CD - SACD Player - PULSAR SACD 1250 R

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T+A is introducing four new disc players covering the most important music and video formats. They are based on the converter technology of the preceding series, which provides superior sound quality, but now feature high-end loaders, mechanisms and decoders which are completely new developments. These innovations have brought a significant improvement in mechanical quality as well as enhanced disc reading and playback characteristics. The disc mechanism is equipped with absolutely top-quality components: heavy-duty motors from Mabuchi, a sub-chassis with excellent damping, steel pushrods, aluminium / ABS laminate disc drawer and metal encapsulation. The disc mechanism is suspended in a solid, special coated anti-resonance housing with a three-point mounting. The net result is that all four models feature the latest and most compact disc mechanism / loader design available on the world market.

The T+A philosophy of audio playback is unique: each music format has its own independent signal processing section with clock resynchronisation for jitter reduction and accurately D/A converter timing, i.e. CD and stereo signals are processed in exactly the same way as in our high-end CD players, and are reproduced to the highest standards of quality via separate stereo outputs.

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Characteristics

Consistent two-channel sound

The **SACD 1250 R** is a pure-bred two-channel player which we have developed for the purpose of obtaining the highest-quality stereo reproduction from CD and SACD. The T+A philosophy of audio playback is unique: each music format has its own independent signal processing section with clock and data resynchronisation for jitter reduction. This process was developed ten years ago by T+A, and synchronises the converter's clock signals perfectly with those of the disc mechanism. There are even different oscillators for CD and SACD.

No-compromise design

A crucial factor in the superb overall results of our players is the thorough, ingenious overall design and construction of all the individual sub-assemblies. Signal paths are extremely short, minimising interference influences and cable losses. The mains power supplies for the digital and analogue sections are strictly separated in order to avoid any

induced interference between them. Both sections are extremely stable under load, and the analogue power supply is even based on a toroidal transformer. Each stage of the power supply features multiple stabilising measures, and all sub-assemblies are separately encapsulated and shielded.

Bandwidth switching

SACD discs deliver a much higher bandwidth, and this can cause severe problems with amplifiers of moderate quality. One solution for us would have been to limit the frequency response of the player to the lowest common denominator, in order to cope with amplifiers of modest quality, and this would certainly have been the safe route. However, we were not content with this, so we decided to equip the **SACD 1250 R** with a pure analogue output filter whose bandwidth can be switched between 60 kHz and 120 kHz. By this means it is possible to set up the player to match any amplifier very accurately, and there is no need to forfeit anything in terms of frequency response and phase linearity where a good, wide-bandwidth amplifier is used.

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Design a. Connection



- DSP-Signalprocessor, programmable, updateable, controlls the signal processing individually for CD and SACD.
- New High-End-mechanism with metal-loader, steel pushrods, metal shielding, antiresonanz cabinet and decoupling.
- Stereo-Quadrupel-High-End-D/A-converter and State-of-the-Art-Analogue output stage with total galvanic separation.
- Signal board with radial network and overall signal distribution.
- High performance mains power supplies with vast current delivery for analogue and digital sections.



R-Link System-remote control, RS 232 control- and updateinterface

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The Loader

The disc mechanism is equipped with absolutely top-quality components: heavy-duty motors from Mabuchi, a sub-chassis with excellent damping, steel pushrods, aluminium / ABS laminate disc drawer and metal encapsulation. The disc mechanism is suspended in a solid, special coated anti-resonance housing with a three-point mounting.



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The converter

The **SACD 1250 R** is a thoroughbred two-channel CD / SACD player, i.e. it is designed and built specifically for purist fans of stereo reproduction, and contains absolutely no video components. Its counterpart, of identical construction, is the SADV 1250 R HD: this is a six-channel (multi-channel) player capable of reproducing top-quality two-channel audio as well as multi-channel audio from CD and SACD.

A common feature of these two superb players is the unique and extremely sophisticated D/A converter board / analogue board. Burr-Brown D/A converters are acknowledged as the best in the field, and no fewer than eight carefully selected units are used in each machine, although they are used in different ways in the SACD 1250 R and SADV 1250 R HD.



In the **SACD 1250 R** four of these converters are used for each channel in the form of our T+A quadruple converters, a further enhancement of the differential converter, which has been considered the last word in circuit design until now. The ground-breaking quadruple converter allows the machine to achieve values for total harmonic distortion, signal: noise ratio and dynamics which are genuinely extraordinary. The outstanding test results from all

over the world concerning these players' predecessors - and the D 10 player, which features the same technology - are sample proof of the superiority of this unique design philosophy in terms of sound quality.

A programmable 56-bit signal processor is employed to provide faultless digital control of the converter units, and this, in conjunction with the superior T+A oversampling algorithms, ensures that the player is able to exploit the full performance potential of the D/A converters. The listener can choose between no fewer than four selectable mathematical processes for the eight-times oversampling: from the conventional FIR (highly linear frequency response) to T+A Bezier polynomial interpolation with its unexcelled timing precision; the latter sounding extraordinarily authentic and "analogue" in character. These two sections are strictly separated galvanically by the latest iCouplers and opto-couplers, to prevent any danger of the digital section influencing the audiophile analogue section.

State-of-the-Art analog output stage with switchable filters

4 Stereo D/A-converters

Opto-couplers and iCouplers separate the analog section strictly from the digital section

Programmable 56-Bit DSP-Signalprocessor

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Specifications

Formats

Audio CD, CD-R / CD-RW, SACD-Stereo

Audio Section

Audio-outputs (analogue) 1 x Stereo 2,5Veff / 22 Ohm

Audio-outputs (digital) 1 x coax

1 x optical

IEC 60958 (CDDA / LPCM)

D/A Converter 24-Bit, 384 kHz Sigma/Delta

Double-Mono-Quadruppel-Wandler

8-time Oversampling

Frequencyresponce / eff system dynamic

CD 2 Hz - 20 kHz / 100 dB

SACD 2 Hz - 44 kHz / 110 dB

Total harmonic distortion < 0,001 %

Signal / noise 115 dB

Channel separation 110 dB

General

Remote control via R-System

Dimensions ($H \times W \times D$) 7,5 x 44 x 39 cm

Finishes silver, black

we reserve the rights to alter technical specifications

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