

# PIONEER®

## 1974/75 Hi-Fi Stereo





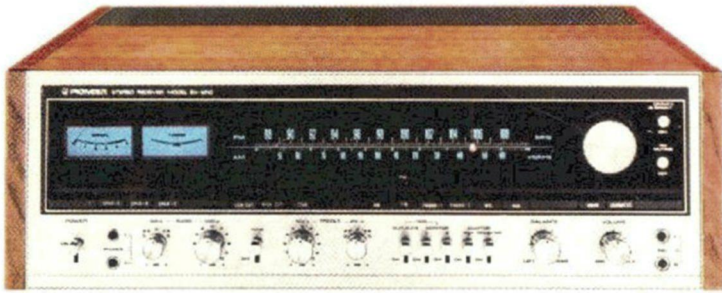
Pioneer. The name was first heard in 1938 when we began to develop and manufacture loudspeakers. Today, Pioneer's involvement with audio equipment ranges from the most sophisticated hi-fi components to background music systems and telephone answering devices. In fact, you'll find Pioneer products the world over, where fine quality sound is demanded.

Sound is a vital part of man's life. At Pioneer, we want sound reproduction to be of the highest quality possible. To obtain this, Pioneer products are turned inside out to obtain the highest level of technical perfection possible. Our quality tests simulate the burning heat of an Arabian desert and the bitter cold of the Arctic tundra. There are moisture tests, shock tests, and many more.

The secret of a success story like Pioneer's is that our technologists are never satisfied. We believe that quality can always be improved. What does all this mean to you, at the moment you are choosing a stereo system? It means that our worldwide network of dealers stands ready to give you expert advice. They can show you how all Pioneer equipment is designed today to meet the challenges of tomorrow. And it means that to back up these specialists, Pioneer guarantees satisfaction. A bold statement — but true. Because we're confident of the quality of our products and our after sales service. As we have been since that day in 1938 when we set out from the simple ability to reproduce sound to pioneer in a new world of high fidelity perfection.

## CONTENTS

	Page		Page
FM/MW STEREO RECEIVERS	3-4-5	SPEAKER SYSTEMS	16-17-18
LW/MW/FM STEREO RECEIVERS	6	STEREO HEADPHONES	19
STEREO AMPLIFIERS	7-8-9	CASSETTE TAPE DECKS	20-21
FM/MW STEREO TUNERS	10-11	REEL-TO-REEL TAPE DECK	20
FOUR-CHANNEL FM/MW STEREO RECEIVERS	12-13	COMPACT STEREO SYSTEM	22
TURNTABLES	14-15	8-TRACK TAPE DECK	22



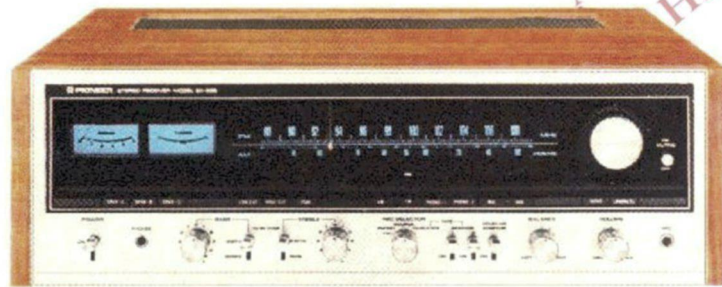
SX-1010

**SX-1010: Pioneer's top of the line FM/MW stereo receiver.** Masters up to 110 watts  $\times$  2 RMS with less than 0.1 % THD. FM front end with dual-gate MOS FET & 5 gang variable capacitor. Parallel push-pull OCL power amp. New dimensional PLL (Phase-Lock-Loop) Mpx circuit. Twin tone control system. Automatic protection circuit. Also featuring a Dolby and 4-channel adaptor in/out terminal. Possibility to connect 2 turntables, 3 pairs of speakers, 2 microphones and 2 headphones. Has 2 pairs of tape REC/MON terminals with duplication switch (Deck 1 - Deck 2).



SX-939

**SX-939: A highly versatile big-powered FM/MW stereo receiver.** 100 watts  $\times$  2 RMS parallel push-pull OCL power amp with less than 0.3 % THD (Total Harmonic Distortion). Completely new PLL MPX circuit. Frequency linear 4-Gang variable capacitor. Newly developed IC AM. Also has a twin-control system and duplication switch. Dolby adaptor in/out terminals with switch.



SX-838

**SX-838: Pioneer's perfect example of the latest electronic advances.** 70 watts  $\times$  2 RMS with THD less than 0.3 %. FM front end with 4-gang variable capacitor and dual-gate MOS FETS. FM MPX with PLL. Turnover frequency selector for each of the tone controls. Reliable protection circuit. Unique recording selector enables you to record FM broadcasts while listening to the disc reproduction and vice-versa. Switch for Dolby or other type of noise reduction system or 3rd tape deck for recording/playback. Handling up 3 pairs of speaker systems.

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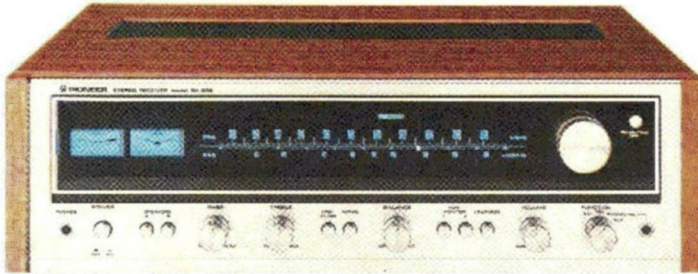


SX-737

**SX-737: High sensitive FM/MW stereo receiver.** 50 watts  $\times$  2 RMS with THD less than 0.5 %. Dual meter tuning system with FM-linear dial scale. Stable PLL MPX section. IF circuit with 5-stage limiter and high-performance IC. 4 element phase-linear ceramic filters provide very high selectivity. Automatic protection circuit. Unique recording selector.

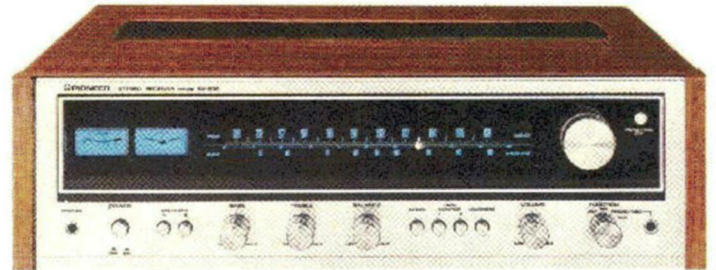
# FM/MW STEREO RECEIVERS

**SX-636: Pioneer's latest state-of-the-art FM/MW stereo receiver.** 30 watts × 2 RMS with less than 0.5 % THD. FM front end with low noise FET. Perfect FM reception with dual meter tuning system and FM-linear Dial scale. Stable PLL MPX circuit. Precise RIAA Equalization. Taps and a control for using up to 2 pairs of speakers systems.



SX-636

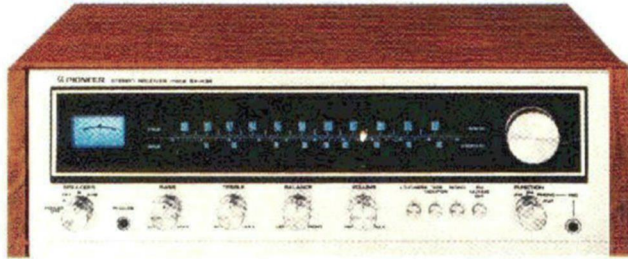
**SX-535: Pioneer's medium-powered FM/MW stereo receiver.** 25 watts × 2RMS with less than 0.5 % THD. FM IF section with an exclusively developed PIONEER LSI (Large-Scale-Integration) circuit for extremely stable limiter characteristics. MPX section uses new PLL circuit that gives very wide separation with low distortion. 2-stage direct coupled Phono equalizer circuit. Possibility to connect 2 pairs of speakers systems, 2 tape decks.



SX-535

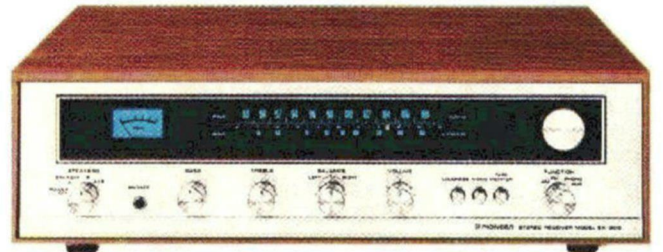
STEREO RECEIVERS	SX-1010	SX-939	SX-838
<b>FM SECTION</b>			
Sensitivity (DIN) 26 dB s/n, 40 KHz dev.	1.1 $\mu$ V	1.2 $\mu$ V	1.2 $\mu$ V
Sensitivity (IHF)	1.7 $\mu$ V	1.8 $\mu$ V	1.8 $\mu$ V
Capture ratio	1 dB	1 dB	1 dB
Selectivity	90 dB	80 dB	80 dB
Signal - to-noise ratio	72 dB	70 dB	70 dB
Image rejection	> 110 dB	> 85 dB	> 85 dB
IF rejection	> 110 dB	> 100 dB	> 100 dB
AM suppression	55 dB	55 dB	55 dB
Harmonic distortion (stereo)	< 0.3 %	< 0.4 %	< 0.4 %
Frequency response (+0.2dB,-2dB)	20 Hz-15 kHz	20 Hz-15 kHz	20 Hz-15 kHz
Stereo separation (1 kHz)	> 40 dB	> 40 dB	> 40 dB
Subcarrier suppression	65 dB	65 dB	65 dB
<b>MW SECTION</b>			
Sensitivity (IHF)	15 $\mu$ V	15 $\mu$ V	15 $\mu$ V
Image rejection	65 dB	65 dB	65 dB
IF rejection	85 dB	85 dB	85 dB
<b>AUDIO SECTION</b>			
Continuous power output both channels driven, at 1 kHz, 4 $\Omega$ 8 $\Omega$ 20 Hz - 20 kHz, 8 $\Omega$	2×120 W 2×110 W 2×100 W	2×100 W 2×75 W 2×70 W	2×70 W 2×55 W 2×50 W
Total Harmonic Distortion at rated output power, 1 kHz	< 0.1 %	< 0.3 %	< 0.3 %
Power bandwidth both channels driven	5 Hz-40 kHz THD 0.1 %	5 Hz-40 kHz THD 0.3 %	5 Hz-40 kHz THD 0.3 %
Frequency response at "Aux" input	10 Hz-40 kHz + 0 dB, - 1 dB	10 Hz-40 kHz + 0 dB, - 1 dB	15 Hz-40 kHz + 0.5 dB, - 1 dB
<b>Input sensitivity/impedance</b>			
Phono mag	2.5 mV/50 k $\Omega$	2.5 mV/50 k $\Omega$	2.5 mV/50 k $\Omega$
Microphone	2.0 mV/50 k $\Omega$	2.0 mV/50 k $\Omega$	2.0 mV/50 k $\Omega$
Tape monitor	150 mV/70 k $\Omega$	150 mV/70 k $\Omega$	150 mV/80 k $\Omega$
Aux	150 mV/70 k $\Omega$	150 mV/70 k $\Omega$	150 mV/80 k $\Omega$
Dimensions (W X H X D) mm	520×175×440	520×175×420	520×175×420
Weight (kg)	22.2	18.5	16.2

**SX-434: Pioneer's budget-priced FM/MW receiver.** 18 watts  $\times$  2 RMS with less than 0.5 % THD. High performance FM front end with low noise FET and 3-gang frequency-linear variable capacitor. Phase linear ceramic filters and an IC in the FM IF section provides high selectivity of 60 dB. Click-stop tone controls. 2 pairs stereo speaker facilities, stereo headphones, microphone, tape decks and turntable.



