

Instructions for use



VIDEOPhilip





General information

Laser safety

This unit employs a laser. To prevent possible eye injury, only a qualified service person should remove the cover or attempt to service this device.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY **RESULT IN HAZARDOUS RADIATION EXPOSURE.**

LASER

InGaAlP semiconductor laser (DVD) Туре

AlGaAs semiconductor laser (CD)

660 nm (DVD) Wavelenght

780 nm (CD)

20 mW (DVD writing) Output Power (out of objective) 0.8 mW (DVD reading)

0.3 mW (CD reading)

82 degrees (DVD) Beam divergence

54 degrees (CD)

CLASS 1 LASER PRODUCT

WARNING LOCATION: INSIDE ON LASER COVERSHIELD

CAUTION VISIBLE AND INVISIBLE LASER RADIATION. WHEN OPEN AVOID EXPOSURE TO BEAM

ADVARSEL SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÅLING

ADVARSEL SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN

VARNING SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD BETRAKTA EJ STRÅLEN

VARO! AVATTAESSA OLET ALTTIINA NÄKYVÄLLE JA

NÄKYMÄTTÖMÄLLE LASER SÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN VORSICHT SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETSEN DANGER VISIBLE AND INVISIBLE LASER RADIATION. WHEN OPEN AVOID DIRECT EXPOSURE TO BEAM

ATTENTION RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE EXPOSITION DANGEREUSE AU FAISCEAU

NEVER MAKE OR CHANGE CONNECTIONS WITH THE POWER SWITCHED ON.



The DVD recorder is in conformity with the EMC directive and low-voltage directive.



CAUTION ONLY QUALIFIED SERVICE PERSONNEL SHOULD REMOVE THE COVER OR ATTEMPT TO SERVICE THIS DEVICE.

For Customer Use:

Read carefully the information located on the back of your DVD recorder and entered below the Serial N°. Retain this information for future reference.

Model N°. DVDR985

Serial N°. __



"VIDEO Plus+" and "PlusCode" are registered trademarks of the Gemstar Development Corporation. The Video Plus+ system is manufactured under licence from Gemstar Development Corporation.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works. ©1992-1997 Dolby Laboratories, Inc. All rights reserved.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

TRUSURROUND, sRs, and symbol () are trademarks of SRS Labs, Inc. TRUSURROUND technology is manufactured under license from SRS Labs, Inc.

Introduction	
DVD Video Recorder	6
Box contents	
Placement	
Cleaning discs	
Remote control	 7
Loading the batteries	· 7
Installation	
Connections - back side of your DVD recorder	8
Connecting to the antenna	8
Connecting to a TV set	8
S-video (Y/C) connection	8
Video (CVBS) connection	8
Connecting to audio equipment	9
Connecting to A/V receiver or A/V amplifier with digital	
Multi-channel decoder	9
Connecting to a receiver equipped with two channel digital stereo (PCM)	9
Connecting to a receiver equipped with Dolby Pro Logic	,
Connecting to a TV set equipped with a Dolby Pro Logic decoder_	
Connecting to a receiver with two channel analogue stereo	^
Connecting to other equipment	
Connections - frontside of your DVD recorder	10
Camcorder connection	_10
Power supply	_ 10 11
• • •	-'' 11
Switching on	- ' ' 11
First time set-up: virgin mode	- ' ' 11
Automatic setting Manual setting	_11
Functional overview	
Event of vecendary	1.
Front of recorder	_14 15
Rear of recorder	_
Display	_16
Remote control	_17
Operation	
Important notes for operation	_18
Loading discs	_18
Disc types	_18
The following disc types can be used for recording and playback _	_ 18
The following disc types can be used for playback only	_ 18
The following disc types cannot be used at all, neither for	_
recording nor for playback	19
On-screen display information	_ 19
System menu bar	19
User preference menu operation	20
Status box	20
Tuner info box	 21
Timer info box	 21
Warning box	 21
Index Picture Screen	22
User preferences	_ <u></u> 23
Setting user preferences	_23 23
Picture settings	_23 23
Sound settings	_23 ?3

Language settings	24			
Feature settings	24			
Remote control settings	25			
Record settings	25			
Installation				
Recording				
Before you start recording	28			
Manual recording	28			
Checking input	28			
Recording	28			
Manual audio control	_29			
Recording with automatic switch-off (OTR One-Touch Recording)	_30			
Timer programming	30			
Timer programming with the VIDEO Plus+® system	30			
Timer programming without the VIDEO Plus+ system	31			
Programming with 'NexTVIEW Link'	32			
If a timer setting is incorrect	32			
How to check or alter a timer block	33			
How to clear a timer block	33			
Playback				
Playing a DVD+RW or DVD+R disc	_34			
Playing a pre-recorded DVD-Video disc	34			
Playing a (Super) Video CD disc	_34			
General features	35			
Moving to another title/track	35			
Moving to another chapter/index	 35			
Slow Motion	 35			
Still Picture and Step Frame	 36			
Search	 36			
Repeat	 36			
Repeat A-B	 36			
Scan	 37			
Time search	 37			
Zoom	 37			
Special DVD+R(W) features	 38			
Recording date and time	38			
Special DVD-Video features	 38			
Menus on the disc	 38			
Camera Angle	 38			
Changing the audio language	 38			
Subtitles	 39			
Special VCD-Features	 39			
Playback Control (PBC)	 39			
Playing an audio CD	39			
Pause	 40			
Search	40			
Moving to another track	40			
Repeat track/disc	40			
Repeat A-B	40			
Scan	40			

Access control	
Child Lock (DVD and VCD)	41
Activating/deactivating the child lock	
Authorizing discs when Child Lock is activated	
Securing discs	
Parental Level (DVD-Video only)	
Activating/Deactivating Parental Control	
Country	
Changing the 4-digit code	
Managing disc content	
Title settings	44
Changing the title name	44
Play full title	
Erasing a title	
Disc Info Screen	
Disc Settings	
Changing the Disc Name	
Protection of recordings	
Erasing a disc	
Finalising a DVD+R disc	45
Making your edits DVD compatible	46
Favourite Scene Selection	46
Calling up the FSS menu	46
Inserting chapter markers	47
Hiding chapters	
Deleting chapter markers	
Changing the index picture	47
Dividing a title	48
Append recording	48
Troubleshooting	
Troubleshooting checklist	49
Diagnosis programme	 51
Instructions	 51
System limitations	51
Glossary	
Appendix	
мррепиіх — — — — — — — — — — — — — — — — — — —	
Using your DVD recorder remote control with your TV set	5 4

Introduction

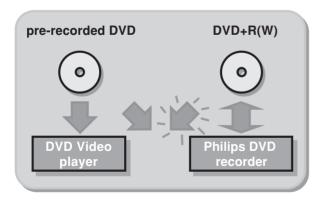
DVD Video Recorder

DVD (Digital Versatile Disc) is the new storage medium that combines the convenience of the Compact Disc with the latest advanced digital video technology. DVD-Video uses state-of-the-art MPEG2 data compression technology to register an entire movie on a single 5-inch disc. DVD's variable bitrate 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 (picture elements) to each line. This resolution is more than double that of VHS, superior to Laser Disc, and entirely comparable with digital masters made in recording studios.

DVD recording is the next step in video technology. DVD+ReWritable (DVD+RW) uses phase-change media, the same technology that formed the basis for CD-ReWritable. A high-power laser is used to change the reflectivity of the recording layer. This process can be repeated more than a thousand times. DVD+Recordable (DVD+R) uses discs based on an organic dye, a technology pioneered with the successful CD-Recordable format, to produce discs that keep your data for a lifetime.

Your Philips DVD recorder is a **recorder** and **player** for digital video discs, with a **two-way compatibility** to the universal DVD-Video standard. This means that:

- existing **pre-recorded DVD-Video** discs can be played on your Philips DVD recorder and
- recordings, made on your Philips DVD recorder, can be played on most DVD-Video players and DVD-ROM drives.



With it, you will be able to record TV programmes or to edit and archive your own camcorder recordings. Superb digital picture and sound quality, quick access to the tracks you have recorded and extensive playback features contribute to a completely new video experience.

From now on you will enjoy full-length movies with true cinema picture quality, and stereo or Multi-channel sound (depending on the disc, and on your playback setup). You will find your recorder remarkably easy to use, by way of the On-Screen Display on your TV and the display on the DVD recorder, in combination with the remote control.

Box contents

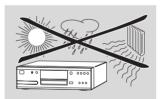
First check and identify the contents of your DVD recorder package, as listed below:

- DVD recorder
- Remote Control Handset with separately-packed batteries
- 2-core power cord
- SCART cable
- S-video cable
- Antenna (aerial) cable
- Audio cable
- Video cable
- DVD+RW disc
- User Manual
- Warranty card

If any item should be damaged or missing, please inform your supplier without delay.

Keep the packaging materials; you may need them to transport your recorder in the future.

Placement



- Place the recorder on a firm, flat surface.
- Keep away from domestic heating equipment and direct sunlight.
- In a cabinet, allow about 2.5 cm (1 inch) of free space all around the recorder for adequate ventilation.
- The lense may cloud over when the DVD recorder is suddenly moved from cold to warm surroundings. Playing a CD/DVD is not possible then. Leave the DVD recorder in a warm environment for two hours before use, so the moisture can evaporate.
- The recorder should not be exposed to dripping or splashing, no objects filled with liquids, such as vases, should be placed on the recorder.

Cleaning discs

Some problems may occur because the disc inside the recorder is dirty. To avoid these problems clean your discs regularly, in the following way:

 When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the centre out.

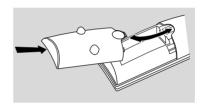
Caution:

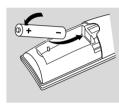
Do not use solvents such as benzine, thinner, commercially available cleaners, or anti-static spray intended for analogue discs.

Do not use commercially available cleaning discs to clean the lens, as these discs may damage the optical unit.

Remote control

Loading the batteries





- Open the battery compartment cover.
- Insert two 'AA' (LR-6) batteries as indicated inside the battery compartment.
- Close the cover.

Caution:

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.). This may reduce the lifetime of the batteries.

Installation

Connections - back side of your DVD recorder

- Please refer to your TV set, VCR, Stereo System and any other User Manual(s) as necessary to make the optimal connections.
- Do not connect the power until all other connections are made.
- Do not connect your DVD recorder to your TV set via your VCR, because the video quality could be distorted by the copy protection system.
- For better sound reproduction you can connect the recorder audio outputs to your amplifier, receiver, stereo system or A/V equipment. For this see 'Connecting to A/V receiver or A/V amplifier'.

Caution:

Do not connect the recorder's audio output to the phono input of your audio system in order to avoid damage to your equipment.

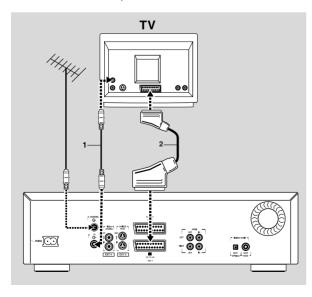
Connecting to the antenna

- Remove the antenna (aerial) cable plug from your TV set and insert it into the antenna socket at the back of the DVD recorder.
- Plug one end of the antenna (aerial) cable supplied (1) into the TV socket on the DVD recorder and the other end into the antenna input socket on your TV set.

Connecting to a TV set

To obtain the highest possible picture and sound quality from your TV set it is recommended to use the SCART connector on both DVD recorder and TV set.

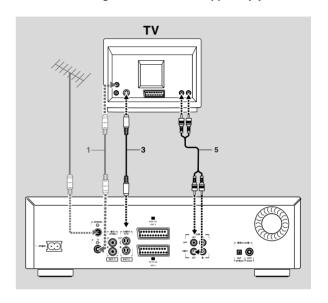
Connect the bottom SCART connector (EXT 1) to the TV set, using the SCART cable supplied (2) as shown in the drawing. If your TV set is equipped with EasyLink or Cinema Link, make sure you use the correct scart connector. For this refer to the user manual of your TV set.



If your TV set is not equipped with a SCART connector, you can connect the DVD recorder with the S-video (Y/C) sockets.

S-video (Y/C) connection

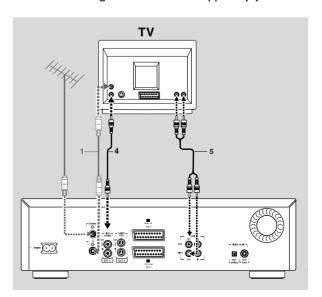
- Connect the S-video output socket to the corresponding input socket on the TV set, using the supplied S-video cable (3).
- Connect the audio Left (white) and Right (red) output sockets to the corresponding sockets on the TV set using the audio cable supplied (5).



If your TV set is not equipped with S-video sockets, then connect the DVD recorder with the CVBS sockets to your TV set.

Video (CVBS) connection

- Connect the Video (CVBS) output socket (yellow) to the corresponding input socket on the TV set using the video cable supplied (4).
- Connect the audio Left (white) and Right (red) output sockets to the corresponding sockets on the TV set using the audio cable supplied (5).



Connecting to audio equipment

Connecting to A/V receiver or A/V amplifier with digital Multi-channel decoder

The best possible sound quality is obtained by connecting your DVD recorder to an A/V receiver with Multi-channel decoder (Dolby Digital, MPEG 2 and DTS).

Digital Multi-channel sound

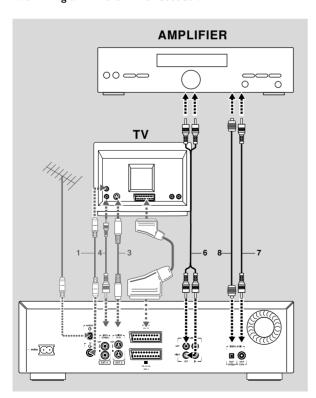
Digital Multi-channel connection provides the optimum sound quality. For this you need a Multi-channel A/V receiver that supports one or more of the audio types supported by your DVD recorder (MPEG 2, Dolby Digital and DTS). For this you can check the receiver manual and the logos on the front of the receiver.

 Connect the recorder's digital audio output to the corresponding input on the receiver. Use a digital coaxial cable (7) or a digital optical audio cable (8).

If you do not own a digital coaxial audio cable (not supplied), you may use the supplied video cable (4).

Note:

If the audio type of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound. The audio type of the DVD disc in play is displayed in the Status Window, when changing the language. 6 Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.



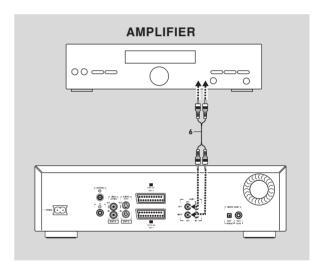
If you cannot connect your DVD recorder to an A/V receiver with Multi-channel decoder, choose one of the following alternatives.

Connecting to a receiver equipped with two channel digital stereo (PCM)

- Connect the recorder's digital audio output to the corresponding input on your receiver. Use the supplied video (CVBS) cable (7) or an optional digital optical audio cable (8).
- After installation you will need to activate PCM on the DVD recorder's digital output (see 'User Preferences').

Connecting to a receiver equipped with Dolby Pro Logic

 Connect the recorder to the TV set and connect the recorder's audio Left and Right output sockets to the corresponding inputs on the Dolby Pro Logic Audio/Video receiver, using the audio cable supplied (6).



 Make the appropriate Sound settings for Analogue Output in the user preferences menu.

Connecting to a TV set equipped with a Dolby Pro Logic decoder

 Connect the recorder to the TV set as described in chapter 'Connecting to a TV set'.

Connecting to a receiver with two channel analogue stereo

• If you have a receiver with two-channel analogue stereo without any of the above mentioned sound systems, connect the audio Left and Right output sockets to the corresponding sockets on your receiver, amplifier or stereo system. Use the audio cable supplied (6).

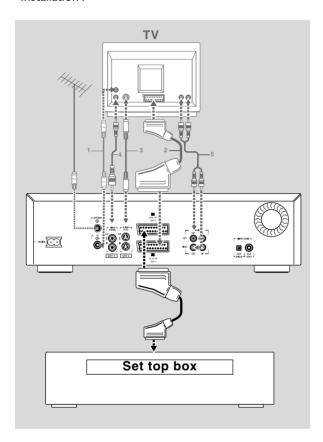
Connecting to other equipment

Use the top SCART connector (EXT 2) on your DVD recorder to make connections to a:

- Satellite receiver or Set top box,
- VCR,
- DVD-Video player

Most pre-recorded video cassettes and DVD discs are copy protected. If you try to copy them the display shows 'EOPY PROTECT'.

For installation of a decoder, see 'User Preferences' - 'Installation'.



