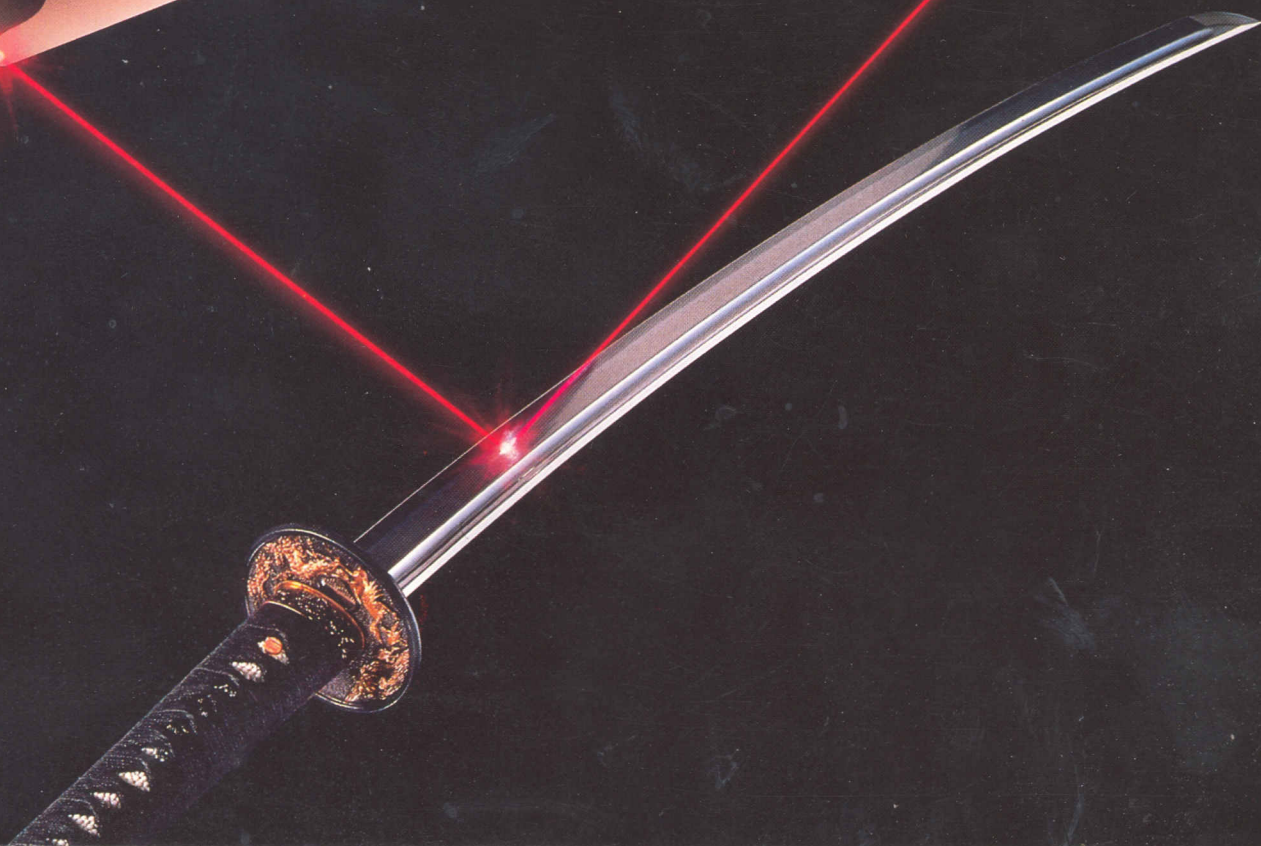


\$10.00

TRADITIONAL EXCELLENCE

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LUXMAN





# TRADITIONAL EXCELLENCE

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The Luxman story begins with an uncompromising commitment to develop audio components that reproduce music with purity and clarity – audio which is accurate and virtually indistinguishable from the original live performance.

Starting 60 years ago, manufacturing electrical parts, Luxman has evolved into the finest line of high fidelity systems and the best audio brand in Japan.

Luxman's designers and engineers have dedicated themselves to traditional quality and innovation in design, always in pursuit of their dedication to music. Only the highest quality components are used in the manufacture of Luxman products. Luxman's technological innovations have continued to support the sonic excellence of the line and many of Luxman's "firsts" are now standards in the audio industry. To name a few: negative feedback tone control circuitry, multi-stage feedback, D.C. amplification, Duo-Beta circuitry, computer analyzed tuning (CAT), and now the world's first hybrid integrated amplifier and A/V control centre. Many of these innovations and technological advancements remain exclusive to Luxman, and Luxman's history is indelibly etched with the mark of engineering excellence.

The recent amalgamation of Luxman with its traditional purist approach to audio, and Alpine with its computer inroads and hi tech achievements, have allowed Luxman to marry these two technologies and expand Luxman into exciting new frontiers in the home entertainment field. The Luxman "brid" series of fine audio components are representative of this new era of hi tech audio excellence, and the addition of multiple inputs and outputs to these components now allow you to matrix stereo television, video, compact disc players and numerous other audio and video components to enhance your enjoyment of complete home entertainment systems.

The computer age with its digital technology now delivers the ultimate for your home listening and viewing environment. Confidently, Luxman continues to lead with its recent marriage of traditional craftsmanship and new technologies. Enjoy, and be assured of Luxman's commitment to the pure audio approach and traditional excellence.



Alex Romanov  
Vice-President & General Manager.



# SUMMARY OF TERMS

## Amplified Splitter

The amplified splitter for antenna outputs provides a better signal to the cable box as well as an improved signal for wiring multiroom applications.

## BTL

Bridged transformer-less (BTL) is a sophisticated method of combining two channels into one, for high power applications. Bridging an amplifier, more than doubles its power output due to the push-pull relationship of the two power amplifiers.

## CAT System

Computer Analyzed Tuning provides error-free FM reception at all times. The computer adjusts internal circuitry for optimum performance under any given reception condition.

## Class "A" Circuitry

Class "A" Circuits always keep their transistors on, enabling them to pass all of the signal all of the time (as opposed to passing only the positive or negative portion of the signal) thus totally eliminating notch distortion.

## Copper Film Capacitors/ Non-Magnetic Resistors

These specialized parts prevent the digital signal from contaminating the analog signal.

## dbx® Noise Reduction

dbx® NR provides more than 30 dB of noise reduction at all frequencies.

## Digital Fader

A digital fader allows the user to fade the music to zero without introducing phase shift or extra amplification stages.

## Discrete Circuitry

Discrete power transistors are used to increase the driving power of the amplifier. Reproduction of louder music passages without distortion or damage to the amplifier and speakers is possible only with discrete circuitry.

## Dolby® Noise Reduction

Dolby B NR provides 10 dB of noise reduction and is compatible in the playback of most recordings that have been Dolby encoded.

## Dolby® C Noise Reduction

Dolby C NR provides an additional 10 dB of signal to noise ratio over and above that of Dolby B NR.

## Double-Tuned FM Quadrature Detector

Lowers distortion and provides a better station lock for the conversion from the intermediate frequency to the audio frequency.

## Duo-Beta Circuitry

Duo-Beta is a patented and technologically advanced form of negative feedback (error correction circuitry) which is exclusive to Luxman products. It minimizes the audible effects of over-correction and eliminates DC offset, thus allowing the engineering team to design a stable wide-band amplifier (greater than the audio range of 20 Hz to 20 kHz) which approaches perfection in the audible region.

## Duo-Beta/S Circuitry

The design technique of Duo-Beta/S utilizes only one stage of amplification and an impedance conversion stage. By adding this superior technique of single stage amplification design to the benefits of Duo-Beta, Luxman has further minimized slewing induced distortion and noise.

## Dynamic Headroom

Music with a wide dynamic range can contain transient peaks that require instantaneous power beyond the continuous capability of an amplifier. Luxman amplifiers are designed with more power than their continuous power ratings so that they can follow loud musical passages without distortion.

## Electrostatic Shielding

Copper banding plates (electrostatic shielding) on power transformers minimize magnetic interference from the power transformer.

## Electrostatic Speaker Terminals

Designed for interface with electrostatic speakers. Special speaker terminals are designed for optimum sound and performance, as well as, for protection of both the amplifier and the speakers.

## Energy Storage Device

A capacitor-like device which lasts ten times longer than a battery.

## Farraday Shielding

Farraday Shielding reduces the amount of induced noise from the digital circuitry that reaches the analog circuitry of Luxman CD and LV machines.

## 4 Ohm-2 Ohm Load Stability

The ability of a Luxman amplifier to maintain stability below 2 ohms is very important in driving multiple speaker applications.

## GT Transport

The Luxman GT transport has twin driven capstans which improve tape-to-head contact, an all cast aluminum mechanism providing "rock steady" musical cassette operation, and a cast head assembly for elimination of tape skew.

## Hexalam

HEX meaning six, and LAM an abbreviation for laminations. Designates six lamination of super hard permalloy on Luxman tape head gaps. Six laminations prevent eddy currents that would normally reduce or eliminate the high frequencies in the music.

## High Energy PLL

This high energy tuning circuit is more stable over a long period of time than conventional phase lock loop (PLL) circuitry.

## High Selectivity IF Filter

This quality device prevents stronger signals from interfering with weaker signals, thus improving the FM reception.

## Hybrid Circuit

The Luxman Hybrid Circuit utilizes TRIODE vacuum tubes plus MOS FET discrete transistors to deliver sonic definition and dynamic power demanded by high performance source materials.



# SUMMARY OF TERMS

## **Integral D/A Converter**

Luxman prevents non-linear dynamic channel distortion from occurring by ensuring that the two digital to analog (D/A) converters track together.

## **LED Bias**

Normal silicone diodes are used by other manufacturers in the bias circuitry, while light emitting diodes (LED) are used by Luxman. The galenium arsenide that is used in LED's is 6 to 10 times faster than silicone. Therefore, the increased speed of an LED helps eliminate intermodulation distortions.

## **Liquid Cooled Heat Sink**

To avoid excess heat build up, Luxman incorporates a liquid cooling system. This form of constant temperature control prevents sonic coloration due to thermal cycling.

## **Low-Mass Tone Arm**

Luxman low-mass tone arms provide superior trackability and the lowest possible wear of records.

## **Low Pass Filter**

Eliminates the 19 kHz stereo control signal providing a smoother, better sounding FM as well as the ability to make better tapes from FM broadcasts.

## **Multi-Path Indicator**

An LED readout that provides the user with the ability to optimize antenna placement.

## **NF Tone Controls**

Luxman NF tone controls eliminate an extra buffer amp while also reducing slewing-induced distortion.

## **Non-Magnetic Chassis**

Luxman provides a chassis which will not carry magnetic fields, eliminating magnetic interaction within one channel and from the other channel.

## **Plus X Power Supply**

A power supply circuit designed by Luxman engineers to minimize low level distortion and noise caused by improper supply feeds.

## **Record Sensing Device**

This sensor will only allow the phono cartridge to be placed on a platter containing a record, thus preventing accidental damage of the stylus.