SX-434

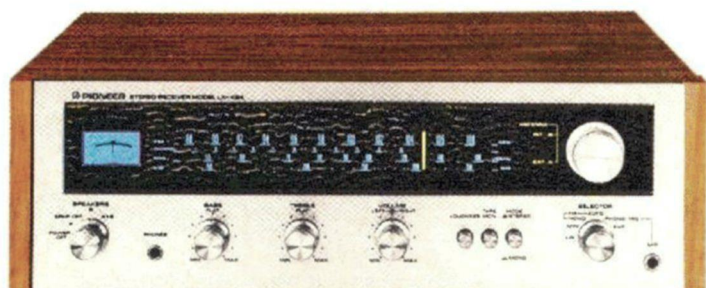
**SX-300: Pioneer's quality FM/MW stereo receiver** for introduction to the world of stereo listening pleasure. 7 watts  $\times$  2 RMS. FM linear dial scale and large tuning meter. FET-equipped FM front end and 3-gang variable capacitor provide better FM reception under all conditions. Precise RIAA equalization within 1 dB. It can handle all your stereo needs: stereo turntable, tape deck, auxiliary unit such as a cartridge player etc.



SX-300

SX-737	SX-636	SX-535	SX-434	SX-300
1.3 $\mu$ V	1.3 $\mu$ V	1.3 $\mu$ V	1.3 $\mu$ V	1.8 $\mu$ V
1.9 $\mu$ V	1.9 $\mu$ V	1.9 $\mu$ V	1.9 $\mu$ V	2.3 $\mu$ V
1 dB	1 dB	1 dB	1 dB	3.5 dB
60 dB	60 dB	60 dB	60 dB	—
70 dB	70 dB	70 dB	70 dB	65 dB
> 80 dB	> 60 dB	> 60 dB	> 60 dB	> 50 dB
> 100 dB	> 90 dB	> 90 dB	> 90 dB	> 80 dB
55 dB	50 dB	50 dB	50 dB	45 dB
< 0.4 %	< 0.4 %	< 0.4 %	< 0.4 %	< 0.8 %
20 Hz-15 kHz	20 Hz-15 kHz	20 Hz-15 kHz	20 Hz-15 kHz	—
> 40 dB	> 40 dB	> 40 dB	> 40 dB	> 40 dB
40 dB	40 dB	40 dB	40 dB	35 dB
15 $\mu$ V	15 $\mu$ V	15 $\mu$ V	15 $\mu$ V	15 $\mu$ V
40 dB	40 dB	40 dB	40 dB	45 dB
70 dB	70 dB	70 dB	50 dB	35 dB
2 $\times$ 50 W 2 $\times$ 40 W 2 $\times$ 35 W	2 $\times$ 30 W 2 $\times$ 27 W 2 $\times$ 25 W	2 $\times$ 25 W 2 $\times$ 22 W 2 $\times$ 18 W	2 $\times$ 18 W 2 $\times$ 16 W 2 $\times$ 12 W	2 $\times$ 7 W 2 $\times$ 7 W —
< 0.5 %	< 0.5 %	< 0.8 %	< 0.8 %	< 1 %
5 Hz-60 kHz THD 0.5 %	5 Hz-60 kHz THD 0.5 %	10 Hz-70 kHz THD 0.8 %	10 Hz-70 kHz THD 0.8 %	25 Hz-60 kHz THD 1 %
15 Hz-40 kHz + 0.5 dB, - 1 dB	20 Hz-30 kHz + 0.5 dB, - 1 dB	20 Hz-30 kHz $\pm$ 1 dB	30 Hz-25 kHz $\pm$ 1 dB	30 Hz-20 kHz $\pm$ 1 dB
2.5 mV/50 k $\Omega$	2.5 mV/50 k $\Omega$	2.5 mV/50 k $\Omega$	2.5 mV/50 k $\Omega$	2.5 mV/50 k $\Omega$
2.5 mV/50 k $\Omega$	7 mV/ 85 k $\Omega$	7 mV/85 k $\Omega$	10 mV/90 k $\Omega$	—
150 mV/50 k $\Omega$	150 mV/60 k $\Omega$	150 mV/75 k $\Omega$	150 mV/80 k $\Omega$	150 mV/100 k $\Omega$
150 mV/50 k $\Omega$	150 mV/60 k $\Omega$	150 mV/75 k $\Omega$	150 mV/80 k $\Omega$	150 mV/100 k $\Omega$
500 $\times$ 158 $\times$ 410	480 $\times$ 147 $\times$ 405	480 $\times$ 147 $\times$ 405	430 $\times$ 140 $\times$ 347	441 $\times$ 132 $\times$ 327
13.2	11.2	10.3	8.1	6

# LW/MW/FM STEREO RECEIVERS



LX-424

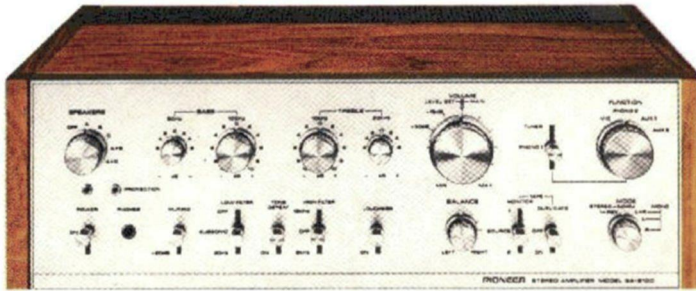
**LX-424: Pioneer's budget-priced LW/MW/FM stereo receiver.** 13 watts  $\times$  2 RMS. FM tuner section employs FET and 3-gang variable capacitor in the front end, ceramic filters in the IF section and high-performance IC's in the IF and MPX section. The AM section (MW/LW) also uses a FET, AGC circuit and ceramic filters. Rotary type AM ferrite bar antenna.



LX-626

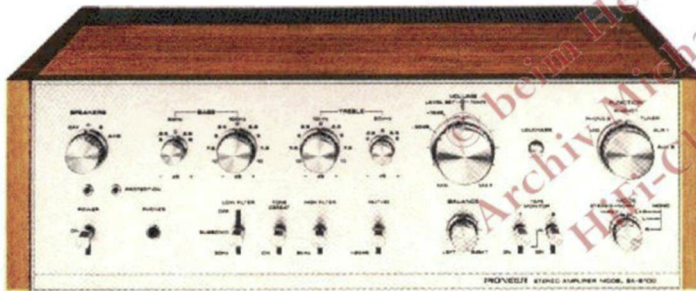
**LX-626: Pioneer's top LW/MW/FM stereo receiver.** 30 watts  $\times$  2RMS. Low-noise dual-gate MOS FETS in the FM front end. FM IF section with phase-linear ceramic filters. Special muting circuit for cancellation of the irritating click noise. Antenna mode selector for different signal conditions in the receiving area. Separately usable pre- and power-amplifier. Other features: 3 pairs of speakers systems, 2 turntables, tape-to-tape duplication, loudness contour switch.

STEREO RECEIVERS	LX-424	LX-626
<b>FM SECTION</b>		
Sensitivity (DIN) 26 dB S/N 40 KHz dev.	1.3 $\mu$ V	1.3 $\mu$ V
Sensitivity (IHF)	1.9 $\mu$ V	1.9 $\mu$ V
Capture ratio	1.5 dB	1.5 dB
Selectivity	60 dB	80 dB
Signal - to - noise ratio	70 dB	70 dB
Image rejection	> 60 dB	> 80 dB
IF rejection	> 90 dB	> 100 dB
AM suppression	50 dB	55 dB
Harmonic distortion (stereo)	< 0.4 %	< 0.4 %
Frequency response (+ 0,2 dB, - 2 dB)	20 Hz-15 kHz	20 Hz-15 kHz
Stereo separation	> 40 dB	> 40 dB
Subcarrier suppression	60 dB	65 dB
<b>MW SECTION</b>		
Sensitivity (IHF)	15 $\mu$ V	10 $\mu$ V
Image rejection	35 dB	> 65 dB
IF rejection	35 dB	> 85 dB
<b>LW SECTION</b>		
Frequency range	150-350 kHz	150-350 kHz
Sensitivity	45 $\mu$ V (S/N20dB)	25 $\mu$ V (IHF)
Selectivity	45 dB	> 50 dB
Image rejection	45 dB	> 80 dB
<b>AUDIO SECTION</b>		
Continuous power output both channels driven, at 1 kHz, 4 $\Omega$ 8 $\Omega$ 20 Hz - 20 kHz, 8 $\Omega$	2 $\times$ 13 W 2 $\times$ 12 W —	2 $\times$ 30 W 2 $\times$ 27 W 2 $\times$ 20 W
Total Harmonic Distortion at rated output power, 1 kHz	< 1 %	< 1 %
Power bandwidth both channels driven	20 Hz-60 kHz THD 1 %	10 Hz-70 kHz THD 1 %
Frequency response at "Aux" input	30 Hz-15 kHz $\pm$ 1 dB	15 Hz-20 kHz $\pm$ 1 dB
<b>Input sensitivity/impedance</b>		
Phono mag	2.5 mV/50 k $\Omega$	2.5 mV/45 k $\Omega$
Microphone	6.5 mV/50 k $\Omega$	2.2 mV/22 k $\Omega$
Tape monitor	150 mV/100 k $\Omega$	200 mV/100 k $\Omega$
Aux	150 mV/100 k $\Omega$	200 mV/100 k $\Omega$
Dimensions (W X H X D) mm	431 $\times$ 146 $\times$ 347	450 $\times$ 144 $\times$ 365
Weight (kg)	8.5	11.6



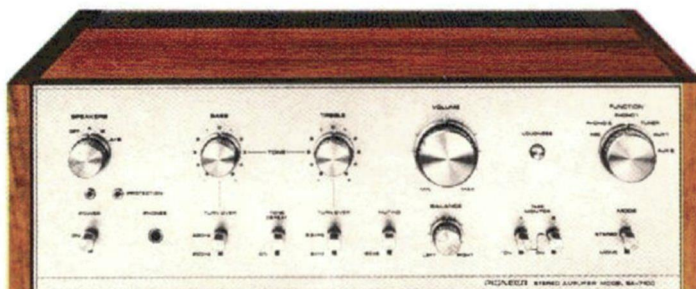
SA-9100

**SA-9100: Pioneer's finest professional stereo integrated amplifier.** 85 watts  $\times$  2 RMS. All-stage direct coupled pure complementary OCL circuit, resulting in a superwide bandwidth and distortion-free power. Unique 3-stage direct-coupled equalizer. Twin stepped tone controls for making most critical bass and treble adjustments with total ease. Level-set volume and loudness contour controls adjust to listening preference. Original and positive speaker protector circuit. Other features: 2-way tape duplicating and monitoring, 2-position high & low filters, level controls for phone 2, aux 2, 3 pairs speaker output terminals.



