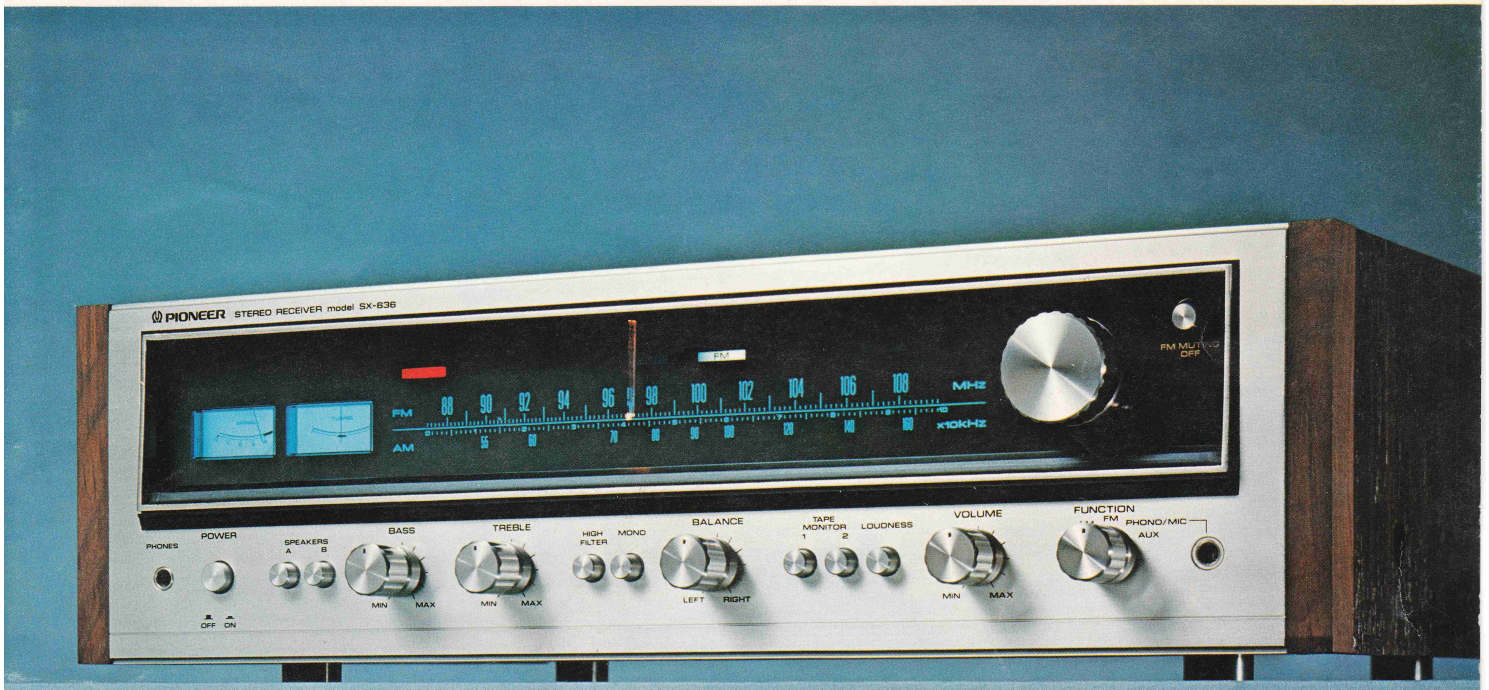
PIONEER®

SX-636

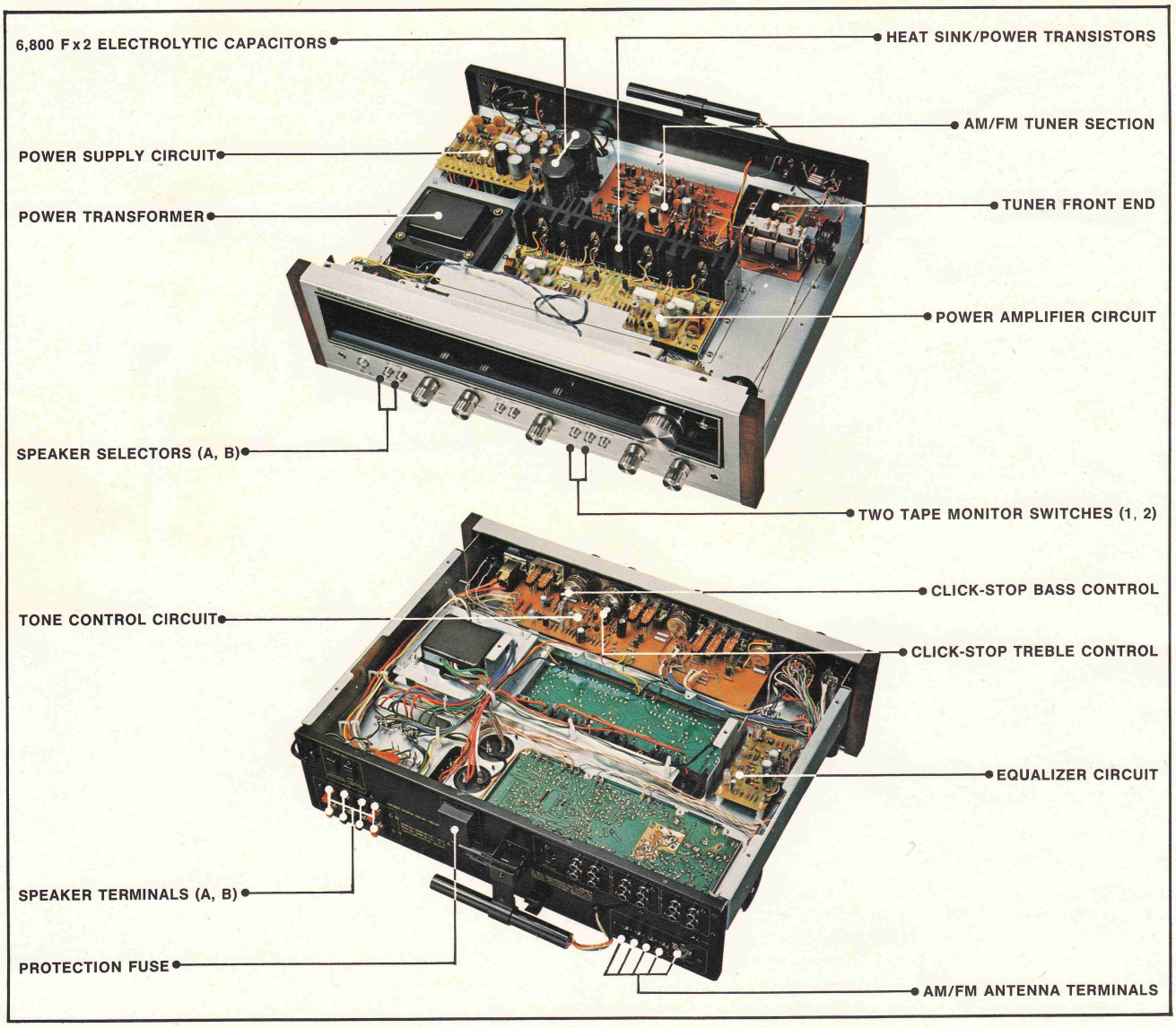
High-performance stereo receiver featuring 25 watts* per channel, min. RMS at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.5% total harmonic distortion.



Not all high fidelity situations require high powered equipment. If your listening room is of average size, and what you really want is more efficiency and more sophisticated versatility in a medium-powered model, Pioneer's new SX-636 will be a good choice. It incorporates the latest state-of-the-art advantages for superior high fidelity performance. But it saves you money and doesn't waste watts. The FM tuner employs a low-noise FET and a frequency-linear 3-gang variable capacitor in the front end. The FM IF section features a 5-stage limiter of high-performance IC and phase-linear ceramic filters. And to ensure stability under all operating conditions, the FM MPX circuit is the advanced PLL (Phase-Lock-Loop) type with an IC. FM results are impressive: 1.9μV (IHF) sensitivity, capture ratio of 1.0dB (IHF), 60dB selectivity (IHF), signal-to-noise ratio of 70dB and wide separation of more than 30dB over the 50 to 10,000Hz range. Accurate high fidelity reproduction is achieved with a particularly precise phono equalizer in the Pioneer SX-636. It keeps RIAA deviation within ±0.5dB. And as for power, the advanced direct-coupled OCL power amplifier provides **continuous power output of 25 watts* per channel, min. RMS at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.5% total harmonic distortion.** This is enough to drive up to two pairs of stereo speaker systems independently or simultaneously with brilliant, high fidelity results. As a stereo control center the SX-636 is up to the minute. There are two stereo pairs of tape terminals (deck 1 to deck 2 tape duplication is possible), a function switch to handle FM, AM PHONO, MIC and AUX. An FM-linear dial scale with dual meter tuning system, illuminated program indicators, a stereo headphone jack and other conveniences add to the versatility. The efficient Pioneer SX-636 puts stereo power in its place—with no wasted watts or wasted money for your stereo pleasure.

*Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.

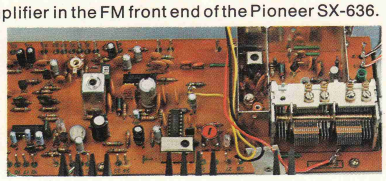
SX-636



AM/FM STEREO TUNER SECTION

(1) STABLE FET-EQUIPPED FM FRONT END FOR HIGH SENSITIVITY

A selected low-noise FET and frequency-linear 3-gang variable capacitor are coupled in the one-stage RF amplifier in the FM front end of the Pioneer SX-636. They provide the kind of high IHF sensitivity (1.9μV) you'd expect from a high-class tuner. Special attention is given to stability, even in strong-signal areas, thus providing clear FM reception at all times.



(2) FM IF SECTION WITH 5-STAGE LIMITER AND HIGH PERFORMANCE IC

A high-performance IC is employed in the FM IF section; that is an exclusively-developed Pioneer LSI (Large Scale Integrated-circuit)—the equivalent of no less than 203 conventional solid state devices (88 transistors, 18 diodes, 83 resistors and 14 capacitors). The results are a high signal-to-noise ratio of 70dB, capture ratio of 1.0dB (IHF) and AM suppression of 50dB to provide excellent FM dependability.

(3) PHASE-LINEAR CERAMIC FILTERS IN IF

To obtain high FM selectivity (a rated 60dB IHF) and low phase distortion, the FM IF section uses phase-linear ceramic filters only. This improves FM

tonal quality and further enhances wide stereo separation even in the high frequencies.

(4) STABLE PLL MPX SECTION

For stereo stability, the MPX section uses the new PLL (Phase-Lock-Loop) circuit. This locks the phase of the 19KHz FM pilot signal to that of the 38KHz switching signal to ensure extraordinary stability under all conditions. The circuit achieves a very wide separation with low distortion (separation is more than 30dB over the 50 to 10,000Hz range; harmonic distortion is less than 0.4% in stereo mode).

(5) DUAL METER TUNING SYSTEM AND FM LINEAR SCALE

The SX-636 is extremely easy to tune with accuracy. In the FM mode, the dial is FM-linear (evenly divided). You first observe the signal-strength meter to obtain rough tuning, then fine tune with the center-tune meter. For AM tuning, the signal-strength meter will help you locate the strongest signal.

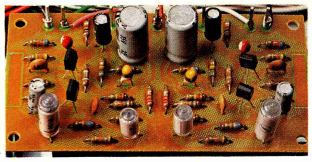
(6) EXCLUSIVE IC-EQUIPPED AM SECTIOM

Pioneer uses a special IC (LSI) in the one-stage RF amplifier for AM, providing excellent AGC (Automatic Gain Control) for low distortion. A balanced mixer design, and ceramic filters, further improve AM reception with better tonal quality and sharp selectivity.

EQUALIZER AMPLIFIER SECTION

(1) 2-STAGE DIRECT-COUPLED EQUALIZER

The phono equalizer circuit in the Pioneer SX-636 uses selected low-noise transistors in a 2-stage direct-coupled NF (Negative Feedback) circuit. This improves maximum allowable phono input signal level to 110mV (rms, 1KHz), while rated input is 2.5mV, meaning that a wide dynamic range is assured. In other words, it means that all sounds are reproduced without "clipping."



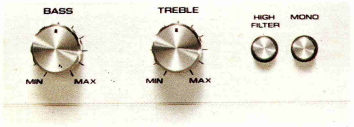
(2) PRECISE RIAA EQUALIZATION

Sound information cut into the grooves of the record you play must be picked up and reproduced with a minimum of error. The RIAA curve, a standard of "perfect reproduction" is adhered to with hardly any deviation (±0.5dB or less) over the 30 to 15,000Hz range. You hear only what's on the record with no coloration.