## **Separate Power Supplies**

Separate power supplies help provide isolation between channels or, in the case of digital equipment, between the digital and the analog circuits.

## **Spectrum Front-End AGC**

This superior Luxman circuit enables the tuner to lock in stations over a broader range.

## **Split-Carrier/Inter-Carrier**

A television signal is composed of a video and an audio portion mixed together; this carrier, as it is called, can be processed together until the respective parts have to be separated. The inter-carrier method is more economical due to the fact that both audio and video share the same amplification stages; however, the problem with this method is that part of the visual carrier causes a buzz (15.750kHz, the interlace frequency). The split-carrier method used in Luxman video tuners, separates the visual and aural intermediate frequency carriers, eliminating the buzz caused by the visual carrier in the audio portion of the television reception, thus improving the sound quality even more.

## **Star Pattern Circuit Topology**

Luxman employs star pattern circuit topology (patent pending) to attain the lowest induced noise and distortion, resulting in better circuit realization.

## **STD-TV, STD-CATV, HRC-CATV**

The different types of television broadcasting are: STD-TV (standard television) as over the air; STD-CATV (standard cable television) as fed via a cable system; HRC-CATV (harmonic related carrier of cable television) as fed via newer cable systems. The CAT system of the tuner analyzes these different signals and locks on the appropriate carrier frequency.

## **Subsonic Filter**

A subsonic filter eliminates power-robbing rumble without disturbing the music.

## **Test Tone Switch**

An output tone which allows the user to set maximum recording levels when making a tape recording from FM broadcasts.

## **T.E.S. Tone Controls**

Changing the operating frequency of the tone control circuit minimizes mid-range distortion (where most of the music occurs) and phase distortion.

## **Tone Defeat**

The Luxman tone defeat switch totally bypasses the tone control circuitry eliminating potential phase shift distortion.

## **Torroid/Circular Power Transformer**

By keeping the magnetic fields inside the transformer, torroid and circular power transformers eliminate all magnetic interference, as well as, interaction between the windings.

## **Urethane Anti-Resonant Ribbons**

These ribbons prevent impulse or air-borne noise from vibrating the disc, which would then cause the laser pick-up to focus excessively (causing excessive error correction).

## **Video Buffer Amplifier**

Video signals can suffer losses when interconnect cables are used between video components. This Luxman circuit can add up to 6 dB of gain to the video signal to insure A/V duplications are indistinguishable from the original.

## **Wireless Remote Control Chain**

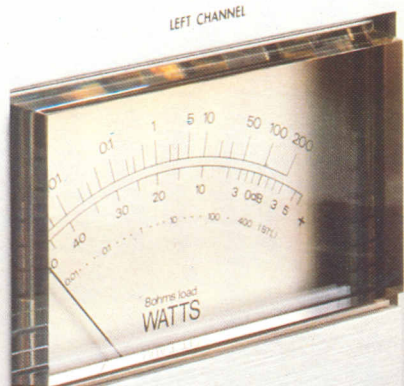
Luxman offers the ability to operate various individual components by a single hand-held remote control unit and to control these functions from various rooms simultaneously.



LUXMAN TWIN-MONOLITHIC PURE CLASS A POWER AMPLIFIER M-05

200β circuit 5

LEFT CHANNEL



METER off PEAK HOLD

ATTENUATOR

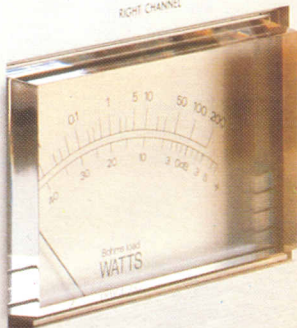
- L protection
- R protection
- overheating
- warm-up
- direct input operation
- BTL operation

SUBSONIC 15Hz SIGNAL off

STAND-BY

POWER

RIGHT CHANNEL



METER off PEAK HOLD

ATTENUATOR

ULTIMATE PRECISE STEREO COMPONENT BY JBL CORPORATION

ULTIMATE PRECISE STEREO COMPONENT BY JBL CORPORATION





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## R-406

**Digital Synthesized Receiver**  
 60W/Channel Power Output  
 Duo-Beta Circuitry • Discrete Output Circuitry • Dynamic Headroom • Electrostatic Shielding Liquid-Cooled Heat Sink • 4 Ohm-2 Ohm Load Stability • Computer Analyzed Tuning • 16 Preset Station Memory • Auto Seek (AM/FM) Double-Tuned FM Quadrature Detector • Spectrum Front-End AGC • High Selectivity IF Filter Low Pass Filter • Energy Storage Device • 75 and 300 Ohm Antenna Inputs • NF Tone Controls Loudness Switch • Subsonic Filter Tape Dubbing Capability • Video Sound Selector • Stereo/Mono VCR Switch • Full-Function Remote Control • Optional Remote Eye (RC-1)



## R-405

**Digital Synthesized Receiver**  
 55W/Channel Power Output  
 Duo-Beta Circuitry • Discrete Output Circuitry • Dynamic Headroom • Electrostatic Shielding Liquid-Cooled Heat Sink • 4 Ohm-2 Ohm Load Stability • Computer Analyzed Tuning • 16 Preset Station Memory • Auto Seek (AM/FM) • Double-Tuned FM Quadrature Detector • Spectrum Front-End AGC • High Selectivity IF Filter • Low Pass Filter • Energy Storage Device • 75 and 300 Ohm Antenna Inputs • NF Tone Controls Loudness Switch • Subsonic Filter Tape Dubbing Capability • Video Sound Selector • Stereo/Mono VCR Switch



## R-404

**Digital Synthesized Receiver**  
 33W/Channel Power Output • Duo-Beta Circuitry • Discrete Output Circuitry • Dynamic Headroom Electrostatic Shielding Liquid-Cooled Heat Sink • 4 Ohm-2 Ohm Load Stability • Computer Analyzed Tuning • 16 Preset Station Memory • Auto Seek (AM/FM) • Double-Tuned FM Quadrature Detector • Spectrum Front-End AGC • High Selectivity IF Filter • Low Pass Filter • Energy Storage Device • 75 and 300 Ohm Antenna Inputs • NF Tone Controls • Loudness Switch • Subsonic Filter • Tape Dubbing Capability



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# RECEIVERS

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## SONIC ACCURACY

The ability to drive loudspeakers to realistic, entertaining sound pressure levels without distortion, requires a well built power amplifier section.

All Luxman receivers maintain discrete output transistors, as opposed to low-cost I.C. chips, to increase the overall driving power. And these units are also designed with enough reserve power for non-distorted instantaneous peaks, even into low impedance speaker loads.

In addition, Duo-Beta negative feedback and N.F. type tone controls are employed to maintain sonic accuracy from input to output.

And, with a computer analyzed tuning system and a sophisticated low-pass filter network, the FM section of these receivers continues Luxman's commitment to sonic excellence.

## TOTAL CONTROL

All Luxman receivers are designed to interface with a variety of audio components. And for those listeners who wish to connect the audio portion of their video equipment to their stereo system, the R-405 and R-406 models include three extra inputs.

For the ultimate in convenience, the R-406 includes a full-function, wireless remote control that easily operates Luxman cassette decks, turntables and compact disc players.

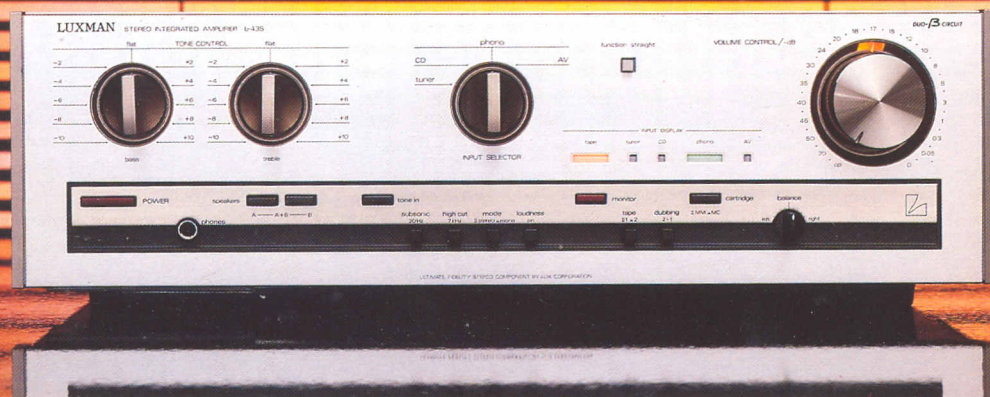
And one step further, the optional remote eye (RC-1) can extend this full-function remote operation to other rooms, converting the R-406 into a master control center for the whole house.





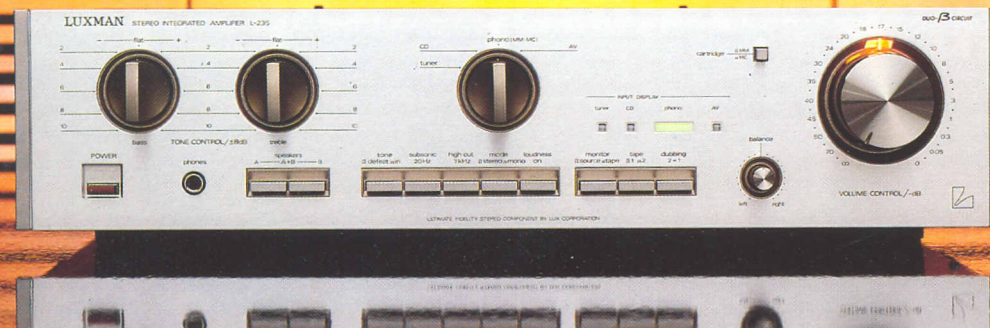
## L-525

DC Integrated Amplifier  
 110W/Channel Power Output  
 Duo-Beta/S Circuitry • Discrete  
 Output Circuitry • Single Stage  
 Amplification • Dynamic Headroom  
 LED Bias Circuitry • Electrostatic  
 Shielding • 4 Ohm-2 Ohm Load  
 Stability • T.F.S. Tone Controls  
 Phono Straight • Subsonic and  
 High Cut Filters • Tape Dubbing  
 Capability • Moving Coil Impedance  
 Selector



## L-435

DC Integrated Amplifier  
 100W/Channel Power Output  
 Duo-Beta Circuitry • Discrete  
 Output Circuitry • Dynamic  
 Headroom • LED Bias Circuitry  
 Electrostatic Shielding • 4 Ohm-  
 2 Ohm Stability • Function Straight  
 Switch • Audio/Video Sound Inputs  
 Two-Way Tape Dubbing Capability  
 Moving Coil Capability • Subsonic  
 and High Cut Filters



## L-235

DC Integrated Amplifier  
 68W/Channel Power Output • Duo-  
 Beta Circuitry • Discrete Output  
 Circuitry • LED Bias Circuitry  
 Electrostatic Shielding • 4 Ohm-  
 2 Ohm Stability • NF Tone Controls  
 Tone Defeat Switch • Moving Coil  
 Compatibility • Audio/Video  
 Sound Input • Subsonic and High  
 Cut Filters • Loudness Switch  
 Tape Dubbing Capability



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# INTEGRATED AMPLIFIERS

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While receivers exhibit the benefits of combining several units into one, Luxman separates offer the opportunity to mix and match different components to build a system tailored to your individual needs.