SA-8100

**SA-8100: Pioneer's big-power integrated stereo amplifier.** 50 watts  $\times$  2 RMS. Unique twin tone control system for versatile tonal adjustment. High and low subsonic filters. High stability, reliable pure complementary OCL power amp design, with differential amplifier at the first stage. Large electrolytic capacitors for stable operation. Independant pre- and power-amplifier usage.

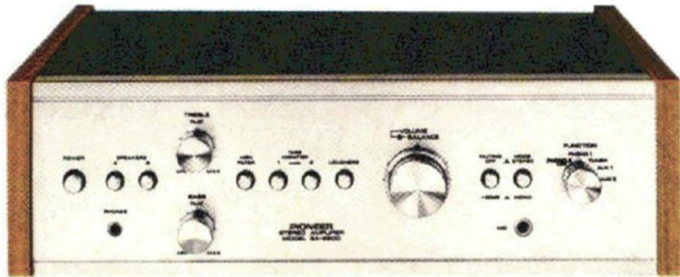


SA-7100

**SA-7100: Pioneer's advanced stereo integrated amplifier.** 30 watts  $\times$  2 RMS. 3-stage direct-coupled equalizer section for dynamic range. FET equipped tone control amplifier section. Turnover frequency selectors for versatile tone control facilities. First stage differential amplifier, direct-coupled pure complementary power amp. Reliable automatic protection circuit.

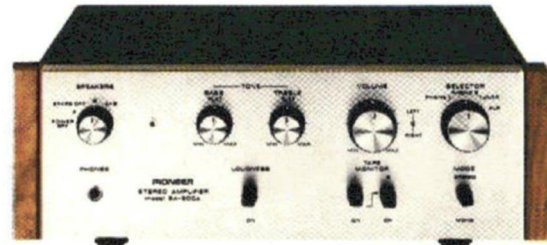
# STEREO AMPLIFIERS

**SA-6200: Pioneer's medium-powered, versatile stereo integrated amplifier.** 22 watts  $\times$  2 RMS. Equalizer amplifier section with extra-wide dynamic range signal acceptability. Extended frequency response and wide power bandwidth with low distortion. Complementary SEPP circuit design employing differential amplifier at the first stage. It handles up to 2 pairs of speaker systems, 2 turntables, 2 tape decks (for easy tape-to-tape duplication and dual recording) as well as 2 auxiliary sound sources and a microphone. Pre- and power-amp sections may be separated and used independently.



SA-6200

**SA-500A: Pioneer's budget-priced stereo integrated amplifier.** 12 watts  $\times$  2 RMS. Direct coupling preamplifier section. Click-stop-type individual bass and treble controls. Quasi-complementary SEPP circuit to ensure distortion-free sound reproduction and a wide frequency response. It can handle up to 2 different pairs of speaker systems, either separately or simultaneously. Other features: 2 phono-inputs in addition to a tuner and an auxiliary terminal, 2 tape deck terminals permitting simultaneous operation of 2 tape decks.

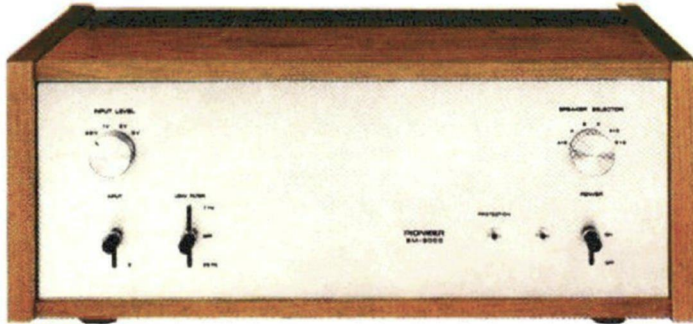


SA-500A

STEREO AMPLIFIERS	SA - 9100	SA - 8100	SA - 7100
Cont. Power both channels driven at 1 kHz	85 W + 85 W (4 $\Omega$ ) 65 W + 65 W (8 $\Omega$ )	50 W + 50 W (4 $\Omega$ ) 44 W + 44 W (8 $\Omega$ )	30 W + 30 W (4 $\Omega$ ) 22 W + 22 W (8 $\Omega$ )
Power Output in 20-20 kHz both channels driven	75 W + 75 W (4 $\Omega$ ) 60 W + 60 W (8 $\Omega$ )	45 W + 45 W (4 $\Omega$ ) 40 W + 40 W (8 $\Omega$ )	24 W + 24 W (4 $\Omega$ ) 20 W + 20 W (8 $\Omega$ )
Total Harmonic Distortion at rated output power	< 0,1 %	< 0,3 %	< 0,5 %
Intermodulation Distortion at rated output power	< 0,1 %	< 0,3 %	< 0,1 %
Power Bandwidth (IHF) Both Ch. driven	5 Hz-40 kHz (HD 0,1 %)	5 Hz-40 kHz (HD 0,3 %)	5 Hz-70 kHz (HD 0,5 %)
Frequency Response	7 Hz-80 kHz + 0 dB - 1 dB	7 Hz-80 kHz + 0 dB - 1 dB	7 Hz-80 kHz + 0 dB - 1 dB
Damping factor (1 kHz, 8 $\Omega$ )	> 70	> 60	> 40
Hum and noise	> 95 dB	> 95 dB	> 90 dB
Residual Hum and Noise (8 $\Omega$ pre-and power amp)	< 1 mV (0,13 $\mu$ W)	< 1 mV (0,13 $\mu$ W)	< 1 mV (0,13 $\mu$ W)
Input Sensitivity/Impedance			
Phono mag	2,5 mV/50 k $\Omega$	2,5 mV/50 k $\Omega$	2,5 mV/50 k $\Omega$
Microphone	2,0 mV/50 k $\Omega$	2,0 mV/50 k $\Omega$	2,0 mV/50 k $\Omega$
Tape Monitor	150 mV/100 k $\Omega$	150 mV/100 k $\Omega$	150 mV/100 k $\Omega$
Aux	150 mV/100 k $\Omega$	150 mV/100 k $\Omega$	150 mV/100 k $\Omega$
Tuner	150 mV/100 k $\Omega$	150 mV/100 k $\Omega$	150 mV/100 k $\Omega$
Bass Control	$\pm$ 10 dB (100 Hz) $\pm$ 6 dB ( 50 Hz)	$\pm$ 10 dB (100 Hz) $\pm$ 5 dB ( 50 Hz)	$\pm$ 6,5 dB + 10 dB (Turnover Freq. 200, 400 Hz)
Treble Control	$\pm$ 10 dB (10 kHz) $\pm$ 6 dB (20 kHz)	$\pm$ 10 dB (10 kHz) $\pm$ 5 dB (20 kHz)	$\pm$ 7,5 dB $\pm$ 10,5 dB (Turnover Freq. 50 Hz, 2,5 kHz)
High Filter	8 kHz, 12 kHz (12 dB/oct.)	8 kHz (12 dB/oct.)	—
Low filter	30 Hz (12 dB/oct.)	30 Hz (12 dB/oct.)	—
Loudness Contour (- 40 dB position)	+ 10 dB (100 Hz)	+ 10 dB (100 Hz)	+ 10 dB (100 Hz) + 6 dB (10 kHz)
Subsonic Filter	8 Hz (12 dB/oct.)	8 Hz (12 dB/oct.)	5 Hz (12 dB/oct.)
Power consumption	430 W (max.)	270 W (max.)	160 W (max.)
Dimension (W $\times$ H $\times$ D) mm	430 $\times$ 138 $\times$ 341	430 $\times$ 138 $\times$ 341	430 $\times$ 138 $\times$ 341
Weight (kg)	13,6	12,1	10,1

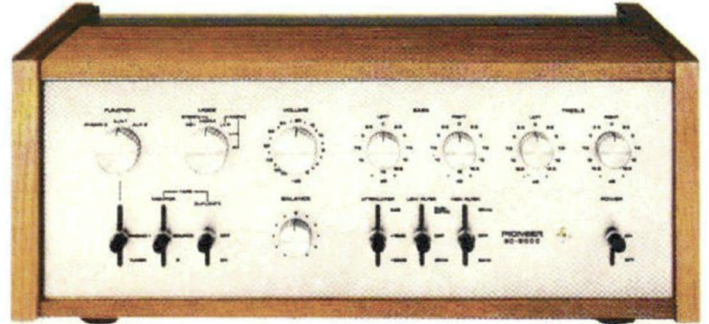
## SM-3000: A most impressive Stereo Power Amplifier.

Produces a dashing continuous power output of 130 + 130 watts with both channels driven (at 4 ohm) under remarkably low distortion. The SM-3000 is one of the finest circuitry designs ever assembled, it allows the connection of 2 different pre-amplifiers and since the unit is equipped with an input/sensitivity selector, it creates an impressive acoustical presence.



SM-3000

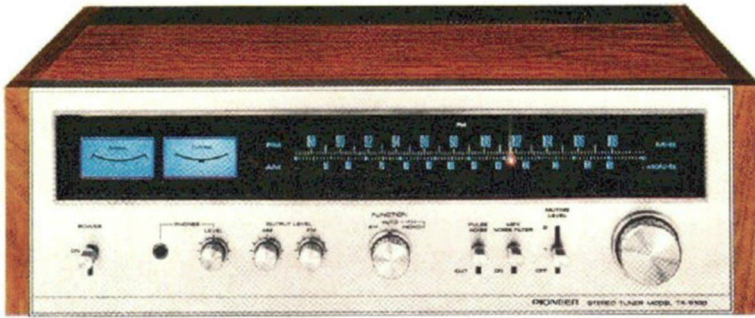
**SC-3000: Stereo Pre-Amplifier.** This pre-amplifier unit matches the Pioneer SM-3000 power amplifier. It is one of the highest quality pre-amplifiers available, featuring 2-tape monitors with free duplication switch enabling tape 1-2 and 2-1 duplication. The unit has a 3-stage direct-coupling NF circuit in the equalization amplifier part.



