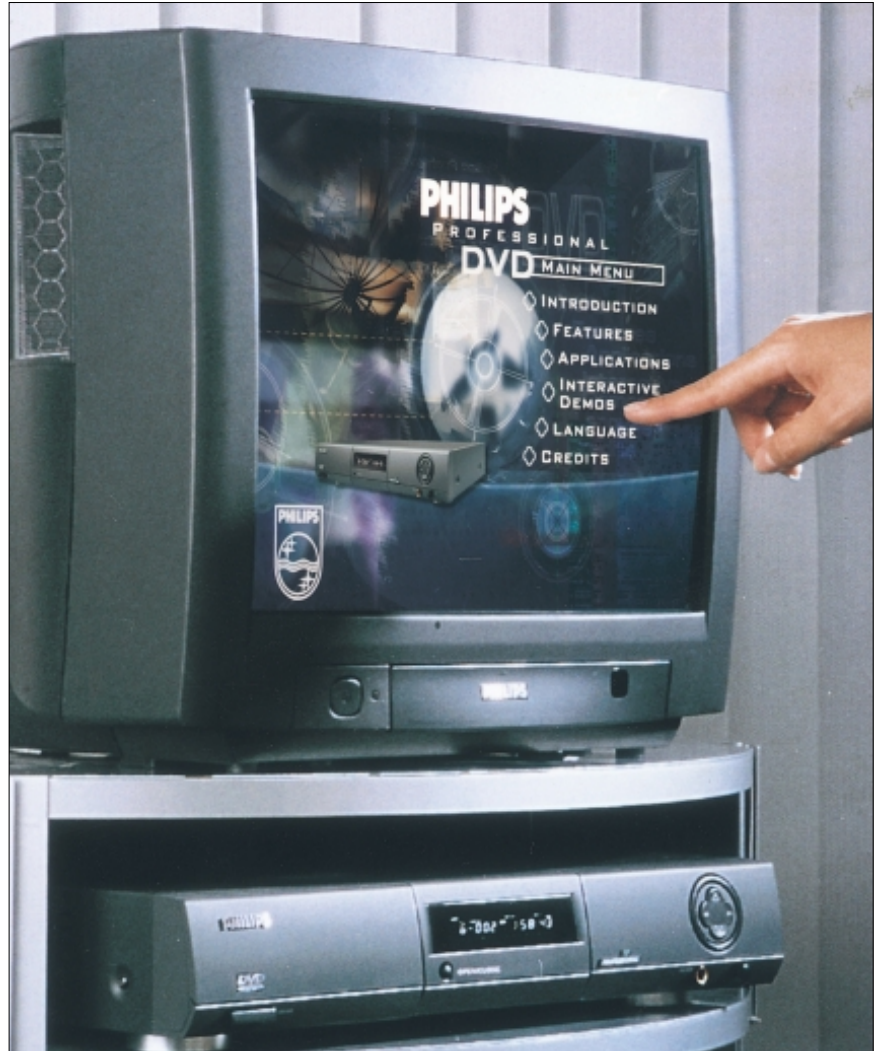## Philips Professional multi-standard DVD-Video player

- *Ultimate video playback source for Professional applications*
- *Designed for point of sale, training, background audio/video and training/educational applications*
- *Wired control of all features from a variety of input devices (touch screen, touch pad, bar code reader, etc) as well as Infra Red control*
- *Multi-standard (PAL/NTSC) video for international Professional applications*
- *Plays DVD-Video, Video-CD discs and Audio CDs*
- *Perfect Still Pictures*
- *Wide screen and regular TV playback*
- *Multi-Standard (MPEG/Dolby Digital™) audio decoder*
- *Suitable for 19′ rack mounting (optional mounting brackets)*

*Let's make things better.*

PHILIPS

From Philips, the innovators of

optical disc technology,

the ultimate Video playback

source for your Professional

requirements. This

sophisticated player delivers

stunning digital video pictures

with digital multichannel sound

from revolutionary long-playing

DVD-Video discs.



