

marantz[®] Super Audio CD Player

SA-11S1



Also gold available

SA-11S1 Super Audio CD player

Today's digital circuitry is capable of truly remarkable renditions of the clarity and emotional content of music. Nowhere is this more clearly seen than in the latest SA-CD player of Marantz. The SA-11S1 SA-CD player has an unsurpassed rhythmic intensity and a quality of dynamics and pace more usually associated with the recording studio. The new DAC in combination with exclusive by Marantz developed digital filtering provide stunning SA-CD and Audio CD stereo playback. A multitude of sound enhancements make this player a must for every audiophile and true music lover

NEW



SUPER AUDIO CD



P R E M I U M S E R I E S

because music matters

Features

- SA-CD playback
- Selection of Marantz exclusive digital filtering options
- Super Ring power transformer
- Copper plated Chassis
- Choke input power supply
- Current Feedback HDAMs
- Customized components
- Switchable DC filter
- Switchable noise-shaper

Benefits

- For an incredible 'live' experience
- Allows you to fine tune your preferred music reproduction
- Ultra low vibration and leakage flux keep the signal clean and minimizes internal electro magnetic distortion
- Copper shielding eliminates all possible radiation interference which can have a negative effect on the sound quality
- Reduced rectifier harmonic noise
- Achieving a more dynamic, accurate and detailed sound reproduction regardless the amount of channels
- For superb sound quality
- Removes DC components added to the signal that could be added especially with older recordings
- On top of the digital filters it allows additional fine tuning

Technological glossary:

Digital Breakthrough

Evolved from the globally raved SA-1 Marantz presents its latest new stereo SA-CD player in the Premium series. The Marantz SA-11S1 Super Audio CD Player brings the highest quality audio to the audiophiles. It's our answers to concerns of audiophiles regarding functional integration at the costs of audio quality. This player utilized all the benefits of the SA-CD format in stereo and of course allowing also standard CDs to be played back at reference quality. Constructed according to highest standards with a copper shielded chassis, high grade power supply and audiophile components, to preserve the signal integrity and the original sound stage. The SA-11S1 expresses the Marantz dedication to the purest reproduction of musical emotion!

Super Audio playback

Enjoy the fabulous world of high resolution audio! Finally you can have an incredible close to original experience in your home as it was in reality. Not only the total ambiance is reproduced, but also the natural 'sound' of the instruments is being preserved. SA-CD is based upon the DSD conversion principle that links excellent specifications like a frequency range of 100 kHz and a dynamic range of 120 dB, to superb sound quality.

Marantz original filtering

In the past, lack of true understanding in digitally filtering the signal's spurious images and unwanted noise compromised even technology advances multi bit DACs by introducing pre and after echo. For the SA-11S1 Marantz has stepped right back into the digital domain by using a special D/A converter which allows external Digital Signal Processing. In most applications the digital filter is incorporated in a special IC with very little flexibility. In SA-11S1 Marantz uses a Motorola DSP and therefore all parameters can be influenced and optimized by Marantz. The DSP's software is designed with an accuracy of 48 bits. This DSP allowed us to develop a brand new filter which acts with extreme subtlety and precision before the datastream is converted to analogue. This new Marantz filter which 'adds' only the interpolated samples and keeps the original samples of the CD untouched providing a very short impulse response. In addition we have included the Marantz Linear Music Filter as applied in the CD-7. We have modified the LMF to a 8-times oversampling structure. It can compensate for the characteristics of analogue filters to ensure a flat frequency response and zero phase distortion in the audio band. Its 8-times oversampling shifts spurious images and noise far outside our range of hearing. The third filter option available on the SA-11S1 is a standard 8 times oversampling FIR filter with very low passband ripple and a stopband attenuation of >50 dB.

Current Feedback HDAMs

Audio devices are usually equipped with Op-Amps (operational amplifiers) for which Integrated Circuit (IC) are commonly used. Unfortunately these IC's do not match the very high requirements of Marantz. Marantz developed its own discrete circuit boards to replace the IC's. These HDAM's consists of discrete components with short mirror image L/R signal paths. Those devices are doing exactly the same thing as the Op-Amps, but outperform the regular IC Op-amps dramatically in terms of the Slew Rate, resulting in a much more dynamic, accurate and detailed sound. There are no IC OP-amps used at all in the SA-11S1's analogue signal path. Its analogue audio circuitry is a full discrete design including newly developed Current Feedback HDAM modules that operates as a buffer amplifier and as a Low Pass Filter. Both channels are completely identical in terms of components and circuit layout. This is extremely important to be able to enjoy a breathtaking sound stage of stereo SA-CD material.

Customized Components

Every Marantz product is designed with a fine ear and eye for details. The designers have to know the characteristics of every component. On paper the component might look excellent but the result may fall short of the combined design expectations. Therefore Marantz collects vast amounts of information upon specific component performance capabilities. Marantz selects the appropriate components for the specific design application. The sonic result is then critically acclaimed by international reviewers. In other cases it's simply not possible to use standard components that meet the high Marantz standards. These components will then be specially made for Marantz only in co-operation with the Marantz engineers. Examples in the SA-11S1 are the stress-free electrolytic capacitors and the shot-key diode. These are used in the rectifier circuit. High-grade electrolytic and film capacitors are used in the audio circuitry. All the regulators are covered with a copper plated shielding that prevents vibrations and radiation of electro-magnetic noise.

