

Specifications



Playback System

- SUPER AUDIO CD
- DVD-Video
- Video CD
- Audio CD (CD-R and CD-RW)
- Super VCD

Optical Read-out System

Laser type	Semiconductor AlGaAs
Numerical Aperture	0.60 (SACD/DVD) 0.45 (SVCD/VCD/CD)
Wavelength	650 nm (SACD/DVD) 780 nm (SVCD/VCD/CD)

SACD Disc Format

Medium	Optical disc
Diameter	12cm (8cm)

DVD Disc Format

Medium	Optical disc
Diameter	12cm (8cm)
Playing time (12cm)	
One layer	2.15h ¹
Dual layer	4h ¹
Two side, single layer	4.30h ¹
Two side, dual layer	8h ¹

¹) typical playing time for movie with 2 spoken languages and 3 subtitle languages.

TV Standard

	PAL	NTSC
Scan Frequency	50Hz	60Hz
Number of lines	625	525
Playback	Multi-standard	

Audio Format

Digital	DSD	Uncompressed Digital
	Dolby digital	Compressed Digital
	DTS/MPEG	
	PCM	16, 20, 24 bit fs 48, 96 kHz

Analog Sound Stereo
Dolby Surround™ downmix from multi-channel sound
3D Sound for virtual 5.1 channel sound on 2 speakers

Video Format

Digital Compression	MPEG2 for DVD	MPEG1 for VCD
DVD-VIDEO	50Hz	60Hz
Horiz. Resolution	720 pixels ²	720 pixels ²
Vertical Resolution	576 lines	480 lines
VCD	50Hz	60Hz
Horiz. Resolution	352 pixels	352 pixels
Vertical Resolution	288 lines	240 lines

²)Equivalent to 500 lines on your TV
Specifications subject to change without notice

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SACD Audio Performance

Multi-channel output (DSD stereo/multi-channel)		
DA Converter	1 bit	
SACD	fs 2.8 MHz	DC - 100 kHz
Max.output voltage (0dB)	2 V _{RMS} +/-0.3 V	
Channel unbalance	<0.5 dB	
Cut-off frequency normal mode	40kHz	
Cut-off frequency custom mode	+/-5 kHz	
	50kHz	
	+/-5 kHz	

	Typical	Normal	Custom
Amplitude linearity	+0.1/-0.6	+0.1/-0.4	
Total harmonic distortion and noise (1 kHz)	-100 dB	-102 dB	
Total harmonic distortion and noise (20 Hz -kHz)	-88 dB	-95 dB	
Inter-modulation distortion	-107 dB	-112 dB	
Dynamic range	-114 dB	-111 dB	
Signal-to-noise ratio (A-weighted)	-114 dB	-111 dB	

Video Performance

Low level linearity (0 -100 dB)	<+/-0.1 dB
Low level linearity (0 -115 dB)	<+/-0.5 dB
Inter-channel phase	<1 degree
Crosstalk (1kHz)	-130 dB
Crosstalk (20 Hz -20 kHz)	-100 dB
Video Output	1 Vpp into 75 ohm
S-Video Output	Y: 1 Vpp into 75 Ohm C: 0.300 Vpp into 75 Ohm
RGB Output (Europe only)	0.7 Vpp into 75 ohm
YPbPr Output (USA/Asia only)	Y: 1 Vpp into 75 Ohm P: 0.7 Vpp into 75 Ohm P: 0.7 Vpp into 75 Ohm
Black Level Shift	On/Off
Video Shift	Left/Right

General Functionality

- Play / Stop / Pause
- Fast Forward/Backward (3-speed)
- Next / Previous Title / Track / Chapter
- Title / Track Select
- Repeat (Track / All) or (Chapter / Title / All)
- Screen Saver (Dim 75% after 15 min.)
- Intro Scan
- Aspect Ratio conversion (16:9, 4:3 Letterbox, 4:3 Pan Scan)
- Time Display (Total / Track / Remaining Track Time)
- Full audio functionality with remote control