As in all Luxman amplifiers, these models incorporate Duo-Beta technology to minimize the audible effects of error correction circuitry. Each model also incorporates NF-type tone controls to avoid distortion.

And all Luxman integrated amplifiers maintain discrete output sections to maximize the real driving power.

In addition, light emitting diodes (LED) are employed in the bias circuitry to minimize I.M. distortion.

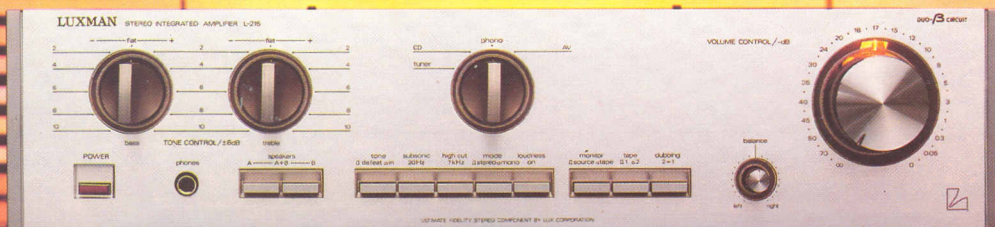
The top-of-the-line L-435 and L-525 even add a single-stage amplification design that further improves sonic accuracy at all frequencies.

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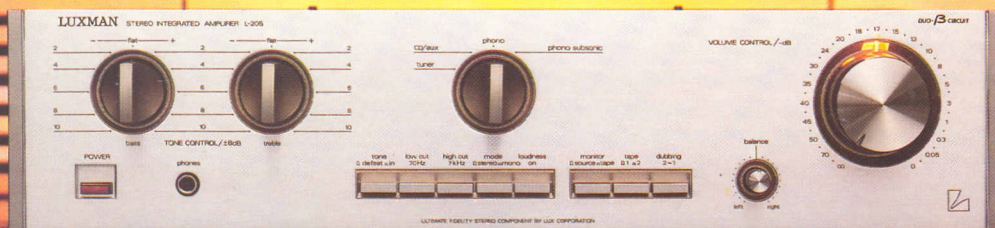
## L-215

DC Integrated Amplifier  
45W/Channel Power Output • Duo-Beta Circuitry • Discrete Output Circuitry • LED Bias Circuitry  
Electrostatic Shielding • NF Tone Controls • Tone Defeat Switch  
Subsonic and High Cut Filters  
Loudness Switch • Audio/Video  
Sound Input • Tape Dubbing  
Capability



## L-205

DC Integrated Amplifier  
30W/Channel Power Output  
Duo-Beta Circuitry • Discrete  
Output Circuitry • LED Bias  
Circuitry • Electrostatic Shielding  
NF Tone Controls • Tone Defeat  
Switch • High and Low Cut Filters  
Loudness Switch • Phono Subsonic  
Filter • Tape Dubbing  
Capability





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# INTEGRATED AMPLIFIERS

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Luxman Integrated Amplifiers are designed to reproduce all the dynamics of today's high performance sources. This reserve dynamic power means your music will be delivered undistorted to your speakers even with a digital disc player. All Luxman Integrated Amplifiers are capable of delivering this dynamic power even with the severe load impedance changes of some loudspeakers.

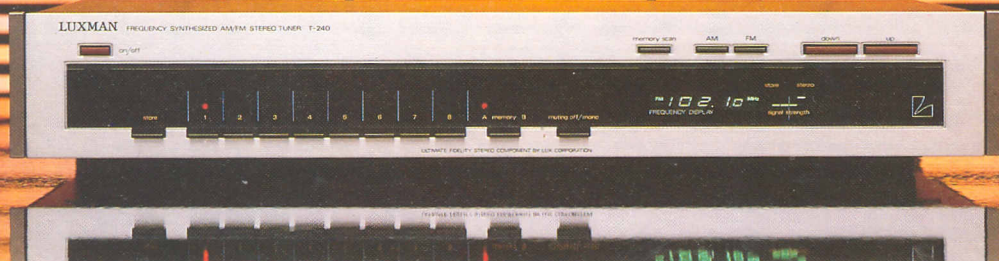
Luxman Integrated Amplifiers... real power and style for your real musical enjoyment.





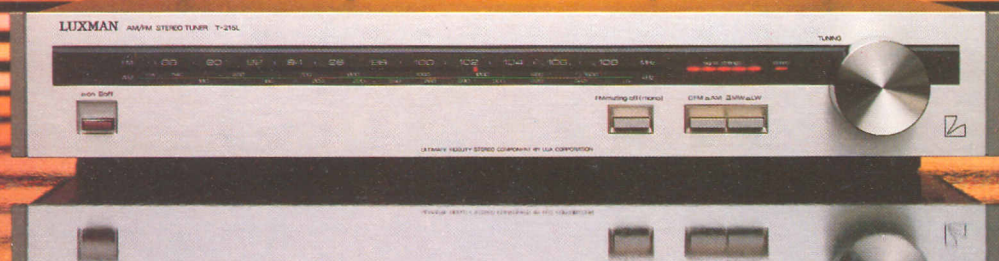
## T-530

FM Stereo/AM Tuner  
 Computer Analyzed Tuning • Duo-Beta Circuitry • 24 Preset Station Memory • Memory Scan • Double-Tuned FM Quadrature Detector Spectrum Front-End AGC • Low Pass Filter • Energy Storage Device Electrostatic Shielding • Signal Strength Indicator • Multi-Path Indicator • Test Tone Switch



## T-240

FM Stereo/AM Tuner  
 Computer Analyzed Tuning High-Energy PLL • 24 Preset Station Memory • Preset Channel Display • Memory Scan • Double-Tuned FM Quadrature Detector Spectrum Front-End AGC • High Selectivity IF Filter • Low Pass Filter • Energy Storage Device Electrostatic Shielding



## T-215

FM Stereo/AM Tuner  
 Double-Tuned FM Quadrature Detector • Spectrum Front-End AGC • High Selectivity IF Filter Low Pass Filter • Flashing Dial Pointer Tuning • Electrostatic Shielding



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# TUNERS

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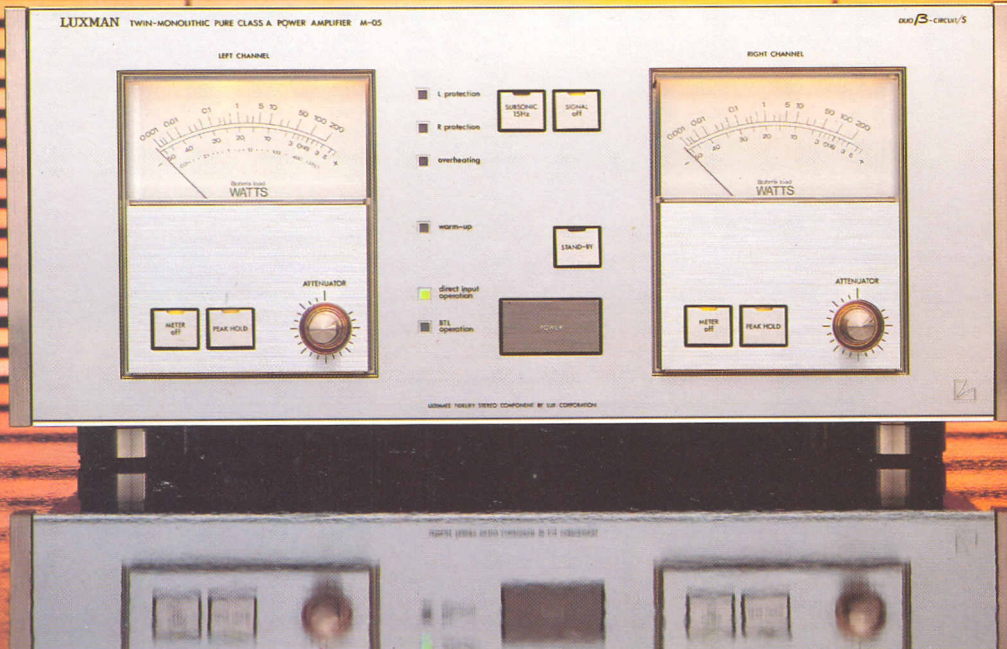
The T-240 and T-530 incorporate a high-energy PLL frequency synthesized tuning system, a spectrum front-end AGC circuit that locks in stations over a broad range, and computer analyzed tuning that provides error-free FM reception at all times.

Simple circuitry design maximizes and stabilizes the AM/FM signals to provide noise free reception for all conditions across Canada.



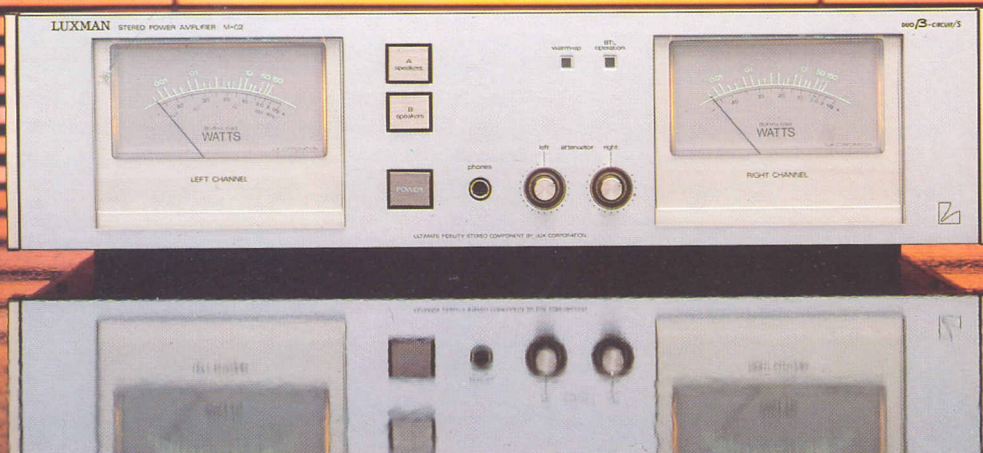
## M-05

**Duo-Beta/S Class "A" Power Amplifier**  
 105W/Channel Class "A" Power Output • Duo-Beta/S Circuitry  
 Discrete Output Circuitry  
 Dynamic Headroom Bridged Transformer-Less (400W) • 4 Ohm-2 Ohm Load Stability • LED Bias Circuitry • Torroid Power Transformer • Plus-X Power Supply  
 Separate Power Supplies • Star Pattern Circuit Topology • Non-Magnetic Chassis • Subsonic Filter  
 Peak Reading Meters with Peak Hold • Separate Channel Attenuators • Electrostatic Speaker Terminals



## M-02

**Duo-Beta/S Power Amplifier**  
 150W/Channel Power Output  
 Duo-Beta/S Circuitry • Discrete Output Circuitry • Dynamic Headroom • Bridged Transformer-Less (320W Mono) • 4 Ohm-2 Ohm Load Stability • LED Bias Circuitry  
 Circular Power Transformer  
 Plus-X Power Supply • Liquid-Cooled Heat Sink • Peak-Reading Power Meters Separate Channel Attenuators





# POWER AMPLIFIERS

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Over the years, Luxman's strength in engineering excellence has always been most evident in amplifier design.

