

Technical Specifications

Amplifiers	PM-17SA	SM-17SA
Amplifier Section		
Rated power output (20 Hz - 20 kHz both channels driven) 8/6/4 ohm load	60 + 60 W/80 + 80 W/100 + 100 W	
BTL (20 Hz - 20 kHz) 8 ohm load	200W	
THD (20 Hz - 20 kHz both channels driven)	8 ohm load .01%	
Cross modulation distortion (SMPTE)	.01%	
Output bandwidth (8 Ω load, .04%)	10 Hz - 50 kHz	
Frequency response	5 Hz - 70 kHz, +0/-1 dB	5 Hz - 100 kHz, +0/-1 dB
Damping factor (8 Ω load, 20 Hz - 10 kHz)	100	
Input sensitivity/Input impedance		
Phono (MC)	230 μ/100 Ω	
Phono (MM)	2.5 mV/22 kΩ	
High level	220 mV/22 kΩ	
Main in	1.6 V/22 kΩ	
Phono input level (1 kHz)		
MC	15 mV	
MM	150 mV	
RIAA deviation (20 Hz - 20 kHz)	±0.2 dB	
Signal to noise ratio (IHF network, input shorted)		
Phono (MC)	76 dB	
Phono (MM)	90 dB	
High level	112 dB	
Tone control		
Bass (100 Hz)	±8 dB	
Treble (10 kHz)	±8 dB	
General		
Power requirements	120 V, 60 Hz, 180 W	
Dimensions H x W x D	4 3/4" x 18" x 16 1/16" 110mm x 458mm x 429mm	
Weight	35.3 lbs. 16 kg.	34.2 lbs. 15.5 kg.

Receivers	SR-14EX	SR-18EX	SR-19
Amplifier Section			
Continuous power output (RMS) into 8 ohms (<.05% THD, 20 Hz - 20 kHz)	140 + 140 W		120 + 120 W
Left and right channels	140 W		120 W
Center channel	140 + 140 W		120 + 120 W
Surround channels	140 + 140 W		120 + 120 W
Frequency response	8 - 80 kHz ±3 dB		10 - 50 kHz -2 dB
Signal to noise ratio	106 dB		105 dB
Dolby Digital channel separation			
1 kHz L/C/R/L/S/R/S	>55 dB		
Preamp Input level	350 mV 47 kΩ		
L/R channel crosstalk 1 kHz	80 dB		
FM Tuner Section			
# of FM/AM station presets	50		
Usable FM sensitivity (mono)	16.4 dBf		
Signal to noise ratio (mono/stereo)	76/72 dB		
Stereo channel separation 1 kHz	45 dB		
Total harmonic distortion (mono/stereo)	.2/3 %		
Alternate channel selectivity	±300 kHz 60 dB		
Capture ratio	1 dB		
Video Section			
Television format	NTSC		
Input level/impedance	1 Vp-p/75 Ω		
Output level/impedance	1 Vp-p/75 Ω		
Video frequency response	5 Hz to 8 MHz (-1 dB)		
Signal to noise ratio	60 dB		
General			
Power requirements	120 V, 60 Hz, 470 W	120 V, 60 Hz, 440 W	
Dimensions H x W x D	7 3/16" x 18" x 19 1/16" 190mm x 458mm x 493mm		
Weight	58.4 lbs. 26.5 kg	50.7 lbs. 23 kg	48.6 lbs. 22. kg

Super Audio CD	SA-1
Audio Section	
Optical readout system	
Wavelength	650 nm
Laser	AlGaAs
Channels	2 channels
Frequency range (SACD)	2 Hz - 100 kHz
Frequency response	2 Hz to 50 kHz (±3 dB)
Dynamic range	109 dB
Sampling frequency	2.8224 MHz
Total harmonic distortion (1 kHz)	0.0012%
Wow and flutter	Precision of quartz
Analog output	
Output level (unbalanced)	2.2 V
Output level (balanced)	3.9 V
General	
System	SACD/CD
Applicable discs	CD CD-R SACD Hybrid CD/SACD
Power requirements	120 V, 60 Hz, 33 W
Dimensions H x W x D	5 1/4" X 18" X 14 1/8" 133mm x 458mm x 365mm
Weight	39 lbs. 17.7 kg