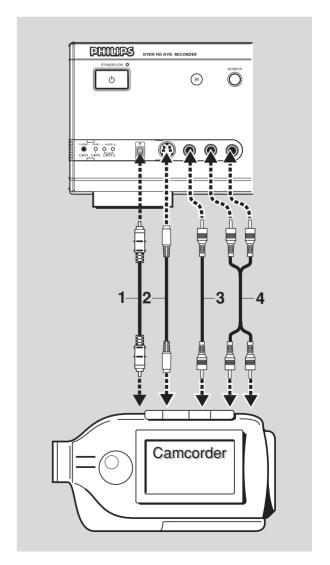
Notes

- If the power is off or Low Power Standby is selected (see User Preferences - features), the signal from EXT 2 will not be passed on to the TV set on EXT 1.
- EasyLink functionality will not be available to devices connected via the DVD recorder's EXT 2 SCART connector.

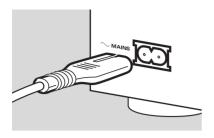
Connections - frontside of your DVD recorder

Camcorder connection

- If you have a DV or Digital 8 camcorder, connect the i-link DV input socket (1) to the corresponding output socket on the camcorder using the i-link cable of your camcorder.
- If you have a Hi-8 or S-VHS(C) camcorder, connect the S-video input socket to the corresponding output socket on the camcorder, using the S-video cable supplied (2) and connect the audio cable (4) supplied.
- Otherwise connect the Video input socket (yellow) to the corresponding output socket on the camcorder using the video cable supplied (3) and connect the audio Left (white) and Right (red) input sockets to the corresponding sockets on the camcorder using the audio cable supplied (4).
- If your camcorder has mono sound, use only the left audio connector. In this case the sound will be recorded on both audio channels.



Power supply



- Make sure that all necessary connections are made before connecting the DVD recorder to the power supply.
- Plug the power cable supplied into the Power connector on the rear of the recorder.
- Plug the mains plug into an AC outlet.

Note:

Always check if the local mains voltage matches the required 220V - 240V.

When the recorder is in the Standby position, it is still consuming some power.

If you wish to disconnect your DVD recorder completely from the mains, withdraw the plug from the AC Outlet. When the DVD recorder is disconnected from the mains, TV channels and timer data will be stored typically 1 year.

Switching on

- Switch on the TV set and select the programme number that you have chosen for video playback (see operating manual for your TV set).
- Press () STANDBY/ON.
 - ➤ The recorder display lights up. If you have not yet installed your DVD recorder, it will enter 'virgin mode'. In this mode you will have to set your personal preferences.



First time set-up: virgin mode

After switching on the DVD recorder for the very first time the 'virgin mode screen' will appear.

In 'virgin mode' you may have to set your preferences for some of the recorder features.

If the 'virgin mode screen' does not appear, your DVD recorder has been installed already. You may still change the settings via the 'installation menu'.

Depending on the kind of TV set, preferences will have to be set manually or they will be taken over automatically from the TV set.

Automatic setting

When your TV set is equipped with EasyLink™, Cinema Link™, NexTVIEW Link™, SmartLink™, Q-Link™ or MegaLogic™, the TV settings will be taken over from the TV set but they cannot be changed manually afterwards.

When preferences are taken over from your TV set, the message 'Easy Link loading data from TV-please wait' will appear.

Menus for which no preferences are available will be displayed. They have to be set manually.

Note.

Preferences have to be set in the order in which the item menus will appear on the screen.

If the recorder is switched off while setting user preferences, all preferences have to be set again after switching the recorder on again.

The 'virgin mode' will only be concluded after the preferences for the last item have been confirmed.



Manual setting

When a menu is displayed:

- Use the ∇△ (down up cursor) keys to go through the options in the menu. The icon of the selected option will be highlighted.
- Use **OK** to confirm your selection and to select the next menu.

The following items may have to be set in virgin mode:

Menu language

The on-screen menus of DVD-Video discs will be displayed in the language you choose.



Audio language

The sound of DVD-Video discs will be in the language you choose, provided this is available on the disc in play. If not, speech will revert to the first spoken language on the disc. Also the DVD-Video disc menu will be in the language you choose, provided this is available on the disc.



Subtitle language

The subtitles of DVD-Video discs will be in the language you choose provided this is available on the disc in play. If not, subtitles will revert to the first subtitle language on the disc.

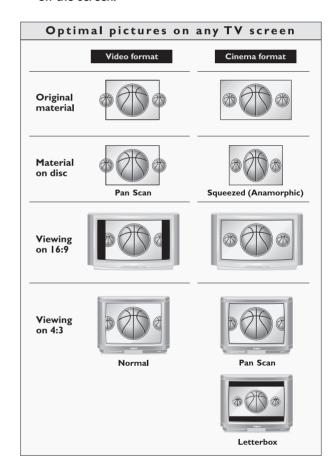


TV Shape



You can choose:

- -16:9 if you have a wide screen (16:9) TV set.
- 4:3 if you have a regular (4:3) TV set. In this case you can also choose between:
 - Letterbox for a 'wide-screen' picture with black bars at the top and bottom,
 - Pan Scan, for a full-height picture with the sides trimmed. If a disc has Pan Scan, the picture then moves (pans) horizontally to keep the main action on the screen.



Country

Select your country. This is used as input for the 'Parental Control' feature (see 'Access Control') as well as the searching of TV channels.



Auto TV Channel Search

Make sure the antenna is connected. See 'Connecting to the antenna'. Your DVD recorder will search for all TV channels.

It stores channels in the sequence they are found.

- Confirm with **OK**.
 - ➤ Auto search starts. This can take several minutes.



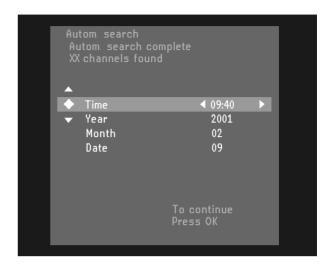
➤ When Auto search is completed 'Autom search complete - XX channels found' appears on the TV screen.

After Auto channel search you can have TV channels stored automatically in the same order as your TV set. See 'User preferences installation' - 'Follow TV'.

Time/Date

When Channel auto search is completed the actual Time and Date are also set automatically.

If the time in the DVD recorder display is not correct, the clock must be set manually.



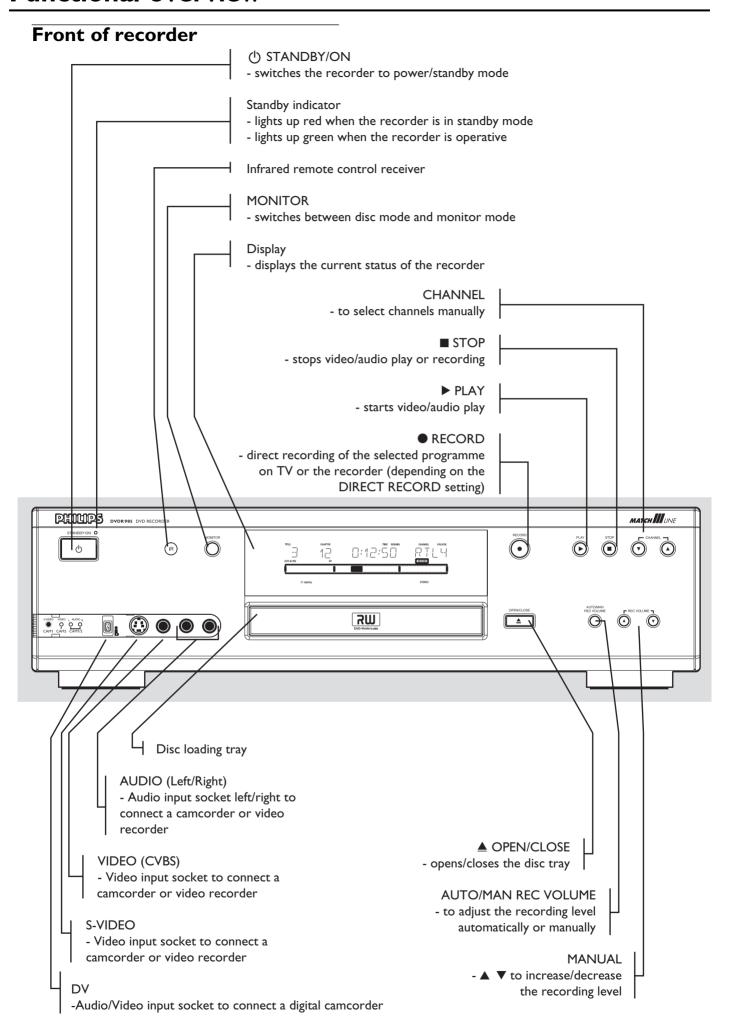
- Adjust 'Time', 'Year', 'Month', 'Date' if required, with the ∇ (down cursor) or △ (up cursor) key.
- Change values with the the < (left cursor) or ▷
 (right cursor) key or the digit keys 0-9.
- To end, press **OK**.

Note:

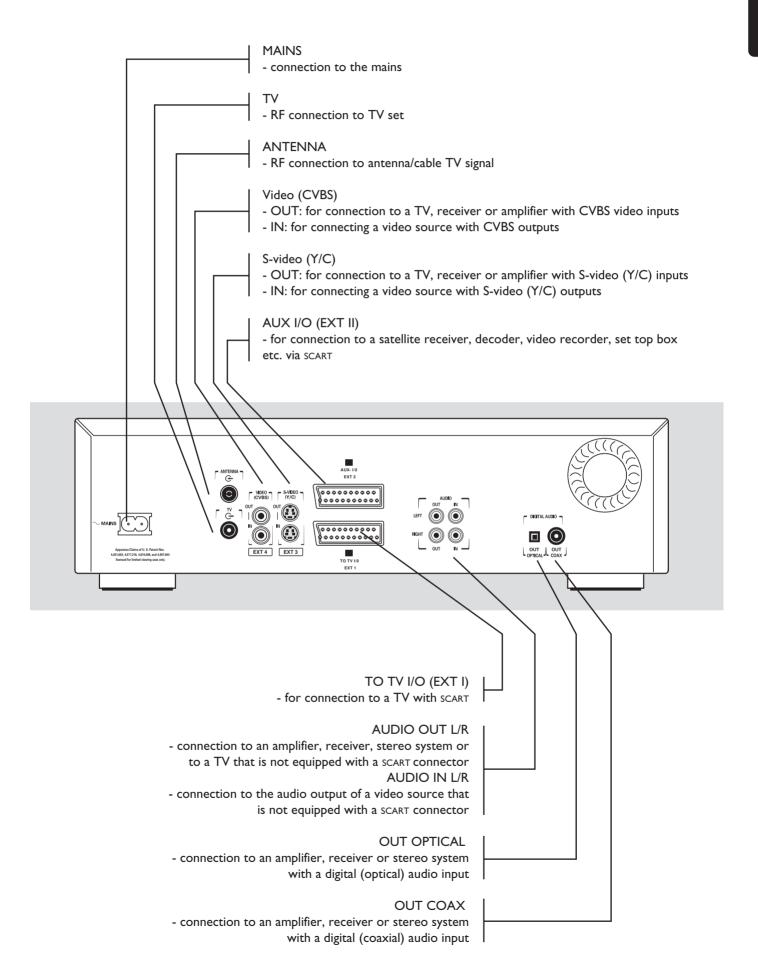
All these items may have to be set after first start up ('virgin mode'). After that they can always be adapted in the user preferences menu. When your TV set is equipped with EasyLink the TV set presets will be taken over from the TV set but they cannot be changed manually afterwards.

Virgin mode settings are now completed.
All settings can still be changed. See 'User preferences'.

Functional overview



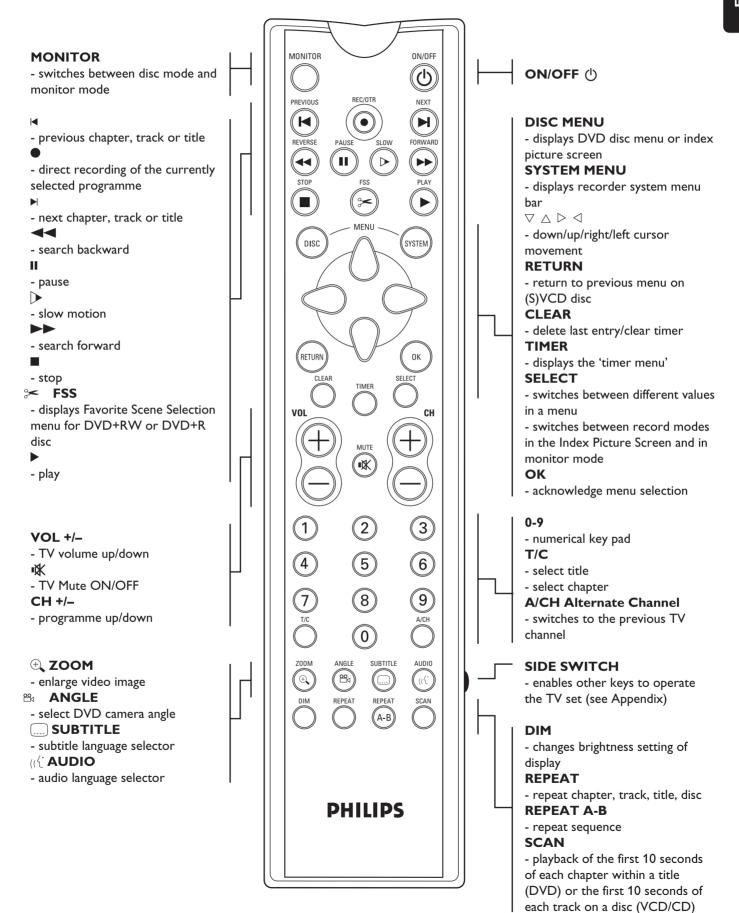
Rear of recorder



Display DECODER - DVD Video disc inserted - Decoder activated for current preset - DVD+Recordable disc inserted VPS/PDC DVD+RW - Video Programming System/Programme - DVD+Rewritable disc inserted Delivery Control active on current preset CHANNEL - Preset name or number - DVD title number RECORD - Recording in progress - VCD/CD track number - Timer programmed or active - Video CD inserted - Audio CD inserted - Track time in minutes and seconds - Super Video CD inserted - Total playback or recording time in hours, minutes and seconds TOTAL REMAIN HQ - SP - LP - EP - Total remaining playback or recording time - Selected recording mode: High Quality, in hours, minutes and seconds Standard Play, Long Play or Extended Play - Remote control active (flashing) CHAPTER - DVD chapter number MPEG DE DIGITAL DTS PCM STEREO - Recorder prepared for or engaged in satellite recording - NICAM digital stereo sound on current preset **STEREO** - Stereo sound from tuner dB scale - indicates recording volume when using manual level control Disc bar - Displays disc content, recording level or formatting progress - Manual recording level control

DIGITAL - DTS - MPEG - PCM - Active audio format

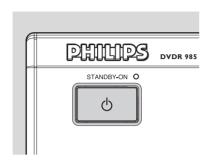
Remote control



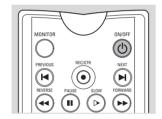
Operation

Important notes for operation

You can switch on the DVD recorder with the (1) **STANDBY/ON** key. Keep your DVD recorder connected to the mains at all times to ensure that programmed recordings can be made and that the television functions normally.



Both the DVD recorder and the remote control have an 'Emergency interrupt' button. You can use the (¹) **STANDBY/ON** button to interrupt a function. When you have an operating problem, you can interrupt the function and start again.



When you switch off the DVD recorder, the display will briefly show 'NRIT'.

Loading discs

- 1 Press ▲ OPEN/CLOSE on the front of the recorder. The disc loading tray opens.
- 2 Lay your chosen disc in the tray, label side up. Make sure it is sitting properly in the correct recess.
- 3 Press / Open/Close, to close the tray.
 - ➤ 'RERBING' appears in the status box and on the recorder display. If the inserted disc is pre-recorded or write-protected, playback always starts automatically.

You can always unload a disc by pressing

▲ OPEN/CLOSE again or pressing ■ STOP on the remote control for two seconds.

Note:

If 'Child Lock' is set to ON and the disc inserted is not in the 'child safe' list (not authorized), the PIN code must be entered and/or the disc has to be authorized. (see 'Access Control')

Disc types

You will recognize the different types of discs, that can be used in your DVD recorder by the logo. Depending on the disc type you can either use it for recording and playback or playback only. Some discs are not suitable at all to be used in the DVD recorder.

In the next table a summary is given of all excisting disc types and their DVD recorder compatibility.

The following disc types can be used for recording and playback:

DVD+RW

Records and plays; In case of a new blank disc, after the first recording, some more time (up to two minutes) is needed to make the disc compatible with DVD-Video players.



