

CD - SACD - DVD Player - PULSAR SADV 1245 R HD incl. HDMI + PROGRESSIVE SCAN



The **SADV 1245 R** is a six-channel (multi-channel) player which plays two-channel and multi-channel audio from CD, SACD and DVD-V to the highest standards of quality. However, it also features a superb video processing section: the latter is based on the high-quality Progressive Scan Board for PAL and NTSC, which is equipped with the latest Faroudja video processor with DCDi technology and YUV outputs, and the video board featuring ultra-broadband Op-Amps (150 MHz) for Scart, S-Video and Video outputs.

T+A's overall design philosophy for audio playback is unique: for each music format there is an independent, dedicated signal processing section incorporating accurately matched pulse rates, and pulse resynchronisation, designed to minimise jitter. As in our High-End CD players, the CD and stereo signals are processed and reproduced to the highest standards of quality via separate stereo outputs. For SACD (multi-channel) reproduction we employ a separate processor-controlled signal processor section with eight converters, and pass on the analogue signals to the highest quality via six outputs. A jitter-free digital output is provided for DVD (AC3 and DTS). Of course, it would have been simpler and cheaper to reproduce all the formats via the multi-channel output, but there would have been considerable loss of quality, so this solution was not even considered by T+A.

Connection elements



Mechanism and decoder

This latest generation of highly refined mechanisms is crystal-controlled. The design is optimised for CD, SACD and DVD formats with precision dual-laser systems, and tracks discs with enormous security.

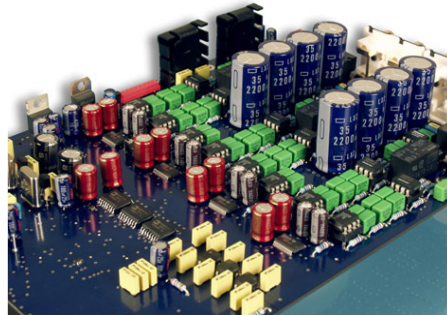
Mechanical encapsulation, vibration de-coupling measures and shielding keep all external influences away from the disc mechanism. The decoder is equipped with the latest generation of super-performance processors designed for the various formats; error correction was already good, but we have been able to improve it further. A crucial factor in the superb overall result is the ingenious, carefully considered overall design and layout of the individual sub-assemblies. Signal paths are kept to the absolute minimum length, thereby minimising their susceptibility to interference influences and conductor losses.

The mains power sections and voltage supplies for the digital and analogue sections are kept strictly separated, to avoid any trace of interference coupling. Both sections are extremely stable under load; the analogue mains section is even equipped with a toroidal transformer. Every stage features multiple stabilising measures!

D / A - converter

The new converter is unique even by T+A

standards. No fewer than ten highly selected Burr Brown D/A converters are employed; these are acknowledged as the world's best. The D/A board features eight converters whose task is to convert the multi-channel and stereo outputs, while two more are fitted to the Video board. The stereo outputs, or the front channels of the six-channel outputs, are supplied by four converters. Two are wired in parallel in double-mono mode for each channel. The result is that the background noise - already low - falls below the measurable limit, and total harmonic distortion and dynamic range are now at fabulous levels!



Of course, we use a freely programmable signal processor, so the player still features the switchable oversampling algorithms for CD / DVD playback for which T+A is renowned, i.e. the listener can select the best possible reproduction to suit his personal taste, according to the quality and mix of the disc material. For SACD playback our engineers have also developed oversampling and noise-shaper circuits which can be switched to four different modes, generating curves of different gradient and secondary wave suppression. These circuits make it possible to carry out highly effective fine-tuning to match the sound characteristics of the chain connected to the player. After the conversion section comes an extremely sophisticated audiophile analogue output section of discrete construction. The analogue output filters are switchable between 60 kHz and 100 kHz. To prevent any danger of the digital section influencing the analogue section, these two sub-assemblies are separated and de-coupled completely using a unique T+A circuit design. The control signals are transferred via opto-couplers, while the latest jitter-free magnetic iCouplers from Analog Devices are employed to cope with the high-speed data signals. The overall result is that the machine achieves genuine analogue High-End sound quality both with CD / DVD and also with SACD.

Specifications

Formats

<i>Video</i>	DVD, DVD+R / +RW, DVD-R / -RW, VCD, SVCD
<i>Audio</i>	CD, CD-R / RW, MP3-CD, SACD-Stereo + Multichannel
<i>Picture</i>	Picture CD (JPEG), Music MP3

Audio

<i>Audio outputs (analogue)</i>	Stereo (Differential-Doppel-Mono-Schaltung) Multikanal (6 channel) Stereo (TV 2-Channel downmix)	
<i>Audio outputs (digital)</i>	1 x coaxi, 1 optical IEC 60958 (CDDA / LPCM) IEC 61937 (MPEG1/2, Dolby Digital, dts) (1,2)	
<i>D/A - converter</i>	24-bit, 192 kHz, 8-times Oversampling	
<i>Frequency response</i>	CD	2 Hz - 20 kHz
	SACD normal	2 Hz - 60 kHz
	SACD wide	2 Hz - 120 kHz
	DVD - V	2 Hz - 22 kHz
	DVD 96 / 24	2 Hz - 44 kHz

Total harmonic distortion	< 0.002 %	
<i>effective system dynamics</i>	CD	100 dB
	SACD	110 dB
	DVD - V	100 dB
	DVD 96 / 24	110 dB
<i>Signal / Noise</i>	115 dB (A-weighted)	
<i>Channel separation</i>	110 dB	

Video

<i>D/A conversion</i>	10-bit / 54 MHz		
<i>Bandwith</i>	Luma	12,5 MHz	Cr 6 MHz
<i>HDMI - output</i>	HDMI with HDCP as RGB 4:4:4 or YcbCr as 4:4:4 with each 8 bits		
	Progressive-PAL 720 x 576 or Progressive-NTSC 720 x 480 depending on input signal		
	HDTV 720p		
	HDTV 1080i		
<i>HDMI-Audio</i>	Supports IEC 60958 2-channel PCM or IEC61937 compressed audio (dolby Digital, DTS,etc.) *1, *2)		
<i>Component-output</i>	Analog Output with 3 RCA-Jacks (cinch) for YpbPr with 4:2:2 or 4:4:4		
	Analog progressive 576/480 signal with 4x oversampling (108 MHz)		
	(All analog signals are 10 bit with resolution!)		

Allgemein

<i>Dimensions (H x B x T)</i>	7,5 x 44 x 39 cm
Remote control	via R-System
lieferbare Ausführungen	black (RAL 9005) Alu silber elox. Chrom * as non standard version

We reserve the right to alter technical specifications.

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2) "DTS" is a registered trademark of Digital Theater Systems, Inc.