CD Recorder	DR-17
Audio Section	
Frequency response	20Hz - 20 kHz
Playback signal to noise ratio	102 dB
Playback dynamic range	97 dB
Playback total harmonic distortion	.003%
Recording signal to noise ratio	90 dB
Recording dynamic range	96 dB
Recording total harmonic distortion	.0056%
Line output voltage	2 Vrms
Digital coaxial output	0.5 V (pp)/75 Ω
Digital optical output	-20 dBm
Digital coaxial input (automatic sample rate conversion)	32-48 kHz
Digital optical input (automatic sample rate conversion)	32-48 kHz
Analog input	500 mVrms/50 Ω
General	
System	compact disc digital audio
Number of channels	2 (stereo)
Applicable discs	CD, CD-R, CD-RW
Power requirements	120 V, 60 Hz, 25 W
Dimensions H x W x D	3 1/2" X 18" X 12 1/2" 83mm x 458mm x 324mm
Weight	17.2 lbs. 7.8 kg

Tuner	ST-17
FM Tuner Section	
Mono usable sensitivity	1.0 μV
Sensitivity (50 dB quieting)	
Mono/Stereo	1.3 μV/25 μV
Selectivity	65 dB
Signal to noise ratio	
Mono/Stereo	80 dB/73 dB
THD (1 kHz)	
Mono/Stereo	.05%/ .08%
Stereo separation	55 dB
Frequency response	
30 Hz - 15 kHz	+ .5/-1 dB
Output level at 1 kHz (75 kHz deviation)	940 mV
AM Tuner Section	
Usable sensitivity	350 μV
Signal to noise ratio	52 dB
THD (1 kHz)	.2%
General	
Power requirements	120 V, 60 Hz, 8.5 W
Dimensions H x W x D	3.39" x 18" x 12.4" 86mm x 458mm x 315mm
Weight	15 lbs. 6.8 kg

DVD Player	DV-18 Mark II
Audio Section	
Laser pickup	Semiconductor laser
Wavelength DVD/CD	655 nm/790 nm
Frequency response (digital audio)	
DVD linear sound	96 kHz sampling 4 Hz to 44 kHz
Audio CD	4 Hz to 20 kHz
Signal to noise ratio (digital audio)	>115 dB
Dynamic range (digital audio)	>102 dB
Total harmonic distortion (digital audio)	<.002%
Digital audio outputs	optical x 1, coaxial RCA x 1
Analog audio outputs	200 mV (rms), (1kHz, -20 dB)
Video Section	
Composite video output	1.0 V (p-p), 75 Ω, negative sync
S-Video output	(Y) 1.0 V (p-p), 75 Ω, negative sync (C) 0.286 V (p-p), 75 Ω
Component video output	(Y) 1.0 V (p-p), 75 Ω, negative sync Cb/Cr 0.7 V (p-p), 75 Ω
General	
Power requirements	120 V, 60 Hz, 15 W
Dimensions H x W x D	3 7/16" x 18" x 12 1/16" 88mm x 458mm x 313mm
Weight	14.1 lbs. 6.4 kg

Crowning Achievements from Marantz

The Reference Series by Marantz, represents the ultimate expression of the design and engineering art form. Ever since the company's founding in 1953 by Saul Marantz, that goal has remained constant. From the beginning, Marantz products have established a reputation as the finest vehicles obtainable for the faithful and accurate reproduction of music. Then, home theater and video product achievements followed, to great accolades.

Every Reference Series product is designed and manufactured to exacting standards. They undergo a rigorous battery of tortuous tests during the development process. New amplifiers for example, are routinely driven well beyond their design limits until they fail. This ensures that once these products arrive in your home they will perform flawlessly, even under the most demanding circumstances.




Although seldom mentioned, no audio equipment performs optimally when first turned on. The PM-17SA and SM-17SA feature an exclusive temperature meter which indicates when the unit has warmed sufficiently to perform at its best.

The unique and elegant Reference Series styling is implemented using metal alloys for faceplates and other cosmetics. Inside, only the highest quality semi-conductors, power supplies and other components are utilized. Fine quality and craftsmanship are evident throughout the Reference Series, as is the prestigious Marantz reputation for cutting-edge advancements, and both digital and analog engineering triumphs.

