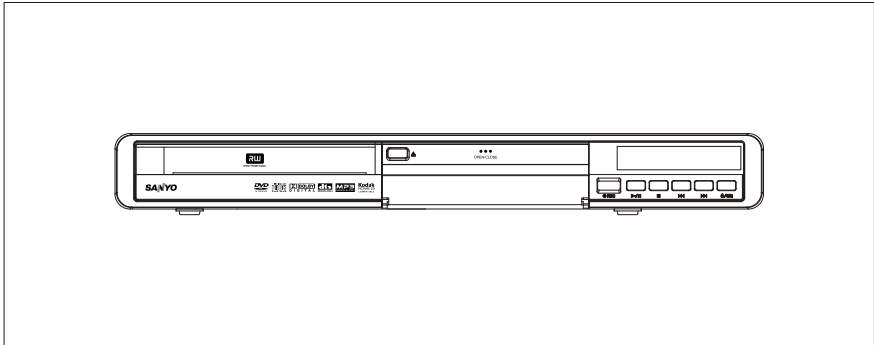


# SANYO

## DVR-S300<sup>UK</sup>

### OPERATING INSTRUCTIONS

#### DVD RECORDER



Problems with set-up?

Call 0870 240 7475



GB English

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## **ABOUT THIS MANUAL**

Instructions on this manual describe the controls of the DVD Recorder. You can also use the remote controller controls with the same name as those on the unit.

### **Dear Customers**

We would like to thank you for purchasing this DVD+R/RW Recorder.

We strongly recommend that you carefully study the operating instructions before attempting to operate the unit and that you note the listed safety precautions.

## SAFETY INFORMATION

### CAUTION

**CLASS 1  
LASER PRODUCT**

LASER CLASS 1	
Wave Length	: 650 nm $\pm$ 1.5nm (DVD) 790 nm $\pm$ 1.5nm (CD)
Maximum output of accessible laser radiation	: < 0.39 mW (continuous wave)
Classified according to IEC 60825-1	: 1993 + A1 : 1997



This unit is a class 1 laser product. However this product uses a visible laser beam which could cause hazardous radiation exposure.

Be sure to operate the recorder correctly as instructed.

While this recorder is plugged to the wall outlet, do not place your eyes close to the opening of the disc tray or other openings to look inside the recorder for your own safety.

Use of performance control or adjustment procedures other than those specified may result in hazardous radiation exposure. Do not open the covers and do not attempt to repair any damaged parts. Please refer to a service technician or qualified personnel for any necessary repairs.

### WARNING

To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.





To reduce the risk of fire or electric shock, and any interference, use the recommended accessories only.

**The device shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.**

**The mains plug or the appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.**

### CAUTION

**Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.**

	<b>WARNING</b> <b>RISK OF ELECTRIC SHOCK</b>	
	<i>The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock of persons.</i>	
	<i>The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</i>	

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



**THE RATING LABEL IS PUT ON THE BOTTOM CABINET.**

## **IMPORTANT SAFEGUARDS**

### ***Power Cord***

Do not place the unit, a piece of furniture, etc., on the power cord (mains lead), or pinch the cord. Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Never make a knot in the cord or tie it with other cords. The power cords should be routed in such a way that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask closest service agent for help. When the AC power cord need to be changed, it should be done at a qualified service shop only.

For your own safety read following instructions carefully before attempting to connect this clock radio to the mains.

This unit is designed to operate on a 220-240V~ 50Hz supply only. Connecting it to other power sources may damage it. Ensure that the supply corresponds to the information on the rating label on the bottom of the unit.

This component system may be fitted with a non-rewireable plug. If it is necessary to change the fuse in a non-rewireable plug the fuse cover must be refitted. If the fuse cover becomes lost or damaged, the plug must not be used until a replacement, available from the manufacturer, is obtained. It is important that the colour of the replacement fuse cover corresponds with the colour marking on the base of the plug.

