

## Progressive Scan SACD

### PICTURE QUALITY

- 108 Mhz/13bit (video oversampling) DAC for ultimate picture quality
- Digital Crystal Clear – advanced setting for Gamma, Chroma/Luma and DNR/Sharpness
- Crystal Clear Pro™ 3:2 pull down progressive scan with motion compensation
- Passes pluge signals
- Component, composite and S-Video outputs

### SOUND QUALITY

- Super audio CD playback with advanced bass management
- 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 pure CD and SACD playback

### GREAT CONVENIENCE

- Dual laser optical pickup unit for optimum CD-R and CD-RW playback and multi-session MP3
- SACD/CD text



# DVD-Video/SACD Player



## Technical specifications

### 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>
- DVD+RW

### 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: 12cm (8cm)
- 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

- PAL: 50Hz, 625 lines, Multi-standard Playback
- NTSC: 60Hz, 525 lines, Multi-standard Playback

### Audio format

- Digital  
DSD: Uncompressed digital  
MPEG/Dolby: Compressed digital,  
Digital/DTS/PCM: 16, 20, 24 bits, fs 44.1, 48, 96kHz  
MP3 (ISO 9660: 96, 112, 128, 256kbps and  
variable bit rate, fs 32,44.1, 48kHz
- 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 and 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: 2V rms  
voltage (OdB)
- Channel unbalance: <0.5dB
- Cut-off frequency: 40kHz
- Signal-Noise (1kHz): 115dB
- Dynamic Range (1kHz): 108dB
- Crosstalk (1kHz): 110dB
- Total harmonic distortion (1kHz): 100dB

### Audio performance (upsampling off)

- D/A converter  
DVD: (24 bits)Fs 96kHz, 4Hz-44kHz  
(24 bits)Fs 48kHz, 4Hz-22kHz  
CD/Video CD: (24 bits)Fs 44.1kHz, 4Hz-20kHz  
S-Video CD: (24 bits)Fs 48 kHz, 4 Hz-22 kHz  
(24 bits)Fs 44.1kHz, 4Hz-20kHz
- Signal-Noise (1kHz): 105dB
- Dynamic Range (1kHz): 105dB
- Crosstalk (1kHz): 105dB
- Total harmonic distortion (1kHz): 100dB

### Video performance

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

### Connections

- 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: 110V, 60Hz
- Power usage: Approx. 20 watt
- Power usage standby: Less than 4 watt

### Product

- Dimension 17 x 3.9 x 12.4 inches (w x h x d)
- Weight Approx. 9.5 lbs

### Carton

- Dimension 20.6 x 8 x 15.7 inches (w x h x d)

UPC Code: 0 3784 992792 2

### Package contents

- DVD-video player
- Remote control with batteries
- User manual
- Video cable/Audio 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/standby<sup>3</sup>
- Parental Control and Disc lock (120 disc)
- NTSC/PAL conversion
- Smart power off for better energy saving
- Advanced SACD bass management
- Audio Upsampling
- Audio Direct Mode
- Crystal Clear Pro

### 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

Printed in USA ©2002 Philips Consumer Electronics A Division of Philips Electronics North America Corp. Specifications subject to change without notice. The products and services described here will not necessarily become available in the market. This document contains preliminary information. All rights reserved. DVD963SA-USA  
Dolby and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation. DTS is a registered trademark of Digital Theater Systems, Inc.

[www.philips.com](http://www.philips.com) or AOL keyword: Philips