Today, the Marantz name represents not only the finest in quality and performance, but in technological leadership and innovative design, as well. The Reference Series exemplifies the culmination of these efforts. All Reference Series products are proudly provided with a three year limited warranty.

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Super Audio Compact Disc

SA-1 Super Audio CD Player

Presenting the new reference standard in digital audio – the Marantz Reference Series SA-1 Super Audio Compact Disc (SACD) Player. The SA-1 represents nothing less than an astonishing advancement in high fidelity digital audio reproduction. It offers fidelity and sonic accuracy far beyond any previous digital or analog audio playback system.

Engineered and built entirely without compromise, the Marantz SA-1 provides an unprecedented level of musical realism from Super Audio CDs, as well as exceptional playback quality from standard CDs. The SA-1 employs Direct Stream Digital (DSD) technology to achieve a remarkable new level of sonic purity. With a sampling rate of 2.8224 MHz, the SACD format can deliver a frequency response from DC to over 100,000 Hz and a dynamic range greater than 120dB – performance unmatched by any previous record/playback system. The Marantz SA-1 is truly the ultimate high fidelity music source.

The SA-1 incorporates leading-edge Super Audio CD digital signal processing circuitry with an advanced full-floating laser mechanism and die cast metal alloy housing and disc tray, plus a digital servo control for ultra precise disc tracking. Four 1-bit dual Direct Stream Digital D/A converters handle signals with perfection. Enhanced playback quality from standard CDs is also assured, thanks to the SA-1's precision digital filtering with 8-times oversampling and Bitstream technology.

The SA-1 personifies Marantz' Reference Series parts and construction techniques to obtain the ultimate in sound quality. Included are audiophile grade internal components throughout, copper-shielded toroidal power transformer, aluminum alloy construction and a copper plated, double-layer steel bottom plate to dampen internal vibration and mechanically induced jitter. In addition, extensive internal copper shielding prevents unwanted interference.



The THX Standard For DVD

The DV-18 Mark II THX Ultra® DVD Player

Lucasfilm's THX® standards for DVD players mandate nothing less than perfection in DVD video and audio reproduction. The Marantz DV-18 Mark II is among the very few players to have risen to this challenge.

The DV-18 Mark II was designed to meet these exacting standards by incorporating numerous cutting-edge technologies. Video D/A conversion is accomplished through the use of state-of-the-art 10-bit/27MHz processing, resulting in high resolution video quality, color purity and an improved signal to noise ratio. The audio section employs the latest 24-bit/96kHz D/A converters. Only audiophile grade premium components are used in critical

signal path applications, including copper shielded HDAM's.

The DV-18 Mark II is fully compatible with both Dolby Digital® and DTS® surround sound formats. Either signal can be output through the coaxial and optical digital outputs. Gold plated video outputs include component video, S-video and composite video. Remote control operation is simplified by a comprehensive on-screen display.

The DV-18 Mark II offers a host of convenience functions including slow motion, freeze frame, multi-speed forward/reverse scan, chapter and track search and a variety of repeat modes.



High Fidelity Broadcast Reception

The ST-17 AM/FM/FM Stereo Tuner

The ST-17 Tuner is capable of reproducing broadcast signals with spectacular fidelity, free of background hiss and crackle. It excels at both signal reception and processing, to deliver sound with rare detail, clarity and spaciousness.

Convenience features abound, including one-touch 60 station preset capability, station naming function, dual FM antenna

connections, and both wide and narrow FM selectivity settings. A low noise HDAM output stage ensures signal purity, while the exclusive Gyro Touch tuning wheel provides a luxurious feel.

This precision Digital Synthesized tuner is complimented by its Reference class metal alloy cosmetics, D-BUS remote connection and full remote control operation.



The Ultimate in CD Recording

The DR-17 CD Player/Recorder

With the DR-17, Marantz offers the ultimate expression in CD recording technology. Constructed with audiophile-grade premium parts throughout, the DR-17 incorporates copper shielded HDAM's, an OFC Winding Power Transformer and state-of-the-art Bitstream D/A and A/D conversion for the greatest signal purity.