If the plug needs to be changed because it is not suitable for your socket, or becomes damaged, it should be cut off and an appropriate plug fitted following the wiring instructions below. The plug must then be disposed of safely, as insertion into a 13A socket is likely to cause an electrical hazard.

### **IMPORTANT**

The wires in the mains plug should be connected as shown in the diagram.

The colours of the wires in the mains lead of the unit may not correspond with the coloured markings identifying the terminals in your plug. Connect them as follows:-

The wire which is coloured blue must be connected to the terminal which is marked with the letter 'N' or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red.

There should be no connection to the earth terminal of your plug.  
If you use a 13 Amp (BS1363) plug, you will need a 5 Amp fuse.

#### **How to replace the fuse**

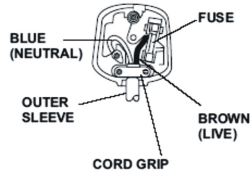
Open the fuse compartment with a blade screwdriver, and replace the fuse.

When replacing the fuse in the plug use ASTA approved 5 AMP fuse and be sure to re-fit the fuse cover.

If the plug supplied with this equipment has a detachable fuse cover, be sure attach the fuse cover after you change the fuse. Never use the plug without the fuse cover.

If you should lose the fuse cover, please contact your nearest service station.

If in doubt – consult a competent electrician how to replace the fuse



This symbol means that this unit is double insulated. An earth connection is not required.

### **DANGER**

#### **LASER SAFETY**

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

INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK FAILED OR DEFEATED. AVOID DIRECT EXPOSURE TO BEAM

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service



### **CAUTION**

To prevent electric shock, disconnect from the mains before removing cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

## **SAFETY PRECAUTIONS**

### **PROPER VENTILATION**

#### **CAUTION**

•Do not block the ventilation openings or holes.

(If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)

•Do not place any naked flame sources, such as lighted candles, on the apparatus.

•When discarding batteries, environmental problems must be considered and local rules or laws governing the disposal of these batteries must be followed strictly.

•Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

#### **Caution:**

To avoid risk of electric shock and fire and to protect from damage.

#### **Locate the apparatus as follows:**

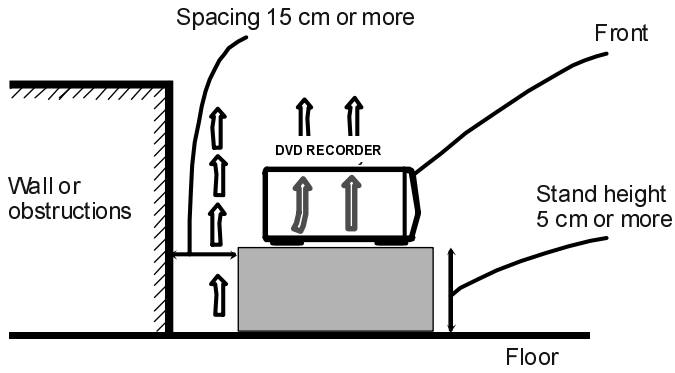
**Front:** No obstructions and open spacing.