DVD+R

Records and plays.



The following disc type can be used for playback only:

DVD-Video





DVD-R

Only plays if it contains DVD-Video.





DVD-RW

Only plays if it is recorded in Video mode and has been finalized.





CD Digital Audio

You can play digital audio CDs in conventional style through a stereo system, using the keys on the remote control and/or front panel, or via the TV set using the on-screen display (OSD).



Super Audio CD

Of hybrid SACD discs, the CD layer can be played.

(Super) Video CD

Depending on the material on the disc (a movie, video clips, a drama series, etc.) these discs may have one or more tracks, and tracks may have one or more indexes, as indicated on the disc case. To make access easy and convenient, your recorder lets you move between tracks, and between indexes.



CD-R/CD-RW

Plays if it contains Audio CD.



The following disc types cannot be used at all, neither for recording nor for playback:

DVD-RAM





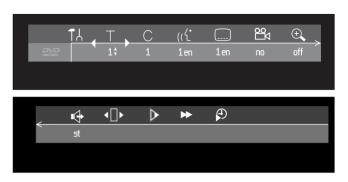
DVD-Audio



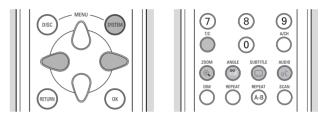


On-screen display information

System menu bar



The system menu bar can be called up by pressing any of the following keys on the remote control: **SYSTEM MENU**, **T/C**, ANGLE, SUBTITLE, ((\(\lambda \)) **AUDIO** and **\(\lambda \) ZOOM**.



Widescreen (16:9) TV sets may show only part of the system menu bar in certain screen modes. Select a different screen mode on the TV to see the full menu. A number of recorder functions can be controlled via the system menu bar. You can navigate between the two parts of the system menu bar with the \triangleleft (left cursor) and the \triangleright (right cursor) key.

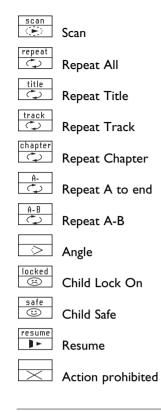
System menu bar icons

	PART 1		PART 2
T٨	User preference	•	Sound
T	Title/Track	4 □►	Step motion
C	Chapter/Index	\triangleright	Slow motion
((ť	Audio language	>>	Fast motion
	Subtitle language	\mathfrak{D}	Time search
≌⊲	Angle		
\oplus	Zoom		

Temporary Feedback Field

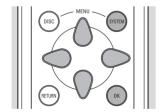


The system menu bar contains a 'Temporary Feedback Field' with information concerning prohibited actions, playback modes, available angles, etc.



User preference menu operation

- Press **SYSTEM MENU** on the remote control.
- Select Th in the system menu bar and press ∇ (down cursor).
 - ➤ The user preferences menu appears.
- Use the ▷ ▷ ♡ (left right up down cursor) keys to toggle through the menus, sub menus and submenu options.
 - ➤ When a menu item is selected, the cursor keys (on the remote control) to operate the item are displayed next to the item.
- Press **OK** to confirm and return to the main menu.

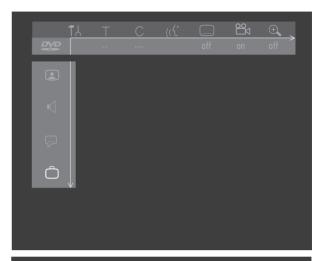


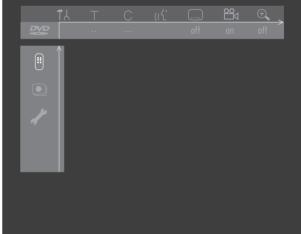
The following functions can be operated via the user preference menu.

User preference menu icons

- Picture settings
- Sound settings
- Language settings
- Feature settings
- Remote control settings
- Record settings
- Installation

• You can navigate between the various items of the user preferences menu with the \triangle (up cursor) and the ∇ (down cursor) key. To select an item press \triangleright (right cursor) key.





 By pressing SYSTEM MENU the system menu bar will disappear from the screen.

Status box

The status box on the left hand side of the screen displays the current status of the recorder and the disc type loaded for several seconds.







Disc type icons

® RW

DVD+RW



DVD+R



DVD-Video



Super Video-CD



Video-CD



no disc



disc error

Disc status icons

rec

recording

■ stop

stop



playing

Ш

.

pause • II pause play

pause

record pause

• erasing

erasing

8 x

fast forward

44 8 x

fast reverse

⊳ slow

slow motion

Tuner info box

The tuner info box is located at the bottom left of the screen and is displayed in monitor mode (See: Recording Checking input). It displays the currently selected input. When the tuner is selected it shows programme number and/or channel name.



Current channel



No signal



Copy-protected signal

Timer info box

The timer info box is located above the tuner info box and is displayed in monitor mode. It displays the current status of the timer.

When a timer is programmed it shows a timer indication and the start time or date of the first programmed recording.



Timer event due today



Timer event due on another day

When an OTR recording is in progress it shows the end time.



OTR recording in progress

When no timer is programmed it displays the current time.



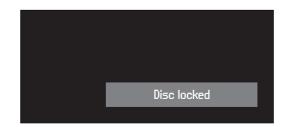
Current time

Note:

Tuner info box and timer info box disappear during playback and after recording is started.

Warning box

The warning box will be displayed near the bottom of the screen when appropriate. For instance: 'Disc locked'.



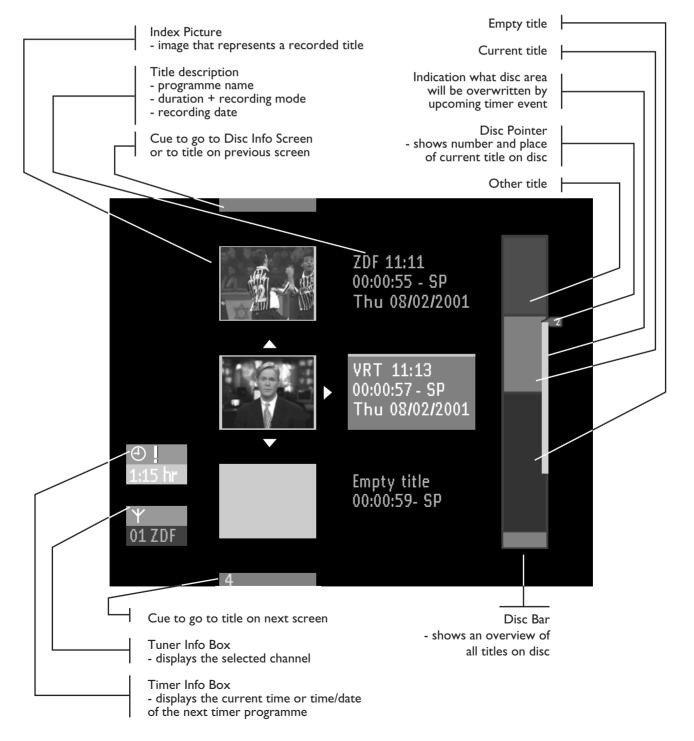
Index Picture Screen

The Index Picture Screen displays an overview of the titles recorded on the disc. Each title is represented by an index picture. Next to the index picture the programme name, duration, recording mode and recording date of the title are shown. If no name is known, the DVD recorder will fill in the source and the time of the recording instead.

Empty spaces (erased titles, or blank space at the end of the disc) are also shown as such.

• At maximum three titles will be shown on the screen at once. If more titles are present, you can navigate to those with the $\nabla \triangle$ (down up cursor) keys.

- On the right hand side of the Index Picture Screen, you can see the disc bar. This gives an overview of all titles on the disc, as well as any empty spaces.
 On the disc bar, an arrow the disc pointer indicates your current position on the disc. From this point you may resume playback or recording.
- If you navigate trough the list of titles with ∇ △
 (down up cursor) or |
 PREVIOUS/► NEXT, the disc pointer will move along.
- Press
 STOP to reset the disc pointer to the beginning of the disc.
- To move the disc pointer to the end of the last title, keep ► NEXT pressed.
- If you navigate from an Index Picture to the box right next to it (containing name, rec mode, etc.), you enter the title settings menu (see under 'Managing disc content - Title settings').



T人 User preferences

Setting user preferences

You can set your user preferences for some of the recorder features. (See 'Operation' - 'User preferences menu operation')

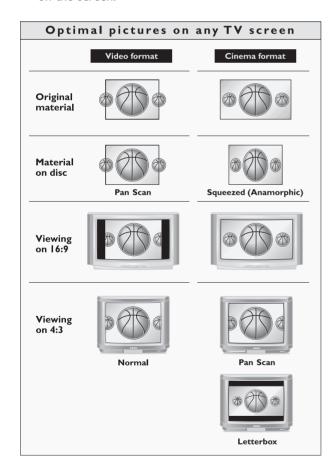
The following items can be adapted:

Picture settings

TV Shape

With TV Shape you can adjust the output of your DVD Recorder to optimally fit your TV screen. You can choose:

- -16:9 if you have a wide screen (16:9) TV set.
- 4:3 if you have a regular (4:3) TV set. In this case you can also choose between:
 - Letterbox: for a 'wide-screen' picture with black bars at the top and bottom,
 - Pan Scan: for a full-height picture with the sides trimmed. If a disc has Pan Scan, the picture then moves (pans) horizontally to keep the main action on the screen.



Black level shift (NTSC only)

Adapts the colour dynamics to obtain richer contrasts. Select 'On' or 'Off'.

Video shift

Factory setting is such that the video will be centered on your screen. Use this setting to adjust the position of the picture on your TV set by scrolling it to the left or right.



SCART Video

Factory setting is RGB. Select 'S-video' (Y/C) via SCART when connecting to an S-VHS recorder.

■ Sound settings

Digital output

Factory setting 'All' means that both coaxial and optical outputs are switched on, and that Dolby Digital Multichannel is fed to the outputs as such MPEG audio is converted to PCM. If your equipment doesn't include a digital Multi-channel decoder, set the digital output to 'PCM only' (Pulse Code Modulation). Both coaxial and optical outputs are then switched on, and Dolby Digital and MPEG audio are converted to PCM. If you are not connecting equipment with a digital input, change the setting to 'Off'.

Analogue output



Select 'Stereo', 'Surround' or '3 D Sound'. Factory setting is Stereo.

Surround: Select this setting when using equipment with a Dolby Surround Pro Logic decoder. In this setting the 5.1 audio channels (Dolby Digital, MPEG-2) are downmixed to a Surround-compatible 2-channel output.

3D Sound: In a set-up without rear speakers (analogue stereo output), this option remixes the six channels of digital surround (Dolby Digital, MPEG-2) into a two speaker output, while retaining all of the original audio information. The result is the listening sensation of being surrounded by multiple speakers.

Connected audio system	Digital out	Analogue out
Amplifier or TV with two channel analogue stereo	Off	Stereo
Amplifier or TV with Dolby Surround or Dolby Pro Logic	Off	Surround
Amplifier with two channel digital stereo	PCM only	Stereo
A/V receiver with Multi-channel decoder (Dolby Digital, MPEG, DTS)	All	Stereo or Surround
Multi-channel A/V receiver with 6-ch connectors	Off	Surround

Night Mode

Night mode optimizes the dynamics of the sound with low volume playback for less disturbance in quiet environments. This only works for Dolby Digital audio on DVD-Video discs.

Language settings

The preferred language can be adapted via the system menu bar. Also see 'virgin mode'. Settings can be changed for:

- Playback audio language
- Subtitle language
- Menu language
- Country setting.

Feature settings

Access Control

Access Control contains the following features: Child Lock - When Child Lock is set on, a 4-digit code needs to be entered in order to play discs.

Parental Level - Allows the conditional presentation of DVD discs containing Parental Level information.

Change country - Allows conditional presentation of DVD-Video discs containing country information.

Change code - To change the pin code.

See 'Acces Control'.

Adapt disc format

This option is only available when a DVD+RW or DVD+R disc recorded on a different brand of recorder is loaded. You can adapt the menu to your own recorder.

A DVD+RW video disc that has been recorded on a different type or brand of recorder can be played, but may not provide all features commonly available to DVD+RW discs, such as the on-screen disc bar, the disc settings menu, the title settings menu, and editing. If the disc is not write-protected, the disc format can be adapted to the own recorder, after which these functions are available.

Status box

The status box displays the current status of the recorder and the disc type loaded (See 'Operation' - 'On-screen display information'). You can switch it On or Off.

Off = always Off.

On = displayed together with the system menu bar or displayed temporarily (disappears after time-out) when changing the playback or record status.

Factory setting is 'On'.

Auto resume

The Auto resume setting only applies to pre-recorded DVD-video and Video CD discs only - not only to the disc in the recorder but also to the last twenty discs you have played.

If 'Auto resume' is set to 'On', playback will start from the point where it was stopped the last time the disc was played.

When 'Auto resume' is set to 'Off', the recorder will start playing from the beginning of a disc. In this case you can still resume when resume appears on screen by pressing PLAY. Factory setting is 'On'.

Low power standby

If low power standby is 'On', the recorder will consume minimum power in standby mode. Factory setting is 'Off'.

Notes:

When the recorder is in low power standby mode:

- the output of the equipment connected to EXT 2 will not be passed through to the TV set on EXT 1,
- the Display will be Off,
- the Standby indicator on the recorder will still light up in standby mode.



PBC

This feature is only available when a (Super) Video CD is loaded. It allows you to disable or enable the PBC (Playback Control) menu of VCD discs. See under 'Special VCD features': Factory settings is 'On'.

Finalise disc

This option is only available on unfinalised DVD+R discs. See 'Managing disc content - Finalising a DVD+R disc'.



Remote Control settings

Key sound

The recorder makes a 'beep' sound upon every key command given via recorder or remote control keys. Select 'Off' to disable this sound. Factory setting is 'On'.

Remote control used

If you want to use the remote control of a Philips DVD player instead of the standard DVD recorder remote control, select 'DVD player'. Factory setting is 'DVD recorder'.

System information

When you move further down in the Remote Control settings menu, the system status screen will appear. Press \triangle (cursor up) to go back.



Record Settings

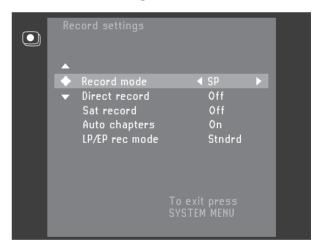
Record mode

By selecting a recording mode you define picture quality of recordings and maximum recording time for a disc.

Mode	Picture quality	Total recording time
HQ (High Quality)	best possible picture quality	60 minutes
SP (Standard Play)	pre-recorded DVD quality	120 minutes
LP (Long Play)	better than S-VHS picture quality	180 minutes
EP (Extended Play)	better than VHS picture quality	240 minutes

In practice, the DVD recorder may record a few minutes more than indicated. For playback, the correct recording mode will automatically be selected. The HQ mode is optimised for recording via the i-link DV input. For all other sources use SP, LP or EP.

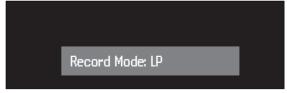
In the record settings menu, select 'Record mode'.



- Alter the recording mode with \triangleleft or \triangleright (left right
- Confirm with the **OK** key.
- To end, press SYSTEM MENU.

An alternative way to select the record mode is available in the Index Picture Screen and in monitor mode:

- Press **SELECT**.
 - ➤ The new record mode appears on the screen and the display.



It is not possible to switch record modes during recording.

Direct record

With the Direct Record function switched 'On' and the DVD recorder switched to standby, the channel number selected on your television will be automatically taken over by the DVD recorder, at the moment it starts recording. This only applies for televisions connected via scart, which have video output via SCART or which have EasyLink. Factory setting is 'Off'.

- In the record settings menu, select 'Direct record'.
- Select 'On'. If you select 'Off', the function will be switched off.
- Confirm with OK.
- To end, press SYSTEM MENU.

Sat record

You can only use this function, when you have a satellite receiver, which can control other equipment by a 'programming' function. In this mode your DVD recorder starts recording when the satellite receiver releases a signal. The start and end of the recording is controlled via one of the SCART sockets.

- In the record settings menu, select 'Sat record'.
- Select the SCART socket to which the satellite receiver is connected with < or ▷ (left right cursor).
- Confirm with OK.
- Insert a recordable DVD+RW disc.
- Press (¹) STANDBY/ON.
 - ➤ When this function is switched on, **SAT** appears on the display.
 - ➤ The DVD recorder is now prepared for recording.

Factory setting is 'Off'.

Auto chapters

If autochapters is 'On' every five to six minutes a chapter marker (beginning of a new chapter) is inserted during recording. This enables easy navigation through a title during playback. In either case you can manually insert chapter markers afterwards. (See 'Managing disc content' - 'Edit in playback mode'.)