The M-05 and M-02 represent the latest in electronic technology from Luxman.

These power amplifiers contain the most current circuit designs, including Duo-Beta with single-stage amplification and L.E.D. bias circuitry.

And as the models from which all Luxman amplifier sections are designed, the M-05 and M-02 utilize discrete output transistors and maintain high dynamic power even into low impedance loads.

The top-of-the-line M-05 is a pure class "A" configuration and sonically ranks with the finest amplifiers in the world.



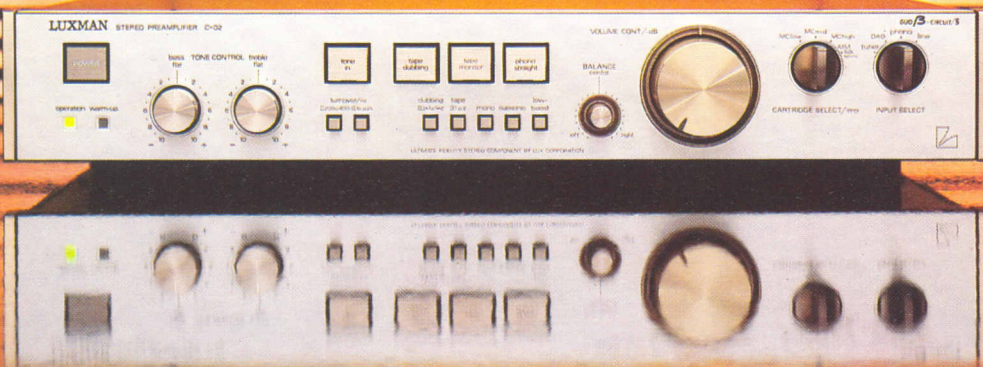
## C-05

Duo-Beta/S Class "A" Pre-amplifier  
Duo-Beta/S Circuitry • Class "A" Circuitry • LED Bias Circuitry  
Torroid Power Transformer  
Plus-X Power Supply • Separate Power Supplies • Star Pattern Circuit Topology • Non-Magnetic Chassis • Subsonic Filter • Phono Impedance Selector • Two-Way Tape Dubbing



## C-02

Duo-Beta/S Pre-amplifier  
Duo-Beta/S Circuitry • Class "A" Circuitry • LED Bias Circuitry  
Circular Power Transformer  
Plus-X Power Supply • NF Tone Controls • Tone Defeat Switch  
Subsonic Filter • Low Boost Switch • Phono Straight • Moving Coil Impedance Selector • Two-Way Tape Dubbing





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# PRE-AMPLIFIERS

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As the central control unit of a system, a pre-amplifier must relay all input sources to the power amplifier with optimum clarity and simplicity.

Luxman pre-amps achieve this goal by utilizing Duo-Beta technology, single-stage amplification and L.E.D. bias circuitry to minimize distortion.

In addition, these models employ a class "A" configuration for fine-tuned accuracy.

The top-of-the-line C-05 also incorporates a torroid power transformer and separate power supplies, and truly represents the state-of-the-art in pre-amplifier technology.





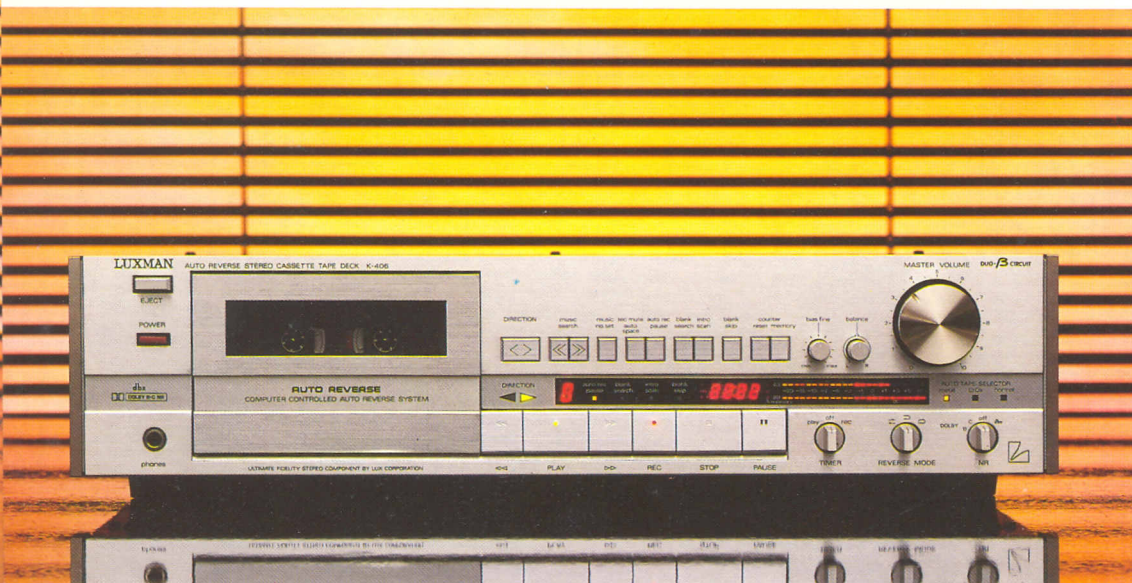
## K-05

**3 Head, Direct-Drive Cassette Deck**  
 Computer Tuning System with Memory • Duo-Beta Circuitry • GT Direct-Drive Transport • 3 Motor Operation • Closed-Loop Dual Capstans • Feather-Touch Full-Logic Controls • Three-Head Configuration • HI-B Permalloy Sendust Heads • Metal Tape Capability • Dolby® B and C • Auto Play, Rewind and Repeat • Realtime Tape Counter • Electrostatic Shielding • Remote Control Capability



## K-03

**3 Head, Direct-Drive Cassette Deck**  
 Duo-Beta Circuitry • GT Direct-Drive Transport • 3 Motor Operation • Closed-Loop Dual Capstans • Feather-Touch Full-Logic Controls • Three-Head Configuration • Hi-B Permalloy Sendust Heads • Metal Tape Capability • Dolby® B and C • Auto Play, Rewind and Repeat • Realtime Tape Counter • Built-in Head Demagnetizer • Electrostatic Shielding • Remote Control Capability



## K-406

**Dolby® B•C•dbx® Auto-Reverse Cassette Deck**  
 Duo-Beta Circuitry • Full IC Logic Transport Controls • 3 Motor Operation • Auto Reverse/BI-Directional Record • HI-B Permalloy/Sendust Heads • Dolby® B•C•dbx Noise Reduction • Dolby® HX-PRO Circuitry • Metal Tape Capability • Bias Fine • Auto Record Pause • Auto Space • Intro Scan • Blank Skip and Search Programmable Music Search • Realtime Tape Counter • LED Peak Level Meters • Electrostatic Shielding • Remote Control Capability



# CASSETTE DECKS

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To ensure accurate sound reproduction, Luxman cassette decks deliver in three distinct areas:

## QUALITY ELECTRONICS

Luxman cassette decks incorporate wideband circuitry and Duo-Beta technology, to ensure precise accuracy.

## SPEED ACCURACY

The GT transport found in the flagship model K-05 combines twin drive capstans with an all cast aluminum mechanism to deliver "rock steady" operation. This advanced design provides Luxman engineers with the knowledge to develop all our transports with similar wow-and-flutter ratings.

## FLEXIBILITY OF CONTROL

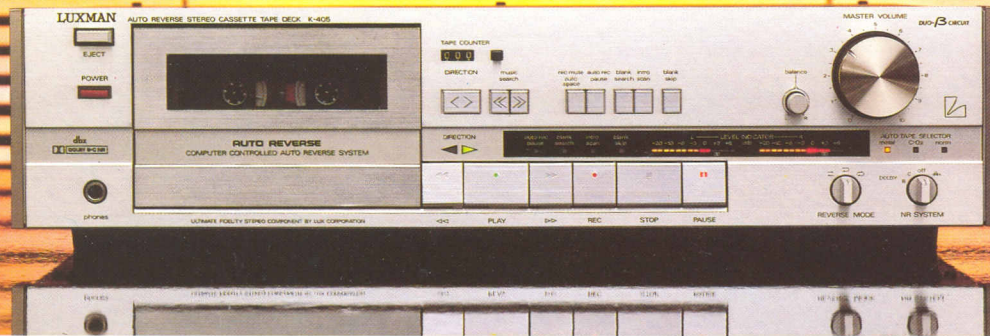
Luxman cassette decks provide a variety of noise reduction systems and programmable features for ease of use and compatibility with other playback decks.

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## K-405

**Dolby® B•C•dbx® Auto-Reverse  
Cassette Deck**  
 Duo-Beta Circuitry • Full Logic  
 IC Transport Controls • 3 Motor  
 Operation • Auto Reverse/Bi-  
 Directional Record • Hi-B  
 Permalloy Heads • Dolby B and  
 C • dbx Noise Reduction • Metal  
 Tape Capability • Electrostatic  
 Shielding • Auto Record Pause  
 Auto Space • Intro Scan • Music  
 Search • Blank Skip and Search  
 FL Peak Level Meters • Remote  
 Control Capability



## K-240

**Dolby® B•C Cassette Deck**  
 Duo-Beta Circuitry • Full-Logic  
 IC Transport Controls • Hexalamin  
 Heads • Dolby B and C • Metal Tape  
 Capability • Electrostatic Shielding  
 Auto Tape Selector • Music Search  
 System • Memory Play, Rewind and  
 Repeat • Bias Fine Trim • FL Peak  
 Level Meters • Dual Microphone  
 Inputs • Remote Control Capability



## K-205

**Dolby® B•C Cassette Deck**  
 Duo-Beta Circuitry • Soft Touch  
 Transport Controls • Permalloy  
 Heads • Dolby B-C Noise Reduction  
 Metal Tape Capability • LED Peak  
 Level Meters • Electrostatic  
 shielding





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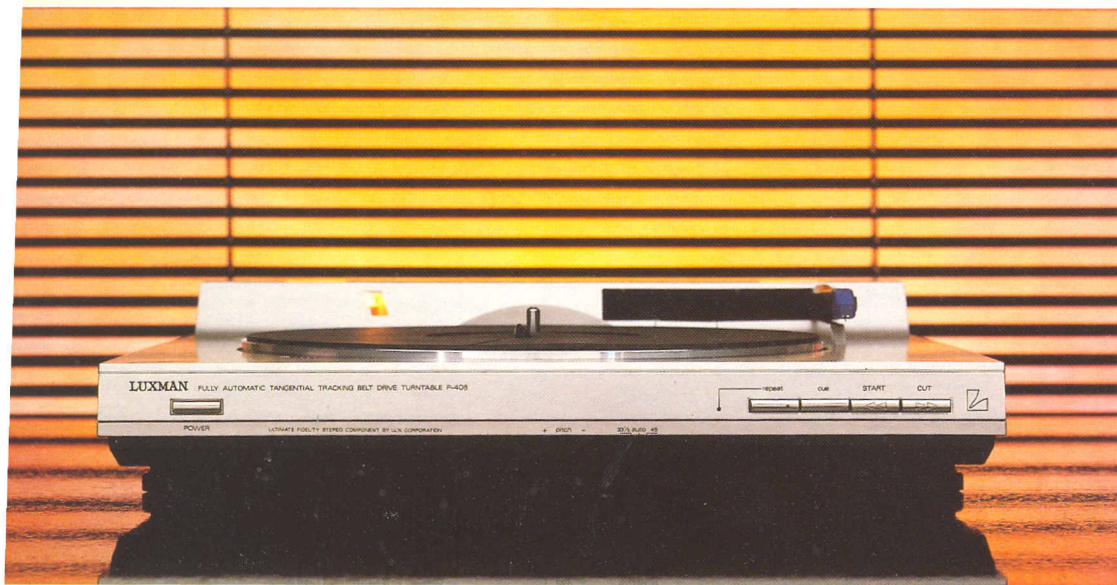
# CASSETTE DECKS

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The end result is the ability to make quality cassette recordings that are virtually indistinguishable to the original sources.