DVD-video has the full support of the movie as well as the electronics industry, and this player is making cost effective technology available for professional purposes requiring the presentation of stunning quality A/V material.

To meet the demanding requirements of professional applications, Philips Professional DVD-video player provides sophisticated plug and play control for various kinds of wired pointing devices in addition to Infra-Red Remote control.

Serial communication enables external input and output to communicate with the player for control and player status.

gs
ations

The most cost effective solution for professional video applications, like kiosks, training, presentations and background Audio/Video.

It runs all DVD-Video and Video-CD applications and it will also play CD-Audio discs.

"Personal Preferences" settings and special custom features allow the system to be defined to suit individual business requirements.

An RS232 serial interface for wired pointing devices and/or external control allows this player to be used in a wide range of professional applications.

*DVD pick-up system.*

*Professional dual laser CD pick-up system.*

This DVD-Video player guarantees the highest quality and simplicity of operation available in this new medium. It is guaranteed by Philips the inventors of the CD with our experience in the optical disc industry.

### Digital Video

DVD-Video uses state-of-the-art MPEG2 data compression technology to store A/V Material on a 5-inch disc. DVD's variable bit rate compression, running at up to 9.8 Mbits/second, captures even the most complex pictures in their original quality.

The crystal-clear digital pictures have a horizontal resolution of over 500 lines, with 720 pixels to each line.

This resolution is more than double that of VHS or CD-i, superior to Laserdisc and entirely comparable with digital masters in recording studios.

4:2:2 digital video coding gives exceptionally bright, crisp colors. The 10-bit Video digital to analogue

converter, unlike typical 8 or 9 bit circuits, preserves every detail of the authentic picture quality.

DVD-Video discs conform to either the PAL or NTSC video standard. This dual standard Professional player can play both types in the best possible way, making this professional DVD Player ideal for international applications. Designed for wide-screen (16:9) format it also makes special provisions for optimal playback on regular (4:3) screens, where you have the choise of Letterbox or Pan-scan presentation.
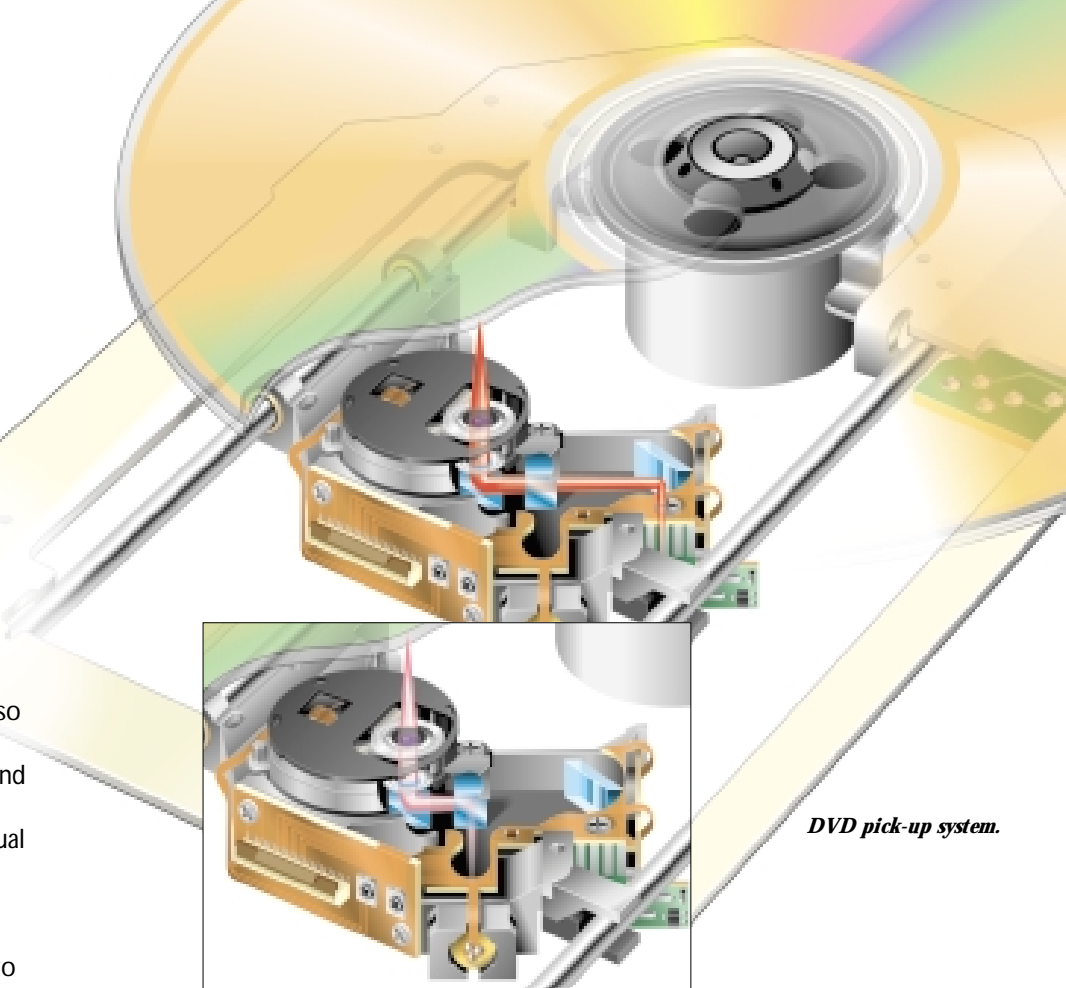
### Digital Audio