**Sides:** No obstructions in 3 cm from the sides.

**Top:** No obstructions in 5 cm from the top.

**Back:** No obstructions in 15 cm from the back

**Bottom:** **No obstructions, place on the level surface.**



## **GENERAL PROPERTIES**

- 1) DVD+R/RW, DVD Video, DVD-R/RW, Audio CD, (S)VCD, CD-R/RW, MP3, JPEG playback, DVD+R/RW recording
- 2) Low power standby mode support
- 3) User-friendly OSD menu control
- 4) Vacuum Fluorescent Display (VFD)
- 5) NTSC/PAL playback (according to disc content) and recording
- 6) Recording in different qualities (HQ, SP, LP, EP, SLP)
- 7) One Touch Recording
- 8) Auto title menu with thumbnail index pictures
- 9) Finalise for DVD+R disc
- 10) Adding chapter markers
- 11) Appending, overwriting, deleting titles
- 12) Hide/unhide chapters
- 13) Recording with timer
- 14) Dolby Digital, LPCM audio via coaxial and optical digital audio outputs
- 15) Multiple Aspect Ratio support (16:9 Widescreen, 4:3 Letterbox, 4:3 PAN&SCAN)
- 16) Multi-Audio (up to 8) support (According to disc content) (For DVD)
- 17) Multi-Subtitle (up to 24) support (According to disc content) (For DVD)
- 18) Multi-Angle (up to 9) support (According to disc content) (For DVD)
- 19) 8 level parental control
- 20) Fast forward and rewind in 5 different speeds (2x, 4x, 8x, 16x, 32x Fast Forward/Backward)
- 21) For DVD; frame by frame forward playback
- 22) For DVD;(S)VCD slow forward playback (1/2x, 1/4 x, 1/8x Slow Forward)
- 23) Maximum 5K\*5K resolution for baseline, 1280\*1024 resolution for progressive JPEG playback
- 24) 8-320 kbit bit rate for MP3 playback
- 25) Time Search
- 26) Repeat modes (Disc, Chapter, Title, Track, Folder)
- 27) Different play modes for Audio CD and MP3 (Normal/Random)
- 28) Program function for Audio CD, MP3, JPEG and MPEG
- 29) Simultaneous playback of audio and pictures
- 30) 10 timer recording events
- 31) Pause recording.
- 32) A → B repeat
- 33) Antenna input / output (loop through)
- 34) 2 SCART socket
- 35) Composite Video input/output
- 36) S-Video input
- 37) Coaxial and Optical Digital Audio outputs
- 38) DV input
- 39) Component output



## **NOTES ON CD-R/RW, DVD-R/RW AND DVD+R/RW DISCS**

- CD-R, DVD-R, DVD+R (Recordable) and CD-RW, DVD-RW, DVD+RW (Rewritable) discs, recorded by the users, may only be used after finalization process.
- CD-R/RW, DVD-R/RW and DVD+R/RW discs may not be usable, depending on the disc features, recording conditions and damage or dirt on disc. The disc configuration and features are determined by the tool and device used for recording. Therefore, users may face with the following undesired consequences:
  - Some discs may not be read at all
  - Some discs may cause system crash after laying for a while
  - Some parts of the disc may be skipped or worked abnormally
- Compare with the original discs, the time passed for reading a CD-R/RW, DVD-R/RW and DVD+R/RW discs may be longer.
- This DVD RECORDER may not support some MP3 recordings due to differences in recording formats or disc type.
- Please read the user's manual MP3 playback.
- CD-R/CD-RW discs recorded by CD-DA method can be played. Some CD-R/CD-RW disc may be incompatible due to laser pick-up and disc design.
- DVD-R discs recorded by DVD-Video method can be played. Some DVD-R discs may be incompatible due to laser pick-up and disc design.
- Some discs may be incompatible with JPEG Viewer function due to different recording format or condition of the disc.

## **SAFETY PRECAUTIONS**

### ***Power Source***

---

The unit should be operated only from a 220-240V~ 50 Hz outlet. Please do not open the cover by yourself. There is high voltage in the set, which will endanger your life. Please contact local service agent for help and advice. Repairs to be carried out by a qualified technician only.

- The apparatus is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the apparatus itself has been turned off.
- If you are not going to use the apparatus for a long time, be sure to disconnect the apparatus from the wall outlet.

### ***Power Cord***

---

Do not place the unit, a piece of furniture, etc., on the power cord (mains lead), or pinch the cord. Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Never make a knot in the cord or tie it with other cords. The power cords should be routed in such a way that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask closest service agent for help. When the AC power cord need to be changed, it should be done at a qualified service shop only.