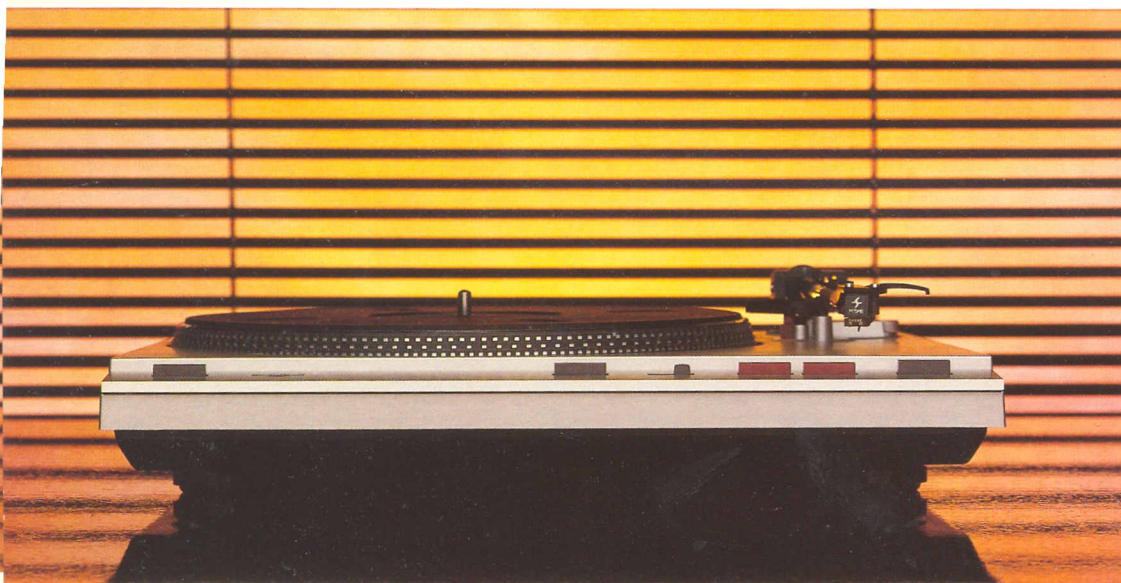
In addition, several of the Luxman cassette decks are remote operable with optional hand-held remotes (R-406, AK-10, AK-20).





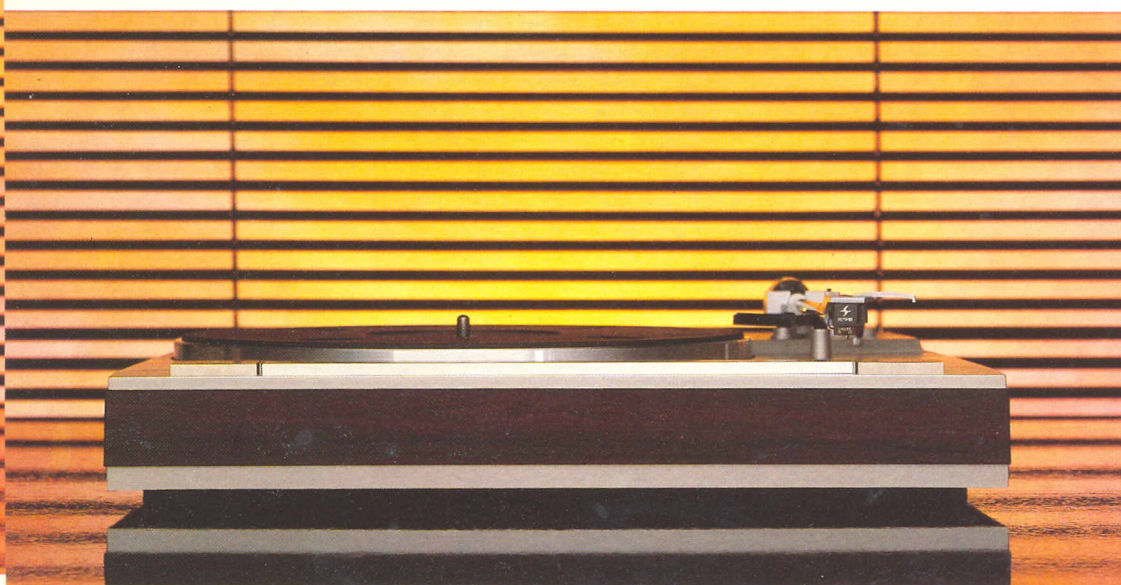
## P-406

Tangential Tracking Belt-Drive Turntable  
 Tangential Tracking Tonearm  
 Low-Mass Cartridge Compatibility  
 P-Mount Cartridge Connector  
 High-Grade Needle Bearings  
 Precision Belt-Drive System • FG Servo DC Motor • Electrostatic Shielding • Automatic Speed Selector • Record Sensing Device  
 Variable Pitch Control Automatic Repeat • Stroboscopic Indicator  
 Remote Control Capability



## P-405

Belt Drive Turntable  
 Straight-Line Radial Tonearm  
 Low-Mass Cartridge Compatibility  
 High-Grade Needle Bearings  
 Adjustable Anti-Skate • Precision Belt-Drive System • FG Servo DC Motor • Electrostatic Shielding  
 Variable Pitch Control • Automatic Repeat • Stroboscopic Indicator



## PD-210

Belt Drive Turntable  
 Straight-Line Radial Tonearm  
 Adjustable Anti-Skate • Precision Belt-Drive System • Semi-Automatic Operation • AC Synchronous Motor • Electrostatic Shielding



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# TURNTABLES

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## SPEED ACCURACY

A high-speed motor, precision belt and turntable platter combined with a well-matched center spindle bearing, produce below audible wow and flutter and maintain speed consistency.

## CARTRIDGE TRACKABILITY

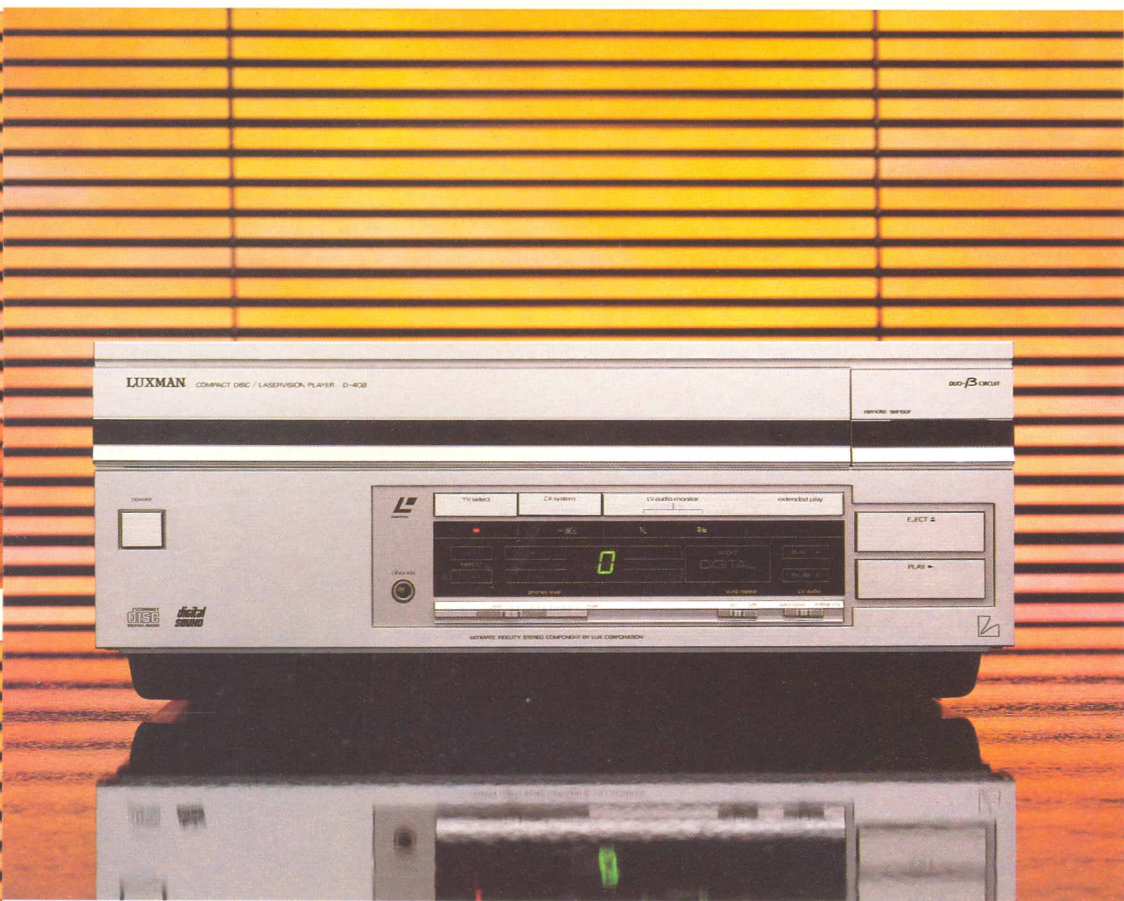
The low-mass tonearms on Luxman turntables use high-grade needle bearings to achieve very low friction. This enables the tonearm to move freely in any direction and be compatible with a wide range of cartridge compliances.

## FEEDBACK ISOLATION

The suspension on Luxman turntables is designed to dampen external vibrations that can affect the sonic integrity of the music.