LP/EP rec mode

In long play or extended play recording mode you can select the 'Sport' setting to optimize the video recording for images that contain fast movements, like sports programmes. The setting does not influence high quality or standard play recording mode. Factory setting is 'Stndrd'.



Auto TV Channel Search

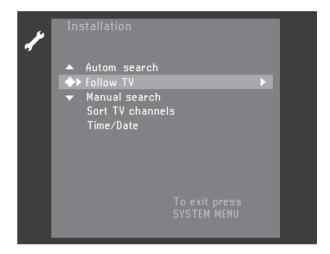
Your DVD recorder will search for all TV channels. It stores channels in the sequence they are found. (See 'Installation - First time Set-up')

Note.

All channels stored so far will be erased.

Follow TV

With Follow TV you can programme the same channel sequence on the DVD recorder as on the TV set. This only functions if the recorder socket (EXT1) and the TV set are connected with a SCART cable. Additional equipment connected to socket EXT2 must be switched off.



Press OK.

▶ If the DVD recorder recognizes that the TV set has been connected with a SCART cable, ' $\top V \Box$ 4' appears on the display.



- ➤ When 'N□TI'' (no signal from TV set) appears on the display, the TV channels can not be allocated automatically. In this case read 'Manual TV channel search'.
- Select programme number '1' on the TV set.
- Confirm with **OK** on the remote control of the DVD recorder.
 - ➤ The DVD recorder compares the TV channels on the TV set and the DVD recorder. If the channels match, this channel is stored at 'P01'.
- Wait until 'TV□2' appears and repeat the previous two steps for programme number 2 and the rest of the channels you want to store.
- To end, press **SYSTEM MENU**.

Manual TV channel search

You can perform a search to select and store TV channels manually. If the DVD recorder is connected via EasyLink, this function is not available.

- Press SYSTEM MENU.
- Select 'Installation'.
- Select 'Manual search'.
- In the line 'Channel/freq.' select the display for:

Freq.: frequency CH: channel S-CH: special channel

- If you know the frequency or channel of the desired TV channel, you can enter the data in line 'Entry/search' with the digit keys 0-9. If you don't know the frequency or channel of the TV channel of your choice, press ▷ (right cursor) to start channel search
- In the line 'Programme number' select the programme number you want, using < or ▷ (left right cursor) or digit keys 0-9.
- If you want to change the TV channel name, press the ▷ (right cursor) key in line 'TV channel name'.
- Select the character you want to change with the
 ⟨left cursor⟩ or ▷ (right cursor) key.
- Change the character with the ∇ (down cursor) or
 ∆ (up cursor) key.
- Press OK to confirm.

This DVD recorder can receive HiFi sound transmissions in NICAM Stereo. However, if sound distorsion occurs, due to poor reception, you can switch off NICAM:

In the line 'NICAM' select 'On' or 'Off' with the
 (left cursor) or ▷ (right cursor) key.

If you want to change the automatic TV channel setting, select the line 'Fine tuning'. With the < (left cursor) or ▷ (right cursor) key you can vary the automatic TV channel setting.

Important: This re-tuning is only necessary and useful in special cases, e.g. when stripes appear on your TV screen when using a cable-TV system.

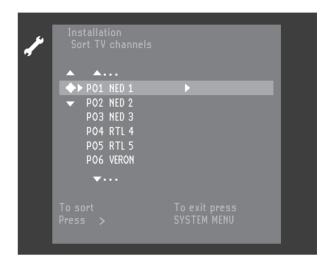
- Press OK to store the TV channel.
- To end, press **SYSTEM MENU**.

Connecting a decoder:

- Switch on the TV set and select the programme number for the DVD recorder.
- Select the TV programme you wish to link with the decoder function with CH+ or CH-.
- Press SYSTEM MENU
- Select 'Installation'.
- Select 'Manual search'.
- Select 'Decoder'.
- Select ' $\mathbf{O}\mathbf{n}$ ' with \triangleleft (left cursor) or \triangleright (right cursor).
- Confirm with OK.
 - ➤ 'DECODER' apperars on the display.
- To end, press SYSTEM MENU.

Sort/Clear TV channels manually

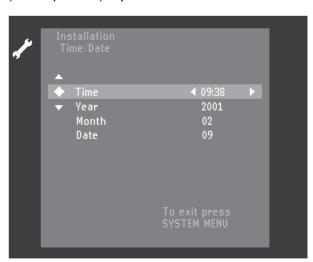
- If the DVD recorder is connected to the TV set with EasyLink or a similar system, manual sort cannot be executed. In all other cases, you can select.
- Press SYSTEM MENU.
- Select the line 'Installation'.
- Select the line 'Sort TV channels'.



- Select the TV channel to which you want to allocate a programme number (starting with 'P01') with the \triangle (up cursor) or ∇ (down cursor) key and press the \triangleright (right cursor) key.
- Select the desired position with \triangle or ∇ (up down cursor) key.
- To store, press **OK**.
- To end, press **SYSTEM MENU**.

Time/Date

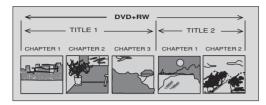
To adjust 'Time', 'Year', 'Month' and 'Date' with the digit keys **0-9**. Switch between fields with the $\nabla \triangle$ (down up cursor) keys.



Recording

Before you start recording

Recordings on a DVD disc are called 'titles'. Every title consists of one or more chapters.



For more information about how to go to other titles or chapters see 'Playback - general features'.

Important:

Recordings on a DVD+RW disc are normally started from the position of the so-called disc pointer, i.e. the point where the last recording was stopped. From there on earlier recordings may be overwritten without notice, unless the disc is write protected. In this respect your DVD recorder behaves just like a Video Cassette Recorder.

If you want to make a recording without the risk of overwriting earlier recordings use the safe Record Function (see Manual Recording - Safe Record)

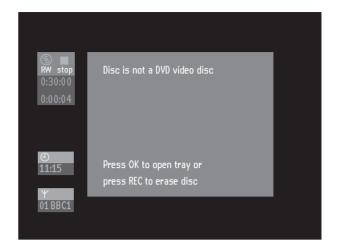
In the Index Picture Screen you can select the point where you want to start your recording. Use the ∇ △ (down up cursor) and ◄ REVERSE/► FORWARD keys. You can see the the current location on the disc bar, indicated by the arrow.

Your DVD recorder always checks the disc that you have inserted:

- ➤ When a DVD+RW disc is inserted on which recordings have been made, the Index Picture Screen is shown on your TV screen.
- ➤ If the inserted disc is a completely empty recordable disc, the message 'EMPT' BISE' appears on the display.
- ➤ If the inserted disc is a DVD+RW disc with a content that is not DVD-Video compatible (e.g. a data disc), a dialog box is shown with the option to erase or eject the disc. You can only record on this disc after erasing it with the **RECORD** key.

Note:

- On a disc containing PAL recordings, no NTSC recordings can be made and vice versa. On an empty disc, either type of recordings can be made.
- No recordings can be made from so-called 'Pseudo-PAL' or PAL-60 sources.



➤ A disc can hold up to 48 titles (including empty titles). When this maximum is reached the onscreen message 'Too many titles' appears, if you want to make a new recording. You have to erase a title first next to an empty title. (See 'Managing Disc Content'.)

Manual recording

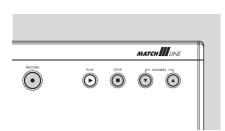
Checking input

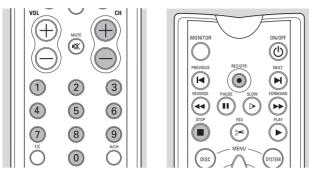
Normally, the DVD recorder displays the contents of the disc on screen.

- Press MONITOR in order to switch to the internal tuner, or whichever other source is selected, if you want to check the input before starting a recording.
 - ➤ On the TV screen, you will see the actual picture quality that you will get if you record: the video has been encoded and decoded again. This is why you will see a delay of about 1.5 seconds when using a 'live' source such as a camera.
- In monitor mode you can choose programme numbers directly with the digit keys 0-9 on the remote control.
- Press SELECT repeatedly to select the desired record mode.
- Press MONITOR again to go back to disc mode.

Recording

- Insert a recordable DVD+RW or DVD+R disc.
- Normally, the DVD recorder displays the contents of the disc on the screen.
- Use the MONITOR button to see the currently selected TV channel.
- Use CHANNEL ▲ or CHANNEL ▼ (on the recorder) or CH+, CH- (on the remote control) to select the programme number (programme name) from which you wish to record.
 - ➤ When a TV channel transmits a channel name, it will be shown on the display.





The following programme numbers are provided for recording from external sources:

'EXT1': TV set via SCART 1 socket

'EXT2': for recording from external sources via

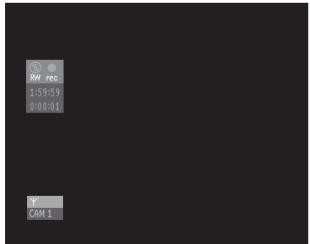
SCART 2 socket

'EXT3': rear S-video 'EXT4': rear CVBS

'CAM1': front S-video (Y/C)
'CAM2': front Video (CVBS)

'CAM3': front DV.

- Press RECORD (on the recorder) or REC/OTR (on the remote control).
 - > RECORD is shown on the display.
 - ➤ The status box is shown on the screen for a few seconds.



- To bring back the status box during recording press
 SYSTEM MENU. Pressing SYSTEM MENU once more will remove the status box again.
- Press II PAUSE to pause recording. You can resume recording by pressing II PAUSE once more.
 The DVD recorder will make a seamless connection.
- Press
 STOP to stop recording. If you are recording from a camcorder watch the video output of the DVD recorder on the TV instead of the camcorder viewer to determine the right moment to stop.

- The Index Picture Screen is updated.
 - ➤ 'MENU UPDATE' is shown on the display.
- After a short recording on a new DVD+RW disc, a few minutes will be needed to complete the formatting of the disc.

Safe Recording

When you start recording on a DVD+RW disc by briefly pressing the **RECORD** or **REC/OTR** key, a recording on DVD+RW will be made from the current position of the disc pointer. To prevent this do the following:

- Hold the RECORD key (on the recorder) or REC/OTR key (on the remote control) press for about two seconds until 'SAFE RECORD' appears on the display.
- The recorder automatically jumps to the end of the last title on the disc and starts recording.
 - ➤ If no free space is left. The display will show 'IISE FULL'. Safe record is not possible then.

Recordings on DVD+RW are always automatically made after the last title on the disc.

Direct Record

With Direct Record you can start recording immediately from the programme selected on the TV set.

- Make sure 'Direct record' is switched 'On'. (See record settings).
- On the TV set, select the programme number you want make the recording from.
- Make sure the DVD recorder is switched to standby.
- Press RECORD (on the recorder) or REC/OTR (on the remote control).

Notes:

- Don't select another programme number on your TV set, until the ≒∃∃' on the display of your DVD recorder disappears. This can take up to one minute.
- When \mathbb{NGTV}' appears on the display, the programme number could not be found. The DVD recorder switches off automatically.
- If your loudspeakers are connected (via an amplifier / receiver) to your DVD recorder, the sound will be delayed relative to the TV picture when recording directly from the TV set
- You can use Direct Record in combination with Safe Record.

Manual audio control

You can control the audio recording level of your DVD recorder manually.

- In monitor mode, press AUTO/MAN REC VOLUME on the DVD recorder.
 - ➤ The display will show the current audio level and MANUAL appears.

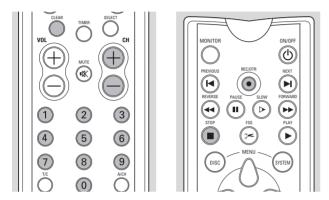


- Adjust the recording level with MANUAL ▲ or ▼ on the DVD recorder, so that the '0 dB' mark lights up during the loudest parts of the recording.
- You can switch back to automatic audio level control by pressing AUTO/MAN REC VOLUME again.
 - ➤ The display will show the current disc position and MANUAL disappears.

Note:

When DV input is selected, manual volume control is disabled.

Recording with automatic switch-off (OTR One-Touch Recording)



- Insert a recordable DVD+RW or DVD+R disc.
- Use CHANNEL ▲ or CHANNEL ▼ (on the recorder) or CH+, CH- (on the remote control) to select the programme number (programme name) from which you wish to record.
- Press RECORD (on the recorder) or REC/OTR (on the remote control) twice.
 - ➤ A recording will be made of 30 minutes.
 - ➤ The required end time of the recording is shown in the timer box on screen. The remaining recording time is shown on the display.



- Press RECORD or REC/OTR again to obtain a 30 minute increment.
- Shortly after pressing REC/OTR, OTR can be cancelled by pressing CLEAR.

Timer programming

The DVD recorder needs the following information for every programmed recording:

- the date on which the recording is to be made;
- the channel;
- the start and stop time of the recording;
- VPS/PDC on or off;
- the recording mode (HQ, SP, LP or EP).

The DVD recorder stores all the information mentioned above in a timer block. You can programme up to six timer blocks, one month in advance.

When you have programmed the timer, a red line on the disc bar (both on the display and on the Index Picture Screen) indicates what part of the disc will be overwritten by the programmed recording from the current disc position (on DVD+RW) or after the last title (on DVD+R).

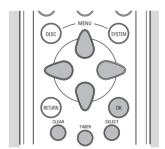
When all timer blocks are full, the options timer programming and VIDEO Plus+ programming cannot be accessed. For clearing a timer block, see 'How to clear a timer block'.

What is 'VPS'/'PDC'?

With 'VPS/PDC', the TV station controls the beginning and the length of the programmed recording. This means that the video recorder switches itself on and off at the right time even if a TV programme you have programmed begins earlier or finishes later than expected.

Usually the start time is the same as the VPS/PDC time. If, however, in the TV guide, in addition to a TV programmes start time, a different VPS/PDC time is given, e.g.: '20.15 (VPS 20.14)', you must enter '20.14' as the start time exactly to the minute. If you want to enter a time that differs from the VPS/PDC time, you must switch off 'VPS/PDC'.

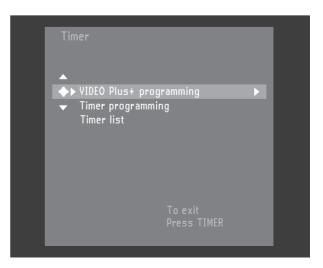
Timer programming with the VIDEO Plus+® system



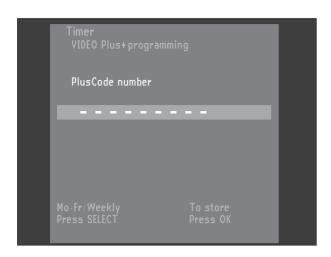
A PlusCode number is a number of up to nine digits, printed in most TV guides next to the start time of a TV programme.

All the information required for a programming is contained encoded in the PlusCode programming number.

Select 'VIDEO Plus+ programming' with △ (up cursor) or ∇ (down cursor).



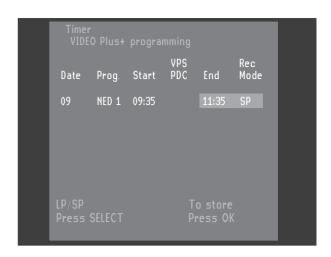
• Press \triangleright (right cursor).



- Enter the entire PlusCode number (up to nine digits) printed in your TV guide next to the start time of a TV programme. If you made a mistake, you can correct it with CLEAR.
- Confirm with OK.
- If the VIDEO Plus+ system does not recognize the TV channel, the message 'Please enter programme number' will appear on screen. Select the required programme number (programme name) with ▷ (left right cursor) or the digit keys 0-9 and confirm with OK.

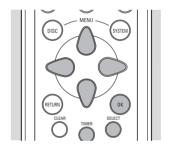


- ➤ The data will appear on the TV screen.
- Press ▷ (right cursor).
- Use SELECT to select the programming key at daily or weekly intervals. Mo-Fr: Recording at daily intervals from Mondays to Fridays inclusive. Weekly: Recording at weekly intervals on the same day of the week.
- Press ▷ (right cursor).
- Use SELECT to switch VPS/PDC on or off.
 When VPS/PDC is switched on, the start time is marked with an asterisk.
- Press ▷ (right cursor).
- Use SELECT to select the recording mode ('HQ', 'SP', 'LP', 'EP').

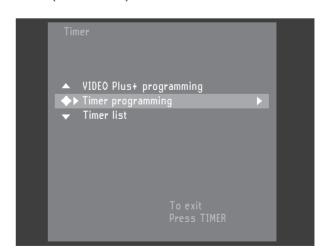


- Confirm with OK.
 - ➤ The data has been stored in a timer block.
- To end, press TIMER.
- Make sure that you inserted a recordable disc.
 If you inserted a write-protected disc recording will be refused.
- Switch off with (I) **STANDBY/ON**.