SC-3000

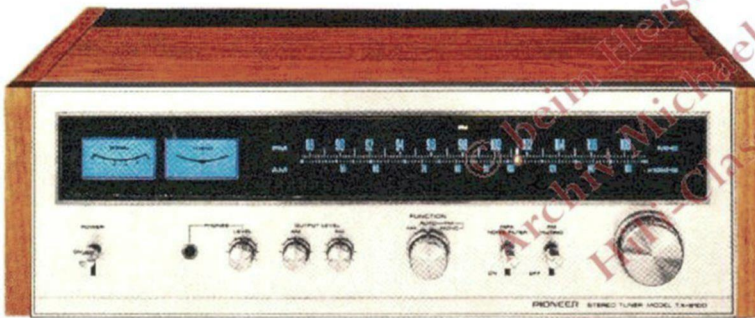
SA - 6200	SA - 500 A	SM 3000 Power Amplifier	SC - 3000 Pre Amplifier
22 W + 22 W (4 Ω) 18 W + 18 W (8 Ω)	15 W + 15 W (4 Ω) 13 W + 13 W (8 Ω)	130 W + 130 W (4 Ω) 90 W + 90 W (8 Ω)	—
15 W + 15 W (4 Ω) 15 W + 15 W (8 Ω)	—	85 W + 85 W (8 Ω)	—
< 0,5 %	< 0,5 %	< 0,1 %	< 0,05 % (0,5 - 2 V) < 0,1 % (5 V)
< 0,5 %	< 0,7 %	< 0,1 %	—
10 Hz-70 kHz (HD 0,5 %)	20 Hz-40 kHz (HD 0,5 %)	5 Hz-50 kHz (HD 0,1 %)	—
15 Hz-80 kHz + 0 dB - 1 dB	30-50 kHz + 1 dB - 2 dB	10 Hz-70 kHz + 0 dB, - 1 dB	Phono: 30 Hz-15 kHz ± 0,2 dB Aux.: 7 Hz-50 kHz, + 0 dB, - 1 dB
> 30	40	> 100	—
> 90 dB	> 90 dB	—	Phono: > 70 dB Aux.: > 90 dB
< 1 mV (0,13 μW)	< 1 mV (0,13 μW)	—	—
2,5 mV/50 kΩ	2,5 mV/50 kΩ	0,5 V/50 kΩ - 1 V - 2 V - 5 V/60 kΩ	Phono 1: 2,5 mV/50 kΩ Phono 2: 2,5 mV/20, 50, 100 kΩ Phono O.L.: 300 mV(rms) 850 mV(P-P)
7,5 mV/50 kΩ	—	—	—
150 mV/100 kΩ	200 mV/100 kΩ	—	100 mV/100 kΩ
150 mV/100 kΩ	200 mV/100 kΩ	—	100 mV/100 kΩ
150 mV/100 kΩ	200 mV/100 kΩ	—	100 mV/100 kΩ
± 10,5 dB (100 Hz)	+ 12 dB - 11 dB (100 Hz)	—	- 10 dB, + 15 dB (50 Hz) in 2,5 dB steps
± 10,5 dB (10 kHz)	+ 9,5 dB, - 10 dB (10 kHz)	—	- 12,5 dB, + 12,5 dB (10 kHz) in 2,5 dB steps
4 kHz (6 dB/oct.)	—	—	12 kHz/8 kHz (12 dB/oct.)
—	—	7 Hz/20 Hz (12 dB/oct.)	Subsonic (13 Hz)/30 Hz (12 dB/oct.)
+ 10 dB (100 Hz) + 6 dB (10 kHz)	+ 10 dB (100 Hz) + 5,5 dB (10 kHz)	—	—
—	—	—	(13 Hz)/30 Hz (12 dB/oct.)
15 W (max.)	75 W (max.)	165 W	9 W
415 × 132 × 328	330 × 118 × 316	422 × 172 × 295	422 × 172 × 295
9,4	5,5	15,1	7

## FM/MW STEREO TUNERS



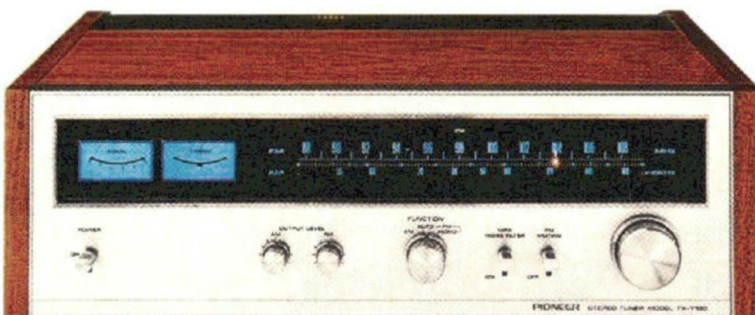
TX-9100

**TX-9100: Pioneer's finest professional FM/MW stereo tuner.** FM sensitivity:  $1.0 \mu\text{V}$  (DIN) or  $1.5 \mu\text{V}$  (IHF). Outstanding FM front-end section with dual-gate MOS FETS, 5-gang variable capacitor and 2-stage RF amplifiers. Phase-linear ceramic filters in the FM IF section for excellent selectivity and phase characteristics. Unique PLL MPX circuit that improves stereo separation. High performance AM IC. Special features: pulse noise suppressor, 2-step FM muting switch, multipath output terminals, MPX noise filter, independent AM, FM output level controls, headphone output jack. Dual meter tuning system and linear dial scale.



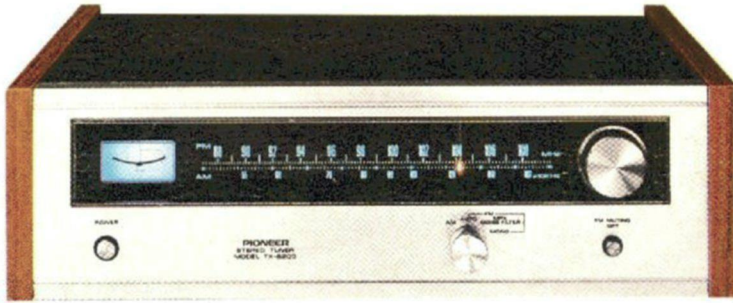
TX-8100

**TX-8100: Pioneer's high-sensitive FM/MW stereo tuner.** Sensitivity:  $1.2 \mu\text{V}$  (DIN) or  $1.8 \mu\text{V}$  (IHF). 4-gang variable capacitor and dual gate MOS FETS in the FM front end results in an image rejection of more than 85 dB and spurious rejection of more than 100 dB. New high-performance L.S.I. circuits for FM IF section and phase-linear ceramic filters for excellent selectivity characteristics. MPX IC for excellent separation. Other features: FM multipath output terminals, MPX noise filter, headphone output jack, dual meter tuning system, fixed and variable output level controls.



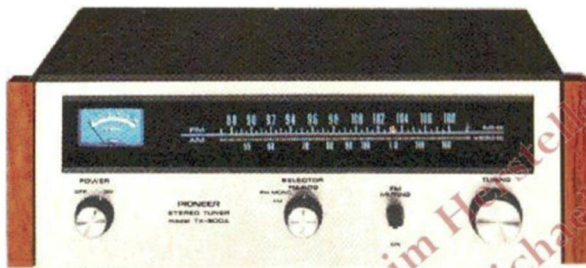
TX-7100

**TX-7100: Pioneer's value-packed FM/MW stereo tuner.** FM sensitivity:  $1.3 \mu\text{V}$  (DIN) or  $1.9 \mu\text{V}$  (IHF). Frequency-linear 4-gang variable capacitor and a dual-gate MOS FET in the FM front-end. Phase-linear ceramic filters with excellent phase characteristics and 5-stage limiter for high-performance in the FM IF section. Exclusive signal strength meter coupled with the center-tuning meter and wide linear dial scale offers precise easy-tuning convenience. High-performance MPX IC for wide separation. Other features: fixed and variable output level controls, multipath output terminals, MPX noise filter.



TX-6200

**TX-6200: Pioneer's easy-to-operate high quality tuner.** Sensitivity: 1.3  $\mu$ V (DIN) or 1.9  $\mu$ V (IHF). Low-noise junction FET in FM front end. Exclusive FM IC with 5-stage limiter. MPX circuit with high-performance IC for wide separation. Large signal meter and wide linear FM dial scale for easy tuning. MPX noise filter.



TX-500A

**TX-500A: Pioneer's budget-priced FM/MW stereo tuner.** Sensitivity: 1.8  $\mu$ V (DIN) or 2.3  $\mu$ V (IHF). Front end with FET and 3-gang variable capacitor. It is equipped with a large tuning meter of the signal strength type and a wide linear type dial scale. FM muting switch for erasing all interstation noise. Separate AM and FM output level controls. Tape rec terminal.