### ***Choice of Location***

---

- Please do not place the set in a place subject to direct sun light, excessive dust or mechanical shock or in a location near heat sources.
- The set should be placed on a solid and safe base. Do not place the apparatus on a soft surface such as a rug that might block the ventilation holes on the bottom.
- A location should not be selected such as a room with high humidity, as the condensation, arising in the kitchen for example, may cause malfunction or damage the set.
- Heating or other thermal radiation under the set also may cause malfunction or damage the set.
- The hot air, which arises during the operation, should be ventilated with sufficient air circulation. Please do not put the set into closed areas and do not cover it.
- Please avoid the contact of the set with water or humidity. Do not put into operation near bath, swimming pools.
- Take care to provide a good air circulation. Place the apparatus in a location with adequate ventilation to prevent heat build-up in the apparatus.
- Should any solid object or liquid fall into the cabinet, unplug the apparatus and have it checked by qualified personnel before operating it any further.

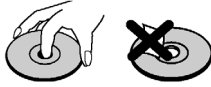


## **NOTES ON DISCS**

Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature can rise quickly and damage the disc.

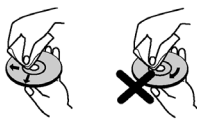
### **On handling discs:**

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.
- If the disc is contaminated with any substance, like glue remove before using it.



### **On cleaning:**

- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the inside to the outside.



- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.

### **Discs that should not be used:**

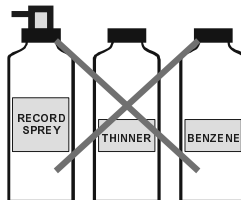
Only the discs including the marks ( see 1.7) can be played.

Note, however, that discs with special shapes (heart-shaped discs, hexagonal discs, etc.) cannot be played. Do not attempt to play such discs, as they may damage the unit.



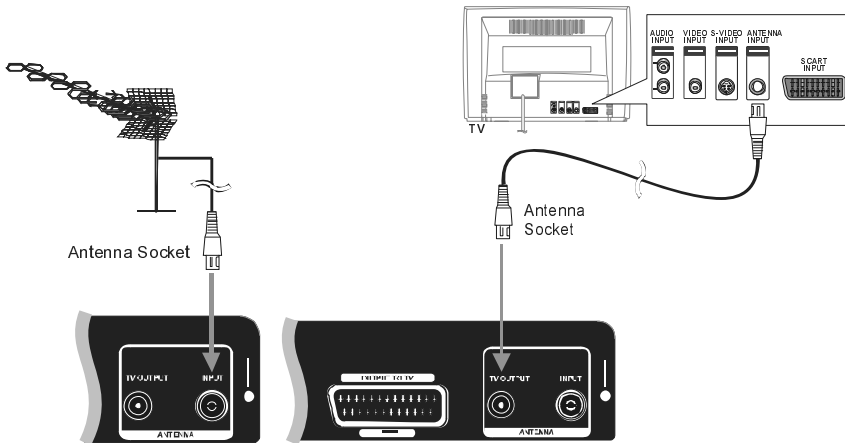
### **NOTE:**

Do not use record spray or antistatic. Also do not use volatile chemicals such as benzene or thinner.