Timer programming without the VIDEO Plus+ system

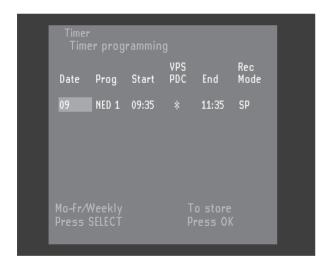


- Press TIMER on the remote control.
- Select 'Timer programming' with △ (up cursor) or
 ∇ (down cursor).



- Press \triangleright (right cursor).
- Enter the date with \triangle (up cursor) or ∇ (down cursor), or with the digit keys **0-9**.

- If desired, select recording at daily or weekly intervals in the field 'Date' with SELECT. 'Mo-Fr': Recording to be made from Mondays to Fridays inclusive. 'Weekly': Recording at weekly intervals on the same day of the week.
- Press ▷ (right cursor).
- Enter the programme number from which you want to record. If you want to record from an external source, select 'EXT1', 'EXT2', 'EXT3', 'EXT4', 'CAM1', 'CAM2' or 'CAM3' with △▽ (up down cursor).
- Press ▷ (right cursor).
- Enter the Start time with $\triangle \nabla$ (up down cursor) or the digit keys **0-9**.
- After entering the Start time, use SELECT to switch VPS/PDC on or off. With most TV stations the VPS/PDC time is always the same as the start time
 - ➤ When VPS/PDC is switched on, the start time is marked with an asterisk.
- Press ▷ (right cursor).
- Enter the End time with △▽ (up down cursor) or the digit keys 0-9.
- Use SELECT to choose the recording mode 'HQ', 'LP', 'SP' or 'EP'.
- If you made a mistake, you can go back with < (left cursor).



- Confirm with OK .
 - ➤ The data has been stored in a timer block.
- To end, press **TIMER** .
 - ➤ Make sure that you inserted a disc without write protection. If you inserted a write-protected (locked) disc, recording will be refused.
- Switch off with () STANDBY/ON.

Programming with 'NexTVIEW Link'

This DVD recorder is equipped with the function 'NEXTVIEW Link'. If your television is also equipped with this function, you can mark TV programmes on the television for programming. These TV programmes will automatically be transmitted to a timer block on the DVD recorder. If you clear the marking of the TV programme on the television, the corresponding timer block on the DVD recorder will also be cleared. For more information, read the instruction manual of your TV set.

If a timer setting is incorrect

The following warnings can be displayed in the timer menu:

Collision

recording programme overlaps with another recording programme.

Solution:

- Ignore by pressing TIMER. The programme with the earlier start time will be recorded completely before the later programme starts.
- Edit one or both timers.
- Delete one of the recording programmes.

Please enter programme number

The VIDEO Plus+ system does not recognize the TV channel.

Solution:

- Select the required programme number (programme name) with < or ▷ (left right cursor).
- Confirm with OK.

PlusCode number wrong

You entered an incorrect PlusCode number or the incorrect date.

Solution:

• Repeat the entry or end by pressing **TIMER**.

Weekend programming - not possible

Date was incorrectly entered. Daily programming can only be used for recordings to be made from Mondays to Fridays inclusive.

Memory full

The maximum number of recording programmes is used. **Solution:**

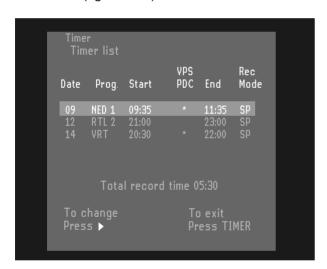
Delete one of the recording programmes.

How to check or alter a timer block

- Press TIMER on the remote control.
- Select 'Timer list' with ∇ or \triangle (down up cursor).

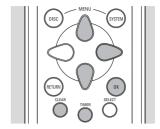


Press ▷ (right cursor).



- Select the timer block you want to check or alter with ∇ or \triangle (down up cursor).
- Press ▷ (right cursor).
- Select what you want to check or alter with < or ▷ (left right cursor).
- Alter data with ∇ or \triangle (down up cursor) or with the digit keys **0-9**.
- Confirm with OK.
- To end, press **TIMER**.
- Switch off by pressing () STANDBY/ON.

How to clear a timer block



- Press **TIMER** on the remote control.
- Select 'Timer list' with ∇ or \triangle (down up cursor).
- Press ▷ (right cursor).
- Select the timer block you want to clear with ∇ or \triangle (down up cursor).
- Press CLEAR.
- Confirm with OK.
- Switch off by pressing TIMER.

Playback

Playing a DVD+RW or DVD+R disc





- Insert a DVD+RW or DVD+R disc.
 - ➤ If the inserted disc is write-protected, playback starts automatically otherwise the Index Picture Screen appears.
- Press ► PLAY.
 - ➤ Playback starts automatically from the point where it was stopped the last time the disc was played or recorded. If you want to start playback from the beginning of the disc, you can do so via the Index Picture Screen (see 'Index Picture Screen').
 - ► If the disc is a new blank disc, the display will show 'EMPT' BISE'.
- To stop playback at any time, press STOP.
 - ➤ You return to the Index Picture Screen.

Playing a pre-recorded DVD-Video disc



Some DVD discs are produced in a way that requires specific operation or allows only limited operation during playback. In these cases the recorder may not respond to all operating commands. When this occurs, please refer to the instructions in the disc inlay. When a appears on the TV screen, the operation is not permitted by the recorder or the disc.

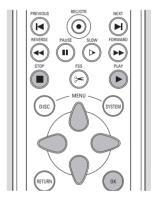
- Insert a pre-recorded DVD-Video disc. Make sure the label is facing up. If the disc is two-sided, make sure the label of the side you want to play is facing up.
 - ➤ When 'autoresume' is set to 'On' (see 'User Preferences') playback starts automatically from the point where it was stopped, the last time the disc was played.
 - ➤ When 'autoresume' is set to 'Off', the disc will play from the start of the disc. You can however resume play from the point at which you stopped, the last time the disc was played, by pressing
 - ▶ **PLAY** when appears on screen.
 - ➤ The currently playing title and chapter number are displayed on the recorder display. The elapsed time is shown also.

Notes:

- DVD movies to be released at different times in different regions of the world, all players have region codes and discs can have an optional region code. If you load a disc of a different region code to your recorder, you will see the region code notice on the screen. The disc will not play, and should be unloaded.



- The region code is stated on a label on the back side of your recorder.
- Regional coding is not applicable for recordable DVD discs.
- The disc may invite you to select an item from a menu. If the selections are numbered, press the appropriate numerical key; if not, use the ∇ △ ▷ < (down up right left cursor) keys to highlight your selection, and press **OK**.
- To stop play at any time, press STOP.
 The default screen will appear, giving information about the current status of the recorder.



Note:

During playback you can display and enter the menu by pressing **DISC MENU**.

Playing a (Super) Video CD disc



- Insert a (Super) Video CD.
 - ➤ When 'autoresume' is set to 'On' (see 'User Preferences') playback starts automatically from the point where it was stopped, the last time the disc was played.
 - ➤ The disc may invite you to select an item from a menu. If the selections are numbered, press the appropriate numerical key **0-9**.
- To stop play at any time, press \blacksquare **STOP**.
 - ➤ The default screen will appear.

General features





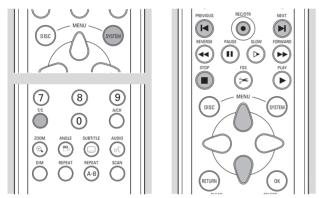


Note:

Unless stated otherwise, all operations described are based on remote control operation. A number of operations can also be carried out via the system menu bar on the screen. (see 'System menu bar operation')

Moving to another title/track

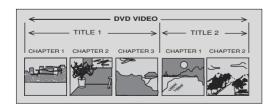
When a disc has more than one title or track, you can move to another title as follows:

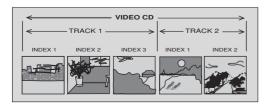


- Press T/C.
- Press ► NEXT during play to step forward to the next title
- Press ◄ PREVIOUS during play to return to the beginning of the current title. Rapidly press
 ◄ PREVIOUS twice to step back to the previous title.
- To go directly to any title or track, enter the title number using the numerical keys 0-9.

Notes:

- If the number has more than one digit, press the keys in rapid succession.
- If the system menu bar is on screen, make sure the \top icon is selected.





Moving to another chapter/index

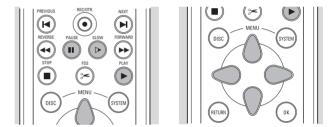
When a title on a disc has more than one chapter or a track has more than one index, you can move to another chapter/index as follows:

- Press ► NEXT during play to select the next chapter/index.
- Press ► PREVIOUS during play to return to the beginning of the current chapter/index. Rapidly press
 PREVIOUS twice to step back to the previous chapter/index.
- To go directly to any chapter or index, enter the chapter or index number using the numerical keys 0-9.

Notes:

- If the number has more than one digit, press the keys in rapid succession.
- If the system menu bar is on screen, make sure the \bigcirc icon is selected.

Slow Motion



- Select

 → (Slow motion) in the system menu bar.
- Use the ∇ (down cursor) key to enter the slow motion menu.
 - The recorder will now go into pause mode.

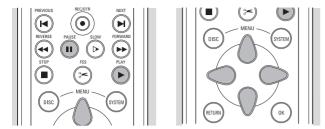


- Use the < > (left right cursor) keys to select the required speed: '-1', '-1/2', '-1/4' or '-1/8' (backward); '1/8', '1/4', '1/2' or '1' (forward).
- Select '1' to play at normal speed again.
- If **II PAUSE** is pressed, the speed will be set to '0'.
- Press ▶ PLAY to exit slow motion mode.
- $\bullet \quad \text{Press} \bigtriangleup \text{ (up cursor) to delete the slow motion menu.}$

You can also select Slow Motion speeds by using the

SLOW key on the remote control.

Still Picture and Step Frame



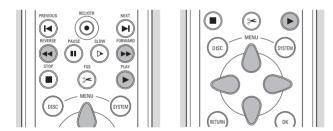
- Select [◀]☐▶ (picture by picture) in the system menu bar.
- Use the ∇ (down cursor) key to enter the picture by picture menu.
 - ➤ The recorder will now go into pause mode.



- Use <> ▷ (left right cursor) keys to select previous or next picture.
- Press ► PLAY to exit picture by picture mode.
- Press △ (up cursor) to exit the picture by picture menu.

You can also step forward by using the **II PAUSE** repeatedly on the remote control.

Search



- Select ▶ (Fast motion) in the system menu bar.
- Use the ∇ (down cursor) keys to enter the fast motion menu.



- Use the < > (left right cursor) keys to select the required speed: '-32', '-8' or '-4' (backward); '4', '8', '32' (forward).
- Select '1' to play at normal speed again.
- Press ► PLAY to exit fast motion mode.
- Press △ (up cursor) to delete the fast motion menu.
 To search forward or backward through different speeds, you can also press ◄ REVERSE or ➤ FORWARD again.

Repeat



DVD Discs - Repeat chapter/title/disc

- To repeat the currently playing chapter, press REPEAT.
 - ► chapter appears on screen.
- To repeat the currently playing title, press REPEAT a second time
 - ➤ title appears on screen.
- To repeat the entire disc, press **REPEAT** a third time
 - appears on screen.
- To exit repeat mode, press **REPEAT** a fourth time.

Video CDs - Repeat track/disc

- To repeat the currently playing track, press REPEAT.
 - ➤ track appears on screen.
- To repeat the entire disc, press REPEAT a second time.
 - ► repeat appears on screen.
- To exit repeat mode, press **REPEAT** a third time.

Repeat A-B



To repeat or loop a sequence in a title:

- Press **REPEAT A-B** at your chosen starting point;
 - ➤ appears on screen.
- Press REPEAT A-B again at your chosen end point;
 - repeat appears on screen, and the repeat sequence begins.
- To exit the sequence, press **REPEAT A-B**.

Scan



Plays the first 10 seconds of each chapter/index on the disc.

- Press SCAN.
- To continue play at your chosen chapter/index, press SCAN again or press ► PLAY.

Time search

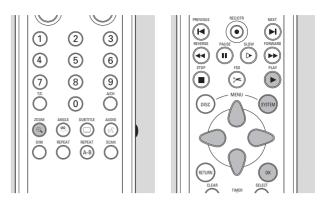
The Time Search function allows you to start playing at any chosen time stamp.

- Select (Time Search) in the system menu bar.
- Press ∇ (down cursor).
 - ➤ The recorder will now go into pause mode.
 - ➤ A time entry box appears on the screen showing the elapsed playing time of the current disc.



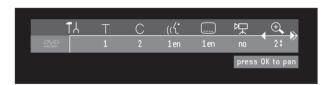
- Use the digit keys 0-9 to enter the required start time. Enter hours, minutes and seconds in the box.
 - ➤ Each time an item has been entered, the next item will be highlighted.
- Press **OK** to confirm the start time.
 - ➤ The time entry box will disappear and play starts from the selected time position.

Zoom



The Zoom function allows you to enlarge the video image and to pan through the enlarged image.

- Select 🖰 Zoom in the system menu bar.
- Press ∇ △ (down up cursor) to activate the Zoom function and select the required zoom factor; 1.33 or 2 or 4.
 - The recorder will go into pause mode.
 - ➤ The selected zoom factor appears below the Zoom icon in the system menu bar and 'Press OK to pan' appears below the system menu bar.



- ➤ The picture will change accordingly.
- Press OK to confirm the selection.
 - ➤ The panning icons appear on the screen: $\nabla \triangle \triangleright \triangleleft$ (down up right left cursor) and **OK**.
- Use the $\nabla \triangle \triangleright \triangleleft$ (down up right left cursor) keys to pan all over the screen.
- When **OK** is pressed only the zoomed picture will be shown on the screen.
- If you wish to zoom at any moment, press Zoom and select the required zoom factor as described
- Press ▶ PLAY to exit zoom mode.

Special DVD+R(W) features

Recording date and time

If a recording was made from a digital camcorder using the i.LINK DV input, the original recording date and time are automatically stored as DVD subtitles.

- Press ____ SUBTITLE to display the recording date and time.
 - ➤ The recording date and time are displayed in the right bottom corner of the screen.



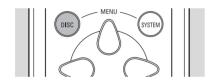
Special DVD-Video features

Menus on the disc

For titles and chapters, selection menus may be included on the disc.

The DVD's menu feature allows you to make selections from these menus. Press the appropriate numerical key; or use the $\nabla \triangle \triangleright \triangleleft$ (down up right left cursor) keys to highlight your selection, and press **OK**.

Title menus

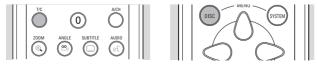


- Press DISC MENU.
 - ➤ If the current title has a menu, this appears on the screen. If no menu is present in the title, the disc menu will be displayed.
- The menu can list camera angles, spoken language and subtitle options, and chapters for the title.
- To exit the title menu, press **DISC MENU** again.

Note:

Most DVD discs do not have separate disc and title menus.

Disc menu

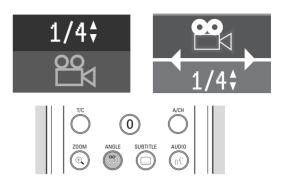


If a DVD-Video disc has separate disc and title menus, you can navigate to the disc menu as follows:

- Press T/C followed by DISC MENU.
 - ➤ The disc menu is displayed.
- To remove the disc menu, press DISC MENU again.

Camera Angle

If the disc contains sequences recorded from different camera angles, the angle box appears, showing the number of available angles, and the angle being shown. You can then change the camera angle if you wish.



- Use the $\nabla \triangle$ keys to select the required angle in the angle box.
- To go to any angle directly, enter the angle number using the numerical keys 0-9.
 - ➤ After a small delay, play changes to the selected angle. The angle box remains displayed until multiple angles are no longer available.

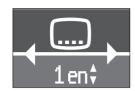
Changing the audio language



- Select (((((Audio)) in the system menu bar.
- Press ((AUDIO or ∇ △ (down up cursor) repeatedly to step through the different languages.
- You can enter the required language number directly using the numerical keys **0-9**.



Subtitles

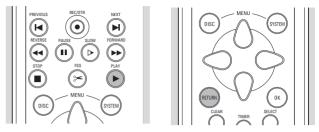


- Select (Subtitle) in the system menu bar.
- Press SUBTITLE or ∇ △ (down up cursor) repeatedly to step through the different subtitles, or to switch the subtitles off.
- You can enter the required subtitle number directly using the numerical keys 0-9.



