marantz

AV Receiver SR5500



Also black available

SR5500 AV Receiver

The Marantz SR5500 Digital Surround Receiver is a high-performance, high-power home theater receiver that offers outstanding home theater surround sound quality and operational flexibility. It features DD-EX, DTS ES, Dolby Pro Logic II and Circle Surround II. The SR5500 features an equal power amplifier section, with high current discrete output on all channels. Highly accurate 192kHz/24-bit audio D/A converters handle the analogue to digital conversion, resulting in more faithful sound quality compared to the original source. It is built to Marantz standards with refinements such as video conversion, a metal faceplate, video off mode and high grade components. Experience your movies and music in dynamic Marantz style.





Features

Benefits

- Innovative 32-bit Digital Signal Processing with DD-EX, DTS-ES and DPL IIx
- Wide range full discrete 7 channel Current Feedback power amplifiers
- Video conversion
- Sound delay function (LipSync)
- Adjustable crossover
- Multi room / multi source system
- Dolby headphone
- Marantz D-Bus and RS232c connection
- Pre-programmed system remote control

- Provides up to 8 channel audio decoding for any source material at the highest quality
- Excellent frequency response and superb sonic performance for the highest standard such as SACD and DVD-Audio
- The highest analogue quality from all sources connected via a single component connection
- Synchronizing the audio and video signal
- Matching the performance characteristics of the subwoofer to the main speaker system
- Allows independent audio source selection and control in a second room
- Full multichannel enjoyment via your regular stereo headphone
- Full system integration flexibility
- Total system control by using one remote handset

Technological glossary:

Power your home theater

For optimum reproduction of Dolby Digital, DTS, Dolby Pro Logic IIx and Circle Surround reproduction, the SR5500 provides high current, wide band audio amplification, capable of generating 90 watts of discrete power into all 7 channels. With Current Feedback technology and a robust power transformer, the SR5500 has ample capabilities to drive low impedance loudspeakers. Furthermore an extensive array of digital and analog audio and video connections secure accommodation of a wide variety of multiple program sources. Other versatile and future ready, custom installment features include multi-channel (7.1) direct inputs and pre-amp outputs, RS232c interface and on-screen display.

Latest surround technologies

The SR5500 incorporates the most advanced 32-bit Digital Signal Processing circuitry decoding the latest generation of digital surround sound such as Dolby Digital EX, DTS ES, DTS Neo:6, Circle Surround II, and Dolby Pro-Logic IIx. The receiver provides an enveloping 7.1 channel playback of any multichannel program, whether it's movie soundtracks or music, over Surround sound via your stereo headphone the widest possible seating area.

Dolby Digital EX

Dolby Digital EX brings a new dimension of depth, spacious ambience and sound localization to home theater environment. The benefits of DD-EX include more realistic flyover and flyaround effects, a more stable image for atmospheres and music and a more consistent surround effect throughout the auditorium or home viewing area.

DTS-ES

The DTS-ES surround system offering a superb sound quality and a range of formats. The Discrete 6.1 offers the ultimate quality of surround field creation, while the Matrix 6.1 provides compatibility for the existing DTS 5.1 software. And the Neo:6 is to create 6.1 surround stage from any two channel source. DTS 96/24 allows for 5.1 channel sound track encoding at a rate of 96kHz/24 bits on DVD-Video titles. Higher sampling rates provide greater bit depth and allow a wider frequency response. In conjunction with the use of anti-alias and reconstruction filters DTS 94/24 results in a more transparent sound quality equivalent to the original soundtrack and is fully backwards compatible at the same time.

Eight channel audio from any source

Pro Logic IIx is the first and only technology to process any native stereo or 5.1 signal into a 6.1- or 7.1- channel output. A product of Dolby's expertise in surround sound and matrix decoding

technologies, Dolby Pro Logic IIx is a complete surround sound solution that maximizes the entertainment experience from stereo as well as 5.1-channel encoded sources. On playback systems with four surround speakers, the result is a more seamless, natural, and enveloping listening experience on everything from stereo music CDs to DVDs encoded in Dolby Digital Surround EX. Until now, processing stereo and 5.1 program sources into 6.1 or 7.1 output channels necessitated that the A/V receiver include a variety of decoders, often from different developers. In contrast, Dolby Pro Logic IIx decoding does it all, offering a single upgradeable solution for the home theater enthusiast who wants to go from 5.1 channels to 6.1 and 7.1. Dolby Pro Logic IIx technology features Movie and Music modes that function with 5.1 as well as stereo sources, including 24-bit/192kHz and 24-bit/96kHz sources. The Game mode restores the impact low-frequency surround effects by routing them to the system's subwoofer. Dolby Pro Logic IIx technology delivers a natural and immersing 7.1-channel listening experience to the home theater environment.

