# marantz

## AV RECEIVER SR-12S1



Platinum available



## SR-12S1 Premium THX Ultra2 Digital Surround Receiver

The SR-12S1 is one of the finest home theater receivers ever created by Marantz - or anyone else! The luxuriously finished SR-12S1 represents the highest achievements of Marantz designers and engineers in the reknown Premium-Series. The SR-12S1 redefines the state-of-the-art in audio/video receiver performance. It delivers the legendary sound quality that has made Marantz the number one choice of the most discriminating audiophile and home theater enthusiasts. In the ultimate quest to preserve the integrity of audio and video content, every individual aspect of the SR-12S1 reinforces the commitment to our aspirations. The accompanying RC3200 Programmable Touchscreen Learning Remote Control is light, ergonomic and housed in a high-tech design. It provides effortless, intuitive control and navigation. An enduring investment...



#### Features:

- Most advanced New Digital Signal Processing: THX Ultra2, Precision 32-bit decoding Dolby Digital and DTS, 96/24 decoding DTS and Circle Surround II
- Wide range full discrete Current Feedback amplifiers
- Addaptive Double Differential Control (A.D.D.C.) for stereo playback
- Precision 32-bit decoding
- Top grade audio components
- Component video switching
- Bi-directional RC3200 Remote Control and Marantz D-BUS system
- Multi room / multi source system
- Firmware update through RS-232C port

### Technological glossary:

#### Challenge the future

The high performance Reference -Series SR-12S1 details our heritage of technical excellence in the highest segment of Home Theatre Systems. Technologies like THX Ultra2 specification provide uncompromised enveloping 7.1 channel playback of any multi-channel program, wether it's movie soundtracks or music, over the widest possible seating area. With a fully discrete 7 channel amplifier section capable to deliver 160 watts of highcurrent amplification, the SR-12S1 ensures an incredibly fast dynamic performance and delivers a continuously clean and stable power into each of the seven channels. The rigid, copperplated casing and extensive bracing reduce the risk of vibration and electromagnetic interference. Ease of control during setup and operation is guanrateed through the RC3200, with two-way communication which will display the status of the SR-12S1 on the back-lit touch screen panel.

## THX Ultra2, Advanced Speaker Array & Boundary Gain Compensation

The SR12S1 features THX Ultra2 which incorporates two additional processing technologies: Advanced Speaker Array (A.S.A.) and Boundary Gain Compensation (B.G.C). Asa is a proprietary THX technology which processes the sound fed into 2 surround and 2 surround back speakers to provide the optimum in enveloping surround sound reproduction. When placing the 2 surround back speakers close to each other and building your home theater setup using 8 speakers, ASA will create the largest possible sweet spot in your surround soundfield. ASA is used in 2 new surround modes: THX Ultra2 Cinema mode and THX Music mode. THX Ultra2 Cinema mode plays 5.1 movies using all 8 speakers, processing the side surround speakers and back surround speakers providing the optimal mix of ambient and directional surround sounds. For the replay of multi-channel music the THX Music Mode ASA processes the surround channels of all 5.1 encoded music sources such as DTS and Dolby Digital to provide a wide stable and natural rear soundstage.

Notes: Both modes are only available having a 7.1 speaker system (2 back surround speakers) and the input signal has surround left and Surround Right content! Boundary Gain Compensation provides an optimised bass balance in case the listening room layout results in most of the listeners being seated close to the rear wall. This technology prevents a 'boomy' bass yet processes the appropriate bass reinforcement.

### **Benefits:**

- Ensures the best aural characteristics in differently encoded movie and music content. Benefits are an extended dynamic range, improved transparancy, separation and imaging which all result in a dramatically improved sense of realism
- Excellent frequency response and superb sonic perfomance for the highest standard such as SACD and DVD-Audio
- Utilizing two DACs per channel in opposite phase, offering the most superb and detailed soundstage and accurracy
- Let's you enjoy a smoother and more realistic surround reproduction for both DD and DTS material
- To ensure the renown premium Marantz sound reproduction
- Multiple component inputs for optimized video switching regardless the source and video format
- Flexible system integration and total control by using one remote handset
- Allows audio and video source selection and control of a second room
- Make today's receiver for tomorrow's standard ready