Special VCD features

Playback Control (PBC)



- Make sure PBC is switched 'On'. See 'User Preferences-features settings'.
- Load a (Super) Video CD with PBC and press
 PLAY.
 - ➤ The PBC menu appears on screen.
- Go through the menu with the keys indicated on the TV screen until your chosen passage starts to play.
 If a PBC menu consists of a list of titles, you can select a title directly.
- Enter your choice with the numerical keys **0-9**.
- Press **RETURN** to go back to the previous menu.

Playing an audio CD

- Insert the disc.
 - ➤ After loading the disc, playback starts automatically.
 - ➤ If the TV set is on, the Audio CD screen appears.
 - ➤ During play, the current track number and its elapsed playing time will be shown on the screen and the recorder display.



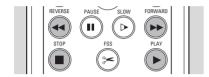
To stop play at any time, press ■ STOP.
 The number of tracks and the total playing time will be shown on the screen and the recorder display.

Pause



- Press II PAUSE during play.
- To return to play, press ▶ PLAY.

Search



- To search forwards or backwards through the disc at 4x normal speed, press REVERSE or ►► FORWARD.
 - > Search begins.
- - > Search goes to 8x speed, and the sound is muted.

- To end the search, press ➤ PLAYor STOP as desired.

Moving to another track



- Press ► NEXT during play to step forward to the next track.
- Press ► PREVIOUS during play to return to the beginning of the current track. Rapidly press
 PREVIOUS twice to step back to the previous track.
- To go directly to any track, enter the track number using the numerical keys **0-9**.



Repeat track/disc



- To repeat the currently playing track, press REPEAT.
 - ➤ 'Repeat track' appears on screen.
- To repeat the entire disc, press REPEAT a second time
 - ➤ 'Repeat disc' appears on screen.
- To exit repeat mode, press **REPEAT** a third time.

Repeat A-B



To repeat or loop a sequence:

- Press REPEAT A-B at your chosen starting point;
 'Repeat A' appears on screen.
- Press REPEAT A-B again at your chosen end point;
 - ➤ 'Repeat A-B' appears on the display, and the repeat sequence begins.
- To exit the sequence, press REPEAT A-B again.

Scan



Plays the first 10 seconds of each track on the disc.

- Press SCAN.
- To continue play at your chosen track, press SCAN again or press ► PLAY.

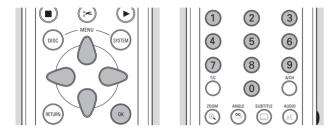
Access control

Child Lock (DVD and VCD)

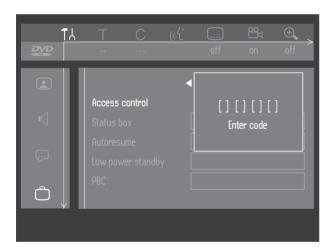
When activating Child lock, only discs that are authorised can be played without PIN code.

The recorder memory maintains a list of 50 authorized ('Child safe') disc titles. A disc will be placed in the list when 'Play Always' is selected in the 'Child protect' dialog. Each time a 'Child safe' disc is played it will be placed on top of the list. When the list is full and a new disc is added, the least recently used will be removed from the list.

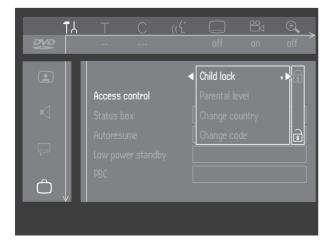
Activating/deactivating the child lock



Select 'Access control' in the features menu using
 ∇△ (down up cursor) and press ▷ (right cursor).



- Enter a 4-digit PIN code of your own choice using the digit keys 0-9.
- Enter the code a second time.
- Move to 'Child lock' using $\nabla \triangle$ (down up cursor).
- Move to $\frac{1}{8}$ / $\frac{1}{8}$ using the \triangleright (right cursor) key.



- Select $\widehat{\mathbb{R}}$ using $\nabla \triangle$ (down up cursor).
- Press OK or < (left cursor) to confirm and press SYSTEM MENU again to exit the menu.
 - ➤ Now unauthorized discs will not be played unless the 4-digit code is entered.
- Select to deactivate the Child Lock.

Note:

Reconfirmation of the 4-digit PIN code is necessary when: The code is entered for the very first time (see above); The code is changed (see 'Changing the 4-digit code'); The code is cancelled (see 'Changing the 4-digit code'); Both Child Lock and Parental Control are switched Off and the code is requested.

Authorizing discs when Child Lock is activated

- Insert the disc.
 - ➤ The 'Child protect' dialog will appear. You will be asked to enter your secret code for 'Play once' or 'Play always'. If you select 'Play once', the disc can be played as long as it is in the recorder and the recorder is in the On position. If you select 'Play always', the disc will become Child safe (authorized) and can always be played even if the Child lock is set to 'On'.



Note:

Double sided DVD discs may have a different ID for each side. In order to make the disc 'Child safe', each side has to be authorized.

Multi volume VCD disc may have a different ID for each volume. In order to make the complete set 'Child safe', each volume has to be authorized.

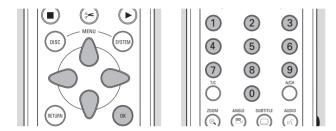
Securing discs

- Insert the disc.
 - ➤ Playback starts automatically.
- Press STOP while ③ is visible.
 - ➤ ③ will appear and the disc is now banned i.e. it is not Child safe any longer.

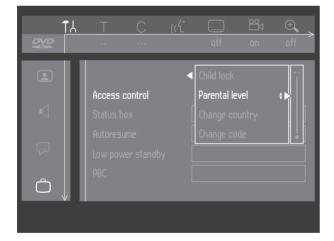
Parental Level (DVD-Video only)

Movies on pre-recorded DVD discs may contain scenes not suitable for children. Therefore discs may contain 'Parental Control' information which applies to the complete disc or to certain scenes on the disc. These scenes are rated from 1 to 8 and alternative, more suitable scenes are available on the disc. Ratings are country dependent. The 'Parental Control' feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.

Activating/Deactivating Parental Control



- Select 'Access control' in the features menu using
 ∇△ (down up cursor) and press ▷ (right cursor).
- Enter your 4-digit PIN code using the digit keys 0-9.
 If necessary enter the code a second time.
- Move to 'Parental level' using ∇△ (down up cursor).
- Move to the Value Adjustment bar using ▷ (right cursor).



Use the ∇ △ (down up cursor) keys or the numerical keys 0-9 on the remote control to select a rating from 1 to 8 for the disc inserted.

Rating 0 (displayed as --):

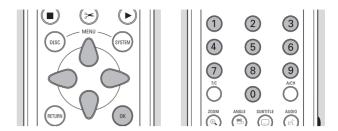
Parental Control is not activated. The disc will be played in full.

Ratings 1 to 8 (1 = childsafe - 8 = adults only):

The disc contains scenes not suitable for children. If you set a rating for the recorder, all scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternative is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, play will stop and the 4-digit code has to be entered.

Press OK or < (left cursor) to confirm and press
 SYSTEM MENU again to exit the menu.

Country

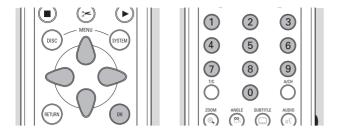


- Select 'Access control' in the features menu using $\nabla \triangle$ (down up cursor) and press \triangleright (right cursor).
- Enter the four digit PIN code.
- Move to 'Change country' using ∇ (down cursor).
- Press ▷ (right cursor).



- Select a country using $\nabla \triangle$ (down up cursor).
- Press OK or < (left cursor) to confirm and press
 SYSTEM MENU again to exit the menu.

Changing the 4-digit code



- Select 'Access control' in the features menu using $\nabla \triangle$ (down up cursor) and press \triangleright (right cursor).
- Enter the old code.
- Move to 'Change code' using ∇ (down cursor).



- Press ▷ (right cursor).
- Enter the new 4-digit PIN code.
- Enter the code a second time and reconfirm with OK.
- Press **SYSTEM MENU** to exit the menu.

Note:

If you forgot your code, press **STOP** four times while in the access control PIN code box and exit with **OK.** Access control is now switched off. You can then enter a new code as described above.

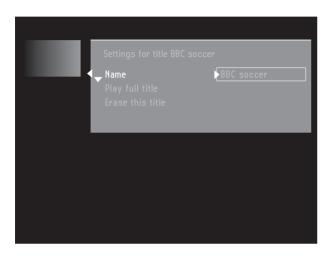
Managing disc content

Title settings

For each title on a DVD+RW or DVD+R disc the default settings can be changed to your personal preference in the title settings menu.

Changing the title name

- In the Index Picture Screen, select the required title with ∇△ (down up cursor).
- Press ▷ (right cursor) to enter the title settings menu.



- Enter the new name. A name may contain a maximum of 64 characters.
- Use <> ▷ (left right cursor) for the position of the characters. Use ▷ △ (down up cursor) to change characters.
- Use SELECT to toggle between capitals and lower case characters.
- Use CLEAR to erase a character.
- Confirm by pressing OK.

Play full title

- In the Index Picture Screen, select the required title with ∇△ (down up cursor).
- Press ▷ (right cursor) to enter the title settings menu.
- Select 'Play full title'.

When this item is selected the title will be played in full, including hidden chapters. Follow the instructions on the screen. (See 'managing disc content - Favorite Scene Selection')

Erasing a title

You may simply erase a title on DVD+RW by recording over it, but if you want to erase the whole title instantly, do the following:

- In the Index Picture Screen, select the required title with ∇△ (down up cursor).
- Press ▷ (right cursor) to enter the title settings menu.
- Select 'Erase this title'.
 - ➤ The message 'This will completely erase this title', 'Press OK to confirm' is shown.

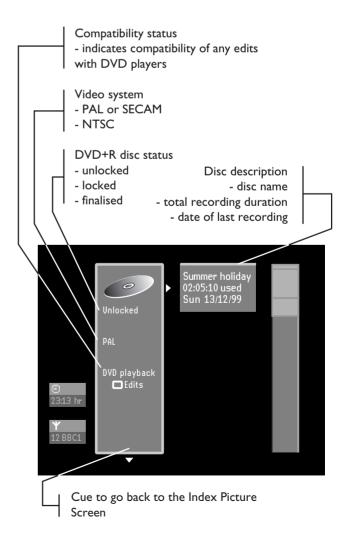
- Press OK to confirm.
 - ➤ 'Erasing title...' is shown until the action is completed.
 - ➤ After the title has been erased, the Index Picture Screen will show an empty space instead. If there was an empty space in front of or behind this title, then these are combined into one empty space. Empty spaces of less then one minute will not be shown.

On DVD+R titles can also be erased but the space occupied cannot be used anymore. During finalisation erased titles are removed from the Index Picture Screen.

Disc Info Screen

- When on the Index Picture Screen, press STOP.
 - ➤ You are now on Title 1.
- Press \triangle (up cursor).
 - ➤ You enter the Disc Info Screen.
- Press ∇ (down cursor) to exit the Disc Info Screen.

The Disc Info Screen contains the following information:



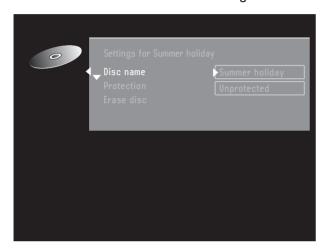
Disc Settings

For each DVD+RW or DVD+R disc the settings can be changed to your personal preference in the disc settings menu.

- In the Disc Info Screen press ▷ (right cursor).
 - ➤ You will now enter the 'disc settings' menu.

Changing the Disc Name

- In the Disc Info Screen press ▷ (right cursor).
 - ➤ You will now enter the 'disc settings' menu.



- Enter the new name. A name may contain a maximum of 64 characters.
- Use <> (left right cursor) for the position of the characters. Use
 ○△ (down up cursor) to change characters.
- Use SELECT to toggle between capitals and lower case characters.
- Use CLEAR to erase a character.
- Confirm by pressing **OK**.

Protection of recordings

- In the Disc Info Screen press > (right cursor).
 - ➤ You will now enter the 'disc settings' menu.
- Select '**Protection**' and press > (right cursor).
- Select '**Protected**' with $\nabla \triangle$ (down up cursor).
- Press **OK** on the remote control to confirm.
 - ➤ No further changes can be made to the disc. It will also disable most title/disc settings options, as well as the complete edit menu.
 - ➤ Future editing is only possible after resetting the Protection feature to 'Unprotected' again.

Erasing a disc

This option is only aivailable for DVD+RW discs that are not erase-protected.

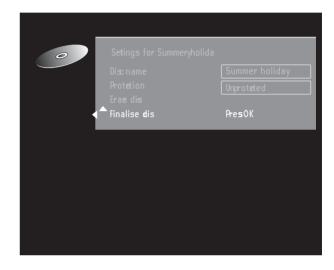
- In the Disc Info Screen press > (right cursor).
 - ➤ You will now enter the 'disc settings' menu.
- Select 'Erase disc' and press OK.
 - ➤ The message 'This will erase all titles' is displayed.

- Press OK to confirm or < (left cursor) to cancel.
 - ➤ 'Erasing disc' is shown until the action is completed.
 - ➤ After the disc has been erased, the Index Picture Screen will show the free space on the disc.

Finalising a DVD+R disc

While a DVD+RW disc can be played instantly on most DVD players, a DVD+R disc can be played only on the DVD recorder until it is finalised. After finalisation no changes can be made to the disc anymore.

- In the Disc Info Screen press ▷ (right cursor).
 - ➤ You will now enter the 'disc settings' menu.



- Select 'Finalise disc' and press **OK** to confirm.
 - ➤ 'Finalise disc' is shown until the action is completed.
 - ➤ After finalisation the Index Picture Screen will appear.

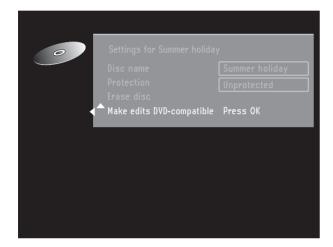
If the DVD+R disc was recorded on a different brand of DVD recorder you may not be able to access the Disc Settings screen. In this case you can use the 'Finalise disc' option in the features menu of the user preferences menu.



Making your edits DVD-compatible

If one or more titles have been edited (see 'Favourite Scene Selection'), then the edits will play on your DVD recorder, but a DVD player may show the original versions instead of the edits. You can prepare your DVD+RW discs so that also a DVD player will show the edited version. This is not possible with DVD+R discs.

 If the Disc Settings menu shows the option 'Make edits DVD compatible', select this option. If the menu does not show this option, then your DVD+RW disc is already compatible, and no conversion is needed.



- Press OK on the remote control to confirm.
 The messages 'This will take ...' and 'Press OK to confirm' will appear to indicate how long the action will take.
- Press OK on the remote control to confirm.
 'Processing...' and a progress bar are shown until the action is completed.

Favourite Scene Selection

The basic function of any edit operations is to improve accessibility and handling of your recordings. For instance: scenes you do not want to see during playback (e.g. commercials during a movie) can be marked as chapters and made hidden. During playback you will see your recording without the hidden chapters as one sequence.

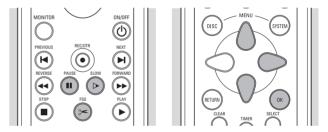
Note

In between the scenes the picture may freeze for a short moment.

Each title consists of chapters. With the FSS menu any chapter can be made hidden or made visible again. Normally, during recording, chapter markers are inserted automatically every five to six minutes (this setting can be changed in the record settings menu). After the recording is finished, you can manually add and remove chapter markers via the FSS menu. Both automatically generated and manually inserted chapter markers can be removed.

After editing, the modified version of a title is the default playback version. The original can be accessed via the 'Play full title' option in the title settings menu. Other DVD players may still play the original. To guarantee that the edited version will play on these DVD players, choose 'Make edits DVD-compatible' in the disc settings menu (only available on DVD+RW discs).

Calling up the FSS menu



- Play the title you want to edit.
- Press the **FSS** key on the remote control.
- ➤ The video image is overlayed with a transparant edit menu. Title and chapter information appear in an information box at the top of the screen.

Note:

The Favourite Scene Selection menu may disappear after about five minutes if you do not edit any information.



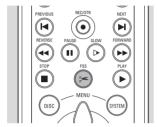
Use ∇ or △ (down up cursor) to toggle through the menu's functions.

Inserting chapter markers

- In play mode press FSS on the remote control, to call up the FSS menu.
- Select 'Insert chapter marker'.
- Press **OK** on the remote control to insert a marker.