The DR-17 will create flawless recordings on both CD-R and CD-RW media, producing mirror-image clones which are virtually identical to the original. It's capabilities include HDCD® copy and playback, double-speed disc finalization and sampling rate conversion which automatically converts digital audio source material to the CD standard of 16 bit/44.1 kHz, regardless of its original data rate. During CD to CD dubbing, the sampling rate converter circuit is bypassed for uncompromised sonic excellence.

Advanced editing functions and other conveniences make CD recording fast and easy, using either the metal alloy full-function remote control or front panel controls. The DR-17 has a die-cast metal transport utilizing familiar tape deck type controls and a precision calibrated recording level meter.

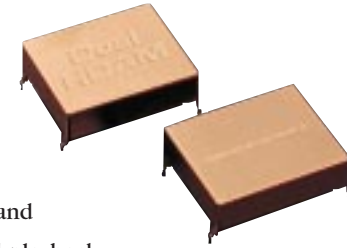
Other features include automatic or manual track indexing, CD-Synch recording, optical and coaxial digital inputs and outputs and D-BUS remote connection. The DR-17 all metal alloy chassis is available in both black and the classic Marantz champagne gold.



HDCD®

A New State of the Art in Digital Audio.

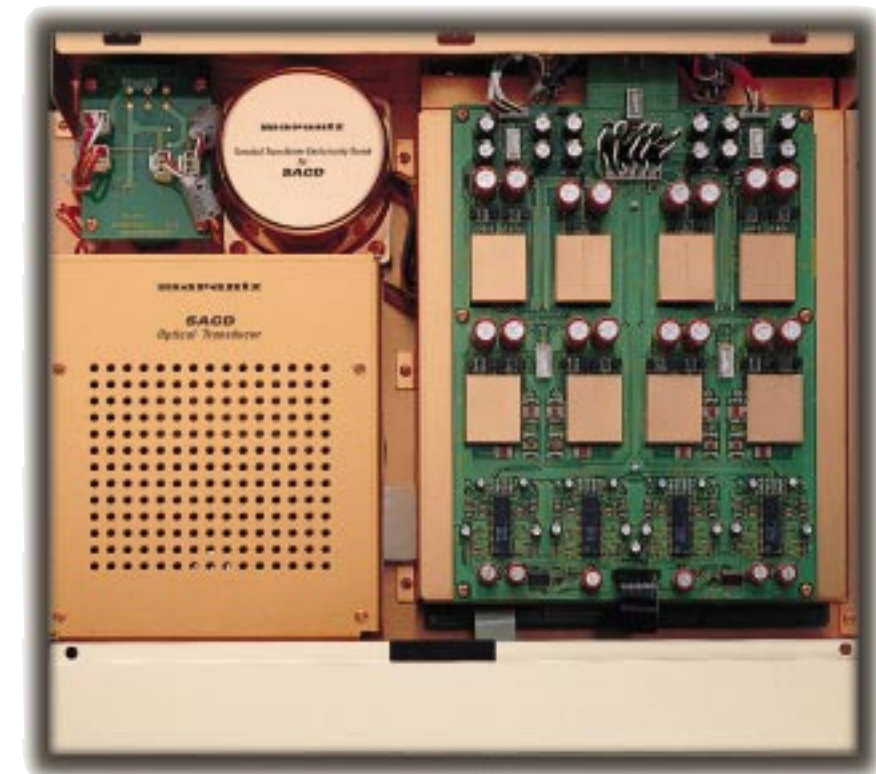
The SA-1 employs dual HDAM (High Definition Amplifier Modules) in a differential configuration, for vanishingly low noise and maximum signal purity. These fully discrete copper shielded output stages offer wide bandwidth, extremely fast slew rate and exceptional dynamic range.



The SA-1 is playback-compatible with CD-R discs in addition to Super Audio CDs, standard CDs and hybrid Super Audio CD/standard CD discs. Optical and coaxial digital outputs are provided for convenient digital CD recording and playback, as well as balanced (XLR) outputs for connection to a preamplifier with balanced inputs. Programming and play modes include 20-track music programming and more.



