

## Philips DVD-Video/SACD player



# Progressive Scan SACD

### PICTURE QUALITY

- 108 Mhz/13bit video processing
- Crystal Clear Pro™ video adjustment for optimum video quality on any TV monitor
- RGB on scart: highest quality video connection

### SOUND QUALITY

- Built-in DSD/Dolby Digital and DTS decoders
- CD upsampling to 192Khz/24bit
- Audiophile grade audio circuitry for crystal clear sound
- Rigid chassis with double bottom plate for superior acoustic isolation
- Audio direct mode for purer CD and SACD playback
- Enhanced SACD bass management for optimised bass response
- Optical and coaxial digital audio output (Dolby Digital, DTS, MPEG2 and PCM)

### GREAT CONVENIENCE

- Dual laser optical pickup unit for optimum CD-R and CD-RW playback
- Cinemalink: one touch Home Cinema control
- CD/SACD-Text
- Double Scart



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PHILIPS



# DVD-Video/SACD player

## Technical specifications DVD 963SA

### Playback system

- SACD multi-channel
- SACD Stereo
- DVD-Video
- Video CD (VCD)
- S-Video CD (SVCD)
- MP3-CD
- CD (CD-R and CD-RW)<sup>1</sup>

### Optical read-out system

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

### DVD disc format

- Medium Optical disc
- Diameter 12 cm (8 cm)
- Playing time (12cm)
 

One layer	2.15 h <sup>2</sup>
Dual layer	4 h <sup>2</sup>
Two side, single layer	4.30 h <sup>2</sup>
Two side, dual layer	8 h <sup>2</sup>

### TV standard

- |                   |                           |             |
|-------------------|---------------------------|-------------|
|                   | <b>PAL</b>                | <b>NTSC</b> |
|                   | 50 Hz                     | 60Hz        |
| • Number of lines | 625                       | 525         |
| • Playback        | Multi-standard (PAL/NTSC) |             |

### Audio format

DSD	Stereo and Multi channel
MPEG/ Dolby Digital/DTS/PCM	Compressed digital, 16, 20, 24 bits fs, <b>44.1, 48, 96</b> kHz
MP3 (ISO 9660)	<b>96, 112, 128, 256</b> kbps and variable bit rate fs <b>32, 44.1, 48</b> kHz

- Full decoding of Dolby Digital and DTS multi-channel sound
- Analog Sound Stereo
- Dolby surround compatible downmix from Dolby Digital multi-channel sound
- 3D Sound for virtual 5.1 channel sound on 2 speakers

### Video format

- Digital compression MPEG 2 for DVD, SVCD  
MPEG 1 for VCD

DVD	50Hz	60Hz
Horiz. resolution	720 pixels	720 pixels
Vertical resolution	576 lines	480 lines
VCD	50Hz	60Hz
Horiz. resolution	352 pixels	352 pixels
Vertical resolution	288 lines	240 lines

### SACD audio performance

D/A converter	DSD	
SACD:	fs 2.8224Mhz	DC - 100kHz
Max. output voltage (OdB)	2V rms	
Channel unbalance	<0.5 dB	
Cut-off frequency :		
Front Channel	50kHz	
Surround, Center, LFE	40kHz	

- Signal-Noise (1kHz) -125 dB
- Dynamic Range (1kHz) -105 dB
- Crosstalk (1kHz) -120 dB
- Total harmonic distortion (1kHz) -100 dB

### Audio performance (Without upsampling)

D/A converter	24 bits	
DVD	Fs 96 kHz	4 Hz- 44 kHz
	Fs 48 kHz	4 Hz- 22 kHz
CD/Video CD	Fs 44.1 kHz	4 Hz- 20 kHz
S-Video CD	Fs 48 kHz	4 Hz- 22 kHz
	Fs 44.1 kHz	4 Hz- 20 kHz

- Signal-Noise (1kHz) <-120 dB
- Dynamic Range (1kHz) <-95 dB
- Crosstalk (1kHz) <-110 dB
- Total harmonic distortion (1kHz) <-95 dB

### Video performance

- RGB output 0.7 Vpp into 75 ohm
- YUV output Y: 1 Vpp into 75 ohm  
CrCb: 0.7 Vpp into 75 ohm
- S-Video Output Y: 1 Vpp into 75 ohm  
C: 0.3 Vpp into 75 ohm  
1 Vpp into 75 ohm
- Video output 1 Vpp into 75 ohm
- Black Level Shift On/off
- Video Shift Left/right

### Connections

- SCART Euroconnector 2x
- Y, Cb, Cr output (480i/p) Cinch 3x (green, blue, red)
- S-Video output Mini DIN, 4 pins
- Video Output Cinch (yellow) 2x
- Audio L+R output Cinch (white/red)
- Digital Output 1 coaxial, 1 optical IEC958 for CDDA / LPCM IEC1937 for MPEG1/2, Dolby Digital, DTS

### 6 Channel analog output

- Audio Front L/R Cinch (white/red)
- Audio Surround L/R Cinch (white/red)
- Audio Centre Cinch (blue)
- Audio Subwoofer Cinch (black)

### Power supply

- Power inlet 110-240V, 50/60 Hz
- Power usage Approx. 23 watt
- Power usage standby Less than 1 watt

### Cabinet

- Dimension 435 x 101 x 315 mm (w x h x d)
- Weight Approx. 4.6 kg

### Package contents

- DVD-video/SACD player
- Remote control with batteries
- User manual
- Video cable/Audio cable
- Scart cable
- AC Power cord

### General functionality

- Stop/ play/ pause
- Fast forward/ backward
- Step forward/ backward
- Slow motion
- Title/ chapter/ track select
- Skip next/ skip previous
- Repeat (Chapter/ title/ all) or (Track/ all)
- A-B repeat, Shuffle & Scan
- Zoom (x1.33, x2, x4) with picture enhancement
- 3D sound
- 5.1 Channels user defined speaker settings
- Virtual Jog Shuttle
- Enhanced smart picture with Monitor type selector
- SACD/CD Text
- Resume (5 disc) after stop / standby3
- Parental Control and Disc lock (120 disc)
- NTSC/PAL conversion
- Smart power off for better energy saving
- S-Video Upsampling
- Progressive Scan with DCDI

### DVD functionality

- Multi-angle selection
- Audio selection (1 out of max. 8 languages)
- Subtitles selection (1 out of max. 32 languages)
- Aspect ratio conversion (16:9, 4:3 letterbox, 4:3 Pan Scan)
- Disc Menu support (title menu and root menu)

### Video CD, SVCD functionality

- Playback control for VCD 2.0 discs and SVCD
- Audio Selection (1 out of max. 4 languages) for SVCD

### MP3 functionality

- Time display (Track)
- Album and track selection
- Repeat (disc/album/ track)
- Nested directory levels supported to 8 levels
- Max. albums possible is 32
- Max. number of tracks is 999

- 1 Applicable for finalized multi-session discs also.
- 2 Typical playing time for movie with 2 spoken languages and 3 subtitle languages.
- 3 Applicable only for DVD, VCD, SVCD discs