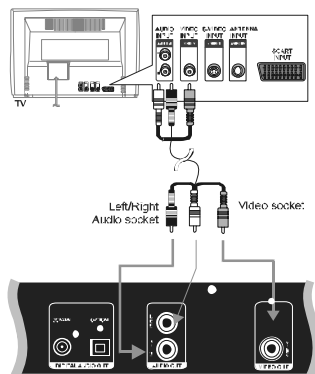


## CONNECTION

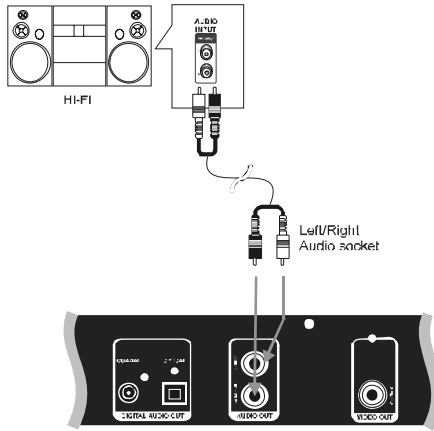
### ANTENNA CONNECTION



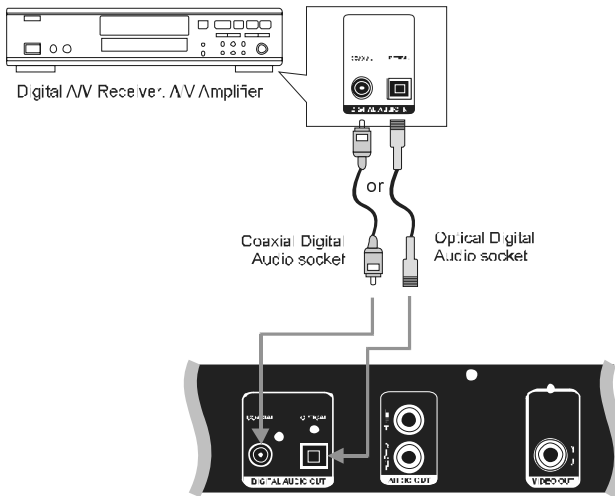
### VIDEO & AUDIO OUTPUT SOCKETS



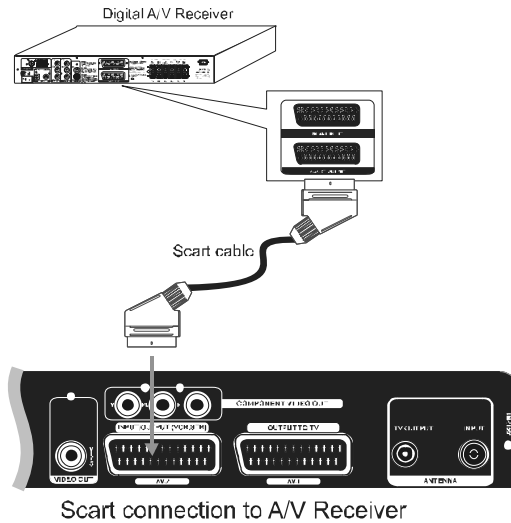
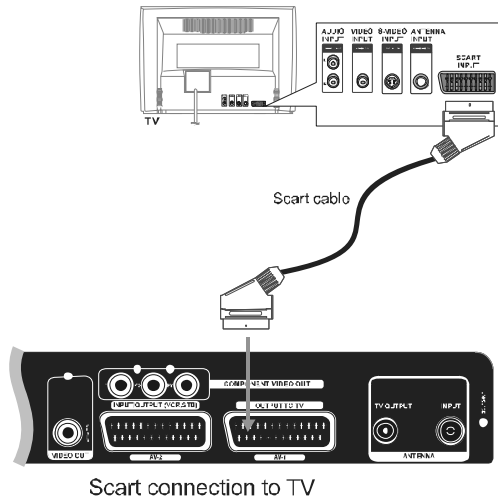
## ANALOG AUDIO CONNECTION