#### THX Surround-Ex

THX Surround-Ex brings a new dimension of depth, spacious ambience and sound localization to home theatre environment. Feature films originally released in Dolby Digital Surround EX carry the encoded third surround channel in their subsequent DVD releases, as well as onto 5.1-channel digital satellite and terrestrial TV broadcasts. The benefits of Surround EX include more realistic flyover and fly-around effects, a more stable image for atmospheres and music, and a more consistent surround effect throughout the auditorium or home viewing area. The SR-12S1 provides this effect via two additional Surround Back channels. The overall effect is one of phenomenal sonic realism, and audible sense of 'being there' that has never before been realised at home.

#### DTS-ES, 96/24 decoding

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.

#### **Dolby Pro Logic II**

Dolby Pro Logic is capable of producing a Multi Channel soundstage using only a two channel source, meaning that normal TV broadcast can only be decoded using this decoding technique. Now the standard is being successed by the Dolby Pro Logic II format, offering the full frequency range accross all channels and even with a stereo soundfield on the surround speakers. This experience of two channel decoding adds a more realistic element to watching TV and is fully compatible with the Dolby Pro Logic standard.

#### Unique distinction

The SR-12S1 features a number of unique Marantz sound enhancements like Current Feedback topology amplification with ample reserve of energy to drive low impedance loudspeaker loads. It incorporates leading edge digital signal processing, along with a Crystal 192 kHz/24 bit D/A converter in each of the seven channels. In 2-channel mode, the high grade DACs automatically switch to dual differential mode for a highest possible D/A conversion quality. All of the digital, analogue and control circuits are separated and extensively shielded in their own enclosures to prevent cross-talk and other unwanted interference.

Independent power supplies for the FL display, audio and video sections secure maximum separation, clarity and dynamics. Hand-selected high grade customised components, gold-plated terminals and a copper plated chassis all work in harmony. It employs an extensively braced and shielded, massive super ring toroidal power transformer in combination with quad marantz blue, oversized filter capacitors. To achieve a top-notch competitiveness Marantz has also designed a new intelligent cooling system and a high efficiency heatsink. This design configuration is capable of a clear and powerful reproduction of the most demanding action movie soundtracks and full range (multi channels) music discs.

#### The Centerpiece

The SR-12S1 is equipped with 5 component terminals to connect your video sources 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 multi room/multi source, 2 assignable DC triggers, a RS232c communication port, high grade - heavy duty - speaker binding posts and an extensive array of both analog and digital in-outputs. With 9 assignable digital inputs (10 in total), 1 scart input, SACD Multi-Channel (7.1 channel) direct inputs and a multi room speaker and OSD output versatility is taken to a new stunning level. To allow the connection of a separate digital multi-channel decoder, the SR-12S1 has an 7.1 input of which each channel is completely independent. This input is connected to the power amplifiers with only volume control in between. Future technologies can therefor be easily incorporated and making this AV receiver future proof. With the Marantz audio system placed in the main room of the

house, a second loudspeaker set can be placed in the main room of the house, a second loudspeaker set can be placed at a separate room. In those rooms separately an audio source can be selected at a different sound level, even with full remote controlled functionality. Not only sound but even video signals can be handled in such a way that in the separate room a video source with OSD feature can be selected.

#### In control

To control entire system with one remote handset, Marantz has designed the D.Bus system. Individual devices inform each other and remote control commands are communicated via this bus line. The SR-12S1 comes with the RC3200, a programmable LCD touch screen learning remote control, with two way communication to fully control every Marantz and non-Marantz components. 1 MB memory, a computer connection (via RS232c) to upload customized control codes, programmable macro's and a wide carrier range for compatibility with other brands. The total functionality of the RC3200 enables intuitive and extensive control over your SR-12S1, but also other IR based devices.

