muting circuitry touch by hand the Touch-Mute ON Switch and the gain may be reduced by 16dB and the sound volume is reduced to 1/6.

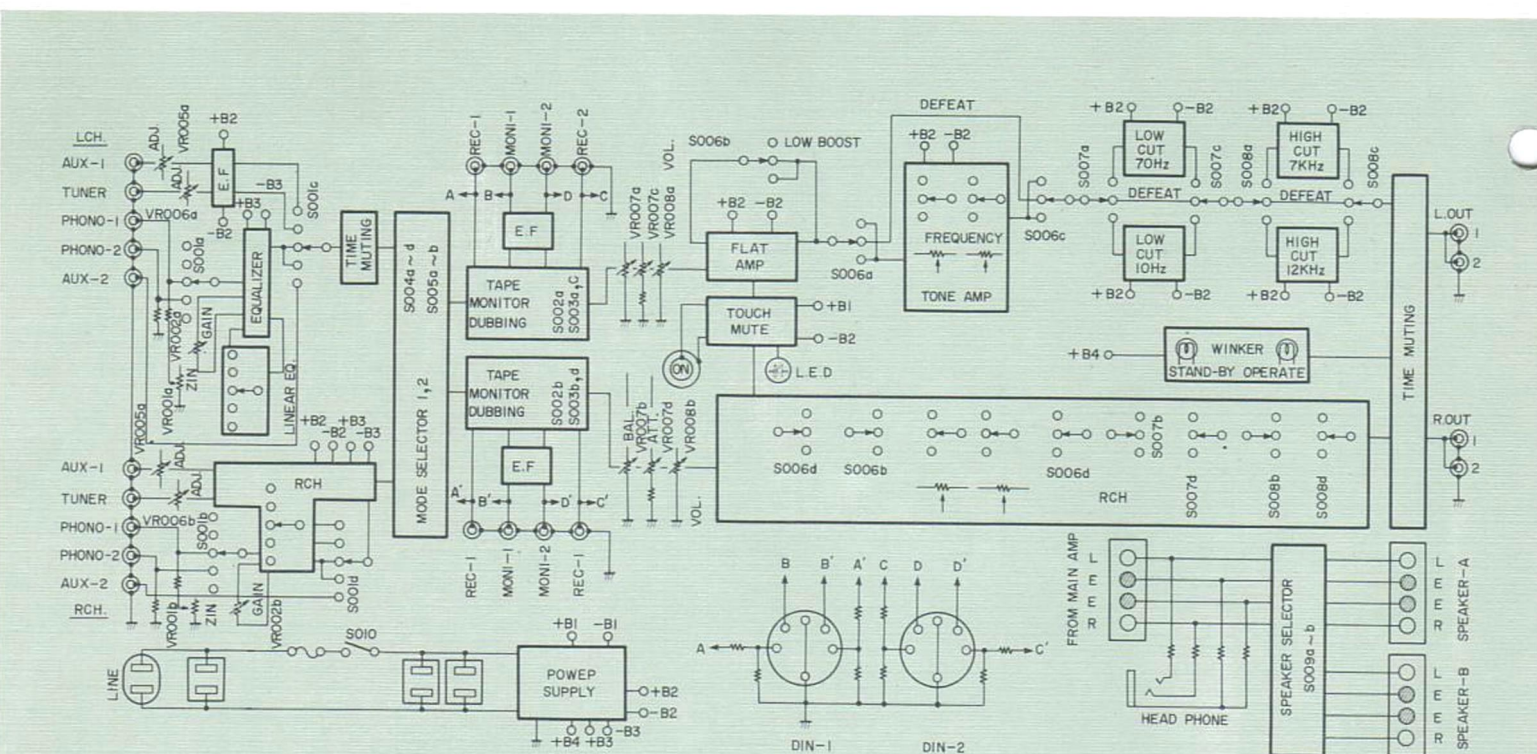
Cancellation is possible by touching the volume control knob just like the case of normal operation of the main volume.

For instance, the C-1000 is placed in the perfectly shielded room with the GND terminal grounded. In such occasion, operate in the same way as described above, touching the front panel by hand and the touch-mute switch will operate perfectly.