DVD/VCD/CD Performance

DA Converter	24 bit
DVD	fs 96 kHz 4 Hz -44 kHz fs 48 kHz 4 Hz -22 kHz
Video CD	fs 48 kHz 4 Hz -22 kHz
CD	fs 44.1 kHz 4 Hz -20 kHz
Signal-Noise (1kHz)	<100 dB
Dynamic Range	<90 dB
Crosstalk (1kHz)	<105 dB
Distortion Noise (1kHz)	<90 dB

Rear Connections

High Quality Audio Outputs	
Audio Left	Cinch ³
Audio right	Cinch ³
Audio Left Surround	Cinch ³
Audio Right Surround	Cinch ³
Audio Center	Cinch ³
Audio Subwoofer	Cinch ³
SCART ^{Europe only}	2 Euroconnector
Y,U,V output ^{USA/Asia only}	3 x Chinch ³
S-Video Output	Mini DIN 4-pin
Video Output	Cinch ³
Audio L/R Output	Cinch ³
Digital Audio Output	1 coaxial ³ , 1 optical IEC958forCDDA/LPCM IEC1937 for MPEG2, AC-3 DTS

Mains 3) gold plated

DVD-Video Functionality

- Step Forward/Backward
- Slow (3 speeds)
- Multi-angle Selection
- Audio Selection (1 out of max. 8 languages)
- Subtitles Selection (1 out of max. 32 languages)
- Parental Control and Disc Lock
- Disc Menu support (Title Menu and Root Menu)
- Resume (5 discs) after stop / standby / power off
- Perfect Still with digital multi-tap filter
- Zoom (x1.33, x2, x4) with picture enhancement
- 3D sound

Video CD Functionality

- Step Forward/Backward
- Slow (3 speeds)
- Playback Control for VCD 2.0 discs
- Disc Lock
- Resume (5 discs) after stop / standby / power off
- Programming

Power Supply

Power Inlet	100-120V/220-240V,50/60Hz
Power consumption	36 Watt
Power consumption standby	less than 10 Watt

Cabinet

Dimensions (w x h x d)	435 x 110 x 330 mm
Weight	approx. 10Kg
Front Panel	Aluminum

Package Contents

- SACD Player
- Remote Control Handset with separately-packed batteries
- 2-core power cord
- YP R P B cables
- Audio cable
- Video cable
- Digital cable (coax)
- User Manual
- Warranty

The best is the enemy of the merely good.



Let's make things better.



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Philips Super Audio CD



Meet the new standard.

For those who cherish the soul of music, the difference between a Stradivarius and a nice fiddle is incalculably huge. And excruciatingly small.

The tiniest vibrations in the harmonic tapestry make the difference in music. Detail excites the human ear and mind – the tantalizing nuance, the thumbprint resonance, the delicate grace note within the complex structure of music.

Yet these differences can vanish in the journey to your ear – escaping during capture on disk.

No more. Super Audio Compact Disk preserves the exquisite difference in character between the Stradivarius and the mere fiddle. Finally, the rosin and wood of analogue expression meet the dynamics and detail of digital precision.

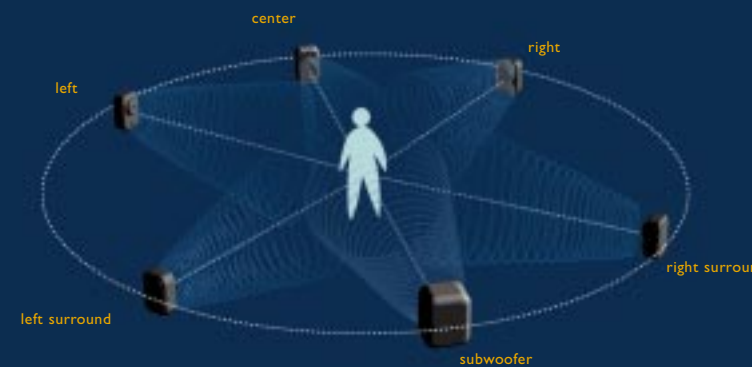
While computers and other digital devices have raced ahead with technology since 1983, not much has dramatically changed with traditional audio CD standards of performance. No wonder music purists have busied themselves with refining the warmth of analogue realm with vinyl disks and

tube amplifiers – waiting for something better.