A touch of Marantz

The strength of each Marantz design can be found in the attention to detail and cohesiveness of the different elements. The SA-11S1 is a clear example of benchmark engineering and craftsmanship and features a number of Marantz sound enhancements. The SA-11S1 SA-CD player is built on a solid copper plated chassis. Extensive bracing, copper plated shielding, a double layer steel bottom plate and shock-absorbing feet result in minimized internal vibration and mechanically induced jitter. All of the digital, analogue and control circuits are separated and shielded in their own enclosures to prevent cross-talk and other unwanted interference. Independent power supplies for each dedicated system block secure maximum separation, clarity and dynamics. Symmetrical laid out hand-selected Customised Components, luxurious machined brass gold-plated terminals and the renown Marantz HDAMs all work in harmony. This design configuration is capable accurate reproduction of the most complex music pieces composed.

Switchable DC filter

Poor A/D converters and mastering equipment of the past allowed that some CDs have a DC level added to the music signal. This can degrade the sound quality in the D/A converter and the analog output amplifiers. By switching it ON/OFF we allow to critical listener to decide under which conditions the disc sounds better.

Super-Ring transformer

A Super-Ring transformer has the same advantage as a toroidal transformer; such as high efficiency, stability, and speed. In addition to that the Super Ring transformer outperform the toroidal transformer on certain aspects. Thanks to its round shape of the core, the super ring transformer's electromagnetic radiation and mechanical vibration are extremely low. On the SA-11S1 the Super Ring transformer is applied for the audio circuitry dealing with both analogue and digital stages. The windings inside the copper shielded transformer are split and separated for the digital circuitry and for the analogue audio circuitry. That latter also receives its power through a separated rectifier circuit that is placed in separated area to prevent any interference."

Zero Impedance Matching Joint

In the final stage of the audio circuitry, the near to Zero-Impedance Matching Joint ensures the exact same ground potential for all channels. This improves the drivability of the next stage in your audio chain. The muting circuitry does not comprise of transistors but is designed with relay based switching, which contribute also to lower output impedance.

Pure audio modules

We've taken advantage of insight from all past Super Audio CD player development to create new mechanism modules specifically for audio applications. Noise radiation is extremely faint, and shielding is provided by box construction incorporating the chassis, preventing any noise from penetrating inside. The tray is finished with an elegant coating that also dampens vibration, and we've chosen black as an ideal color for minimal effect on laser diffusion.

Marantz D-Bus system control

To optimize a Marantz system solution in terms of ease of use, Marantz has designed the D-Bus system. Individual Marantz devices equipped with this special bus system inform each other in order to automatically tune to the customers demands. Also received remote control commands are communicated via this bus, throughout the Marantz system solution chain. This enables equipment without IR-receiver, like a cassette deck or tuner, to be controlled via the receivers system remote control. In combination with an simple external IR receiver, it's even possible to control a fully hidden system.

Bypacked accessories

- User manual
- Power cable
- Remote control
- Batteries
- D-Bus cable
- 1 pair Audio cinch-cable

RC-11SAS1 (no picture available)

(no picture available)

FEATURES

Disc Capacity	1
CD Compatibility: CD / CD-R/RW	•/•/•/-
/ SA-CD / WMA / MP3	/-
SA-CD compatibility: Multi channel / stereo	-/•
CD-Text / SA-CD Text	-/•
High Grade Audio Components	•
Customised Components	•
Symetric circuit layout	•
System block shielding: Copper / metal / none	•/-/-
Power Transformer: Super-ring / Toroidal / EI	•/-/-
Copper grounding	•
HDAM: Standard / SA / Current Feedback	•/-/•
HDAM cover: Gold plated / Copper plated / Metal /no shield	-/•/-/-
CCNE	-
Shottky diodes	•
Relay muting	•
Selectable filter: CD / SA-CD	•/•
Noise shaper (on/off)	•
DC filter (on/off)	•
Zero Impedance Matching joint (copper)	•
Separated rectifier circuit for analogue and digital Circuitry	•
Digital out circuit off	•
Phantom center mode	-
Display: Dimmer / Off	-/•
Output filter switch	•
Variable Analogue Output	-
Discrete Coding	•
Current Feedback headphone circuitry	-
Low Noise LCD display	•
Chassis : Die-cast / Copper plated / Metal	-/•/-
Double layer bottom plate	•
Bi-directional control via RS232C	-

PLAYBACK

Program Play	30
Auto Music Scan (AMS)	•
Repeat: track/program/A-B	•/•/•
Random Play	•
Index Search	-
Peak Search	-
Edit Recording	-
Sync Recording	-
Pitch Control	-
Start Sound Mode for SA-CD	•
Quick Replay	•

INPUTS/OUTPUTS

Analogue Out (Cinch)	2ch
Balanced Out	•
Digital Optical Out	•
Digital Coaxial Out	•
Gold plated Cinch	•
D-Bus In/Out	•
RS232C	-
Headphone Out	-
Headphone Volume Control	-

SPECIFICATIONS

Mechanism	FGSA11
Decoder	CXD1885Q
D/A Conversion	multi-level DAC
DAC IC	SM5866AS
Digital Filter	DSP(Marantz)
Noise Shaper	DSP(Marantz)
Low Pass Filter stage	HDAM
Output Buffer	HDAM+Current

SA-CD AUDIO

Frequency Response (Cust.)	2Hz-50kHz (+0, -3dB)
Dynamic Range	114dB
Signal to Noise Ratio	114dB
Total Harmonic Distortion	0.0008
Channel Separation	100dB

CDDA AUDIO

Frequency Response	2Hz-20kHz
Dynamic Range	100dB
Signal to Noise Ratio	104dB
Total Harmonic Distortion	0.0015
Channel Separation	100dB

GENERAL

Available colors: Platinum/Gold/ Silver/Black	•/•/- /-
Metal Front Panel	•
Remote Control	RC-11SAS1
Power Consumption	25 Watts
Detachable Power Cable	•
Maximum Dimensions (W x D x H)	440 x 123 x418
Weight	14Kg

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

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