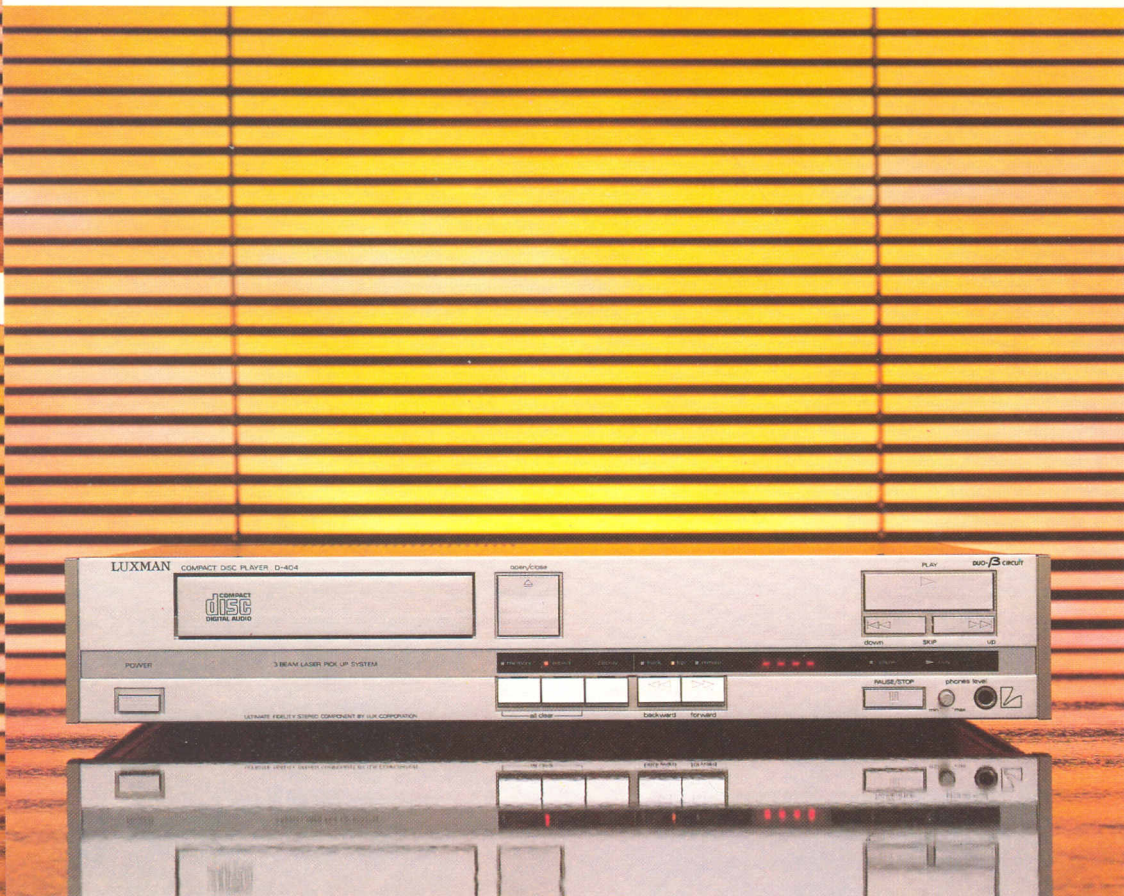
These turntables blend sonically and cosmetically with other Luxman components to form high quality audio systems.





## D-408

**Digital-Audio Compact Disc/Laserdisc Player**  
 Duo-Beta Capacity • Single-Beam Laser Pickups • Integral D/A Converter • Separate Power Supplies • Non-Magnetic Resistors CX Noise Reduction • Automatic Analog/Digital Sensor • Digital-Audio Laserdisc Capability • Auto Disc-Size Selector • Oxygen-Free Copper Cabling • Full Function Remote Control



## D-404

**Digital-Audio Compact Disc Player**  
 Duo-Beta Circuitry • 3 Beam Laser Pickup • Integral D/A Converter • Separate Power Supplies • Star Pattern Circuit Topology • Non-Magnetic Resistors Electrostatic Shielding Programmable Memory Automatic Repeat • Skip Up/Down • Remote Control Capability



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# COMPACT DISC PLAYERS

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The most advanced technology in Audio and Video playback for home use revolves around the "laser" optic systems.

And perhaps the most intriguing model in the Luxman Digital Disc Family is the D-408, combination compact disc/laserdisc player.

Designed to accommodate 4½" compact discs, as well as 8" and 12" laserdiscs, this player represents the highest quality audio/video format available for home use.

The laserdisc has always been rated as the clearest video picture format for viewing pre-recorded movies and music videos. The D-408 adds digital-audio decoding capability so that the sound matches the picture quality when playing a digital-audio encoded disc.

The compact disc performance of this D-408 is pure Luxman.

Separate power supplies are utilized to provide proper isolation between the digital and analog circuits.

An integral D/A converter is implemented to ensure that the left and right converters track together.

A special star circuit pattern is employed to attain the lowest induced noise and distortion possible.

Add Duo-Beta Circuitry and you have a compact disc player that delivers all the potential of these shiny silver discs.



# THE BRID STORY

Brid, a derivative of the word "hybrid" typifies the marriage of traditional tube technology and its smooth sonic quality, with computer speed transistors for the accuracy that today's music demands. Luxman has designed a revolutionary audio amplifier circuit utilizing triode vacuum tubes and MOS FET transistors that approaches sonic perfection. This hybrid concept... tubes and transistors, is Luxman's exclusive "BRID" circuit. Tubes have traditionally been regarded as the ultimate electronic device for audio, providing dramatic detail and musicality. The MOS FET transistor is the most reliable and most powerful of all transistors used in audio amplifiers. The vacuum tubes capture all the detail of the music and control the signal before sending it to the MOS FET transistors that deliver clean dynamic power to your speakers. With today's high performance audio and audio/video source material having such great dynamic range, high power with sonic purity for short durations is mandatory.

While this design has to set new standards in audio performance, it also has to function as the total audio/video control centre for your home. And Luxman's brid series offer multiple inputs and outputs so that you can interconnect a full array of home entertainment components and allow the brid series to serve as the nucleus of your total home entertainment system; all with Luxman's pure clean sound.

Luxman brid series, total system control offering the ultimate technology and musicality.

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## LV-105

Hybrid Integrated Amplifier  
Control Centre  
80W/Channel Power Output • D  
Beta Circuitry • TRIODE Tube  
Pre-Driver Circuitry • Discrete  
Output Circuitry • Dynamic  
Headroom • LED Bias Circuitry  
Electrostatic Shielding • Star  
Circuitry • 4 Ohm-2 Ohm Load  
Stability • NF Tone Controls  
Tone Defeat Switch • Pre-Heating  
Switch • Audio and Video Tape  
Dubbing • Video Buffer Amplifier  
Moving Coil Capability • Front  
A/V Inputs • Video Record Output



## LV-103

Hybrid Integrated Amplifier  
Control Centre  
60W/Channel Power Output • D  
Beta Circuitry • TRIODE Tube  
Pre-Drive Circuitry • Discrete  
Output Circuitry • Dynamic  
Headroom • LED Bias Circuitry  
Electrostatic Shielding • Star  
Circuitry • 4 Ohm-2 Ohm Load  
Stability • NF Tone Controls  
Tone Defeat Switch • Pre-Heating  
Switch • Audio and Video Tape Dubbing  
Moving Coil Capability • Front  
A/V Sound Inputs



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# BRID INTEGRATED AMPLIFIERS

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The LV103 and LV105 incorporate Luxman's exclusive Hybrid Circuit design amplifier. Luxman engineers have designed the Brid Circuit utilizing Vacuum Tubes and Transistors that, together, result in exceptional reproduction of full dynamics and musical harmony. Simply stated, the Brid Circuit incorporates discrete FET transistors at all input stages, two triode vacuum tubes at the pre-driver stage and MOS FET transistors at the final output stage. Independent power supplies are used for the tubes and transistors to ensure unconditionally stable operation even into low-impedance speaker loads. The result of these two devices working together is audible. Compact Disc can be reproduced to its best, creating the open or natural sound of the original recording with wide dynamic range.

The LV105 also incorporates a video signal buffer amplifier that processes video signals with flawless accuracy. The LV105 video circuit automatically adjusts the video signal gain that is historically lost in video system connections. The result is the LV105 can process video duplications with the second generation copy having no loss of quality.





## K-109

**Dolby B•C Direct Drive Cassette Deck**  
 Duo-Beta Circuitry • Full Logic IC Transport Controls • GT Direct Drive Transport • 3 Motor Operation • Closed Loop Dual Capstan • 3 Head Configuration  
 Dolby B•C Noise Reduction • Metal 50 • Built In Test Tone Oscillators  
 Sendust Heads • Bias and Level Controls • Realtime Tape Counter  
 Music Sensor • Blank Skip • Auto Space • Auto Monitor • Multi-Memory • Timer Record and Play  
 FL Peak Level Meters  
 Electrostatic Shielding • Remote Control Capability



## K-106

**Dolby® B•C•dbx® Auto-Reverse Cassette Deck**  
 Duo-Beta Circuitry • Full IC Logic Transport Controls • 3 Motor Operation • Auto Reverse/Bi-Directional Record • Hi-B Permalloy/Sendust Heads • Dolby B•C•dbx Noise Reduction • Dolby HX-Pro Circuitry • Metal Tape Capability • Bias Fine • Auto Record Pause • Auto Space • Intro Scan  
 Blank Skip and Search  
 Programmable Music Search  
 Realtime Tape Counter • LED Peak Level Meters • Electrostatic Shielding • Remote Control Capability



## K-105

**Dolby® B•C•dbx® Auto-Reverse Cassette Deck**  
 Duo-Beta Circuitry • Full Logic IC Transport Controls • 3 Motor Operation • Auto Reverse/Bi-Directional Record • Hi-B Permalloy Heads • Dolby B and C • dbx Noise Reduction • Metal Tape Capability • Electrostatic Shielding • Auto Record Pause  
 Auto Space • Intro Scan • Music Search • Blank Skip and Search  
 FL Peak Level Meters • Remote Control Capability



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# *BRID CASSETTE DECKS*

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As in all Luxman Cassette Decks, the Brid System models are designed to record and play back music with great detail and accuracy.

The K105 and K106 provide a new level of convenient flexibility with Dolby B, C, and dbx noise reduction. Micro-processor controlled ultra precision auto-reverse delivers stable frequency response in both directions.

The K109 on board calibration system enables you to set up optimum recording bias and level for all kinds of tape. Luxman's GT transport incorporates cast mono construction with three (3) motors and dual capstan drive.

Black cosmetics for total Brid System integration.



