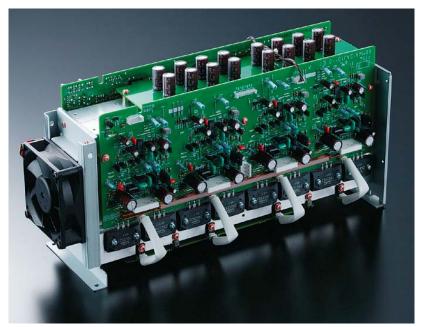# Introducing
The soon to be legendary
SR9600
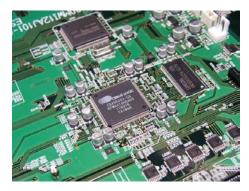# Audio Video Receiver

marantz®

LIFE AMPLIFIED

Boxer Amplifier Design with Active Intelligent Cooling

This highly efficient amplifier design utilizes a "tunnel" type heatsink with an extremely quiet variable speed fan that doesn't even turn on until serious heat occurs. This assures the owner of audiophile level silence. The amplifier uses an OFC copper rail for the power supply side of the output transistors as well as specially sourced OFC cables for the power supply and the speaker outputs.

Dual 32 bit DSP

The SR9600 is one of the first products in the world to use the new Cirrus Logic CS49502 DSP. This chip has unprecedented processing power and utilizes two 32-bit cores for the ability to complete *over 260 million instructions per second*. This enables the extremely complex post-processing of the audio signal to be a cakewalk for the SR9600.

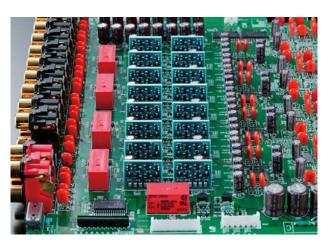## 192 kHz, 24 Bit A/D for 7.1 Channel Input

For audiophiles seeking to use the analog multi-channel input but who wish to use the bass management and/or time alignment, fear not. The SR9600 has high bandwidth A/D converters for those inputs as well. This enables a global setup to wok for all sources, analog or digital.

Improved Volume Control

Most of the electronic volume circuits in the past have been calibrated in 1dB increments. The SR9600 is calibrated in 0.5dB steps for more precise control over the volume level.

HDAM-SA2

The original HDAM® module (High Definition Amplifier Module) was developed in the mid nineties to replace the IC op-amps that were used to buffer the voltage portions of output stages. These legendary circuits have helped shape the "Marantz Sound" and have been used in many highly regarded products since. In this latest version, designed for high bandwidth audio sources, the signal paths are as short as possible, for reduction of external noise and reduced mounting area. The *SR9600 uses 16 of these devices* at the juncture between the preamplifier and power amplifier stages.

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IEEE-1394

IEEE-1394 (otherwise known as FireWire™ or i.Link™) is a high speed (up to 400 mbps) serial data bus that is designed to move digital information. It has several flavors, depending on which type of data is being used. For example, in the video world, 1394 is used to move high definition transport streams, which are the MPEG-2 compressed bit streams that you could watch, decoded on your HD monitor at home. It is also a standard connection for digital camcorders. In the audio world where the SR9600 lives, IEEE-1394 is used to deliver encrypted multi-channel audio from source products like DVD-A and SACD to the receiver. The advantage is both in fidelity as well as convenience, because only one wire can be connected instead of the multiple connections that have to be made for multi-channel analog. Another advantage is that since the information enters the receiver in digital format, it can be processed for bass management and time alignment like every other signal. This enables the owner to have setup done once and every signal will be processed in a similar fashion. To further add to the fidelity, flow rate control is used along with a special extremely high bit rate conversion from DSD (for SACD sources).