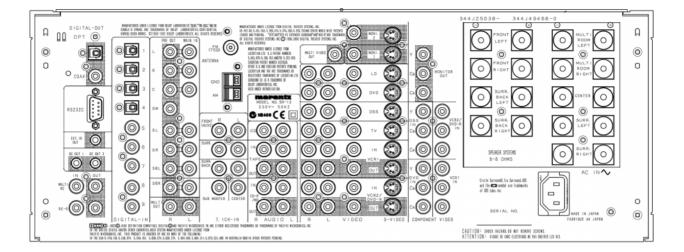
## **Bypacked** Accessories

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

#### **RC3200**







## SR-12S1

## **FEATURES**

MULTICHANNEL SURROUND		
THX Certification	Ultra 2	
THX Surround EX	THX Surround EX	
DTS ES(Matrix/Discret	e), Neo:6, DTS96/24	
Dolby Digital	DD / DD-Ex	
Dolby Pro Logic	DPL / DPL II	
Circle Surround	6.1	
Virtual Surround	•	
Multi Channel Stereo	•	
Other Surround Modes	Movie, Hall, Matrix	
Headphone Surround	-	
Auto Surround Mode Detection		
HDCD Decoder	•	

## SOUND ENHANCEMENTS

Current Feedback Topology	•	
Discrete Amplification (All)	•	
Power Transformer	Toroidal	
Linear Drive Power Supply	•	
Copper Plated Chassis	•	
D/A Conversion 1921	xHz/24bit All Channel	
A/D Converter	96kHz / 24bit	
Digital Signal Processing	24bit, Precision 32bit	
	Decoding	
Digital Signal Processor	CS49329 + CS49330	
Adaptive Double Differential Control •		
Video Off •		
High Grade Component Video Switching •		
Source Direct •		
System Blocks Shielding •		
High Grade Audio Components •		
Costomised Components •		
Intelligent Silent Cooling system •		
Chassis Stabilisation Bracing •		

## OTHERS

GYRO Touch Tuning	•
Random Tuner Presets	50
RDS	PS, PTY, RT
Speaker Distance Correction	•
On Screen Display	Main / Multi Room
Auto TV Switching (On/Off) •	
Software Upgradable (RS-23	2) •

## **IN/OUTPUTS**

VIDEO	
Scart In/Out	-/-
Composite In/Out (incl mo	nitor out) 7/4
S-Video In/Out (incl monit	or out) 7/4
Component In/Out	4/1
Gold Plated In/Out (Cinch)	•
AUDIO	
Analogue In/out	10/4
Digital Optical In/Out	5/1
Digital Coaxial In/Out	5/1
Gold Plated In/out	•
OTHER	
Pre- Amplifier Out	7.1 channels
Main Amplifier In	7
Multi-Channel In	7.1 channels
Speaker Terminal Heavy Du	ity Gold Plated Screw,
Multi-Room Audio Out	•
Multi-Room Video Out	CVBS
D.Bus In/Out	•
Multi-Room D.Bus In/Out	•
External IR In/Out	•
IR Flasher In	-
RS232C	•
DC Triggers	2, assignable
Front Inputs	Audio/Composite/S-
	Video/Digital(Opt)
II 11 O	

Headphone Out

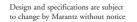
## **Preliminary Specifications**

## **SPECIFICATIONS**

AUDIO SECTION	
Power Output	160W/ch (6 ohm)
Signal to Noise Ratio	106 dB
Freq. Response (Analog	gue In) 8Hz - 80 kHz (+/-
	3dB)
Freq. Response (Dig In	) 8Hz - 45 kHz (+/- 3dB)
Input Sensitivity/Impe	dance 195 mV / 47kohm
TUNER SECTION F	М
Frequency Range	87.5 - 108 MHz
Signal to Noise Ratio	75 / 70 dB (mono/stereo)
Distortion (Mono/Ster	eo) 0.2 / 0.3 %
Channel Selectivity	60 dB (+/-300kHz)
Usable Sensitivity	IHF 1.8uV / 16.4 dBf
Channel Separation	45 dB (1kHz)
TUNER SECTION A	М
Frequency Range	152-282kHz (LW), 531-
	1602kHz (MW)
Signal to Noise Ratio	50 dB
Distortion	0.5% (400Hz 30% mod)
Channel Selectivity	70 dB (+/-18kHz)
GENERAL	

#### GENERA

Color	Platinum / Gold
Metal Front Panel	•
Remote Control	RC3200
System Remote Function	Learning/Touch
	Screen/2-way
Power Consumption	530 W
Detachable Power Cable	•
Maximum Dimensions (W	x D x H)
	440 x 184 x 480 mm
Weight	t.b.d.



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