The ergonomically designed front panel features a distinctive round center display window. The front panel display utilizes its own separate power transformer to totally isolate noise from the SA-1's internal circuitry. Finally, the full-function aluminum alloy remote control perfectly complements the unique beauty of the SA-1.



Amplifiers Designed for Super Audio

The PM-17SA Stereo Integrated Amplifier

With the advent of Super Audio CD technology, co-developed by Philips/Marantz, its spectacular bandwidth, unprecedented dynamic range and sonic purity require electronics of commensurate capability in order to capture and faithfully reproduce SACD without compromise.

Marantz has designed the PM-17SA Integrated Amplifier to achieve the levels of performance necessary to truly appreciate the capabilities Super Audio CD technology has to offer. Voltage Plus Current Feedback circuitry is utilized in power amplifier and preamplifier sections, combined with Marantz' exclusive High Definition Amplifier Modules (HDAM) to optimize slew rates, resulting in extremely wide bandwidth and frequency response.

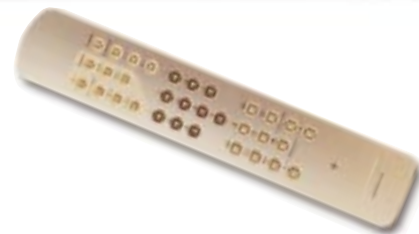


Superior, copper shielded High Definition Amplifier Modules (HDAMs) replaces the low-cost op-amps normally used in audio products. They provide extremely fast slew rate, wide bandwidth, low noise and exceptional dynamic range. The result is a seamless transparency audiophiles have come to love in Marantz products.

Additionally, "Twin Monaural Construction" is incorporated, in which the signal routing of the left and right channels is completely isolated from one another. This effectively eliminates noise and interference inherent in traditional designs. A heavy Toroidal power transformer, premium oversized electrolytic power supply capacitors and massive cast aluminum heat sinks give this amplifier tremendous low-impedance drive capability with generous reserves.



The PM-17SA features quiet, relay-driven source switching with source direct mode; an MM/MC phono stage; and record monitor loops for CD-R and tape, as well as preamp outputs/power amp inputs. D-BUS remote connection, a metal alloy finished remote control and three AC convenience outlets are included. The elegant Reference Class cosmetics are complimented by the front panel temperature gauge.



The SR-19 THX Select® A/V Receiver

Younger sibling to the SR-18, the Marantz SR-19 THX Select® Digital Surround Receiver sets a new standard for the more affordable THX Select® product category, delivering high-end home theater performance in every respect.

It utilizes a surround processor section with 96kHz/24 bit processing, and decoding of both Dolby Digital® and DTS® encoded soundtracks and music. In fact, the front panel is identical to the SR-18, right down to the Gyro Touch tuning wheel and elegant metal alloy finish.

The muscular power amplifier section boasts 120 watts (into 8 ohms) of THX Select® power output into each of the five main channels. It is constructed of premium quality, audiophile grade components throughout for the superb sound quality, performance and reliability which are benchmarks of the Marantz Reference Series.



The SR-19 features a wide variety of audio and video inputs, outputs and switching facilities, including S-video and composite video switching. Four assignable digital inputs (two coaxial and two optical) and two digital outputs provide plenty of versatility for digital connections, while six channel direct inputs can accommodate future technologies. A complete set of preamp outputs and power amp inputs offer flexibility for upgrade options.

The SR-19's ergonomic on-screen menu system and RC18SR universal remote provide effortless control of an entire home theater system, while multi-room/multi-source audio and video management bring entertainment to another part of your home. For home theater environments where THX Select® products are ideal, the SR-19 will deliver the very best performance obtainable.