STEREO TUNERS	TX-9100	TX-8100	TX-7100	TX-6200	TX-500 A
<b>FM SECTION</b>					
Sensitivity (DIN)					
S/N 26 dB, 40 kHz dev	1,0 $\mu$ V	1.2 $\mu$ V	1.3 $\mu$ V	1.3 $\mu$ V	1,8 $\mu$ V
Sensitivity (IHF)	1,5 $\mu$ V	1.8 $\mu$ V	1.9 $\mu$ V	1.9 $\mu$ V	2.3 $\mu$ V
Capture ratio (IHF)	1 dB	1 dB	1 dB	1.5 dB	3.5 dB
Selectivity (IHF)	90 dB	80 dB	60 dB	60 dB	35 dB
S/N ratio (IHF)	75 dB	70 dB	70 dB	70 dB	70 dB
Image rejection	> 110 dB	> 85 dB	> 80 dB	> 60 dB	> 50 dB
IF rejection	> 110 dB	> 100 dB	> 100 dB	> 90 dB	> 80 dB
Spurious rejection	> 110 dB	> 100 dB	> 100 dB	> 75 dB	> 70 dB
AM suppression	65 dB	55 dB	55 dB	50 dB	45 dB
THD stereo	< 0.3 %	< 0.4 %	< 0.4 %	< 0.4 %	< 0.8 %
Frequency response (+ 0.2 dB, - 2 dB)	20 Hz-15 kHz	20 Hz-15 kHz	20 Hz-15 kHz	20 Hz-15 kHz	—
Stereo separation (1 kHz)	> 40 dB	> 40 dB	> 40 dB	> 40 dB	> 40 dB
Subcarrier suppression	65 dB	65 dB	65 dB	60 dB	35 dB
<b>MW SECTION</b>					
Sensitivity (IHF)	15 $\mu$ V	15 $\mu$ V	15 $\mu$ V	15 $\mu$ V	15 $\mu$ V
Selectivity	40 dB	40 dB	35 dB	35 dB	22 dB
S/N ratio	50 dB	50 dB	50 dB	50 dB	> 50 dB
Image rejection	> 65 dB	> 65 dB	> 45 dB	> 40 dB	> 45 dB
IF rejection	> 85 dB	> 85 dB	> 55 dB	> 50 dB	> 35 dB
<b>AUDIO SECTION</b>					
Output (level/impedance)					
Fixed	650 mV/4.7 k $\Omega$	650 mV/4.7 k $\Omega$	650 mV/4.7 k $\Omega$	570 mV/2.7 k $\Omega$	600 mV/10 k $\Omega$
Variable	70 mV-2 V/300 $\Omega$	70 mV-2 V/300 $\Omega$	70 mV-2 V/300 $\Omega$	60 mV-1.8 V/2.5 $\Omega$	60 mV-1.8 V
Headphone	150 mV/8 $\Omega$	150 mV/8 $\Omega$	—	—	—
Power Consumption	30 Watts	27 Watts	25 Watts	12 Watts	12 Watts
Dimensions (W×H×D) mm	430 × 138 × 345	430 × 138 × 345	430 × 138 × 345	415 × 132 × 340	330 × 118 × 330
Weight (kg)	8.9	8	7.7	7	4.6

## FOUR-CHANNEL FM/MW STEREO RECEIVERS

**QX-949: Pioneer's ultimate four-channel FM/MW stereo receiver.** 58 watts  $\times$  4 or 85 watts  $\times$  2. Built-in all present quadraphonic systems: CD-4, SQ and regular matrix. Linear FM dial scale and 2 meter tuning system. Unique power boosting circuit converts the large 4-channel power output to even greater 2-channel power. Automatic protection circuit. Unique 4-channel level indicator permits observation of the output level of each of the four channels, appearing on the viewing screen. Other features: 3 pairs of tape terminals, 4 pairs of speaker systems, 4-channel MPX-out terminal, 2 pairs of phono terminals, 2 headphones terminals, high and low filters, DOLBY NR adapter switch.



QX-949

**QX-747: Pioneer's full capability receiver.** 30 watts  $\times$  4 or 55 watts quadraphonic systems: CD-4, SQ front end with a dual-gate MOS FET capacitor. High-performance MPX meter. Direct-coupled OCL power circuit for converting the 4-channel power. Automatic protection circuit. Unique 4-channel level indicator to each of the 4-channels appearing 3 pairs of speaker systems can be 2 pairs of tape terminals, 4 channels terminals.



QX-747

4 CHANNEL-STEREO RECEIVERS	QX-949	QX-747	QX-646	
<b>FM SECTION</b>				
Sensitivity (IHF)	1.8 $\mu$ V	1.9 $\mu$ V	2.2 $\mu$ V	
Capture ratio	1 dB	1 dB	3 dB	
Selectivity (IHF)	> 80 dB	> 60 dB	> 40 dB	
S/N ratio (IHF)	> 70 dB	> 70 dB	> 65 dB	
Image rejection	> 85 dB	> 80 dB	> 50 dB	
Harm Dist. (Stereo)	< 0.4 %	< 0.4 %	< 0.8 %	
Stereo Separation	> 40 dB	> 40 dB	> 40 dB	
Subcarrier Suppression	65 dB	65 dB	35 dB	
<b>MW SECTION</b>				
Sensitivity (IHF)	15 $\mu$ V	15 $\mu$ V	15 $\mu$ V	
Image rejection	> 65 dB	> 45 dB	> 45 dB	
IF rejection	> 85 dB	> 55 dB	> 30 dB	
S/N ratio	50 dB	50 dB	50 dB	
<b>AUDIO SECTION</b>				
<b>Cont. Power Output</b>				
4 ch driven at 1 kHz	4 $\Omega$	4 $\times$ 58 W	4 $\times$ 30 W	4 $\times$ 15 W
	8 $\Omega$	4 $\times$ 44 W	4 $\times$ 25 W	4 $\times$ 13 W
20 Hz - 20 kHz	8 $\Omega$	4 $\times$ 40 W	4 $\times$ 20 W	4 $\times$ 10 W

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**QX-747: Pioneer's full capability four-channel FM/MW stereo receiver.** 30 watts × 4 or 55 watts × 2. Equipped with all present quadraphonic systems: CD-4, SQ and regular matrix. Sophisticated FM front end with a dual-gate MOS FET and a linear 4-gang variable capacitor. High-performance MPX IC Linear FM dial scale and tuning meter. Direct-coupled OCL power amplifier with unique power boosting circuit for converting the 4-channel power to even greater 2-channel power. Automatic protection circuit for speakers and power transistors. Unique 4-channel level indicator to permit to observe the output level of each of the 4-channels appearing on the viewing screen. Other features: 3 pairs of speaker systems can be connected, DOLBY NR adaptor switch, 2 pairs of tape terminals, 4 channel MPX-out terminal, 2 headphones terminals.

**QX-646: Pione**  
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and regular ma  
signal strength  
IF section with  
linearity. Other  
terminal, 3 pairs



QX-747

QX-646

QX-747	QX-646
1.9 μV	2.2 μV
1 dB	3 dB
> 60 dB	> 40 dB
> 70 dB	> 65 dB
> 80 dB	> 50 dB
< 0.4 %	< 0.8 %
> 40 dB	> 40 dB
65 dB	35 dB
15 μV	15 μV
> 45 dB	> 45 dB
> 55 dB	> 30 dB
50 dB	50 dB
4 × 30 W 4 × 25 W 4 × 20 W	4 × 15 W 4 × 13 W 4 × 10 W

4 CHANNEL-STEREO RECEIVERS	QX-949
<b>Cont. Power Output with 2 Ch Power Boosting Circuit</b> 2 ch driven at 1 kHz, 4 Ω	2 × 85 W
8 Ω	2 × 65 W
20 Hz - 20 kHz	8 Ω 2 × 60 W
4 Ω	2 × 75 W
<b>THD at rated output power, 1 kHz</b>	< 0.3 %
<b>Power bandwidth (IHF)</b> 4 ch driven	7 Hz-40 kHz
<b>Freq. response</b>	7 Hz-25 kHz + 0.5 dB, - 1 dB
<b>Input sensitivity / Impedance</b> <b>Phono mag.</b>	2.5 mV/50 kΩ
<b>Tape monitor</b>	150 mV/100 kΩ
<b>Aux</b>	150 mV/100 kΩ
<b>CD-4 DEMOD. SYSTEM</b>	
<b>Input sens/Impedance</b>	2.5 mV/100 kΩ
<b>Distortion</b>	< 0.07 %
<b>S/N Ratio</b>	> 70 dB
<b>Separation Left to Right</b> <b>Front to Rear</b>	50 dB 30 dB
<b>Dimensions (W×H×D) mm</b>	550 × 160 × 440
<b>Weight (kg)</b>	22.4

# FOUR-CHANNEL FM/MW STEREO RECEIVERS

## Four-channel FM/MW stereo

Equipped with all present regular matrix. Sophisticated FM and a linear 4-gang variable linear FM dial scale and tuning amplifier with unique power boosting circuit to even greater 2-channel speakers and power transistors. Permit to observe the output level of the viewing screen. Other features: DOLBY NR adaptor switch, X-out terminal, 2 head-

## QX-646: Pioneer's medium-powered FM/MW four-channel receiver.

11 watts × 4. Equipped with all present quadraphonic systems: CD-4, SQ and regular matrix. Extra-wide linear FM dial scale and an extra-large signal strength meter for easy, precise tuning. FM front end with FET and IF section with ceramic filters. High selectivity and excellent phase linearity. Other features: program source illumination, headphone terminal, 3 pairs of speakers terminals.



QX-646

4 CHANNEL-STEREO RECEIVERS	QX-949	QX-747	QX-646
<b>Cont. Power Output with 2 Ch Power Boosting Circuit</b>			
2 ch driven at 1 kHz,			
4 Ω	2 × 85 W	2 × 55 W	—
8 Ω	2 × 65 W	2 × 45 W	—
20 Hz - 20 kHz			
8 Ω	2 × 60 W	2 × 40 W	—
4 Ω	2 × 75 W	2 × 50 W	—
<b>THD at rated output power, 1 kHz</b>	< 0.3 %	< 0.5 %	< 1 %
<b>Power bandwidth (IHF) 4 ch driven</b>	7 Hz-40 kHz	7 Hz-40 kHz	15 Hz-20 kHz
<b>Freq. response</b>	7 Hz-25 kHz + 0.5 dB, - 1 dB	10 Hz-25 kHz + 0.5 dB, - 1 dB	10 Hz-100 kHz ± 3 dB
<b>Input sensitivity / Impedance</b>			
Phono mag.	2.5 mV/50 kΩ	2.2 mV/50 kΩ	2.5 mV/10 kΩ
<b>Tape monitor</b>	150 mV/100 kΩ	140 mV/100 kΩ	180 mV/90 kΩ
<b>Aux</b>	150 mV/100 kΩ	140 mV/100 kΩ	180 mV/90 kΩ
<b>CD-4 DEMOD. SYSTEM</b>			
<b>Input sens/Impedance</b>	2.5 mV/100 kΩ	1.5 mV/100 kΩ	2.5 mV/100 kΩ
<b>Distortion</b>	< 0.07 %	< 0.07 %	< 0.07 %
<b>S/N Ratio</b>	> 70 dB	> 70 dB	> 70 dB
<b>Separation Left to Right</b>	50 dB	50 dB	50 dB
<b>Front to Rear</b>	30 dB	30 dB	30 dB
<b>Dimensions (W×H×D) mm</b>	550 × 160 × 440	550 × 160 × 420	525 × 149 × 360
<b>Weight (kg)</b>	22.4	19.1	12.3

## TURNTABLES



PL-71

**PL-71 : Pioneer's professional DC servo direct drive stereo turntable.** Unique brushless DC servo DD-motor provides highest signal-to-noise ratio of more than 60 dB and less than 0.05 % wow and flutter. New S-shaped static balanced tone arm (224 mm) with a lateral balancer with variable center-of-gravity to enhance tracing capability and continuously variable anti-skating device. Usable cartridge weight: 4 - 32 grs. Tracking force up to 0.5 gr, ideal for CD-4 cartridges. Other features: arm height adjustable, cueing control independent up-down, illuminated strobo, natural walnut wooden base.