The digital multichannel audio output contains six discrete sound channels. Feed this, via the Philips Worldstandard Digital Home Cinema receiver, to speakers at left, center and right front, left and right rear, plus a sub-woofer, for sensational multidimensional sound.

### Storage Capacity

DVD can support up to 8 different language soundtracks as well as 32 subtitle languages, providing maximum flexibility for point of sale, training, education, background video and audio applications.

Depending on the application requirements, 2 hours Audio/video material can be placed onto a DVD-Video disc. Due to DVD's variable bit rate compression the amount of Video on a disc can be significantly increased if the Audio/Video qualities are reduced to levels you are used to from Laserdisc, Video-CD and CD-audio. In addition, a DVD disc can be mastered as a two layer disc that can contain 10 hours of good quality video with stereo sound. For audio only a two layer disc can contain 50 hours of stereo music. A 2 sided disc with 4 layers can double the indicated amounts.

### Reliability

This professional DVD player is equipped with a specially designed dual laser pick-up mechanism. One laser for the Video-CD and audio CD type of discs and a separate laser for the DVD type of discs. This guarantees the best performance for both types of discs including write once and rewritable formats. This pick-up has been designed to meet Professional reliability and life-time requirements.

### Surprisingly easy to use

The combination of the DVD player controller and the visual feedback from the TV screen pro-vides an intuitive, easy to use system. For professional applications this player accepts inputs from wired controls including Touch Screen devices and from Infra-Red handheld devices.

### Customizing your player

Another important aspect of the system is that it allows you to customize player preferences.

### Protected mode

For unattended and public use the players can be put into protected mode.

This disables all controls on the player's front panel, including the open tray functions, preventing unauthorized disc exchange. In combination with autostart functions it makes the system the best choise for POI/POS kiosk systems.

### Lock-out functions

As the products appear more and more in specialized environments we are faced with customer specific requirements.

Our experience with these requirements have resulted in a system allowing for such customization. Such modifications could include:
* Lock functions to disable playing CD-DA discs
* Lock functions to allow only Playing the discs provided for by the company.