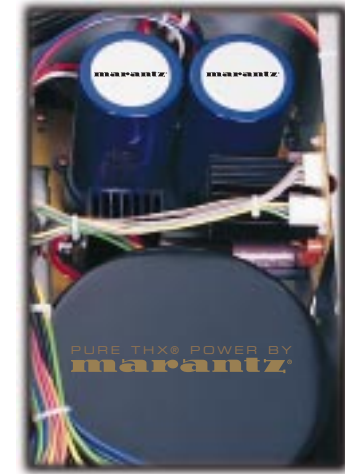
Our Flagship A/V Receivers

The SR-18EX THX Ultra® A/V Receiver

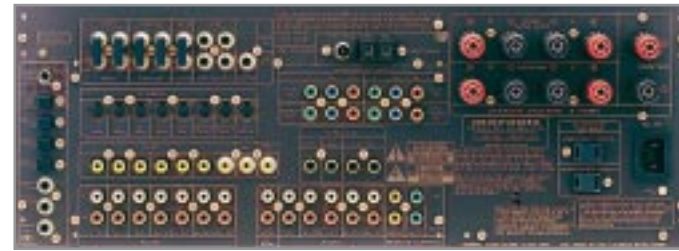
Like the SR-14EX, the Marantz SR-18EX offers THX Surround EX® technology (as well as DTS 6.1), adding a center back surround channel for the ultimate surround sound experience.

The THX Ultra® certified SR-18EX features every luxurious amenity conceivable. It offers both Dolby Digital® and DTS® surround sound, all processed with 192kHz/24bit decoding for the highest possible fidelity and bandwidth. The Preamp stage features copper shielded, High Definition Amplifier Modules (HDAM), and the digital tuner section utilizes Marantz' exclusive Gyro Touch Tuning for a silky smooth feel.

The power amplifier section employs a host of audiophile grade components including an oversized Toroidal transformer, extra large premium-grade power supply capacitors, die cast aluminum heat sinks and voltage-plus-current feedback technology, to deliver 700 watts (140 x 5 into 8 ohms) of pure thundering power for clean, effortless reproduction of both movies and music.



The SR-18EX offers a remarkably comprehensive array of audio and video inputs and outputs, including component video, S-video and composite video low noise switching facilities. Six digital inputs (three coaxial and three optical) are complimented by two digital outputs. Preamp outputs and main amp inputs are provided for all channels, as well as six channel direct inputs. Front panel A/V inputs with S-video are also included, as is multi-room/multi-source audio and video capability and D-BUS remote connections.



Although one of the most advanced home theater receivers available today, the SR-18EX's operation is simple and intuitive. Easy to use on-screen menus guide you effortlessly and everyday operation of an entire home theater system is easily accommodated by the included RC18SR (an advanced version of our renowned RC2000 Mk II) universal learning remote control. The versatile Marantz SR-18EX is equipped to be a powerful and sophisticated control center at the heart of even the most advanced home theater systems.



The SM-17SA Stereo Power Amplifier

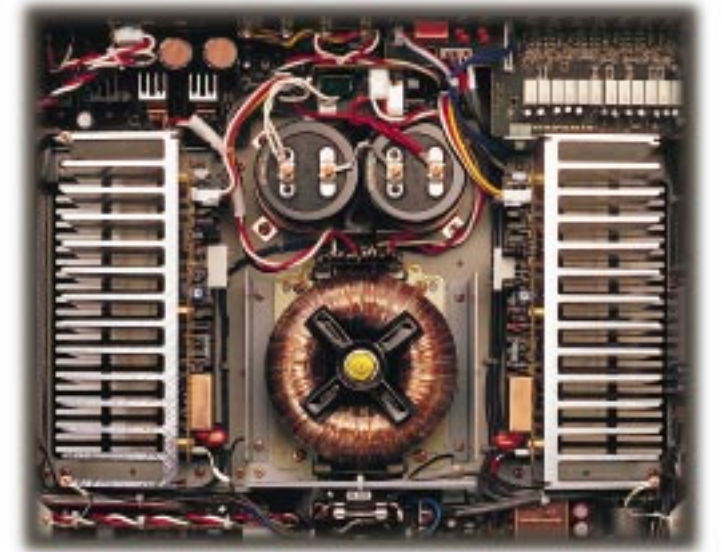
Like its cousin, the SM-17SA is design to faithfully reproduce all the capabilities that Super Audio CD has to offer. For those applications where a pure power amplifier is desired, the SM-17SA is ideal. It's the perfect companion to the PM-17SA in systems utilizing bi-amping, too.

The SM-17SA features Voltage Plus Current Feedback circuitry and High Definition Amplifier Modules, optimizing slew rates to achieve ultra-wide bandwidth and frequency response. Its "Twin Monaural" construction isolates left and right channels for uncompromised signal purity.