PL-51A

**PL-51A : Pioneer's direct drive DC servo stereo turntable.** Brushless DC servo motor provides stable performance without any electric or mechanical noise. Precise servo controlled turntable rotation, independent of mains voltage fluctuations. Electronic speed change with 2 % speed adjustment for both 33 1/3 and 45 rpm. Illuminated strobo.



PL-A45D

**PL-A45D : Pioneer's full automatic belt drive stereo turntable.** Fully automatic from the playing of the record to its auto-repeat and tonearm return functions at the end of the record. Two precision motors: 4-pole synchronous motor for rotating the turntable platter and a gear motor exclusively used for tonearm movement and other automatic functions. Stable, highly sensitive S-shaped static-balanced pipe tonearm. Anti-skating control for minimizing distortion, can be adjusted while playing records.

TURNTABLES	PL-71	PL-51A
Motor	Brushless DC servo	Brushless DC servo
Drive system	Direct-drive	Direct-drive
Speeds	33 $\frac{1}{3}$ and 45 rpm Electronic speed change ( $\pm 2\%$ )	33 $\frac{1}{3}$ and 45 rpm Electronic speed change ( $\pm 2\%$ )
Turntable platter	30 cm, 1,6 kg Aluminium alloy, die-cast	30 cm, 1,6 kg Aluminium alloy, die-cast
Signal-to-noise ratio	>60 dB	>58 dB
Wow and Flutter	<0.05 %	<0.05 %
Tone arm	New/ S-shaped static-balanced pipe-arm	S-shaped static balanced pipe-arm
Usable cartridge weight	4-32 gr	4-14 gr
Effective arm length	224 mm	221 mm
Anti-skating device	Cam + spring	Cam + spring
Cueing control	Independent up-down	Off-on-down
Features	Illuminated Strobo. Lateral balanced with adjustable gravity. Arm height adjustable. Low capacitance p.u. cord (CD-4). Tracking force down to 0.5 gr (especially suitable for quadraphonic records).	Illuminated Strobo. Lateral balance. Plug-in headshell. Low capacitance p.u. cord (CD-4).
Power consumption	5 Watts	5 Watts
Dimensions (W x H x D) mm	480 x 175 x 415	480 x 185 x 410
Weight (kg)	11	10,5

## TURNTABLES

**PL-15D: Pioneer's automatic return belt drive stereo turntable.** Four pole synchronous masterpiece motor. Fully automatic return mechanism brings the tonearm to the rest position. Oil damped cueing device. Anti-skating control which minimizes distortion caused by unequal side with pressure of the stylus. Counterweight with tracking force adjustment gauge allowing easy adjustment of stylus pressure. Static balanced pipe arm with effective arm length of 221 mm.

PL-15D



**PL-12D: Pioneer's value-packed stereo turntable.** Four pole synchronous motor and a belt-drive system to ensure stable rotation of the turntable platter that is free from line voltage fluctuation. Extremely high signal-to-noise ratio of more than 47 dB. The counter weight of the tone arm is the stylus pressure direct-reading type that gives easy weight adjustment when cartridge-changing is necessary. Static-balanced S-shaped tone arm that used a super hard alloy material at the pivot point, assuring sensitive, stable tracking at all times.

PL-12D



**PL-10: Pioneer's budget-priced belt drive stereo turntable.** The perfect turntable for you if you're just now moving into the wonderful world of stereo. The 4-pole synchronous motor with reliable belt-drive mechanism is free from mains supply voltage fluctuations. Static-balanced S-shaped tone arm assures stable tracking. Continuously adjustable anti-skating device to prevent distortion caused by uneven inward force. Elegantly designed cabinet with spring-suppression eliminates external vibrating such as howling.

PL-10



PL-A45D	PL-15D	PL-12D	PL-10
4-pole synchronous	4-pole synchronous	4-pole synchronous	4-pole synchronous
Belt-drive	Belt-drive	Belt-drive	Belt-drive
33 $\frac{1}{3}$ and 45 rpm	33 $\frac{1}{3}$ and 45 rpm	33 $\frac{1}{3}$ and 45 rpm	33 $\frac{1}{3}$ and 45 rpm
30 cm, 1 kg Aluminium alloy, die-cast	30 cm, 1 kg Aluminium alloy, die-cast	30 cm, 1 kg Aluminium alloy, die-cast	30 cm, 1 kg Aluminium alloy, die-cast
> 47 dB	> 47 dB	> 47 dB	> 47 dB
< 0.1 %	< 0.1 %	< 0.1 %	< 0.1 %
S-shaped static-balanced pipe-arm	S-shaped static-balanced pipe-arm	S-shaped static-balanced pipe-arm	S-shaped static-balanced pipe-arm
6.4-10 gr	6.4-10 gr	6.4-10 gr	4-10 gr
221 mm	221 mm	221 mm	221 mm
Cam + spring	Cam + spring	Cam + spring	Cam + spring
Independent up-down, autom. + manual	Up-down	Off-on-down	Up-down
Automatic lead-in, return and repeat. Lateral balance. Plug-in headshell. Low capacitance p.u. cord (CD-4)	Automatic return and cut off. Lateral balance. Plug-in headshell. Low capacitance p.u. cord (CD-4)	Counterweight tracking force adjustment gauge. Lateral balance. Plug-in headshell. Low capacitance p.u. cord (CD-4)	Counterweight with tracking force adjustment gauge. Plug-in headshell. Low capacitance p.u. cord (CD-4)
11 Watts	11 Watts	11 Watts	10 Watts
430 × 164 × 362	430 × 164 × 362	430 × 164 × 362	430 × 164 × 350
8	7,4	7,4	6,5

## SPEAKER SYSTEMS

**CS-3000A: 3-Way, 3-Speaker System (DIN 45500).** Input power: 100 watts. Perfect sound reproduction is achieved through a 30 cm woofer featuring a 1,8 kg magnet, a 6,5 cm mid-range and a newly developed 2 cm dome tweeter. Finish in luxurious Brazilian rose wood.



CS-3000A

**CS-E830: 3-Way, 3-Speaker System (DIN 45500).** A completely new speaker unit, incorporating the latest acoustical innovations. The 30 cm woofer has a very low resonance frequency, the mid-range 4,8 cm dome speaker and the 2,5 cm dome tweeter are absolutely distortion-free. Input power: 90 watts.



CS-E830

**CS-E730: 3-Way, 3-Speaker System (DIN 45500).** Handles up to 75 watts of input power. Equipped with a 30 cm FB (Free Beating) cone woofer, a 4,8 cm dome mid range speaker and a 2,5 cm dome tweeter.



CS-E730

**CS-E530: 3-Way, 3-Speaker System (DIN 45500).** Two of the 3 loudspeakers features Pioneer's exclusive FB (Free Beating process) cone paper. This speaker unit is equipped with a 25 cm woofer, a 12 cm cone mid range speaker and a 2,5 cm dome tweeter. Input power: 60 watts.



CS-E530

SPEAKER SYSTEM	CS-3000 A	CS-E 830	CS-E 730	CS-E 530	CS-E 420
Enclosure type	infinite baffle	Infinite baffle	Infinite baffle	Infinite baffle	Infinite baffle
Speaker Woofer	30 cm	30 cm	30 cm	25 cm	20 cm
Mid Range	6,5 cm Dome	4,8 cm Dome	4,8 cm Dome	12 cm Cone	—
Tweeter	2 cm Dome	2,5 cm Dome	2,5 cm Dome	2,5 cm Dome	2,5 cm Dome
Crossover Frequency	Low 620 Hz High 4000 Hz	750-5500 Hz	650-5000 Hz	800-4000 Hz	1.700 Hz
Frequency Range	30-20.000 Hz	35-20.000 Hz	35-20.000 Hz	35-20.000 Hz	35-20.000 Hz
Sensitivity (at 1 m)	89 dB/w	90,5 dB/w	91 dB/w	88 dB/w	87 dB/w
Max. Input Power	100 W	90 W	75 W	60 W	50 W
Impedance	8 Ω	8 Ω	8 Ω	8 Ω	4-8 Ω
Terminal	Push type	Push type	Push type	Push type	Screw type
Dimensions (W × H × D)( mm )	360 × 630 × 327	380 × 660 × 317	380 × 660 × 307	330 × 570 × 302	260 × 500 × 245
Weight (kg)	33	22,5	21,5	16,5	12

## SPEAKER SYSTEMS

**CS-E420: 2-Way, 2-Speaker System (DIN 45500).** Pioneer's sound capability is reflected in this medium-powered (up to 50 watts) speaker unit. With a 20 cm woofer speaker combined with a highly efficient dome type tweeter. Beautiful wooden cabinet.



CS-E420

**CS-320: 2-Way, 2-Speaker System (DIN 45500).** Rich, powerful bass and clear high tones are reproduced by a 20 cm FB (Free Beating) cone woofer and a dome tweeter. Exceptional low harmonic distortion. Accepts up to 40 watts of power input.



CS-320

**CS-E220: 2-Way, 2-Speaker System (DIN 45500).** Despite its small (but very practical) dimensions, this speaker set fills your room with quality stereo sound. Incorporates a 16 cm woofer processed with FB (Free Beating) cone paper and a dome type tweeter. Up to 30 watts of power input.



CS-E220

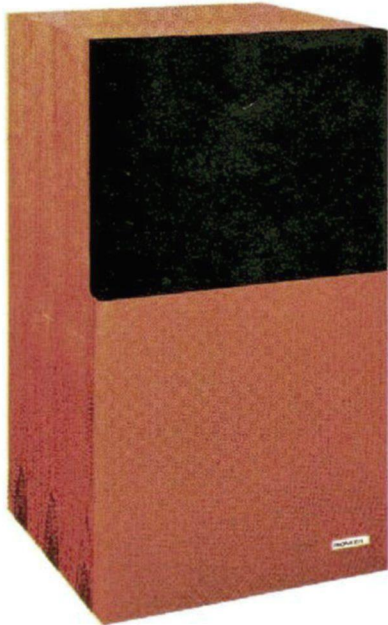
**CS-53: 2-Way, 2-Speaker System.** For use in most rooms, and powerful enough to provide full, rich sound. Features a 30 cm woofer and 9 cm tweeter. Outstanding performance in the important mid-range and bass range. Finish is subdued oiled walnut. Power input: 40 watts.