### Storage

The Professional DVD player is equipped with non-volatile RAM (Random Access Memory) for saving application data.
The data written to this area will be available the next time the application is played or can be used to transfer data from one disc to another.
This data can be retrieved, modified or loaded through the control interface.
The DVD application will be able to set, update and react to the contents of this non-volatile data.
It also allows the logging of data at various places within the application.
This data can be retrieved though the players RS232 serial interface for data processing or statistical analysis.
Ideal for training or POS applications.

### Control

For external control this DVD player is equipped with an RS232 serial interface.
This RS232 serial interface supports the following functions:
* Wired controls such as touch screens and control pads. The standard interface with an automatic recognition protocol will enable various companies to develop all kinds of specialties such as special purpose controllers, approach detectors, lightpens and many other devices.
* Commands to control the playback of the A/V material. During the playback progress and status information is available continuously to allow full external control. Information about the disc which is loaded completes this.
* Through this interface most of the player functions can be controlled. This include access to the customizing information and saved data in Non Volatile Memory.
This RS232 serial interface allows an external controlling divice to really control what the DVD player shows on the screen.

### Additional products

To make this DVD player a perfect match for your professional needs, a number of standard functions are available together with a number of optional products. These products, designed for professional applications, will enable you to install a simple to use reliable system.

**Point of purchase applications**

Point of purchase systems need to have a suitable display and a sturdy pointing device. For this we have designed:
• A wired pointing device designed for integration in a kiosk.
  A special pointing devices logic board is available as an option for full integration in a kiosk with custom designed buttons and shapes matching your kiosk design and application.
• Touch screens available in various sizes. High impact versions of these products will meet safety require-ments of some application areas.

**Background Video**

Background video for shops, waiting rooms and public places often have A/V material intermixed with commercial messages and for these applications we have designed a communication unit which allows a point-to-point or a point-to-multipoint transmission system for the following functions:
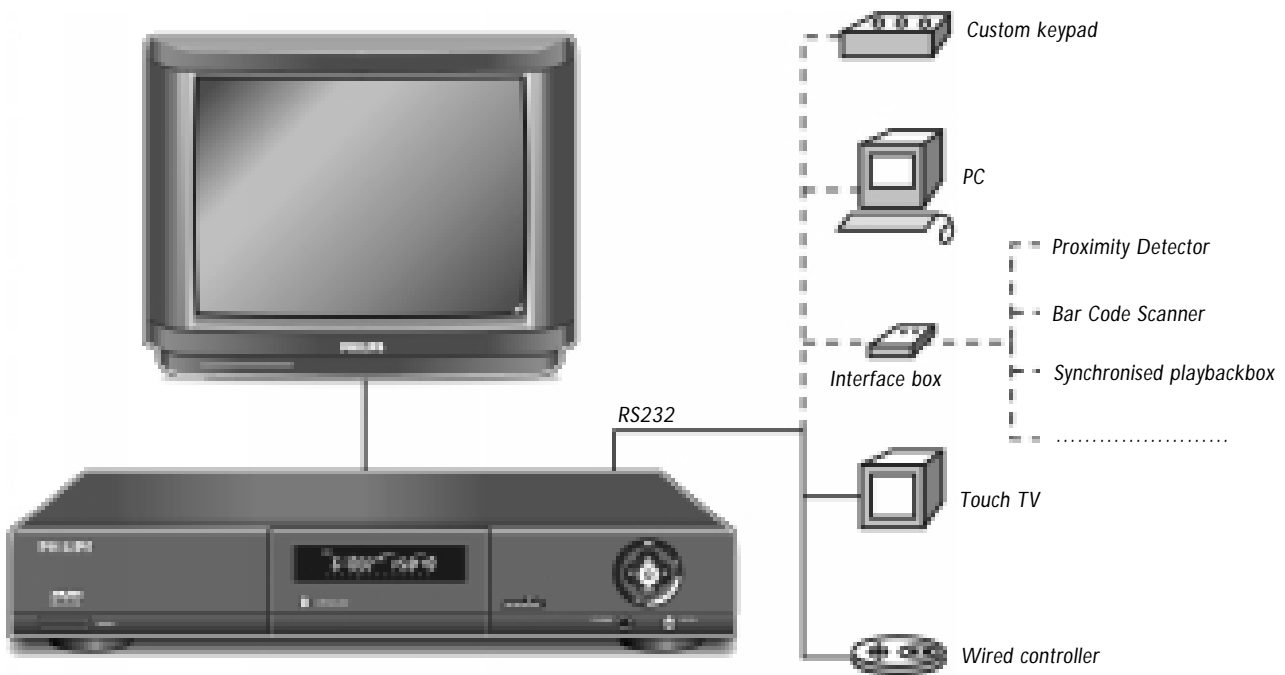• Disable/enable discs.
• Control the playback of the A/V material.
A powerful communication system handling a large number of sites simultaneously at extremely low transmission costs.

