# Ultimate Power.



R-117 AM/FM Stereo Remote-Control Receiver.

Luxman has perfected sonic reproduction with amplifiers that capture the best of both worlds: the warm musicality associated with vacuum tube amplifiers, plus the high power needed for today's digital source material. In other words, "quality plus quantity."

words, "quality plus quantity."
For over 60 years, Luxman components have earned the highest accolades for their musical warmth and transparency. In the past, however, Luxman's amplifiers were designed to deliver optimum results with analog source material and conventional loudspeaker designs. Now, the increased popularity of the compact disc format has created a new demand for higher power output.

### The digital era.

Compact discs have a dynamic range that far exceeds that of phonograph records and cassette tapes. This requires amplifiers with greater reserve power to smoothly handle the dramatic changes in dynamic impact.

In addition, the clarity and wider dynamics of CDs have encouraged speaker manufacturers to introduce new designs with improved sonic performance. However, several of these new speaker designs expose amplifiers to extremely low impedance loads that demand higher current output.

Plus, the CD's remarkable sonic realism has also ignited a whole new interest in listening to music that, in many households, has resulted in multiple speaker arrangements and multiple-room speaker installations. These combined loads pose additional threats to the stability and clarity of an amplifier with insufficient reserve power.

### The new Luxman amplifiers.

To ensure the sonic integrity of CDs into a variety of speaker loads, an amplifier must be able to deliver high dynamic power. In answer to this, Luxman has incorporated massive power supplies with high energy reserves to ensure distortion-free transients. High-current, bipolar transistors are then carefully selected in matched pairs to preserve total sonic integrity at high dynamic levels.

This rugged design technique accommodates the high demands of both digital software and low

impedance loads. But high power is only half the story. . .

### Ultimate fidelity.

The heart of Luxman amplifiers is still the warm, musical feeling that has resulted from decades of research on how vacuum tube amplifiers reproduce music so faithfully.

To achieve this same type of "tube-like" transparency and naturalness, Luxman transistor amplifiers employ voltage driven amplification configurations that perform the main current conversion only at the output.

In addition, sophisticated circuit designs, including Duo-Beta circuitry, STAR circuit patterns and LED bias circuitry, are utilized to obtain that extra degree of musical purity that conventional amplifiers ignore.

### Ultimate power.

The best of both worlds. It's the purity and musical warmth of the original source plus the high dynamic power output that combine to ensure total sonic integrity at all volume levels. In today's Luxman amplifiers, we call it "Ultimate Power".

#### "Ultimate Power" Receivers.

The new R-117, R-115 and R-113 receivers are excellent examples of Luxman's "Ultimate Power" amplifier designs.

The R-117, rated at 160 watts per channel, is capable of supplying up to 600 watts of dynamic power into 4-ohm loads, and 700 dynamic watts into 2 ohms. The amplifier section is backed by a massive triple-shielded high-energy power transformer and fast-recovery rectifier diodes to maintain high energy reserves under all load conditions.

Similarly, the R-115, rated at 70 watts, can provide up to 200 dynamic watts into 4 ohms, and 270 watts into 2-ohm loads. And, with its heavy, double-shielded power transformer and high efficiency, it provides a full 3dB of dynamic headroom.

Both incorporate a new 5-gang varactor, dual-gate MOSFET FM front end, with automatic hiblend circuitry, that ensures clean, distortion-free FM performance.

The R-113, the most affordable model in Luxman's new line of receivers, includes a high-speed dynamic amplifier that delivers up to 100 dynamic watts into a 2-ohm load. And a high-efficiency toroidal power transformer is coupled with high-energy storage capacitors to provide the dynamics and steady-state reserves necessary for the most demanding music transients.

All three receivers employ voltage amplification circuitry that ensures the "tube-like", musical warmth of traditional Luxman amplifiers. In addition, CD Straight circuitry routes CD input signals past all signal processor and switching functions to provide



R-113 AM/FM Stereo Receiver

optimum accuracy, imaging and impact.

Complementing this performance are an array of advanced features that lend versatility and precise control over a wide range of functions. Both the R-117 and R-115 even include a hand-held remote that can operate a complete system of components.

## The ultimate upgrade.

All three Luxman receivers include pre-out connections for upgrading in power output to the awesome M-117 power amplifier.



Rated at 200 watts continuous power into 8-ohms, the M-117 is ideal for multi-speaker and multi-room applications as well as conventional systems. And the sonic accuracy of the M-117 sets new standards in terms of total amplifier performance.

### Power Output Ratings

Specifications	R-113	R-115	R-117
Rated continuous power, per channel (20Hz to 20kHz, 8 ohms)	35W	70W	160W
THD at rated continuous power	0.08%	0.03%	0.03%
Dynamic power, per channel, 8 ohms	50W	140W	440\\
Dynamic power, per channel, 4 ohms	84W	200W	600\
Dynamic power, per channel, 2 ohms	100W	270W	700\\
Dynamic headroom, per channel, 8 ohms	1.5dB	3dB	4.4dB

## Additional Features

Features	R-113	R-115	R-117
20 AM/FM random access memories	X	X	X
Auto seek tuning	X	X	X
AM/FM memory scan-	X	X	X
Cable-ready FM fine-tuning	·X	X	X
FM muting	X	X	X
FM IF bandwidth switch		X	X
Multipath detection circuit & indicator			X
CD straight switches	X	X	X
Tone defeat switch		X	X
MC/MM cartridge switches			X
Tape monitor switch	X	X	
Record-out selector switch			X
Three-position loudness switch			X
Multi-function remote control		X	X
Unified remote DIN jacks		X	X
Unified remote serial output jack		X	X
Remote eye connection (DIN)		X	X
Signal processor jacks/switch	X	X	X
Pre-out jacks	1 pair	1 pair	2 pair
Main-in jacks			1 pai
Speaker terminals accept single banana	3-way	3-way	3-way