## K-102

Dolby B•C Cassette Deck  
Duo-Beta Circuitry • Full Logic  
IC Transport Controls • Dolby B•C  
Noise Reduction • Auto Tape  
Selector • Music Sensor • MPX  
Filter • Microphone Inputs • Timer  
Record and Play • LED Peak Level  
Meters • Electrostatic Shielding  
Remote Control Capability



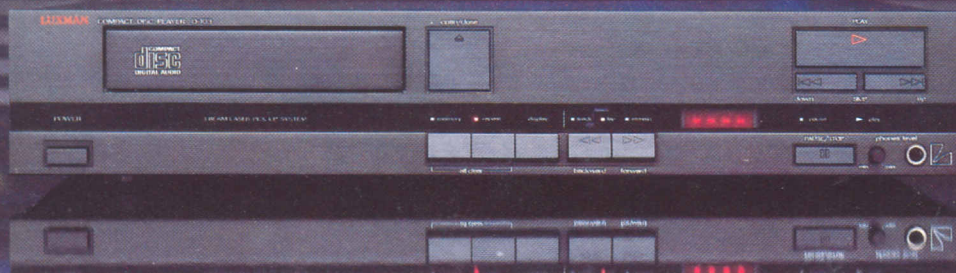
## T-105

FM Stereo/AM Tuner  
Computer Analyzed Tuning  
High-Energy PLL • 24 Preset  
Station Memory • Preset Channel  
Display • Memory Scan • Double-  
Tuned FM Quadrature Detector  
Spectrum Front-End AGC • High  
Selectivity IF Filter • Low Pass  
Filter • Energy Storage Device  
Electrostatic Shielding



## D-103

Digital-Audio Compact Disc Player  
Duo-Beta Circuitry • 3 Beam  
Laser Pickup • Integral D/A  
Converter • Separate Power  
Supplies • Star Pattern Circuit  
Topology • Non-Magnetic Resistors  
Electrostatic Shielding  
Programmable Memory  
Automatic Repeat • Skip Up/  
Down • Remote Control Capability





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## *BRID DIGITAL TUNER*

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The T105 digitally synthesized Tuner provides stable reception and noise free listening under all conditions. Twenty-four (24) station pre-set memory with scan enable you to choose your favourite programming with a single touch or sample all your pre-selected stations for ease of operation.

Exclusive Luxman filtering removes all unwanted noises from the broadcast signal caused by adjacent stations.

## *COMPACT DISC PLAYER*

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The Luxman D103 utilizes a totally Linear Digital/Analog converter with a low-mass laser pick-up to assure accurate digital reproduction and stable tracking. Every detail of the music accurately read by the 3-beam laser to deliver sound quality that is free from error correction harshness. Phase accuracy is enhanced by the STAR circuitry and independent power supplies.

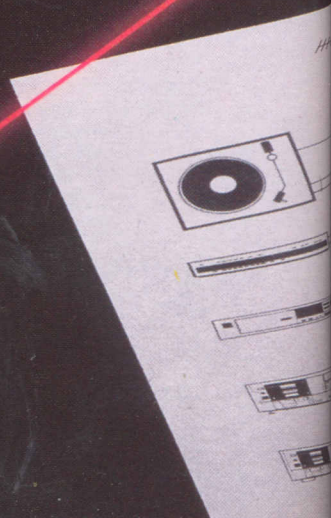


# TOTAL ENTERTAINMENT

The Luxman Brid System incorporating the Audio and Video signal outputs from today's high performance sources represents a new level of simple sophistication in home entertainment system control. Audio/Video sources such as Laservision Players, Hi Fi Video Cassette Recorders, Stereo Television Tuners, and Satellite Television can be interconnected without limitations or loss of quality. The audio portion of these audio/video sources can now be enjoyed with the same sonic purity as the audio sources. A total of twelve (12) home entertainment inputs/outputs can be interconnected through the LV105.

The Luxman Brid System represents the new standard for a control centre for any multi-component Hi Fidelity/Video system design.

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VOLUME CONTROL

22 20 18 16 14 13 12 11 10 9 8 7 6 5 4 3 2 1  
70 ∞ 0  
-dB

REC OUT SELECTOR  
off on  
A/B source CD tuner phono

cartridge

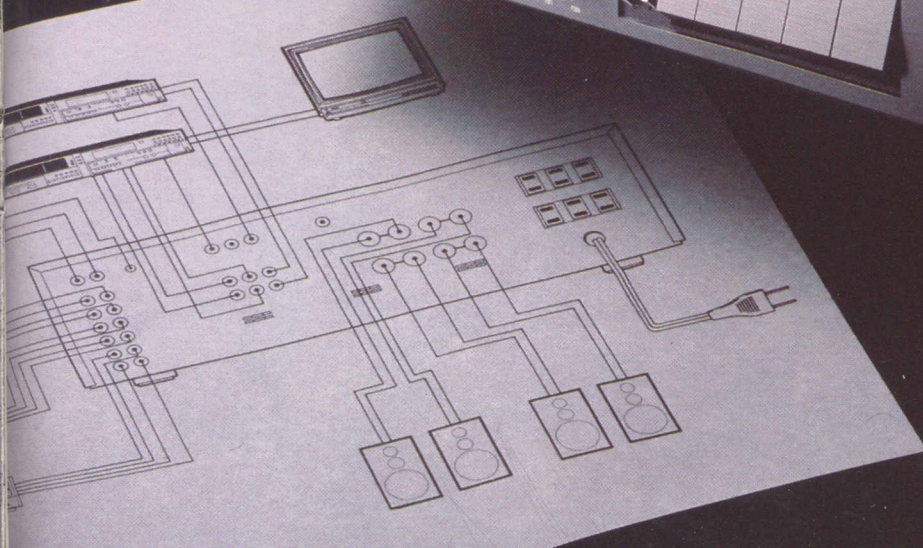
INPUT SELECTOR

MM MC balance

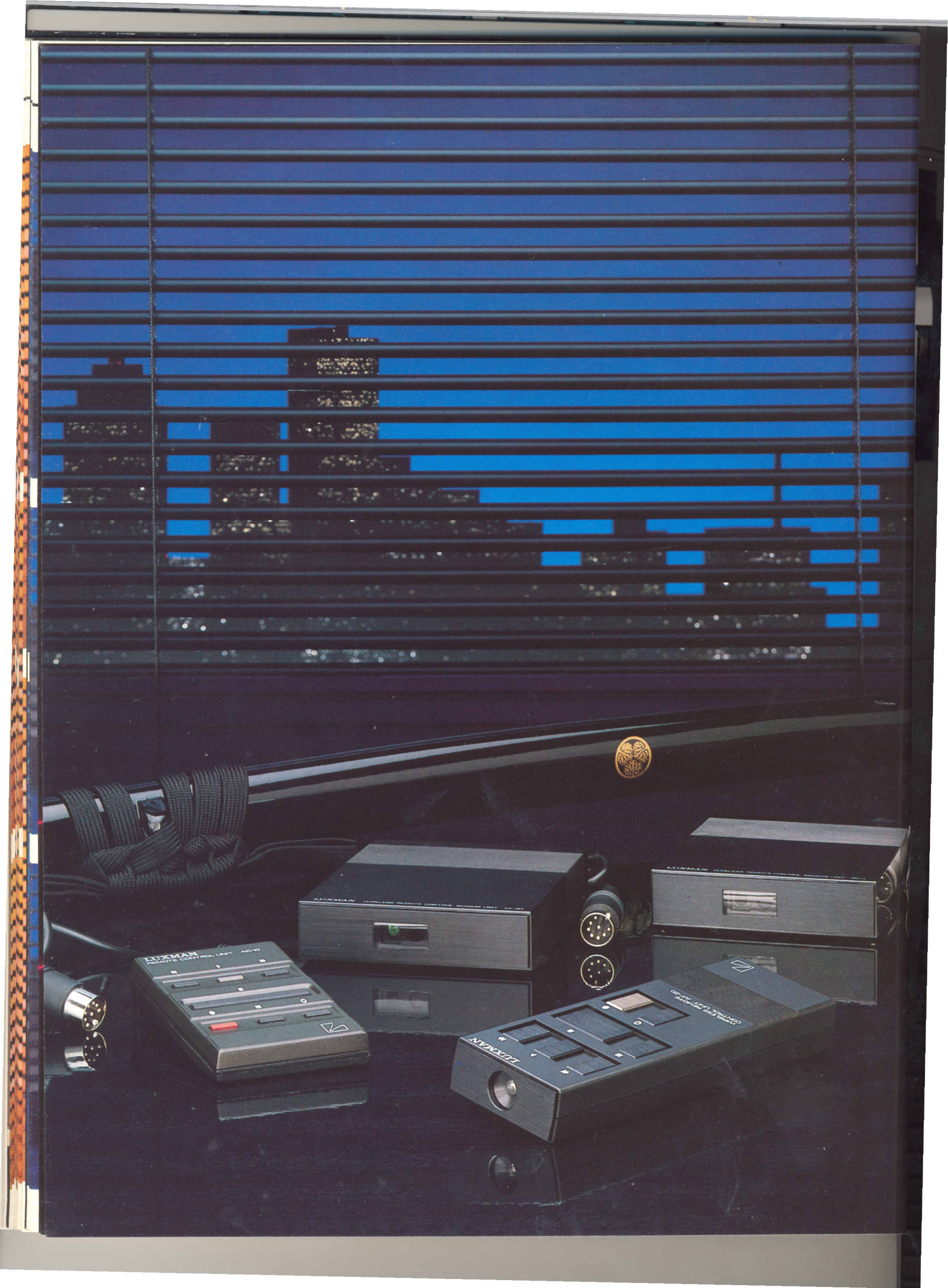
front AV 2/aux  
rear front audio video

left right

L R









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# ACCESSORIES

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## AK-10

When remote operation of the transport functions of a cassette deck is desirable but long-range distance isn't critical, this wired remote unit is a convenient option. Designed to operate with the Luxman K-240, K-405, K-406, K-03, K-05, K-102, K-105, K-106 and K-109 cassette decks.

Functions: Play, Stop, Pause, Fast Forward, Rewind, Record, Record Mute.

## AK-20

The AK-20 permits wireless remote operation for the Luxman Models K-240, K-405, K-406, K-03, K-05, K-102, K-105, K-106 and K-109 cassette decks.

Functions: Play, Stop, Pause, Fast Forward, Rewind, Record, Record Mute.

## RC-1

Several audio/video products on the market today operate with a wireless remote control sensor. But most of these units are limited to one room application. The RC-1 external remote eye operates with the R-406 audio receiver to extend remote capability anywhere in the home.

In other words, the individual components of a primary audio or video system can feed information to secondary rooms and be operated by wireless remote.