## DIGITAL AUDIO CONNECTION



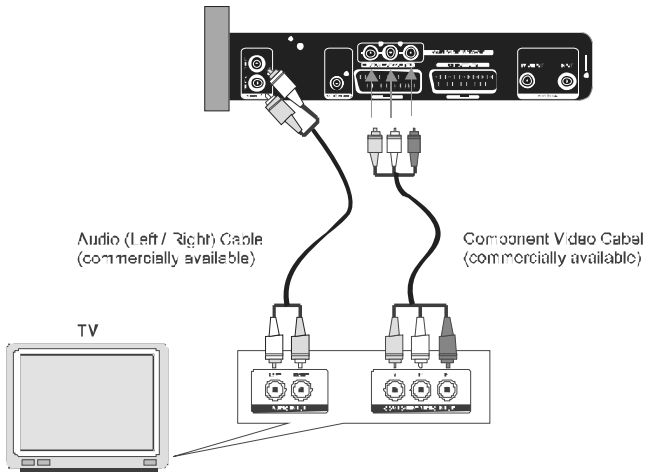
## SCART CONNECTION



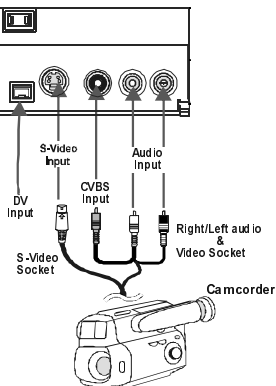
## Component Video & Audio Output Connector

- If you have a high-definition or "digital ready" TV, you may take advantage of the DVD Recorder's progressive scan and YPBPR (YUV) output for the highest video resolution possible.
- If your TV does not accept the Progressive Scan or YPBPR (YUV) format, the picture will appear scrambled when you try Progressive Scan or YPBPR (YUV) output on the DVD Recorder.

1. Connect the **COMPONENT VIDEO OUT** connectors on the DVD Recorder to the corresponding **IN** connectors on the TV, using the component video cable.
2. Connect the **Left and Right AUDIO OUT** connectors of the DVD Recorder to the audio **Left and Right IN** connectors on the TV using the audio cables.