**Training applications**

From our experiences with educational applications we have implemented firmware functions enabling the following features:
• Restarting the course at the location where you stopped last time.
• Creation of a log-file for analyzing educational progress.

• To enhance printed text with A/V materials from a DVD disc, we have developed a bar code reader.
While reading a bar code, the corresponding part on the disc is directly displayed.
A bar code wizard (a PC program) is available to create your own set of bar codes to directly access the selected A/V material on any DVD-Video or Video-CD disc.



Custom keypad

PC

Proximity Detector

Bar Code Scanner

Interface box

Synchronised playbackbox

……………………

RS232

Touch TV

Wired controller

▬▬ : *Products Philips*
▬ ▬ ▬ : *Partner Solutions*

## Product information

### Play-Back System
• DVD-video
• CD-DA
• Video-CD

### Optical readout system
| | | |
|---|---|---|
| • Laser type | : | Semiconductor AlGaAs |
| • Numerical aperture | : | 0.60 DVD 0.45 VCD/CD |
| • Wavelength | : | 645 nm DVD 780 nm VCD/CD |

### TV STANDARD
| | | |
|---|---|---|
| • Playback | : | Multistandard PAL/NTSC Depending on the disc |

### Remote control
| | | |
|---|---|---|
| • System | : | RC6 |

### Connections
| | | |
|---|---|---|
| • Input/serial I/O | : | DB9 Male |
| • DC/Audio output | : | +5 V, 50 mA (Mini-Jack) |
| • Digital output (cinch) | : | 0.5 Vpp into 75 Ohm |
| • CVBS output (cinch) | : | 1.0 Vpp into 75 Ohm |
| • Audio L+R (cinch) | : | 2 Vrms into 10 kOhm |
| • Headphone | : | 6.3 mm jack, 8-2000 Ohm, 30 mW @ 32 Ohm |
| • RGB output | : | Euroconnector [2] |
| • Y/C output | : | Mini Din [3] |

### Controls
• Power on/off
• Play
• Pause
• Next
• Previous
• Stop
• Open/close

### Power supply
| | | |
|---|---|---|
| • Voltage | : | 100-240 V Class 1 |
| • Frequency | : | 50-60 Hz |
| • Power consumption | : | 23 W approx. |

### Cabinet
| | | |
|---|---|---|
| • Material | : | PS front panel Metal case |
| • Dimensions (wxhxd) | : | 435 x 75 x 315 mm (17 1/8 x 3 x 121/2") |
| • Weight | : | 4 kg approx. |

### Package contents

| | Europe [2] | USA [3] |
|---|---|---|
| • DVD unit | • | • |
| • AC cable | • | • |
| • IR remote control | • | • |
| • Euroconnector cable | • | |
| • Stereo Audio cable | | • |
| • Video cable | | • |
| • User manual | • | • |

### Optional products/accessories [4]
• 17" Touch screen
• 21" Touch screen
• Bar code reader
• Wired pointing device
• Technical manual
• 19" Rack Brackets

1) Not available on all models
2) Europe versions only
3) USA version only
4) Might not be available in all territories

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