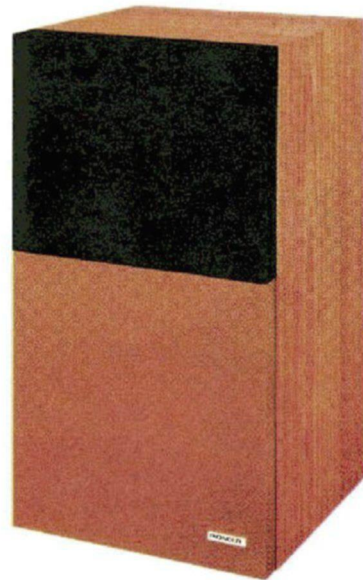
CS-53

CS-E 320	CS-E 220	CS-53	CS-R 700	CS-R 500	CS-R 300	CS-R 100	CS-313
Infinite baffle	Infinite baffle	Bass Reflex	Bass Reflex	Bass Reflex	Bass Reflex	Bass Reflex	Bass Reflex
20 cm	16 cm	30 cm	30 cm	25 cm	25 cm	20 cm	20 cm
—	—	—	horn type	12 cm Cone	—	—	—
2,5 cm Dome	2,5 cm Dome	9 cm Cone	multi-cellular horn type	horn type	horn type	horn type	7,7 cm Cone
1.850 Hz	2.750 Hz	—	700 Hz — 14.000 Hz	650 Hz — 6.000 Hz	4.200 Hz	5.000 Hz	5.000 Hz
45-20.000 Hz	50-20.000 Hz	45-20.000 Hz	35-20.000 Hz	35-20.000 Hz	45-20.000 Hz	50-20.000 Hz	50-20.000 Hz
86 dB/w	86 dB/w	94 dB/w	91 dB/w	91 dB/w	92 dB/w	92,5 dB/w	93 dB/w
40 W	30 W	40 W	75 W	60 W	40 W	20 W	20 W
4-8 Ω	4-8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω
Screw type	Screw type	Screw type	Screw type	Screw type	Screw type	Screw type	Screw type
240 × 450 × 220	200 × 300 × 170	420 × 568 × 285	380 × 660 × 346	350 × 610 × 306	330 × 570 × 268	270 × 470 × 216	270 × 500 × 230
9	6	12,7	23	18,5	12	5,3	6,4

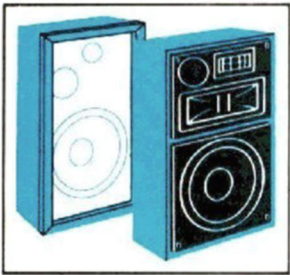
## SPEAKER SYSTEMS



CS-R700



CS-R500



### SPEAKER SERIES (CS-R)

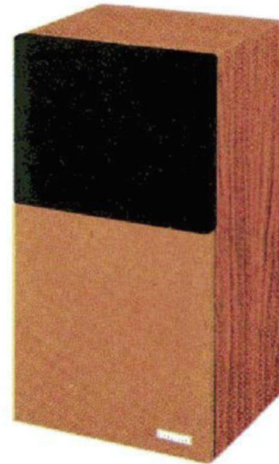
Too often these days superlatives are used to camouflage mediocrity. Let's just say that you'll be excited with the magnitude of the achievement of the new Pioneer R series speaker systems. They represent the culmination of more than six years intensive research in every phase of speaker design on just this series alone. We investigated, tested and evaluated every known area: frequency response, dispersion, distortion, transients, drivers, configurations, cabinetry — rejecting, accepting, improving until we were completely satisfied that we had the perfect combination. The sound most people would prefer when compared with the conventional speakers now available.

CS-R700: Input power: 75 watts 3-way 3 speakers    CS-R300: Input power: 40 watts 2-way 2 speakers  
 CS-R500: Input power: 60 watts 3-way 2 speakers    CS-R100: Input power: 20 watts 2-way 2 speakers

**Flush Mounting.** Unlike other speaker systems, the R series' drivers are flush mounted to the face of the enclosure, rather than recessed. Combined with the advanced design of the individual speaker units, there is added vitality to the individual speaker units, there is added vitality to the mid tones and wider dispersion.



CS-R300



CS-R100

#### CS-313: 2-Way, 2-Speaker System.

Pioneer's bass-reflex type budget-priced speaker system. 2-way, 2-speaker system. Woofer: 20 cm, tweeter: 7,7 cm. Highest sensitivity in this class offering 93 dB/W at 1 m distance best efficiency. Power input of 20 watts.



CS-313

## STEREO HEADPHONES

### SE-700: Pioneer's piezoelectric stereo headphones.

Superb tonal quality from unique high-polymer driver elements. Tonal characteristics are comparable to those of the electro-static type headphones but without the necessity of a matching transformer. You can plug it directly into the headphone jack of your amplifier or receiver. Improved sensitivity and power handling: they will not clip nor produce distortion even if fed excessively strong signals. Linear response over the entire audio spectrum without excessive strain.



SE-700

### SE-Q404: Pioneer's 4 channel headphones.

Four driver elements deliver highly distinguishable separation of left/right and front/back channels. 2-ch/4-ch selector switch for more convincing realism from all 2-channel sources. Each earcup has its own independent volume control for use in creating ideal balance of 4-channel or 2-channel sound. Polyester film driver elements assure crisp, clear and dynamic sound. They have excellent transient characteristics and guarantee undistorted, full-voiced sound reproduction over a broad audio spectrum.



SE-Q404

### SE-505: Pioneer's 2-Way Stereo Headphones.

A quality set for rich, dynamic sound and solid comfort. Features 4,5 and 3,2 cm mylar speakers with aluminium voice coil. Volume and tone control enable you to level the ideal sound reproduction. The luxurious black leather is a pleasure for the eyes too. Compatible with any stereo system with an output impedance range of 4-16  $\Omega$ .



SE-505

### SE-305: Pioneer's finest set of headphones,

covering a wide frequency range from 20 to 20.000 Hz through a small but excellent mylar speaker. The black leather finish invites for hours of stable and fatigue-free music pleasure. Compatible with any stereo system with an output impedance range of 4-16  $\Omega$ .



SE-305

### SE-205: Pioneer's budget-priced dynamic headphones.

Produce a rich bass response. The fidelity in reproduction quality compares with a high performance speaker. The functional construction as well as the attractive black tone design make these headphones a real value-packed purchase.

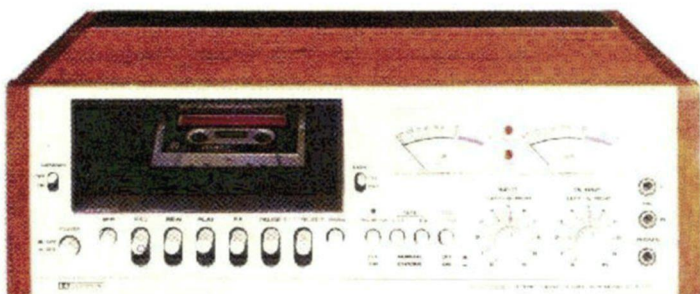


SE-205

HEADPHONES	SE-700	SE-Q404	SE-505	SE-305	SE-205
Matching impedance	4-16 $\Omega$	4-16 $\Omega$	4-16 $\Omega$	4-16 $\Omega$	4-16 $\Omega$
Frequency response	20 Hz-20 kHz	20 Hz-20 kHz	20 Hz-20 kHz	20 Hz-20 kHz	20 Hz-20 kHz
Max. input per channel	> 30 V	500 mW	500 mW	500 mW	500 mW
Sensitivity	105 dB/0,3 V	111 dB/0,3 V (2 Ch) 105 dB/0,3 V (ea Sp.)	108 dB/0,3 V	112 dB/0,3 V	115 dB/0,3 V
Speakers	High Polymer piezo-electric film membrane	4 x 4,5 cm polyester film cone	2 way dynamic 4,5 cm + 3,2 cm	4,5 cm dynamic	7 cm dynamic
Net weight	375 grs	550 grs	690 grs	435 grs	450 grs
Connecting cable	3 m	3 m	5 m	5 m	2,5 m
Features	No adapter needed (Direct hook-up to headphone jack)	2 Ch - 4 Ch. Switchable with level control (only for front in 4 Ch-model)	2 way speaker. Volume control and tone control on each channel		

## CASSETTE TAPE DECKS

**CT-F7171 : Pioneer's sophisticated stereo front access dolby cassette deck.** Built-in Dolby noise reduction system. With Bias/EQ switches for normal or special type tapes. Switched Recording Limiter, LED recording and Peak Level indicators. Memory Rewind and Skip button for high-speed tape search. Less than 0.1 % WRMS wow/flutter thanks to electronically controlled DC motor. Ingenious jam-proof tape compartment slanted at 30° angle.



CT-F7171

**CT-5151 : Pioneer's advanced Dolby cassette tape deck.** Built-in Dolby noise reduction system with Dolby indicator pilot lamp. Separate bias and equalizer tape selection permits to use any cassette tape: standard, low-noise/high output or chromium dioxide, with perfect results. Unique recording peak level indicator employing a LED which measures the exact level of transient peak signals. Level limiter for preventing distortion caused by over-level signals. Other features; tape running pilot lamp, tape counter, skip button, memory rewind button, full auto-stop mechanism, electronically-controlled DC motor, independent REC/PLAY level controls.



CT-5151

## REEL-TO-REEL TAPE DECK



RT-1020

**RT-1020: Pioneer's superb reel-to-reel stereo tape deck.** 2 and 4-channel playback head and built-in 4-channel preamplifier so that you may enjoy quadraphonic as well as 2-track and 4-track stereo playback. 3 positions bias-selector and 2 position equalization-selector guaranteeing perfect reproduction of low-noise/high-output tape. 2 speeds: 19 and 9.5 cm/sec. With its high-torque motors, professional sized 10 1/2 inch reel transport and other standard extras it is built to bring you top versatility, long service and total reliability. Independent MIC and LINE recording level controls.

**Drive system:** 3 motors. **Tape heads:** one 4-track 2-channel recording head, one 4-track 2-channel erase head, one 4-track 4-channel playback head. **Frequency response:** 40 to 20.000 Hz ( $\pm 3$  dB) at 19 cm/sec; 40 to 12.000 Hz ( $\pm 3$  dB) at 9.5 cm/sec. **Wow and Flutter:** less than 0.08% WRMS (0.10 % RMS) at 19 cm/sec; 0.10 % WRMS (0.13 % RMS) at 9.5 cm/sec. **S/N ratio:** more than 55 dB.