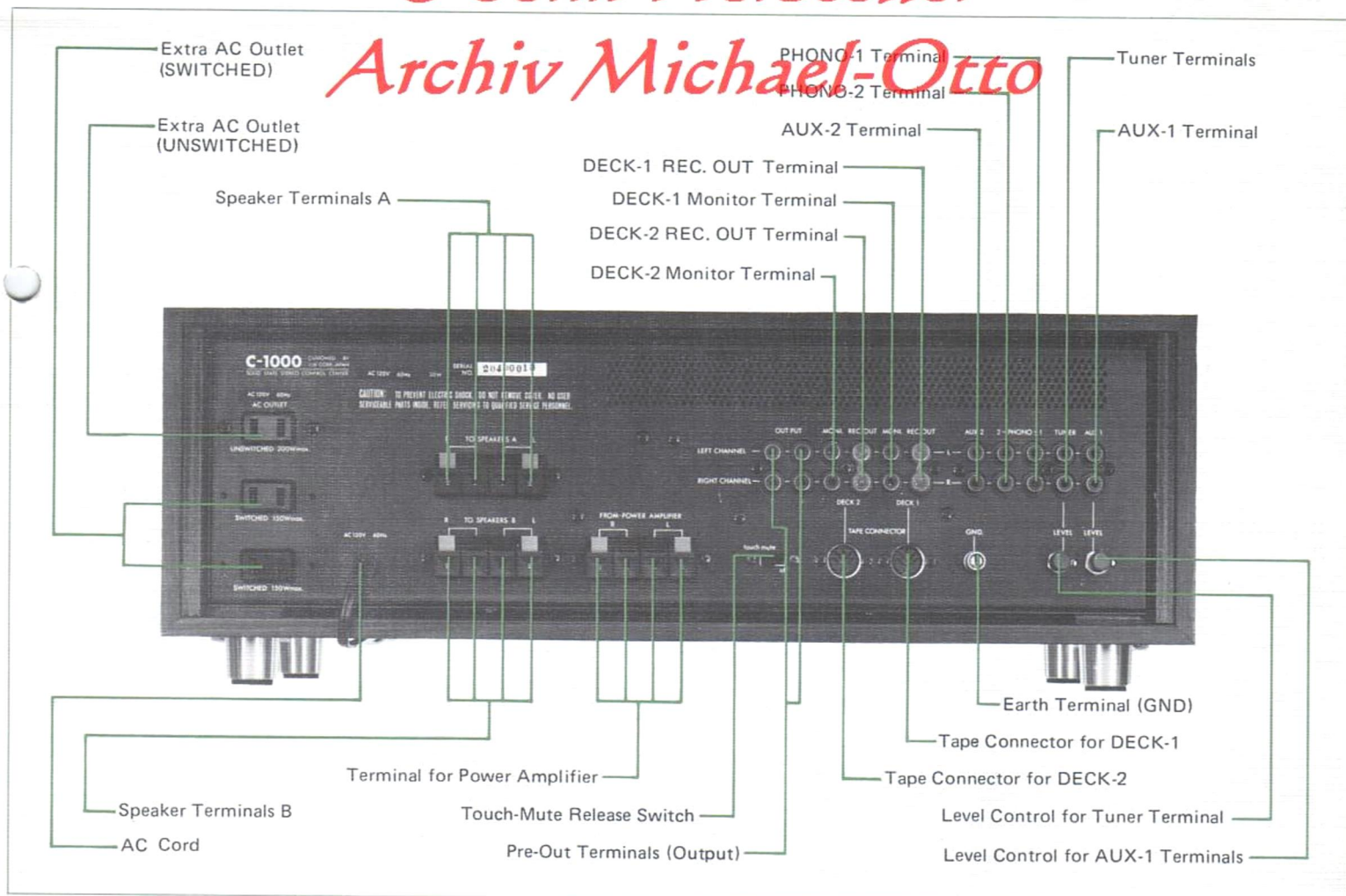