TONE CONTROL AMPLIFIER SECTION

(1) "FLAT" TONE CONTROLS FOR ACCURACY

The tone control amplifier in the SX-636 employs three transistors in all, two of them in a 2-stage direct-coupled NF circuit. These and other elements in the tone control section are chosen for their precision so that when the tone controls are in their "flat" positions you hear no deviation or undulations in the response curve.



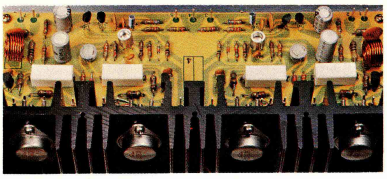
(2) CLICK-STOP CONTROLS

Precise and versatile use of the tone controls is made easy by providing them with click-stop positions. You can tune your listening room to suit its acoustics, the particular music you are playing or to tailor the mood you wish to create.

POWER AMPLIFIER SECTION

(1) RICH POWER OUTPUT

The Pioneer SX-636 makes efficient use of power. To drive one or two pairs of medium-sized stereo speaker systems with spectacular results, it produces **continuous power output of 25 watts* per channel, min. RMS at 8ohms from 20 Hertz to 20,000 Hertz with no more than 0.5% total harmonic distortion.**

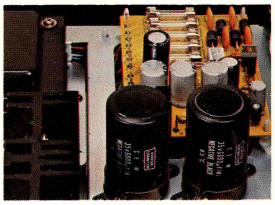


(2) DIRECT-COUPLED OCL CIRCUIT

The power amplifier circuitry is the all-stage direct-coupled OCL type distinguished by wide response. With the use of a first-stage differential amplifier and bias-compen sation circuit, a "zero potential" is precisely maintained at input and output points to reduce error. Paired PNP and NPN driver and power transistors are used in the pure complementary design for low crossover distortion. Since they are coupled with large heat sinks, the SX-636 delivers stable driver force at all times.

(3) DUAL, 6,800μF ELECTROLYTIC CAPACITORS

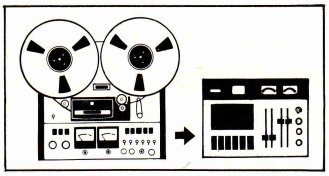
Pioneer rounds out the perfect performance of the power amplifier section by using two large (6,800μF) capacitors in the power supply. The results include excellent regulation contributing to very low distortion in the extremely low frequency ranges at any power output level.

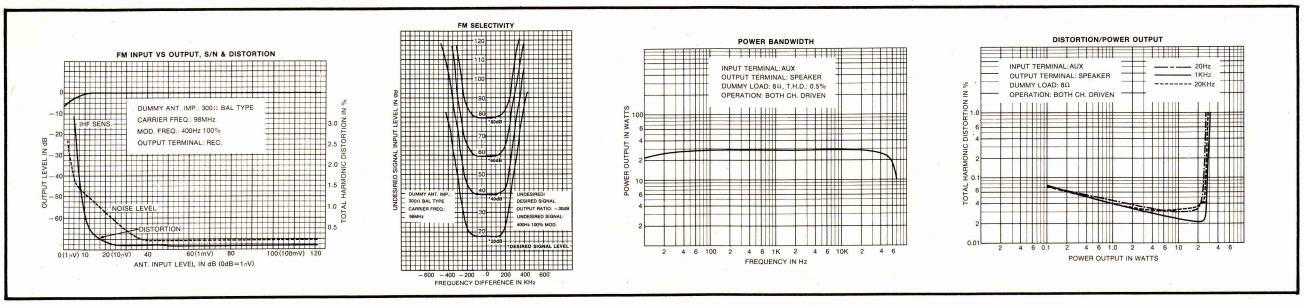


OTHER FEATURES

The Pioneer SX-636 is a complete stereo control center. Its tape monitor circuits allow the use of two independent stereo tape decks, and deck 1 to deck 2 tape duplication is possible. Program input is indicated by attractive illuminators in the dial panel, corresponding to the position of the function switch which lets you control the FM or AM tuner sections, a stereo PHONO, a MIC and a stereo AUX unit. There are taps and a control for using up to two pairs of stereo speakers systems individually or simultaneously, and of course a stereo headphone jack for private listening. An FM muting switch, loudness contour switch, high filter, stereo/mono mode control and other features round out the sophisticated versatility of the Pioneer SX-636.

Tape Duplication (Deck 1→Deck 2)





*Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.