The wait is over. Super Audio Compact Disc technology from Philips redefines high resolution.

Finally, digital 'bits' are no longer perceived. Instead, an astonishing unfurling of the fabric of music, revealing its original subtle textures.

SACDs, with dramatically higher sampling rates and bit resolution, paint the musical stage with fluid – yes, analogue – nuances, where textures meld together. Which is how music is – and audio should be.



Time to 'Unlearn' Stereo?

SACD cuts through limitations of traditional two-channel sound to reveal astonishing soundstages in ordinary stereo. Because phase is controlled with uncanny accuracy, stereo finally lives up to its promise of three-dimensional sound.

Not just in terms of resolution – but in numbers of hi-fi channels supported too.

Consider that the word "stereo" derives from the Greek word for "solid" – what stereo was always meant to deliver: A solid wall of sound, from side to side and floor to ceiling. In fact, early stereo formats called for three speakers, not two, but the public was reluctant to make the leap from mono to trio.

With two channels the norm, audiophiles developed an ear for its sound and rejected various 'quadraphonic' formats over the years. With good reason – too much gimmickry and too little realism.

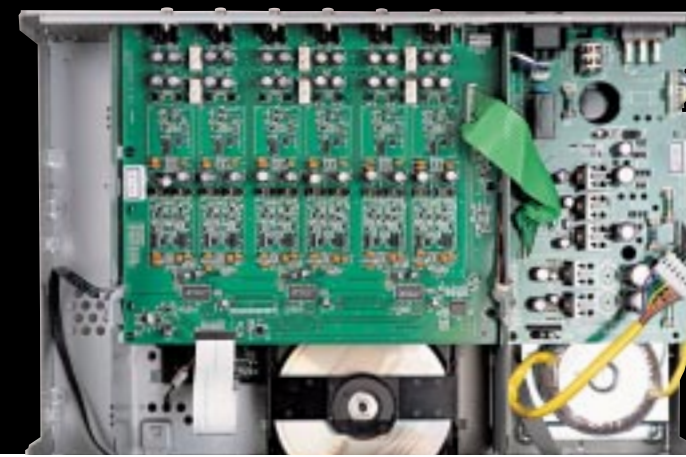
But it's finally time to 'unlearn' listening skills developed for the limits of two-channel music. With SACD, for the first time, each and every surround-sound channel comes through in full resolution and tremendous detail. As that happens, seasoned audiophiles may find themselves listening less and hearing more – as artifacts of learning to listen through faults fall away. And music finally becomes physically thrilling – even spiritually renewing – once again.

An engineer's dream; a bean-counter's nightmare. Philips engineers chosen for the SACD project found themselves in a technical paradise, where they were instructed that cost was no object for the all-precious signal path. Witness the SACD1000's analogue multi-layer PCB DAC boards, the linear power supply, the absence of op-amps throughout the signal path, the discrete outputs for all three stereo DACs, the massively stable and linear toroidal power supply, the Class-A mode in all twelve discrete amplification channels.

Objectivists & subjectivists unite! The SACD1000 is a product not simply of schematics and calculations – it was subject to fifteen months of scrupulous listening tests from critical industry ears as well. Plus the engineers chosen for the project were selected for their audio-enthusiast proclivities too.

Timing is everything. The SACD1000's master audio clock produces less jitter than jitter-measuring devices can detect, and housed directly next to the DACs it controls the rest of the system.

Audio comes first. We admit it: although the SACD1000 delivers an exceptional video signal, its main purpose is music. Third-order Bessel filters, constant group delay – such things mean little to the latest Hollywood blockbuster, but mean everything to delicate harmonics in the musical spectrum.



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