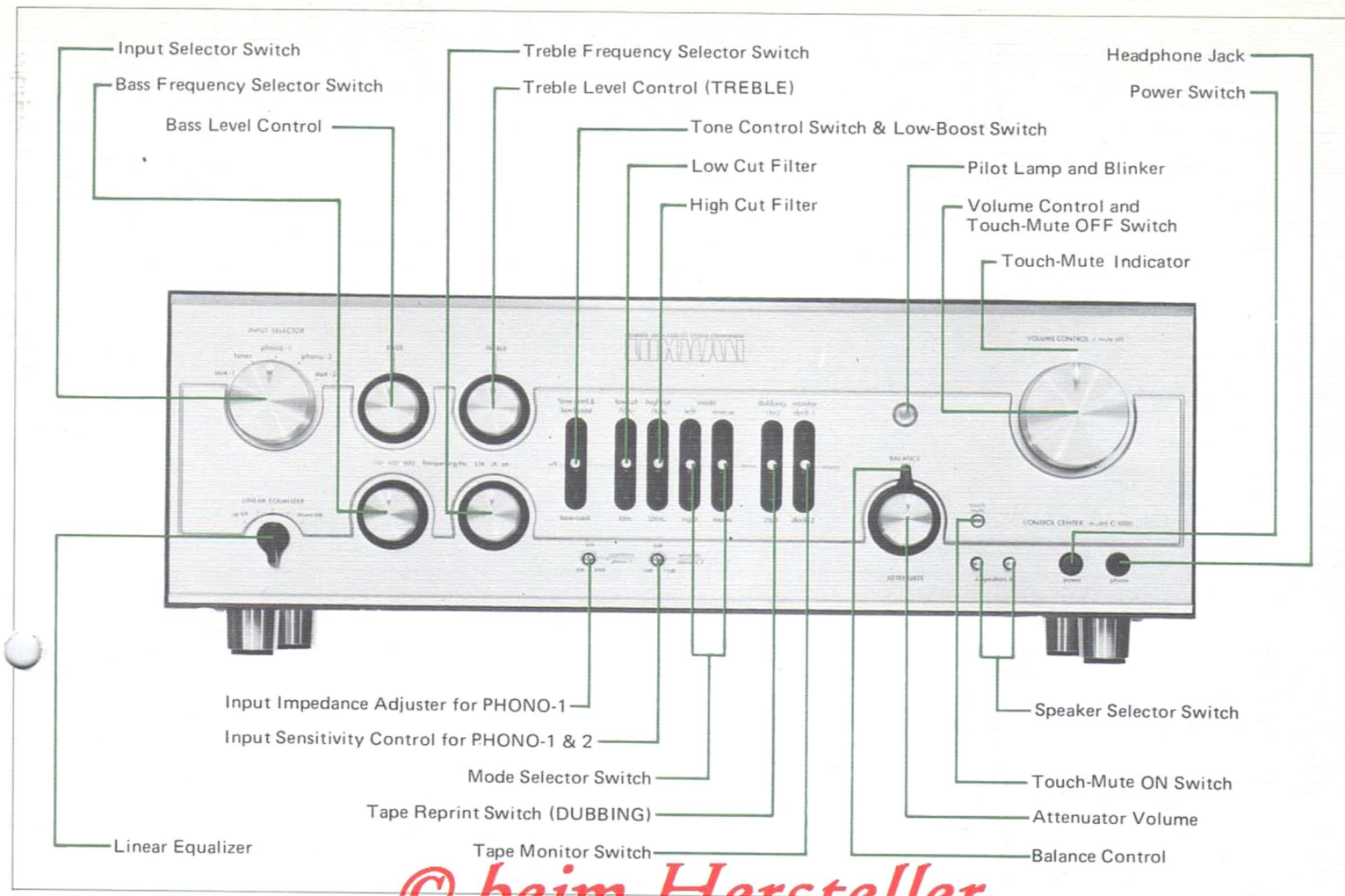
SPEAKER TERMINALS