PIONEER

SX-636 SPECIFICATIONS

AMPLIFIER SECTION

Continuous power output of 25 watts* per channel, min. RMS at 8 ohms or 27 watts* per channel at 4 ohms from 20 Hertz to 20,000 Hertz with no more than 0.5% total harmonic distortion.

Continuous Power Output	
1,000 Hertz:	27 watts per channel (8 ohms)
(both channels driven)	30 watts per channel (4 ohms)
Total Harmonic Distortion:	No more than 0.5%
(20 Hertz to 20,000 Hertz)	(continuous rated power output)
	No more than 0.07%
	(1 watt per channel power output, 8 ohms)
Intermodulation Distortion:	No more than 0.5%
	(continuous rated power output)
	No more than 0.07%
	(1 watt per channel power output, 8 ohms)
Output Speaker:	A, B, A+B
Headphone:	Low impedance
Damping Factor:	35 (1,000 Hertz, 8 ohms)
Input Sensitivity/Impedance	
PHONO:	2.5mV/50 Kohms
PHONO Overload Level (rms):	110mV
MIC:	7mV/85 Kohms
AUX:	150mV/60 Kohms
TAPE PB 1, 2:	150mV/60 Kohms
TAPE PB 2 (DIN connector):	150mV/60 Kohms
Output Level/Impedance	
TAPE REC 1, 2:	150mV
TAPE REC 2 (DIN connector):	30mV/80 Kohms
Frequency Response	
PHONO (RIAA equalization):	30Hz to 15KHz ±0.5dB
AUX, TAPE PB:	20Hz to 30KHz +0.5dB, −1dB
Tone Control	
BASS:	±10dB (100Hz)
TREBLE:	±10dB (10KHz)
Filter	
HIGH:	−9dB (10KHz) 6dB/oct.
Loudness Contour:	+9dB (100Hz), +5dB (10KHz)
(volume control set at −40dB position)	
Hum & Noise (IHF, short-circuited A network)	
PHONO:	70dB
MIC:	65dB
TUNER, AUX, TAPE PB:	90dB

FM TUNER SECTION

Usable Sensitivity (IHF):	1.9μV
Capture Ratio (IHF):	1.0dB
Selectivity (IHF):	60dB
Signal-to-Noise Ratio:	70dB
Image Rejection (98MHz):	60dB
IF Rejection (98MHz):	90dB
Spurious Rejection:	75dB
AM Suppression:	50dB
Total Harmonic Distortion:	Mono; 0.2%
	Stereo; 0.4%
Frequency Response:	20Hz to 15KHz +0.2dB, −2.0dB
	50Hz to 10KHz +0.2dB, −0.5dB
Stereo Separation:	40dB (1KHz),
	30dB (50Hz to 10KHz)
Sub Carrier Suppression:	40dB
Antenna Input:	300 ohms balanced and 75 ohms unbalanced
Muting:	ON-OFF

AM TUNER SECTION

Sensitivity:	300μV/m (IHF, ferrite antenna),
	15μV (IHF, ext. antenna)
Selectivity:	35dB
Signal-to-Noise Ratio:	50dB
Image Rejection:	40dB
IF Rejection:	70dB

SEMICONDUCTORS

FET:	1
ICs:	3
Transistors:	33
Diodes:	17

MISCELLANEOUS

Power Requirements:	U.S.A. and Canada model; 120V 60Hz only or 110, 120, 130, 220, 240V (switchable) 50-60Hz
Power Consumption:	140 watts (KCU), 220 watts (FVGN)
Dimensions:	Without package: 480(W) x 147(H) x 405(D) mm 18-29/32(W) x 5-25/32(H) x 15-15/16(D) inches
Weight:	Without package: 11.2 kg/24 lb. 11 oz.

NOTE: Specifications and design subject to possible modification without notice.

*Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.

PIONEER®

PIONEER ELECTRONIC CORPORATION / 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153, Japan.

U.S. PIONEER ELECTRONICS CORPORATION / 75 Oxford Drive, Moonachie, New Jersey 07074, U.S.A.

PIONEER ELECTRONIC (EUROPE) N.V. / Meir-Center, Meir 21, 2000 Antwerp, Belgium.

PIONEER ELECTRONICS AUSTRALIA PTY. LTD. / 256-8 City Road, South Melbourne, Victoria 3205, Australia.

20,000E-F-4-75 Printed in Japan