Flow Rate Control

This circuit allows the receiver to control the signal transfer speed. It uses the receiver's extremely high precision clock to regenerate the original digital signal, eliminating any jitter that might occur. This results in a **_fourfold decrease in distortion in the audible frequencies!_**

32 Bit DSD – PCM Conversion

This Marantz designed audio circuit allows super high quality conversion of the DSD bit stream from SACD to high bit rate PCM for post processing. This allows MRAC, bass management, time alignment or any other post processing to occur in the digital domain. It is bypassed in the DSD DIRECT mode.

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

This allows fully uncompressed digital video to not only pass through the receiver, but since there are two inputs, you can switch sources as well. The HDMI™ interface has a maximum bandwidth of 5 gbps for DVI quality video, audio, and control signals. The SR9600 uses the 1.1 specification that carries two and multi-channel audio from sources like Dolby Digital, DTS, and DVD-A in addition to uncompressed video up to 1080p. This interface is rapidly becoming the standard for interconnecting all audio, video and control devices.

MRAC with EQ

The MRAC (Marantz Room Acoustic Calibration) was started in the current SR7500/8500. It makes really easy the often confusing and time consuming process of setting up your receiver/speakers/room. Through using a special calibrated microphone and the logic nested in the receiver, MRAC is a new standard for both accuracy and ease of use. For the SR9600, we have **_improved on MRAC to include up to 9 bands of EQ for each and every channel to smooth room response in both stereo and multi-channel applications_**. This level of adjustment was previously unheard of in anything else other than extremely specialized acoustical calibration devices, but it is now standard equipment in the SR9600.

11 Choice Crossover Network
Previously, we have used three crossover frequencies for blending between subwoofers and main speakers. They have been 80, 100, and 120 Hz. While these frequencies will work well with almost any speaker/sub combination, there are certain setups that might be better suited with a different one. The SR9600 has 11 choices, from 60 to 200 Hz. This should satisfy even the choosiest audiophile.

9 Band EQ for each channel
The SR9600 includes a 9 band digital equalizer for each of the channels. It can be adjusted automatically using the MRAC system, or manually. You also have the option of adjusting it differently for two-channel operation or for smoothest response using all channels.

Automatic Video Input Selection
This technology will monitor the status of the video inputs and power on the receiver and/or switch to the active input. It simplifies the operation of the receiver greatly. For example, the owner could simply open the drawer of his or her DVD player and the receiver would turn on and select the DVD input. This can be defeated through the menu.

HD Component video switching with upconversion using Time Base Correction and 2 outputs
The SR9600 has a HD capable component switching section with a bandwidth of over 80 MHz for transparent source switching of Y/Pb/Pr signals. In addition, to allow just one cable to connect to your monitor, it has a Marantz designed video upconversion circuit with a Time Base Corrector (TBC) for tear free stable image from even aging VHS machines. Finally the SR9600 is the first receiver in our line to offer two outputs for the component signal, enabling two different display devices to be connected.

Three Zone
To add additional flexibility and versatility, the SR9600 has a three zone version of Marantz' lauded multi-source, multi-zone capability. Each of the two additional zones can be amplified, line level, at either fixed or variable output level and can be controlled from the front panel, via IR or RS232. Our system is so flexible that there probably isn't a situation that the SR9600 can't manage.

Dual Tuner
To make the multi-room system even better, the SR9600 includes two full AM/FM tuners. This allows simultaneous operation of both tuners tuned to different frequencies.

Direct IR Input and Output
To make the SR9600 as flexible as possible, there are direct IR jacks on the back of it. These have 12V phantom power on the shield, signal on the tip and ground on the ring. These jacks, along with fully discrete commands for all main and multi-room functions, make installing the SR9600 a smooth, reliable choice for your install team.

Discrete IR Commands
The SR9600 includes a full compliment of discrete IR commands, including the opportunity to control *both of the multi-zones and even all four of the DC triggers* remotely. An installer's dream comes true!

RS232
The latest RS232C protocol was co-developed by Marantz and a leading control system manufacturer. As such, it offers unprecedented control and lightning fast feedback of system status. This protocol will soon be posted on the websites of the major control system companies.

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