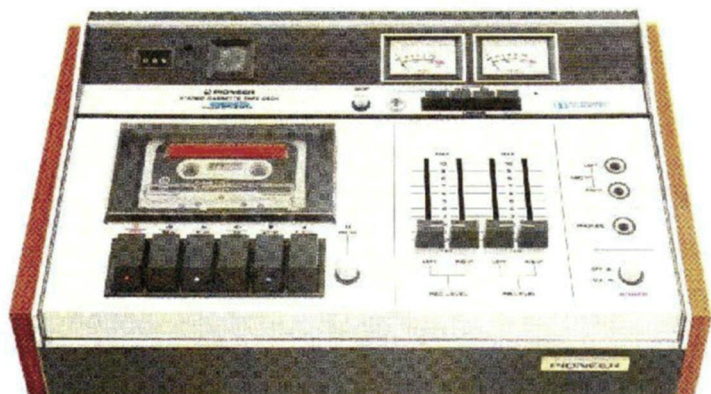
**Inputs:** MIC: 0.25 mV to 80 mV/20 Kohms (1 mV ref); DIN: 15 mV to 1.5 V/1.5 Kohms.

**Outputs:** LINE: 316 mV/50 Kohms load (output impedance: 3.3 Kohms), DIN: 316 MV/50 Kohms load (output impedance: 3.3 Kohms), Headphone: 40 mV/8 Ohms (output impedance: 4 to 16 Ohms). **Power consumption:** 115 Watts (max).

**Dimensions:** (W x H x D) mm: 440 x 431 x 225.

**Weight:** 21 kg.

**CT-4141A: Pioneer's versatile Dolby cassette tape deck.** Built-in DOLBY noise reduction system with Dolby indicator pilot lamp. Independent Bias/Equalizer tape selection permits to use any cassette tape: standard, low-noise/high output or chromium dioxide. Unique skip button allows quickly transport of the tape while monitoring the playback sound. Other features: full auto-stop mechanism, tape running pilot indicator, independent rec/play level controls, electronically-controlled DC motor, stereo/mono mode switch.



CT-4141A

**CT-3131A: Pioneer's quality stereo cassette tape deck.** Tape selector switch for normal and chromium dioxide tapes. Electronically-controlled DC motor. Full auto-stop safety. Unique tape running pilot indicator. Switchable playback noise filter.



CT-3131A

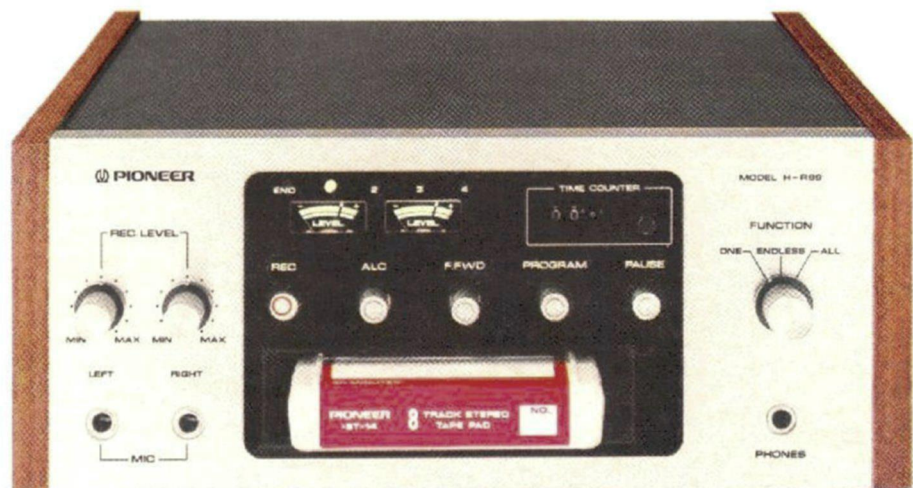
CASSETTE TAPE DECKS	CT-F7171	CT-5151	CT-4141A	CT-3131A
<b>Track</b>	4-track 2-channel	4-track 2-channel	4-track 2-channel	4-track 2-channel
<b>Tape Speed</b>	4.75 cm/s	4.75 cm/s	4.75 cm/s	4.75 cm/s
<b>Motor</b>	El. Contr. DC	El. Contr. DC	El. Contr. DC	El. Contr. DC
<b>Rec/PB Head</b>	1 × Ferrite Solid	1 × Ferrite Solid	1 × Perm. Solid	1 × Permalloy Solid
<b>Erasing Head</b>	1 × Ferrite	1 × Ferrite	1 × Ferrite	1 × Ferrite
<b>Recording System</b>	AC Bias (85 kHz)	AC Bias (85 kHz)	AC Bias (85 kHz)	AC Bias (85 kHz)
<b>Erasing System</b>	AC push-pull	AC push-pull	AC push-pull	AC push-pull
<b>Frequency response</b>	30-13.000 Hz	30-13.000 Hz	30-12.000 Hz	30-12.500 Hz
<b>Standard tape</b>	40-12.000 Hz ± 3 dB	63-12.000 Hz ± 3 dB	63-10.000 Hz ± 3 dB	63-10.000 Hz ± 3 dB
<b>Chrome tape</b>	30-16.000 Hz 40-13.000 Hz ± 3 dB	30-16.000 Hz 63-13.000 Hz ± 3 dB	30-15.000 Hz 63-12.000 Hz ± 3 dB	30-15.000 Hz 63-12.000 Hz ± 3 dB
<b>S/N ratio, weighted at max. recording level</b>	48 dB (Dolby off) 58 dB (Dolby on)	48 dB (Dolby off) 58 dB (Dolby on)	48 dB (Dolby off) 58 dB (Dolby on)	47 dB —
<b>Wow and flutter</b>	< 0.10 %	< 0.12 %	< 0.13 %	< 0.13 %
<b>Fast Winding time</b>	80 sec.	80 sec.	80 sec.	80 sec.
<b>INPUTS</b>				
<b>Mic (6 mm Ø jack)</b>	0.2-90 mV/20 kΩ	0.5-90 mV/20 kΩ	0.5-90 mV/20 kΩ	0.5-90 mV/20 kΩ
<b>Line (pin jack)</b>	60 mV-9 V/470 kΩ	50 mV-7 V/300 kΩ	50 mV-7 V/300 kΩ	50 mV-7 V/300 kΩ
<b>Rec/PB DIN jack</b>	6 mV-2.7 V/10 kΩ	15 mV-2.2 V/10 kΩ	15 mV-2.2 V/10 kΩ	15 mV-2.2 V/10 kΩ
<b>OUTPUTS</b>				
<b>Line (pin jack)</b>	300 mV/50 kΩ	300 mV/50 kΩ	300 mV/50 kΩ	300 mV/50 kΩ
<b>Rec/PB DIN jack</b>	300 mV/50 kΩ	300 mV/50 kΩ	300 mV/50 kΩ	300 mV/50 kΩ
<b>Headphone (6 mm Ø jack)</b>	40 mV/8 Ω	40 mV/8 Ω	40 mV/8 Ω	40 mV/8 Ω
<b>Power Consumption</b>	15 Watts	13 Watts	13 Watts	9 Watts
<b>Dimensions (W×H×D) mm</b>	430 × 138 × 310	396 × 96 × 242	396 × 96 × 242	396 × 96 × 242
<b>Weight (kg)</b>	8.5	4.8	4.7	4.4

# COMPACT STEREO SYSTEM

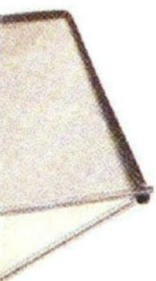


C-4500

# 8-TRACK TAPE DECK



H-R99



**C-4500: Pioneer's Compact Stereo System.**

- Two-piece table-top module which offers you in one attractive package an excellent record player and a superb stereo amplifier.
- The unique compactness of this unit makes it perfect for small or medium-sized rooms.
- The belt-drive turntable shuts out motor vibrations and rumble, while improving overall signal-to-noise ratio.
- S-shaped tone arm with easily adjustable lateral balance and anti-skating provisions. The tonearm is raised and lowered by an oil-damped lifter which is controlled via a 3-position function lever.
- The amplifier uses a direct-coupling preamplifier with a wide dynamic range and a quasi-complementary SEPP power amp circuit that ensures distortion-free sound reproduction over a wide frequency range.
- 2 pairs of speaker systems can be connected and switched on either together or separately.
- Other features: headphones jack, click-stop bass & treble controls, 2 tape deck terminals, 2 phono inputs, place for installing a rediffusion tuner.

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HiFi-Classic.de

<b>COMPACT STEREO</b>	<b>C-4500</b>
<b>AUDIO SECTION</b>	
Continuous power output both channels driven at 1 kHz, 4Ω	12 W × 2
8Ω	10 W × 2
Frequency Response	20 Hz - 50 kHz ± 3 dB
Hum and noise (IHF) phono	> 70 dB
aux.	> 90 dB
Input sensitivity/ Impedance Phono	2.5 mV/50 kΩ
Aux	200 mV/100 kΩ
Bass Control	- 11 dB, + 12 dB (100 Hz)
Treble control	- 10 dB, + 9.5 dB (10 kHz)
Loudness contour (switchable on-off)	+ 10 dB (100 Hz) + 5.5 dB (10 kHz)
Stereo separation phono	> 50 dB (1 kHz)
aux.	> 55 dB (1 kHz)
<b>TURNTABLE</b>	
Motor	4-pole synchronous
Drive system	Belt-drive
Speeds	33 1/3 and 45 rpm
Turntable platter	30 cm, 1 kg Aluminium alloy die-cast
Signal-to-noise ratio	> 47 dB
Wow and Flutter	< 0,1 %
Tone arm	Static balance S-shaped pipe arm
Effective arm length	221 mm
Usable cartridge weight	6.4 - 10 gr
Subfunctions	Anti-skating device Lateral balance control Hydraulic cueing device Head shell plug-in type
Power consumption	78 Watts
Dimensions (W×H×D) mm	517 × 179 × 398
Weight (kg)	13

**H-R99: Pioneer's 8-track record/playback deck.** Records and plays back any 8-track, 2-channel tape cartridge. Automatic or manual track change. Electronically-controlled motor that lasts longer because it generates less heat. Shielded capstan for trouble-free tape feed. Vertical head-shift mechanism to assure proper tape-head contact. Other features: automatic recording level control, end of track signal indicator, illuminated track indicator, function switch for endless playing or auto-stop after 1 track or 4 tracks.

<b>8-TRACK TAPE DECK</b>	<b>H-R 99</b>
Cartridge	8-track
Tape speed	9.5 cm/sec
Wow and Flutter	< 0,15 %
Program selection system	Automatic and manual
Frequency response	30 to 12.000 Hz
Total Harmonic Distortion	< 2 %
Stereo separation	> 40 dB
Crosstalk	> 45 dB
Signal-to-noise Ratio	> 45 dB
Output impedance	Line: < 3 kOhms Headphone: 8 Ohms
Input Level	200 mV
Output Level	775 mV
Dimensions (W×H×D) mm	295 × 116 × 275
Weight (kg)	5,5

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