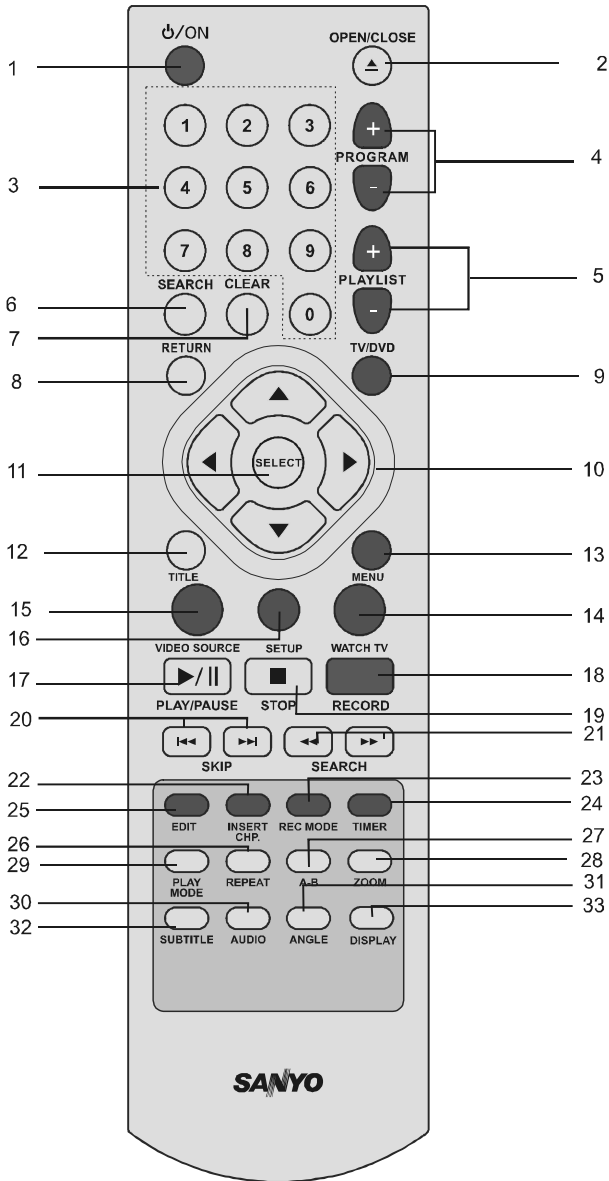


## CONNECT CAMCORDER TO THE FRONT SOCKETS OF DVD RECORDER




# 1.INTRODUCTION

## 1.1 THE REMOTE CONTROL





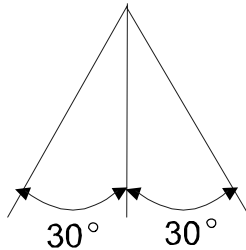
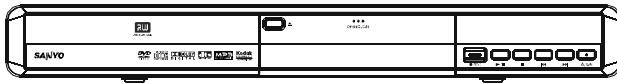
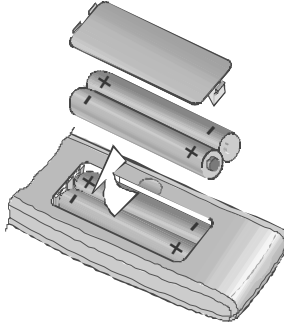
## THE REMOTE CONTROL

1. (ON) STANDBY : To switch the set ON or OFF.
2. OPEN/CLOSE : To Open/close the disc tray.
3. 0-9 : Number keys: 0- 9.
4. PROGRAM+ : Goes to next program while watching TV.
4. PROGRAM- : Goes to previous program while watching TV.
5. PLAYLIST +/- : Adds files to make playlist in PROGRAM play mode and removes added files from playlist.
6. SEARCH : Press to move to any desired title/chapter/track/time within the disc.
7. CLEAR : Erases the number you previously entered. Also removes timer event from timer list.
8. RETURN : Return to previous menu on a video CD. Also for CD Menu and Setup menu.
9. TV/DVD : Enables/disables the SCART socket output to the TV set. This lets you watch another program via TV set while DVD recorder is recording another program or source without unplugging the SCART cable.
10. ARROW KEYS : To navigate inside menus.  
(←/→/▲/▼)
11. SELECT : Select function/value.
12. TITLE : If DVD supports, to choose the title menu in DVD discs.
13. MENU : Displays the DVD or (S)VCD menu.
14. WATCH TV : To switch to monitor mode.
15. VIDEO SOURCE : Switches the video source in the order of TV Tuner, SCART Input, Front CVBS, S-Video, DV and Disc
16. SETUP : It opens and closes the system-menu.
17. PLAY/PAUSE(▶/⏸) : Playback a disc. If this key is pressed during playback or recording, operation is paused. Also use this key to switch to disc playback from the beginning in monitor mode. For any DVD title that has a root menu with still picture, this key functions as "button select" (selects highlighted item) in the root menu. Otherwise this functioning of "play/pause" key on the root menu will be prohibited by the disc, and  will appear.
18. RECORD : Records the selected video source and resumes paused recording. Activates One-Touch-Recording while recording is in progress
19. STOP (■) : Stop playback/recording.
20. SKIP (⏮) : Press this key during playback: Previous chapter/ film or previous file.  
SKIP (⏭) : Press this key during playback: Next chapter/ film or next file. Press this key during pause mode: Shows next frame at each press.  
it returns to the upper folder.
21. SEARCH (▶▶)(◀◀) : Fast forward and fast backward in x2, x4, x8, x16 and x32. Slow forward in Pause state.
22. INSERT CHAPTER : Inserts a chapter manually to recording media during recording or playback of recorded content at Edit mode.
23. REC MODE : Select quality and duration of recording.
24. TIMER : To program a recording or to alter/clear pre-programmed recordings.
25. EDIT : If there is a pre-recorded disc inside (but not a finalised DVD+R), pressing this key will switch system to title editing mode. While in edit mode, if you press this key again, it will close editing mode and return back to the Root Menu.
26. REPEAT : To play titles, chapters and tracks repeatedly.
27. A-B : Repeat a selection from point A to point B.
28. ZOOM : Enlarge the image
29. PLAY MODE : For MP3, CD-DA, JPEG and MPEG tracks switches between play modes.
30. AUDIO : If DVD supports, switches between audio formats during DVD playback.
31. ANGLE : Selects the angle to view the scene. This only works when multiple angles are provided for a scene.
32. SUBTITLE : If DVD supports, changes the subtitle language, turns it on or off.
33. DISPLAY : Opens Display menus.