Dolby Headphone technology allows users to listen to music, watch movies, or play video games with the dramatic surround effects of a 5.1-channel soundtrack through any set of headphones. Best of all, "listener fatigue," a phenomenon commonly associated with headphone playback, is replaced by a spacious, natural sound field that listeners can enjoy for hours.

Current Feedback power amplification

The SR5500 features a fully discrete 7 channel amplifier section capable of delivering 90 watts of high-current amplification, for continuously clean and stable power into each of the 7 channels. Current Feedback amplification is a well known, Marantz' original circuit technology accomplishments from the HiFi amplifier field. Due to the introduction of Super Audio (Super Audio CD, DVD-Audio) multi-channel software and an increasing amount of universal disc players, AV Receiver/ amplifier require a higher performance amplifier not only for digital surround sound from DVD Video via the digital input, but also for analog multi-channel. Even in the DVD Video world the amount of higher quality software increases with formats like DTS 96/24.

The Current Feedback amplifier technology fits perfectly with the high requirements set for this Super Audio software providing wide-bandwidth, high-speed reproduction.

The impedance at the Current Feedback point is limited resulting in a very low phase shift. The SR5500 therefore can keep the phase compensation via Negative FeedBack (NFB) to a minimum, resulting in high through-rate, excellent transient response and superb sonic transparency for the full bandwidth up to 100kHz.

Video conversion

SR5500 is equipped with a high quality video conversion. It can up convert the Composite signal to S-Video/Component and S-Video to Component; as well as down conversion from S-Video to composite (the component signal is not down converted). This feature allows you to connect the best possible video cable between the SR5500 and the display and of course you only need one. In order to avoid synchronization and eroded video quality problems, the SR5500 has a high quality video converter equipped with digital video processing. The SR5500 provides you the highest analogue quality from all sources connected via a single component connection.

Experiencing the emotion

Music and sound track reproduction is enhanced through a highly efficient source direct switch, which bypasses the total A/V section in audio mode. In direct mode, interference and disturbance by radiated electrical or magnetic fields are minimized, ensuring the shortest signal path for the highest degree of clarity and detail. Highly accurate 192kHz/24-bit audio D/A converters process the analog to digital conversion, resulting in a far more faithful sound quality compared to the original source. It encompasses the Marantz heritage with refinements such as a metal alloy faceplate, a efficient video off mode and high grade components.

Matching audio and video

The digital processing and scaling of video displays can create a slight delay in the video signal. This delay makes audio tracks appear out of synch. Using sound delay you can slow the sound presentation to match the presentation of the video. The Sound Delay on the SR5500 adjusts in increments of 10ms steps from 0-200ms.

Convenience & functionality's

The SR5500 is equipped with a 2 Component input terminals to connect your video source through the centre of your home entertainment. It provides one touch switching of video and audio source with a high quality reproduction and feeds useful information onto the screen via the userfriendly OSD. It features heavy duty speaker binding posts and an extensive array of both analog and digital in-outputs. The SR5500 presents in addition an extensive feature list, such as auto preset tuning (program up to 50 stations), manual station naming, front panel cursor control, delay function and clock/timer. With the Marantz audio system placed in the main room of the house, a second pair of loudspeakers can be placed at a separate room. In those rooms an audio source can be selected separately at a different sound level, even with full remote controlled functionality.

In Marantz style

To control entire system with one remote handset, Marantz has designed the D-Bus system. The unique Marantz D-Bus connection allows convenient linkage to other Marantz components Individual devices inform each other and remote control commands are communicated via this bus line, while the RS232c communication port allows full CI integration. The SR5500 comes with an easy to use pre-coded remote control, for full intuitive and extensive system control.

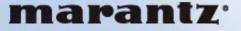
Bypacked accesories

- User manual

- Power cable
- Remote control
- Batteries
- FM antenna
- AM loop antenna

RC5500SR







FEATURES

MULTICHANNEL SURROUND
THX Ultra II / Select -/-
THX Surround EX -
DTS 5.1 / -ES / 96/24 •/•/•
Dolby Digital / Dolby Digital-EX •/•
DPL / DPL II / DPLIIX •/•/•
Circle Surround II •
Virtual Surround •
Multi Channel Stereo •
HT-EQ / Re-EQ •/-
Other Surround Modes -
Headphone Surround Dolby Heaphone
Auto Surround Mode Detection •
HDCD Decoder -
WMA Pro / WMA / MP-3 decoder -/-/-