An oversized Toroidal power transformer; high capacity, premium power supply capacitors and cast aluminum heat sinks result in generous headroom able to handle even the most difficult load requirements.

The SM-17SA also features Balanced Transformerless bridging capability, creating a monoblock powerhouse with 200 watts output into 8 ohms.

The Reference Class metal alloy finish, distinctively elegant, is perfectly complimented by the analog temperature gauge.



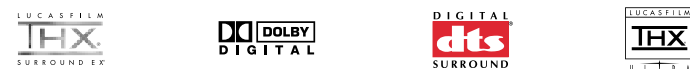
Our Flagship A/V Receivers

The SR-14EX THX Ultra® A/V Receiver

Presenting the next evolution in Marantz home theater receiver excellence: The SR-14EX. The finest home theater receiver ever created. Designed and built entirely without compromise, the SR-14EX redefines the state of the art in audio/video receiver performance in every respect and delivers the legendary sound quality that has made Marantz the choice of the most discriminating audiophiles and home theater enthusiasts for almost fifty years.



The Marantz SR-14EX provides surround sound decoding for multi-channel surround sound formats including THX Surround EX® technology in addition to Dolby Digital® 5.1, and DTS® 6.1 surround sound processing. THX Surround EX® and DTS® 6.1 add a center back surround channel to further heighten your sense of total envelopment.



The SR-14EX is also ready for future surround sound formats, thanks to its six-channel direct inputs. The SR-14EX includes connections for external amplifiers, with preamp outputs for every channel. Additionally, six digital inputs and two digital outputs are provided.



For the ultimate in ease of operation, the SR-14EX is supplied with the RC5000/ Programmable Touchscreen Remote Control.

The SR-14EX incorporates highly advanced digital signal processing circuitry, utilizing multiple 192kHz/24-bit D/A converters, a separate DSP processor and 24-bit A/D converter for extraordinary fidelity and high resolution. The SR-14EX includes built-in HDCD® decoding to deliver the highest possible sound quality from HDCD® encoded CDs.



The new Marantz SR-14EX offers a comprehensive array of features. Three sets of component video inputs allow easy switching between multiple component video sources. An unusually extensive number of inputs and outputs use ultra low-noise switching facilities to preserve sonic purity. The SR-14EX offers a wealth of performance and convenience features including multi-room/multi-source capability for both audio and video, easy to use on-screen menus and much more.

The Ultimate A/V Receiver

The SR-14EX is constructed to the absolute highest standards, including audiophile-grade capacitors and resistors, extensive internal copper shielding, a chassis featuring a heavy-duty bottom plate to minimize internal resonances, along with machined aluminum alloy front, side and top panels for added beauty, strength and rigidity.

The SR-14EX's THX Ultra® certified power section delivers enormous amplifier power - 140 watts RMS (into 8 ohms) to each of the five main channels with substantial reserve headroom. The power section features a high-current toroidal transformer with low impedance drive capability, premium high-storage power supply capacitors, voltage-plus-current feedback technology and fully discrete output stages housed in die cast aluminum heat sinks. Discrete power amp inputs are provided for all five amplifier channels. It all adds up to 700 watts of breathtaking power for clean, precise reproduction of movie soundtracks and music. The preamp section features copper shielded High Definition Amplifier Modules (HDAM) and the digital tuner section utilizes Marantz' exclusive Gyro Touch Tuning for a silky smooth feel.



As sophisticated as it is, the SR-14EX's operation is easy and ergonomic. Its front panel control layout provides ready access to all functions, and includes front panel A/V inputs. A hinged panel covers the front panel inputs and most

controls when they're not in use for a clean, uncluttered appearance. Also featured is a large, easy to read Fluorescent Panel Display which indicates key functions and settings in a logical and straightforward manner.

In addition, the SR-14EX provides an AM/FM tuner with 50 station presets, a Source Direct switch to bypass the tone controls for purest audio quality, heavy-duty banana plug compatible speaker terminals and more — much more. The elegant Marantz SR-14EX is available in black or in limited quantities of traditional Marantz Champagne Gold.