The maximum number of chapter markers is 99. When this maximum is reached the on-screen message 'Too many chapters' appears. You have to delete some, before inserting new chapter markers.

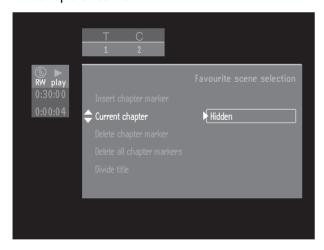
During recording you can add chapter markers by pressing **FSS** on the remote control. The message 'Chapter marker inserted' will appear on the screen.



Hiding chapters

Initially all chapters are visible. You can hide chapters or make them visible again on playback. In FSS mode however hidden chapters are displayed in a dimmed mode.

 In play mode press FSS on the remote control to call up the FSS menu.



- Select 'Current chapter' with ∇ or △ (down up cursor).
- Select 'Visible' or 'Hidden' with the ▷ (right cursor) key.
- You can toggle between 'Visible' and 'Hidden' directly from any line in the FSS menu with the SELECT key on the remote control.

Deleting chapter markers

You van combine a chapter with the previous chapter in the current title by deleting the chapter at the beginning of the current chapter.

- In play mode press FSS on the remote control to call up the FSS menu.
- Select 'Delete chapter marker'.
- Press **OK** on the remote control to confirm
 'Deleting marker' will appear.

You can delete all chapter markers (manually and automatically generated) in the current title.

- In play mode press FSS on the remote control to call up the FSS menu.
- Select 'Delete chapter markers'.
- Press **OK** on the remote control to confirm
 'Deleting markers' will appear.

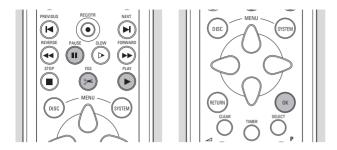
Changing the index picture

You can define the current video frame as a miniature picture to be used for this title's entry in the Index Picture Screen.

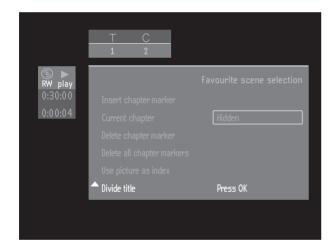
- In play mode press **FSS** on the remote control to call up the FSS menu.
- Select 'New index picture'.
- You can use II PAUSE and/or ➤ SLOW to accurately choose the desired picture.
- Press **OK** on the remote control to confirm.
 - ➤ 'Updating menu' will appear.

Dividing a title

On a DVD+RW disc you split one title into two separate titles. (On DVD+R this is not possible.)



- On the Index Picture Screen, select the title you want to divide.
- Press ► PLAY.
- Go to the point where you want to divide the title and press II PAUSE.
- Press FSS.
 - ➤ The Favourite Scene Selection menu is shown.
- Select 'Divide title'.



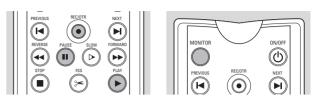
Press **OK** on the remote control to confirm.
 'Dividing title...' is shown until the action is completed. This divide operation cannot be undone.

The Index Picture Screen will show two titles instead of one. Both will have the same name. If you want to change the name, you can do so in the title settings menu. For one of the two resulting titles, a new index picture is created.

If you want to divide one title into more than two titles, use the above procedure several times.

Append recording

This function is only available on DVD+RW discs.



If you want to append a video recording to an earlier recorded title, do the following.

- On the Index Picture Screen, select the title to which you want to add a video recording.
- Press ► PLAY.
- At the point where you want to append the title press II PAUSE.
- To monitor the video input you may press MONITOR.
- Press RECORD (on the recorder) or REC/OTR (on the remote control).

The video recording will now be appended from this point. Video material beyond this point is overwritten. This may include titles following the current title.

Any remaining video material that is not overwritten, which may include the last part of the original title, is maintained. You can access these titles from the Index Picture Screen.

Troubleshooting

If it appears that the DVD recorder is faulty, first consult this checklist. It may be that something has been overlooked. Under no circumstances attempt to repair the system yourself; this will invalidate the warranty. Look for the specific symptom(s). Then perform only the actions listed to remedy the specific symptom(s).

Symptom	Remedy				
The recorder does not respond to the remote control	 The remote control may be configured for a second DVD recorder. Hold SELECT+1 pressed simultaneously to revert to DVD recorder 1. Aim the remote control directly at the sensor on the front of the recorder. Avoid all obstacles which may interfere with the signal path. Inspect or replace the batteries. 				
Keys on the DVD recorder do not work	 The DVD recorder may still be in Virgin mode. See 'First time set-up: virgin mode'. Otherwise disconnect and reconnect the DVD recorder from the 				
	mains. • If this does not solve the problem, check if the remote control still works. If so, the recorder is probably in trade mode. Disconnect the recorder from the mains and reconnect it while holding ▲ OPEN/CLOSE and ■ STOP pressed.				
No picture	 Check if the TV set is switched on. Check the video connection. When the DVD recorder is connected to the TV set via SCART, you may not see the picture at the DVD recorder after selecting the correct programme number on your TV set when a timer recording takes place. This way, you can still view another device (e.g. a satellite receiver). To view the DVD recorder press TV/DVD on the remote control. 				
Distorted picture distorted sound	 Check the disc for fingerprints and clean with a soft cloth, wiping from centre to edge. Sometimes a small amount of picture distortion may appear. This is not a malfunction. 				
Recorder does not play disc	 Ensure the disc label is upwards and that the right disc type is inserted Clean the disc. Check if the disc is defective by trying another disc. Check if the region code of the disc matches the region code of the recorder. (pre-recorded DVD discs only). See 'playing a pre-recorded DVD-Video disc'. Check if Child Lock is activated. 				
Distorted sound from HiFi amplifier	 Check to make sure that no audio connections are made to amplifier phono input. Check to make sure that analogue input of the amplifier is not connected to the digital output of the DVD recorder. 				
Distorted or black and white picture with DVD or Video CD disc	• The disc format is not according to the TV set used (PAL/NTSC).				
No audio at digital output	 Check the digital connections. Check the settings menu to make sure that the digital output is set to on. Check if the audio format of the selected audio language matches your receiver capabilities. 				
Recorder does not respond to all operating commands during playback of a DVD-Video disc	Some operations are not permitted by the disc. Refer to the instructions in the disc inlay.				

The recorder does not record timer programme	• Make sure that the recorder is switched to standby before the timer starts.			
No new title can be recorded	 Check if the maximum number of titles has been reached (message: 'too many titles' on screen). If so, delete a title next to a free space. Check if the disc is write protected. If so, unlock the disc in the disc settings menu (message: 'Disc locked' on screen). Check if the (DVD+R) disc has been finalized. If so, no new titles can be recorded anymore. 			
Service codes on the display	Clean the disc. The recording was most probably done correctly.			
'Disc warning' message on screen	• A write error has occured, but it could be corrected. No user action is required.			
'Disc error' message on screen	• A write error has occured from which the recorder could not recover. Inspect the disc and clean it if necessary (refer to 'Intoduction - Cleaning discs' for cleaning instruction). Record (overwrite) again over the same part of the disc to see if the problem is solved			
Disc errors	 A disc might be corrupted because of dust, scratches or fingerprints. If the disc cannot be accessed anymore, use the back-up disc erase procedure to repair it. Proceed as follows: Clean the disc. Put disc in the drawer (do not close the tray). Press and hold CLEAR for several seconds until the tray closes. 			
Two languages are 'mixed' when recording from a stereo VCR	 When the TV set does not automatically detect the dual-language signal,use left/right audio balance on the TV set to amplify the one or the other language. 			
The disc cannot be erased because the Index Picture Screen does not appear	 Open the tray while leaving the disc in. Hold CLEAR pressed for around 5 seconds until the tray closes. disc is technically not yet erased but you can start a new recording lil on a blank disc. 			
The Index Picture Screen does not appear but the titles on the disc can still be played	• Take out the disc. Clear the disc. Insert the disc. Choose 'Adapt to own disc format' (See 'User Preferences - Features).			
A DVD player shows the Index Picture Screen but does not react to the ▶ PLAY key	• Press ■ STOP to exit the Index Picture Screen, then press ▶ PLAY.			
A DVD+RW disc does not play on a certain DVD player	 There are DVD Players that will not play recordings made with a DVD Recorder. With a special procedure the recorder will solve this problem for some players. Proceed as follows: 1. Put the disc in the drawer (do not close the tray) 2. Press and hold the 2 key on the remote control for several seconds until the tray closes. The disc is now modified. 3. If the change has no effect, you may perform the same procedure with the 3 key on the remote control. Note: Modifying the disc can solve the problem for a specific player model, but playback in other DVD players may no longer be possible. It is therefore recommended to use this procedure carefully and only when needed. 			

with the ${\bf 1}$ key on the remote control0

Diagnosis programme

If the recorder is still faulty you can start the Diagnosis Programme in the recorder.

You can operate the Diagnosis Programme by following the instructions step by step.

Instructions



- Unplug the power cord of the recorder.
- Press the ► PLAY key and keep them pressed while you plug the recorder.
 - ➤ On the display the message '월년5년' appears together with a counter. This counter indicates the termination of the test when zero is reached.
 - ➤ After a few minutes the message on the local display changes over from 'BUSY' to 'FRIL' or to 'PRSS'.
 - ➤ If the message 'FRIL' appears on the display, there is apparently a failure in your recorder and your recorder should be repaired.
- Consult your dealer or the Philips Customer Care Centre for the nearest Service Repair Shop in your country. The phone number is given in your warranty booklet.
- If the message 'PRSS' appears on the display, there is apparently no failure in your recorder, in this case the failure can be caused by incorrect interpretation of the operating instructions or a wrong disc is used or your recorder is not correctly connected. In this case you should consult your dealer or the Philips Customer Care Centre for further assistance in solving the problem.
- If the problem remains, then consult your Philips Customer Care Centre.

System limitations

DVD+RW and DVD+R discs may not play on certain DVD Video players.

A DVD+RW video disc that has been recorded on a different type or brand of recorder can be played, but may not provide all features commonly available to DVD+RW discs, such as the on-screen disc bar, the disc settings menu, the title settings menu, and editing. Refer to 'Adapt disc format'. If the disc is write-protected, the status cannot be changed.

When using manual recording, the DVD recorder will warn before adapting the format of the disc or removing non-video data. When using timer recording however, the DVD recorder will always start to record, unless the disc is write-protected. Menus, edits and other data recorded on a different device (e.g. a PC) may be lost.

Because of the Variable Bit Rate, a title map take up less or more space than the overwritten title, even though the duration is the same. As a result, a part of the original title may remain, or a part of the next title may be lost. The maximum deviation is five minutes.

After a power interruption during recording, the Index Picture Screen will may not match with the actual video content on the disc. The last recorded title may be lost.

Glossary

This section explains most important terms, abbreviations, and acronyms used in this document.

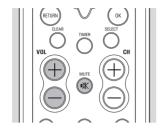
Term	Explanation
AC-3	Audio Coding 3, also known as Dolby Digital. Multi-channel digital audio compression system from Dolby Labs.
A/V	Audio/Video
Chapter	A part of a title.
Disc Bar	A graphical representation of the contents of a (DVD+RW) disc.
Disc Pointer	An arrow indicating the current playback/recording position on the DVD+RW disc, displayed on the 'disc bar'.
DTS	Digital Theater System. A high-end Multi-channel audio compression format.
DV	Digital Video. A camcorder format for high-quality video, different from MPEG. It is converted into MPEG 2 Video when recorded on DVD+RW
DVD	Digital Versatile Disc
DVD+R	DVD+Recordable. The write-once disc standard used by the DVD recorder.
DVD+RW	DVD+ReWritable. One of the disc standards used by the DVD recorder.
EasyLink	If your TV set and your video recorder are equipped with this feature, they can exchange information to adjust certain settings to each other, such as the TV channel order and other user preferences.
FSS	Favorite Scene Selection. see 'Managing disc content'.
i.LINK	Also known as 'FireWire' and 'IEEE 1394'. A cable for transfer of high-bandwidth digital signals, as used by Digital Video camcorders.
Index Picture Screen	A screen that gives an overview of a DVD+RW disc, wih 'index pictures' that each represent a recording.
MPEG	Motion Picture Experts Group. A collection of compression systems for digital audio and video.
NexTVIEW Link	A system that enables easy programming of a video recorder via a TV set. Also see EasyLink.
NICAM	System for reception of digital stereo TV sound.
NTSC	See TV system.
OSD	On-screen Display. The 'user interface' by which you can control the DVD recorder via the TV screen.
OTR	One-Touch Recording. With this feature you can easily start a recording (by pushing just one button) and select the switch-off time in intervals of 30 minutes.

PAL	See TV system.
РВС	Playback Control. A special feature on a VCD 2.0 or Super VCD disc that enables interactive use.
РСМ	Pulse Code Modulation. A digital audio encoding system.
PDC	Program Delivery Control
RGB	Red-Green-Blue. A top-quality video connection where red, green and blue components of a video signal are carried through separate wires.
SCART cable	Also known as Euro-AV cable. This standard cable is an easy way to connect various AV devices and televisions. In addition to audio and video it can carry control signals.
SECAM	See TV system.
S-video	Sometimes also called S-VHS or Super-VHS. A high-quality video connection standard.
SVCD	Super Video Compact Disc.
Title	It is the name given to the unit of recording on the disc. A title, typically, represents one recording.
TruSurround	A system for simulating Multi-channel sound reproduction via a two-channel set-up, by SRS Labs, Inc.
TV system	There are various systems for transmitting television signals, for example PAL, PAL-I, PAL-BG, SECAM, SECAM-DK, NTSC, etc. The TV system is country dependant.
VCD	Video Compact Disc
VCR	Video Cassette Recorder
VIDEO Plus+	A system by which you can easily program a timer recording by entering a nine-digit VideoPlus+ number found next to the programme description in most TV guides.
VPS	Video Programming System

Appendix

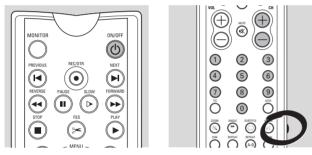
Using your DVD recorder remote control with your TV set

Your DVD recorder remote control can transmit several commands to TV sets of different brands. The following keys will always operate the TV set:



- VOL+ increase TV volume
- VOL decrease TV volume
- **粼** mute TV

Some other keys normally operate the DVD recorder, but will operate the TV set when you keep the button on the side of the remote control pressed:



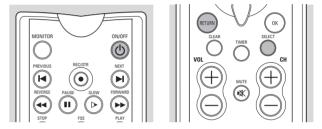
- CH + next TV programme number
- CH previous TV programme number
- 0 9 choose TV channel
- (1) switch TV set to standby

Remote control set-up codes BSR..... 321 BTC 245 for television Bang & Olufsen 592 Basic Line 036, 245 Baur. 064, 037, 581 Acura 036 Admiral 120, 490 Baysonic 207 Adyson 244 Beaumark 205 Beko 397 Akai 057 Akura 245, 291 Bell & Howell 181 Beon 064 Alba . . . 064, 036, 245, 063, 398 Binatone 244 Allorgan 321 Blaupunkt 581 America Action.......... 207 Blue Sky 245 Blue Star 309 Amplivision 244 Amstrad. . . . 198, 398, 036, 064 Boots 244 Bradford 207 Anitech 036 Brandt. 136 Arcam 243, 244 Britannia 243 Brockwood...........046 Asuka 245 Broksonic 263, 490 Atlantic 233 Audiosonic 064, 136 Bush . . 064, 398, 245, 036, 063, Audiovox. 119, 207, 478 309, 321, 401 Autovox 233 CCE 064, 244 CS Electronics.....243

If your TV set does not respond to the remote control, you can re-programme your remote control. Below you will find a list of all available remote control codes for various TV brands. The following procedure reprogrammes your remote control:

- Look up the set-up code for your TV set in the code list below.
- Press and hold the RETURN and SELECT key simultaneously for at least 3 seconds.
- Release both keys.
- Enter, within 30 seconds, the correct three-digit code with the digit keys 0-9.
- If the selected code does not work with your TV set, or if the brand of your TV set is not in the list, try out the codes one after the other.

Alternative procedure:



- Switch on your television set.
- Press and hold the RETURN and SELECT key simultaneously for at least 3 seconds.
- Release both keys.
- Point the remote control to your TV set.
- Press and hold the (b) STANDBY key.
 Your TV set switches off when the right code is found
- When your TV set switches off, immediately release the () STANDBY key.
 - ➤ Your remote control is now re-programmed.
- This complete procedure may take up to 2 minutes.