This set is purely a control amplifier and naturally does not incorporate power amplifiers.

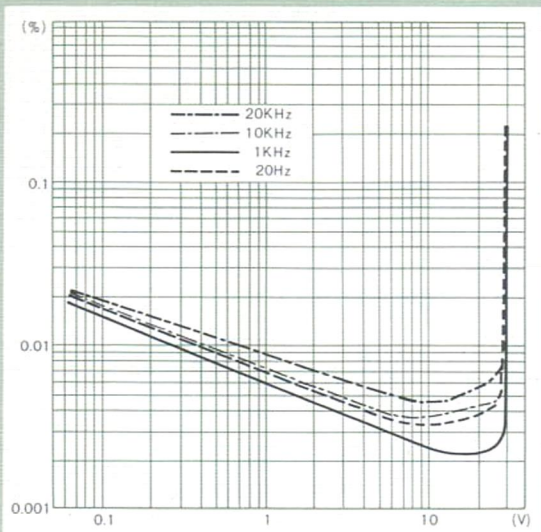
But switching of two pairs of speaker system for comparison purposes is feasible and headphones are usable at the same time when the output of a power amp is connected to this unit.



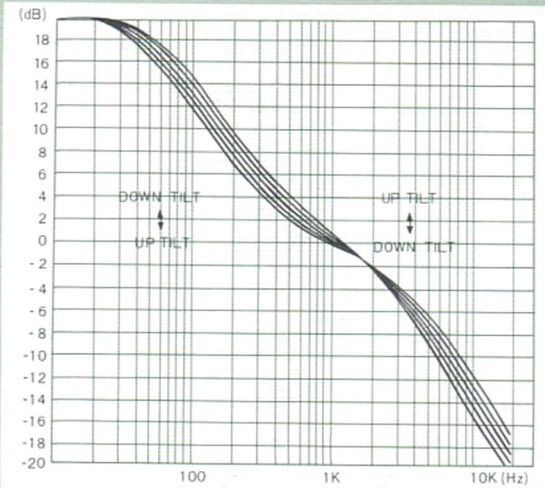
BLOCK DIAGRAM



PHONO OUTPUT VOLTAGE VS DISTORTION
(Output: REC. OUT)

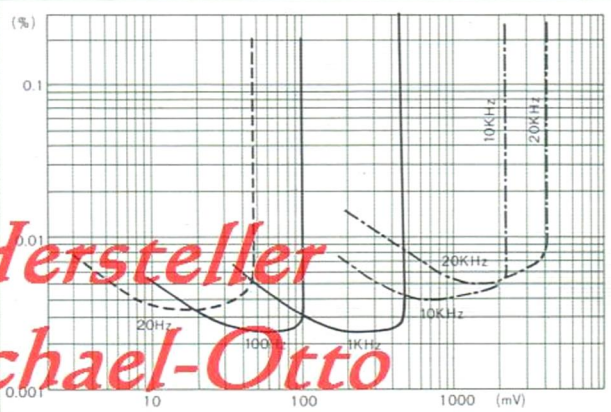


LINEAR EQUALIZER
(Output: PRE. OUT)



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PHONO INPUT VOLTAGE VS DISTORTION
(Output: REC. OUT)



We know the true measurements of minimum performance standards of a quality amplifier must be of a very high level.

However, these figures are not the only requirements.

Despite every effort to make amplifier design a pure science one amplifier among many with similar absolute specification can still have, relatively, far better sound quality.

The reason: there are more comprehensive theories of amplifier design which account for such problems as harmonic intermodulation, and notch distortion; stability, filters, and equalization as they relate to statements of power.

Whatever the scientific theory, LUX conducts the most detailed listening test with engineers and musicians in different fields to ensure that LUX amplifiers sound best apart from what is considered good in brochures.

To LUX, sound is not only a science but an art. Listen to the ultimate difference at your nearest audio shop.

SPECIFICATIONS

Semiconductors:	Transistors (92) Diodes (59)
Output Voltage:	Max. 13V, Typ. 1V
Total Harmonic Distortion:	No more than 0.007% (Pre. out 2V, 20 – 20KHz AUX, TUNER)
Frequency Response:	2 – 80,000Hz (–0.5dB)
Input Sensitivity:	2.5mV (phono-1 & 2, Gain 0dB) 150mV (aux-2, tuner & aux-1 variable)
Input Impedance	Phono-1 30 – 100 variable (Kohms) Aux-1 70 (Kohms) Phono-2 50 (Kohms) Tuner 70 (Kohms) Aux-2 25 (Kohms)
S/N Ratio:	Phono-1: better than 65dB
Phono Overload Voltage:	No less than 420mV (1KHz, RMS, Gain cont; 0dB)
R.I.A.A. Equalization:	Within ±0.2dB
Tone Control:	Improved LUXMAN NF type Turnover freq. selection; Low – 150Hz, 300Hz, 600Hz High – 1.5KHz, 3KHz, 6KHz
Filters:	Low cut: 10Hz, 70Hz (–18dB, –12dB) High cut 7KHz, 12KHz (–12dB)
Additional Features:	Touch muting function, Attenuator, Output signal muting, Linear equalizer, Phono gain control, Tape dubbing & monitor function, Speaker system selector (Remote control) Military class potentiometer, muting indicator
Dimensions:	485(W) x 245(D) x 175(H)mm (19-1/8" x 9-5/8" x 6-7/8")
Weight:	Net. 10kgs (22 lbs.) Gross 12kgs (26 lbs.)

Specifications and appearance design subject to possible change without notice.

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