# TECHNICAL SPECIFICATIONS

## Receivers

AUDIO SECTION	R406	R405	R404
Power Output	60 watts minimum continuous per channel from 20 Hz to 20 kHz both channels driven into 8 ohms	55 watts minimum continuous per channel from 20 Hz to kHz both channels driven into 8 ohms	33 watts minimum continuous per channel from 20 Hz to 20 kHz both channels driven into 8 ohms
Dynamic Power (1 kHz, IHF Signal)	120 watts at 4 ohms 132 watts at 2 ohms	100 watts at 4 ohms 100 watts at 2 ohms	66 watts at 4 ohms 80 watts at 2 ohms
Total Harmonic Distortion	Less than 0.05%	Less than 0.05%	Less than 0.08%
Frequency Response	10 Hz to 50 kHz (-1 dB)	10 Hz to 45 kHz (-1 dB)	15 Hz to 40 kHz (-1 dB)
Input Sensitivity Phono	25 mV	25 mV	25 mV
CD/Aux, Tape	150 mV	150 mV	150 mV
Signal to Noise Ratio (IHF, A-weighted) Phono (MM)	Greater than 86 dB	Greater than 86 dB	Greater than 75 dB
Co/Aux, Tape	Greater than 98 dB	Greater than 98 dB	Greater than 92 dB
FM SECTION			
Usable Sensitivity	1.8 uV (10.3 dB)	1.9 uV (10.8 dB)	1.9 uV (10.8 dB)
Stereo Separation	49 dB	45 dB (1 kHz)	45 dB (1 kHz)
General Dimensions	453mm x 110mm x 305mm	453mm x 110mm x 305mm	543mm x 110mm x 305mm
Weight	18.7 lbs (8.5 kg)	17.7 lbs (8 kg)	13.32 lbs (6.1 kg)

## Integrated Amplifiers

	L525	L435	L235	L215	L205
Power Output	110 watts minimum continuous per channel from 20 Hz to 20 kHz, both driven into 8 ohms	100 watts minimum continuous per channel from 20 Hz to 20 kHz, both driven into 8 ohms	63 watts minimum continuous per channel from 20 Hz to 20 kHz, both driven into 8 ohms	45 watts minimum continuous per channel from 20 Hz to 20 kHz, both driven into 8 ohms	30 watts minimum continuous per channel from 20 Hz to 20 kHz, both driven into 8 ohms
Dynamic Power (1 kHz, IHF Signal)	156 watts per channel at 8 ohms 230 watts per channel at 4 ohms	150 watts per channel at 8 ohms 200 watts per channel at 4 ohms			
Total Harmonic Distortion	Less than 0.007%	Less than 0.015%	Less than 0.02%	Less than 0.02%	Less than 0.02%
Frequency Response	10 Hz to 100 kHz (-1 dB)	10 Hz to 100 kHz (-1 dB)	10 Hz to 100 kHz (-1 dB)	10 Hz to 100 kHz (-1 dB)	10 Hz to 100 kHz (-1 dB)
Signal to Noise Ratio Phono (MM)	Greater than 84 dB	Greater than 90 dB	Greater than 90 dB	Greater than 90 dB	Greater than 90 dB
Phono (MC)	Greater than 70 dB	Greater than 70 dB	Greater than 67 dB	Greater than 90 dB	Greater than 90 dB
CD/Aux, Tape	Greater than 110 dB	Greater than 110 dB	Greater than 117 dB	Greater than 117 dB	Greater than 117 dB
General Dimensions	453mm x 162mm x 430mm	453mm x 139mm x 424mm	453mm x 111mm x 317mm	453mm x 111mm x 317mm	453mm x 111mm x 317mm
Weight	14.3 kg	11 kg	8.5 kg	7.5 kg	6.6kg

## Tuners (FM/AM)

FM SECTION	T530	T240, T105	T215
Usable sensitivity	1.8 uV (10.3 dBf)	1.8 uV (10.3 dB)	1.8 uV (10.3 dBf)
Stereo Separation	1000 Hz 55 dB	1000 Hz 50 dB	1000 Hz 45 dB
Total Harmonic Distortion	1000 Hz Mono 0.05% Stereo 0.06%	1000 Hz Mono 0.08% Stereo 0.01%	1000 Hz Mono 0.1% Stereo 0.2%
Signal to Noise Ratio	81 dB mono 77 dB stereo	76 dB mono 74 dB stereo	80 dB mono 76 dB stereo
Frequency Response	30 Hz to 15 kHz (-0.5 dB)	30 Hz to 15 kHz (-0.5 dB)	30 Hz to 15 kHz (-0.5 dB)
AM SECTION			
Usable Sensitivity	15 uV	15 uV	18 uV
Signal to Noise Ratio	50 dB	50 dB	45 dB
General Dimensions	453mm x 87mm x 344mm	453mm x 77mm x 244mm	453mm x 77mm x 244mm
Weight	5.0 kg	3.0 kg	3.0 kg

## Power Amplifiers

	M05	M02
Power Output	105 watts minimum continuous Class A power per channel at 8 ohms 20 Hz to 20 kHz 210 watts per channel at 4 ohms 20 Hz to 20 kHz	150 watts minimum continuous power per channel at 8 ohms 20 Hz to 20 kHz
BTL (Mono)	400 watts 8 ohms	320 watts 8 ohms
Dynamic Power (1 kHz, IHF Sig) Stereo	210 watts at 8 ohms	290 watts 4 ohms 410 watts 2 ohms
BTL	800 watts at 8 ohms	600 watts 4 ohms
Total Harmonic Distortion	Less than 0.025%	Less than 0.025%
Frequency Response	10 Hz to 100 kHz (-0.5 dB)	10 Hz to 100 kHz (-1 dB)
Signal to Noise Ratio	Greater than 120 dB	Greater than 120 dB
Input Sensitivity	750 mV/300K ohms	1.2V/45K ohms
General Dimensions	461mm x 210mm x 440mm	453mm x 141mm x 336mm
Weight	88.4 lbs (39.8 kg)	31.9 lbs (14.5 kg)

## Pre-Amplifiers

	C05	C02
Total Harmonic Distortion	Less than 0.005%	Less than 0.005%
Phono (MM)	Less than 0.005%	Less than 0.007%
Phono (MC)	Less than 0.003%	Less than 0.005%
High Level Inputs		
Signal to Noise Ratio		
Phono (MM)	Greater than 90 dB	Greater than 90 dB
Phono (MC)	Greater than 80 dB	Greater than 77 dB
High Level Inputs	Greater than 110 dB	Greater than 108 dB
Frequency Response	2 Hz to 100 kHz (-0.5 dB)	10 Hz to 100 kHz (-1 dB)
Maximum Out Level	18V/39 ohms	18V/100 ohms
General Dimensions	460mm x 135mm x 442mm	453mm x 81mm x 317mm
Weight	24.3 lbs (11 kg)	15.4 lbs. (7.0 kg)



# TECHNICAL SPECIFICATIONS

## Cassette Decks

	K05	K03	K109	K406/K106
Frequency Response				
Metal	20 Hz to 22 kHz	20 Hz to 22 kHz	20 Hz to 23 kHz	20 Hz to 19 kHz
Chromium	20 Hz to 20 kHz	20 Hz to 20 kHz	20 Hz to 21 kHz	20 Hz to 19 kHz
Normal	20 Hz to 20 kHz	20 Hz to 20 kHz	20 Hz to 21 kHz	20 Hz to 17 kHz
Signal to Noise Ratio				
Metal				
(with dbx®)	---	---	---	Greater than 90 dB
(with Dolby® C)	Greater than 73 dB	Greater than 73 dB	Greater than 73 dB	Greater than 71 dB
(with Dolby® B)	Greater than 67 dB	Greater than 67 dB	Greater than 67 dB	Greater than 67 dB
(without NR)	Greater than 60 dB	Greater than 60 dB	Greater than 60 dB	Greater than 60 dB
Wow & Flutter	0.022% WRMS	0.022% WRMS	0.022% WRMS	0.05% WRMS
General Dimensions	453mm x 163mm x 365mm	453mm x 163mm x 365mm	438mm x 124mm x 346mm	408mm x 114mm x 307mm
Weight	11.1 kg	11.1 kg	9.3 kg	4.5 kg
	K405/K105	K240	K102	K205
Frequency Response				
Metal	20 Hz to 19 kHz	20 Hz to 20 kHz	20 Hz to 20 kHz	20 Hz to 19 kHz
Chromium	20 Hz to 18 kHz	20 Hz to 18 kHz	20 Hz to 18 kHz	20 Hz to 18 kHz
Normal	20 Hz to 17 kHz	20 Hz to 17 kHz	20 Hz to 17 kHz	20 Hz to 16 kHz
Signal to Noise Ratio				
Metal				
(with dbx®)	Greater than 90 dB	---	---	---
(with Dolby® C)	Greater than 71 dB	Greater than 71 dB	Greater than 71 dB	Greater than 70 dB
(with Dolby® B)	Greater than 67 dB	Greater than 67 dB	Greater than 67 dB	Greater than 64 dB
(without NR)	Greater than 59 dB	Greater than 59 dB	Greater than 60 dB	Greater than 59 dB
Wow & Flutter	0.05% WRMS	0.04% WRMS	0.09% WRMS	0.06% WRMS
General Dimensions	453mm x 114mm x 307mm	453mm x 110mm x 275mm	438mm x 111mm x 250mm	453mm x 110mm x 210mm
Weight	4.5 kg	5.3 kg	4.5 kg	4.2 kg

## Turntables

	P406	P405	PD210
Drive System	Belt Drive System	Belt Drive System	Belt Drive System
Rumble	70 dB DIN B Wtd	72 dB DIN B Wtd	70 dB DIN B Wtd
Wow & Flutter	0.04% DIN Wtd	0.06% DIN Wtd	0.06% DIN Wtd
General Dimensions	416mm x 104mm x 348mm	416mm x 119mm x 376mm	416mm x 119mm x 376mm
Weight	4.9 kg	5.3 kg	5.2 kg

## Digital Audio Disc Players

	D408	D404
System	Optical (compact disc/laserdisc system)	Optical (compact disc system)
Quantizing Bit	16 Linear System	16 Linear System
Frequency Response	5 Hz to 20 kHz (-0.5 dB)	5 Hz to 20 kHz (-0.5 dB)
Total Harmonic Distortion	Less than 0.003% (1 kHz)	Less than 0.003% (1 kHz)
Signal to Noise Ratio	Greater than 96 dB	Greater than 96 dB
Dynamic Range	Greater than 96 dB	Greater than 96 dB
Audio Output Level	260 mVrms (1 kHz-20 dB) Digital	2V
Wow & Flutter	Below measurable limits	Below measurable limits
Channel Separation	Greater than 90 dB	Greater than 90 dB (1 kHz)
Video Output	1Vp-p (75 ohms, sync, negative)	
General Dimensions	420mm x 168mm x 447mm	453mm x 84mm x 313mm
Weight	15.6 kg	6.0 kg

## Hybrid Integrated Amplifiers

	LV105	LV103
Power Output	80 watts minimum continuous per channel from 20 Hz to 20 kHz, both driven into 8 ohms 176 watts per channel at 4 ohms	60 watts minimum continuous per channel from 20 Hz to 20 kHz, both driven into 8 ohms 153 watts per channel at 4 ohms
Dynamic Power (1 kHz, IHF Signal)		
Total Harmonic Distortion	Less than 0.008%	Less than 0.008%
Frequency Response	1 Hz to 200 kHz (-3 dB)	1 Hz to 200 kHz (-3 dB)
Signal to Noise Ratio		
Phono (MM)	Greater than 90 dB	Greater than 90 dB
Phono (MC)	Greater than 70 dB	Greater than 70 dB
CD/Aux, Tape, A/V	Greater than 110 dB	Greater than 110 dB
General Dimensions	438mm x 145mm x 346mm	438 x 145mm x 346mm
Weight	10.5 kg	10.2 kg