SOUND ENHANCEMENTS

Current Feedback Topology •
Real full channel power drive (70%) •
Discrete Amplification (All)
Pure Direct •
Power Transformer: Super Ring/ -/-/•
Toroidal/EI
Linear Drive Power Supply (LDPS) •
Copper Plated Chassis -
D/A Conversion: 192kHz/24-bit /
96kHz/24-bit
Digital Signal Processing: 24-bit /
Precision 32-bit Decoding / 32-bit / -/-/•/-
64-bit
Adaptive Double Differential Control/ _/-
Quad differential DAC
Bi-amp drive (5.1 ch setting) -
Video Off •
System block shielding: Copper / Metal -/-
High Grade Audio Components •
Customised Components -
HDAM -
HDAM: Standard / SA / SA2/
Current Feedback
HDAM cover: Gold plated / Copper
plated / Metal /no shield
Intelligent Silent Cooling system -
Chassis : Die-cast / Copper plated / _/-/•
Metal
Chassis Stabilisation Bracing -
Double Layer Bottom Plate -

OTHERS

MRAC (Marantz Room Accoustic	
Corrections)	-
Easy setup	•
On Screen Display: main / multiroom	•/-
Variable cross over	•

RS232C

Design and specifications are subject to change by Marantz without notice.

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Front panel cursor c	ontrol	•
Video	• (CVBS $< > S < 3$	>
conversion	Com	p)
Line memory (video		•
Analogue down mix		-
Multiroom: Shared s	ource / multi	
source	7	/•
Multiroom zones		1
		1
Speaker A/B		-
Double tuner		-
GYRO Touch Tuning	*	-
DSD direct conversion	On	-
Lip sync control		•
Random Tuner Prese		50
RDS: PTY/PS/CT/TA		-/-
Auto TV Switching (On/Off)	•
Discrete RC coding		•
Bi-directional remote	e control	-
Low Noise LCD disp	lay	-
Software Upgradabl	e (RS-232)	-
Bi-directional control	ol via RS232C	•
IN/OUTPUTS		
VIDEO		
Composite In/Out (i	ncl monitor out) 5	/3
S-Video In/Out (incl		/3
Component In/Out		/1
Gold Plated In/Out (_
Scart In/Out	(onion)	_
DVi in/out		_/_
HDMI in/out		_/_
Video processing ex		′_
Multi-Room Video C	nut: CVBS / S-	
Video / Component		-/-
<u>AUDIO</u>	/ outer	
Analogue In/out	8	/4
Digital Optical In/O		/1
Digital Coaxial In/O		/1
Multichannel USB	ut <u>2</u> ,	1
	dia)	-
IEEE 1394 input (Au Gold Plated In/out	(10)	-
		-
Multi-Room Audio C		1
Pre- Amplifier Out ((inanneis)	7.1
Main Amplifier In	. –	-
Multichannel in char	nnels	7.1
Multi-Channel In		1
Headphone Out		•
OTHER		
Speaker Terminal: G	old plated screw / _	/•
regular screw (all)	,	
Multi-Room Speaker		•
Multi-Room D.Bus Ir	ı/Out	•
D.Bus In/Out		•
External IR In / Emit	ter Out	-/-
IR Flasher In		-

DC Triggers -
AC Outlets (Not for UK Model) •
\mathbf{T} is the let \mathbf{I} \mathbf{I} \mathbf{I}
S-Video / Digital (0pt)
5-video / Digital (opt)
SPECIFICATIONS
AUDIO SECTION
Power Output (8/4 Ohm RMS) 90/- Watts
D/A Converter CS4382
Digital Signal Processor CS494003
Signal to Noise Ratio *
Frequency Response 10Hz to 100kHz
(Analogue In) (+/- 3dB)
Frequency Response 5Hz to 45kHz (+/-
(Dig In) 3dB)*
Total Harmonic Distortion (THD) 0.05% *
Stereo separation 70 dB (kHz) *
Input Sensitivity/ 168 mV / 47
Impedance kOhms*
TUNER SECTION FM
Frequency Range 87.5 - 108.00 MHz
Signal to Noise Ratio (mono/ 75/70
stereo) dB
Distortion mMono/stereo) $0.2 / 0.3 \%$
Channel Selectivity +/- 300 kHz / 60 dB
Usable Sensitivity IHF 1.8 uV / 16.4 dBf
Channel Separation 1 kHz 45 dB
TUNER SECTION AM
Frequency Range 531 - 1602 kHz
Signal to Noise Ratio 50dB
Distortion 400Hz, 30%mod 0.5 %
Channel Selectivity +/- 20kHz 70 dB
Usable Sensitivity Loop 400 uV
VIDEO SECTION
Input level/impedance 1 Vp-p / 75 ohm
Output level/impedance 1 Vp-p / 75 ohm
Video frequency response 5-30MHz
Component video ferquency 5 to
response 80MHz*
Signal to Noise Ratio 60 *
GENERAL
Available colors, Platinum/Cold/
Silver/Black

Metal Front Panel

Power Consumption

Detachable Power Cable Maximum Dimensions (W

System Remote Control: Pre-

programmed / Learnable /Touch

marantz[®]

Remote Control

Screen

x D x H)

Weight

RC5500SR

440 x 463 x

162 mm

13kg

•/-

/-

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