CXC207	172, 181, 193, 478
Candle 057, 083	Cybertron
Carnivale 057	Daewoo 119, 046, 401, 478,
Carrefour 063	036, 064, 066
Carver	Dainichi 245
Cascade 036	Dansai
Cathay 064	Dayton
Celebrity027	Daytron
Centurion 064	Decca 064, 099
Cimline	Denon
Cineral 478, 119	Dixi
Citizen 083, 057, 066, 087,	Dual Tec
	Dumont 044, 046, 097
Clarivox 064	Electroband027
Clatronic	Elin
Concerto	Elite245, 347
Condor347, 397	Elta 036
Contec 036, 063, 207, 243	Emerson 263, 207, 205, 206,
Craig	490, 309, 066, 046, 181
Crosley	Envision 057
Crown 397, 036, 064, 066,	Erres 039, 064
207, 445	Expert
Crystal 458	Ferguson 136, 064
Curtis Mathes 087, 057, 066,	Fidelity 243
074, 078, 081, 083, 120,	Finlux 064, 132, 097, 099, 206

Firstline 348, 036, 243, 244,	1377 104 074 004 100 007	D. 101 100	
	LXI 181, 074, 081, 183, 205	Pioneer 136, 193	Soundesign 205, 206, 207
	Leyco 099, 064, 291, 321	Portland 046, 066, 119	Soundwave 064, 445
Fisher 244, 181, 397	Liesenk & Tter 064	Prism 078	Squareview 198
			•
Flint 482	Luma 233	Profex 036	Standard 244, 245, 036
Formenti 347, 064	Luxman	Proline 348	Starlite 207
Frontech 458, 291	M Electronic 132, 244, 036,	Proscan 074	Stern
Fujitsu 206, 099, 233	064, 136, 401	Protech 064, 129, 036, 458,	Sunkai 321, 348
Funai 321, 198, 206, 207, 291	MGA 177, 046, 057, 205	244, 291, 445	Supra
		_	The state of the s
Futuretech 207	MTC 087, 057, 046, 083, 243	Proton	Supreme
GE 048, 074, 078, 205, 478,	Magnadyne 129	Pulsar 044, 046	Susumu 245
120, 309	Magnafon 129	Pye 039	Sylvania 081, 057
	_	,	•
GEC 099, 064, 244	Magnavox 081, 057, 063, 206	Quasar 078, 277, 192, 677	Symphonic 198
GPM 245	Manesth 347, 244, 291	Quelle 064, 097, 037, 581	Sysline
Geloso 036	Marantz 064, 081, 057	Questa	TMK 083, 205
Genexxa 245	Mark	R-Line 064	Tandy 245, 099, 244, 120
Gibralter 044, 046, 057	Matsui . 036, 064, 244, 398, 062,	RBM 097	Tashiko 063, 244
GoldStar 064, 046, 057, 205,	063, 099, 321	RCA 074, 046, 078, 117, 120	Tatung 099, 244, 064
			•
244, 083, 136	Matsushita 277, 677	Radio Shack 192, 207, 057,	Tec 244
Goodmans 064, 099, 206,	Mediator 039, 064	205, 066, 181, 046,	Technema 347
398, 063, 244, 401	Megatron 172, 205	074, 083	Technics 078, 277, 677
	•		
Gorenje 397	Memorex 205, 036, 083, 177,	Radiola	Technol Ace 206
Gradiente 083, 080		Rank Arena063	Techwood 078, 083
Granada 064, 099, 244	Midland 044, 066, 074, 078	Realistic 192, 207, 181, 057,	Teknika 081, 206, 207, 046,
Grandin	Minerva 097, 581	066, 205, 046, 083	066, 119, 083, 087, 177
Grundig 097, 581, 064	Minutz	Revox	Telefunken 136, 083
Grunpy 206, 207	Mitsubishi 063, 135, 177, 205,	Rex 233, 291	Telemeister 347
HCM036, 309	046, 120	Rhapsody 243	Teletech 036
Hallmark 205	Mivar 243	Roadstar 036, 291, 245, 445	Teleton 233, 063, 244
Hanseatic 064, 347	Motorola120	Runco 044, 057	Tensai 245, 321, 347
Harley Davidson 206	Multitech 036, 129, 207, 243,	SBR 039, 064	Texet 243, 245
Harman/Kardon 081		SEG 244, 063, 291	Thomson 136
Harvard	NAD 183, 193, 205	SEI 129, 037, 321	Thorn 064, 062, 099
Hinari 036, 063, 064, 245,	NEC 057, 063, 046, 083, 482	SKY064	Tomashi 309
	NEI 064, 458	SSS 046, 207	Toshiba 062, 183, 063, 097,
Hisawa	NTC	Saba	087, 181
Hitachi 136, 071, 172, 244,	Neckermann 064, 581	Saisho 036, 291, 458	Totevision
063, 083, 132	Nesco 206	Sambers 129	Uher 233, 347
Huanyu 243, 401	Netsat	Sampo 057, 066	Ultravox 129
		•	
Hypson 291, 064, 309	Nikkai . 064, 062, 245, 099, 243,	Samsung 064, 046, 205, 244,	Universum 132, 064, 291, 397
ICE 244, 291, 398		291, 397, 036, 057,	
			Vector Research 057
ICoS 245			Vector Research 057
ICeS 245	Nikko 205, 057, 119	066, 083, 087, 117	Vestel 064
ICeS			Vestel
ITS 398	Nikko 205, 057, 119 Nobliko 129		Vestel
ITS 398 Imperial 445, 397	Nikko 205, 057, 119 Nobliko 129 Nordmende 136		Vestel 064 Victor 080 Videotechnic 244
ITS 398 Imperial 445, 397 Indiana 064	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205
ITS 398 Imperial 445, 397 Indiana 064	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677 Optonica 120, 192		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677 Optonica 120, 192 Orion 321, 490, 064, 206, 263,		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064 Inteq 044	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677 Optonica 120, 192 Orion 321, 490, 064, 206, 263, 347, 348		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046,
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677 Optonica 120, 192 Orion 321, 490, 064, 206, 263,		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064 Inteq 044 Interfunk 064	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677 Optonica 120, 192 Orion 321, 490, 064, 206, 263, 347, 348 Osaki 099, 244, 245, 291		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677 Optonica 120, 192 Orion 321, 490, 064, 206, 263, 347, 348 Osaki 099, 244, 245, 291 Oso 245		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064
ITS	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677 Optonica 120, 192 Orion 321, 490, 064, 206, 263, 347, 348 Osaki 099, 244, 245, 291 Oso 245 Osume 099		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677 Optonica 120, 192 Orion 321, 490, 064, 206, 263, 347, 348 Osaki 099, 244, 245, 291 Oso 245		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064
ITS	Nikko 205, 057, 119 Nobliko 129 Nordmende 136 Onwa 207 Optimus 277, 193, 181, 677 Optonica 120, 192 Orion 321, 490, 064, 206, 263, 347, 348 Osaki 099, 244, 245, 291 Oso 245 Osume 099 Otto Versand 064, 037, 063,		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063
ITS	Nikko		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347,
ITS	Nikko		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490
ITS	Nikko		Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347,
ITS	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit. 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291 Isukai 245 JBL 081 JCB 027 JVC 080, 063, 398, 680 KEC 207 KTV 207, 244, 057, 066	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit. 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291 Isukai 245 JBL 081 JCB 027 JVC 080, 063, 398, 680 KEC 207 KTV 207, 244, 057, 066 Kaisui 245, 244, 036, 243, 309	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit. 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291 Isukai 245 JBL 081 JCB 027 JVC 080, 063, 398, 680 KEC 207 KTV 207, 244, 057, 066	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit. 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291 Isukai 245 JBL 081 JCB 027 JVC 080, 063, 398, 680 KEC 207 KTV 207, 244, 057, 066 Kaisui 245, 244, 036, 243, 309 Kamp 243	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291 Isukai 245 JBL 081 JCB 027 JVC 080, 063, 398, 680 KEC 207 KTV 207, 244, 057, 066 Kaisui 245, 244, 036, 243, 309 Kamp 243 Kapsch 233 Kawasho 243 Kendo 064 Kingsley 243	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291 Isukai 245 JBL 081 JCB 027 JVC 080, 063, 398, 680 KEC 207 KTV 207, 244, 057, 066 Kaisui 245, 244, 036, 243, 309 Kamp 243 Kapsch 233 Kawasho 243 Kendo 064 Kenwood 057, 046 Kingsley 243 Korpel 064	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291 Isukai 245 JBL 081 JCB 027 JVC 080, 063, 398, 680 KEC 207 KTV 207, 244, 057, 066 Kaisui 245, 244, 036, 243, 309 Kamp 243 Kapsch 233 Kawasho 243 Kendo 064 Kenwood 057, 046 Kingsley 243 Korpel 064	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233
ITS 398 Imperial 445, 397 Indiana 064 Infinity 081 Inno Hit 099 Innova 064 Inteq 044 Interfunk 064 Intervision 064, 129, 244, 291 Isukai 245 JBL 081 JCB 027 JVC 080, 063, 398, 680 KEC 207 KTV 207, 244, 057, 066 Kaisui 245, 244, 036, 243, 309 Kamp 243 Kapsch 233 Kawasho 243 Kendo 064 Kingsley 243	Nikko	Samsux	Vestel 064 Victor 080 Videotechnic 244 Vidikron 081 Vidtech 046, 063, 205 Vision 347 Waltham 244 Wards 081, 192, 205, 046, 048, 057, 083, 206 Watson 347, 064 Watt Radio 129 Wega 063 White Westinghouse 347, 064, 243, 490 Yamaha 046, 057 Yoko 244, 064, 291, 458 Zanussi 233

Philips Customer Care Centers

Austria

tel: 43-0810 001 203

Belgium

tel: 32-2-070 222 303

Denmark tel: 808 82 814

Finland

tel: 358-09-6158 0250

tel: 33-1-825 889 789

Germany tel: 49-0-180-535 6767

tel: 30-0-0800-3122 1280

Ireland

tel: 353-1-7640292

Italy

tel: 800-820026 (Toll Free)

Luxembourg

tel: 352-404061215

Netherlands tel: 0900-8406

Norway tel: 22-748 250

Portugal tel: 352-1-4163063

Spain

tel: 34-902-113 384

Sweden

tel: 08 5985 2250

Switzerland

tel: 0844 800 544

United Kingdom

tel: 44-0-208 665 6350

Poland

tel: 48-22-571 0571

Specifications

\mathbf{r}	FOR	мΛ	TC	CI	IDD	\cap	TED

Disc type	Playback	Recording
DVD+RW	•	•
DVD+R	•	•
DVD-RW (Video mode)	•	_
DVD-R	•	_
DVD-Video	•	_
SVCD	•	_
Video CD	•	_
Audio CD	•	_
CD-R	•	_
CD-RW	•	_

RECORDABLE DISC FORMATS

Medium	DVD+RW: Phase-Change ReWrital			
	DVD+R: dye-based			
Diameter	12 cm	,		
Capacity (single side)	4.7 Gbyte			
Recording time	HQ	60'	9.72 Mbit/s	
3	SP	120'	5.07 Mbit/s	
	LP	180'	3.38 Mbit/s	
	FP	240'	2 54 Mhit/s	

TV STANDARD	PAL/SECAM	NTSC	
Scan Frequency	50Hz	60Hz	
Number of lines	625	525	
Playback	•	•	
Recording	•	•	
Internal tuner	•	_	

VIDEO FORMAT

Digital Compression MPEG2 for DVD MPEG1 for VCD

VIDEO RESOLUTION	50Hz	60Hz			
DVD-Video/DVD+RW(HQ/SP	DVD-Video/DVD+RW(HQ/SP)				
-Horiz. Resolution	720 pixels ¹	720 pixels ¹			
-Vertical Resolution	576 lines	480 lines			
DVD+RW (LP/EP)					
-Horiz. Resolution	360 pixels ²	360 pixels ²			
-Vertical Resolution	576 lines	480 lines			
VCD					
-Horiz. Resolution	352 pixels	352 pixels			
-Vertical Resolution	288 lines	288 lines			

¹ equivalent to 500 lines on your TV

VIDEO PERFORMANCE

DA Converter	10-bit
AD Converter	9-bit
Signal handling	Components
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	0.7 Vpp into 75 Ohm

AUDIO FORMAT

Compressed Digital	Playback	Recording
-Dolby Digital	Multi-channel	2-channel
(AC-3)		16-bit, fs 48 kHz
-DTS	Multi-channel	_
-MPEG1	2-channel	_
SPdif		
-PCM	2-channel	_
	16, 20, 24 bit	
	fs 48 kHz	

AUDIO PERFORMANCE

DA Converter	24-bit	
AD Converter	16-bit	
DVD	fs 96 kHz	4 Hz - 44 kHz
	fs 48 kHz	4 Hz - 22 kHz
Video CD	fs 44.1 kHz	4 Hz - 20 kHz
Audio CD	fs 44.1 kHz	4 Hz - 20 kHz
Signal-Noise (1kHz)	105 dB	
Dynamic Range (1kHz)	100 dB	
Crosstalk (1kHz)	110 dB	
Distortion/Noise (1kHz)	90 dB	

FRONT CONNECTIONS

i.LINK DV	IEEE 1394 4-pin
S-video Input	Hosiden 4-pin*
Video Input	Cinch (yellow)*
Audio Left/Right Input	Cinch (white/red)*

REAR CONNECTIONS

MEAN COMMECTIONS	
SCART 1	CVBS, S-video/RGB-out, Decoder
SCART 2	CVBS, S-video/RGB-in, Decoder
S-video Input	Hosiden 4-pin
S-video Output	Hosiden 4-pin
Video Input	Cinch (yellow)*
Video Output	Cinch (yellow)*
Audio Left/Right Input	Cinch (white/red)*
Audio Left/Right Output	Cinch (white/red)*
Digital Audio Output	1 coaxial*, 1 optical
	IEC958 for CDDA / LPCM
	IEC1937, Dolby Digital, DTS
RF Antenna Input	Coaxial 75 ohms
RF TV Output	Coaxial 75 ohms
Mains	Standard (IEC type)

[°] gold-plated

USER INTERFACE

OSD Languages	English, French, German, Dutch, Spanish,
	Italian, Swedish

PROGRAMMING

I INCONALIII III 10	
Number of events	6; 1 month; Daily/Weekly
Programming mode	OTR, Remote
Record control and	
transmitter identification	PDC, VPS
Timer programming	Manual, VIDEO Plus+, NEXTVIEW Link

DISC RECORDING

- Safe Record
- Direct Record
- One-Touch Record (OTR)
- Append
- Divide
- Erase
- Automatic/Manual Chapter Marker insertion
- Disc write lock
- Favorite Scene Selection
- Index Picture Screen
- Custom Index Pictures
- Automatic/Manual Audio Recording Level

DISC PLAYBACK

- Auto Resume (20 discs)
- Play / Stop / Pause
- Fast Forward/Backward (3 speeds)
- Step Forward/Backward
- Slow (3 speeds)
- Title / Track Select
- Next / Previous Title / Track / Chapter
- Repeat (Chapter / Title / All) or (Track / All)
- A-B Repeat
- Intro Scan
- Perfect Still with digital multi-tap filter
- Zoom (x1,33, x2, x4) with picture enhancement
- Pan

GENERAL FUNCTIONALITY

- 3D sound (SRS TruSurround)
- Beep Feedback for Remote Control
- Backup Presets & Timer Events: 1 year
- Backup Clock & Calendar: 7 hrs
- Time & Date Download

POWER SUPPLY

Power Inlet 220-240 V, 50/60 Hz		
Power consumption	Operation	33 W
•	Low-power Standby	3 W
Tower consumption		

CABINET

Dimensions (W x H x D)	435 × 110 × 330 mm
Net Weight	8.8 kg
Front Panel	3 mm Aluminum

REMOTE CONTROL

- Universal remote for control of main TV functions

² equivalent to 250 lines on your TV

type	no. c	ot l	product •	Numero	аe	serie	au	produit	

DVDR 985

Date of purchase • Date d'achat • Kaufdatum • Koopdatum • Fecha de compra • Data da compra • Data di acquisto • Købsdato • Kjøpedato • Inköpsdato • Ostopäivä

day • Jour month • Mois year • Année 20

Dealer's name, address and signature • Nom, adresse et signature du revendeur • Name, Anschrift und Unterschrift des Händlers • Naam, adres en handtekening van de handelaar • Nombre, dirección y firma del distribuidor • Nome, indirizzo e firma del fornitore • Nome, morada e assinatura do vendedor • Forhandlerens navn, adresse og underskrift • Återförsäljarens namn, adress och namnteckning • Myyjän nimi, osoite ja allekirjoitus



The products and services described herein are not necessarily available in all countries

Due to continuous product improvements this document is subject to change without notice.