### **1.1.1 Preparing the Remote Control for Operation**

The remote control and its batteries are packed separately in the original DVD recorder packaging. You must install the batteries in the remote control before use.

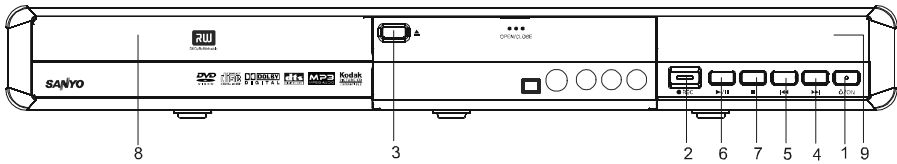
- Take the remote control of the DVD recorder and the enclosed batteries ( 2 x 1.5 V batteries)(R03/AAA)
- Open the battery compartment, insert the batteries as shown and then close the compartment.
- The remote control range is approximately 5 to 10 meters.









Within About 5-10m in front of the device

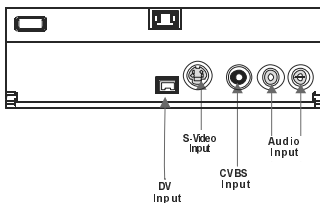


## 1.2 FRONT PANEL FUNCTIONS



1. **⏻/ON** : Switches the set ON or OFF.
2. **RECORD** : Records the selected video source.
3. **OPEN/CLOSE**  : Opens/closes the disc tray.
4. **SKIP FORWARD**  : Plays next chapter/ title/ track/ file.
5. **SKIP BACKWARD**  : Plays previous chapter/ title/ track/ file.
6. **PLAY/PAUSE**  : Playback a disc. If this key is pressed during playback or recording, operation is paused. Also use this key to switch to disc playback from the beginning in monitor mode. For any DVD title that has a root menu with still picture, this key functions as "button select" (selects highlighted item) in the root menu. Otherwise this functioning of "play/pause" key on the root menu will be prohibited by the disc, and  will appear.
7. **STOP**  : Stops playback/recording.
8. **DISC TRAY** : Place a disc on the tray.
9. **FRONT PANEL DISPLAY (VFD)** : Indicates the playing time, title, chapter/track etc.

## 1.3 FRONT PANEL CONNECTIONS



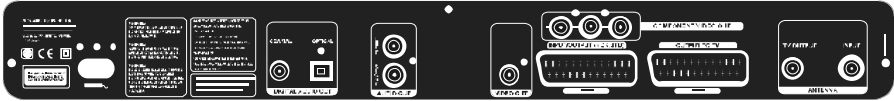
**DV in:** Input jack for DV connection.

**S-VIDEO in :** S-Video socket: Connection of S- Video source.

**CVBS in** : Video input socket: Connection of composite video source (camcorders, video recorders, set top box).

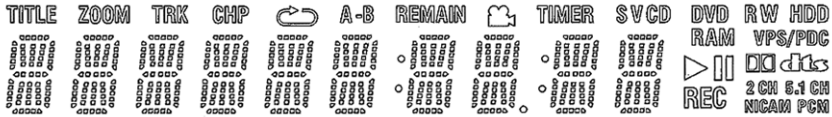
**AUDIO L/R in :** Left/Right audio input socket: L/R Audio inputs are used for both S-Video and CVBS.






## **1.4 REAR PANEL CONNECTIONS**



- ANTENNA INPUT** : Aerial input: Connection of the aerial antenna.
- ANTENNA TV OUTPUT** : Connection of the TV set.
- OUTPUT TO TV** : SCART Socket 1(AV1): Connects to the scart-input connector on the TV. RGB output.
- INPUT/OUTPUT (VCR, STB)** : SCART Socket 2(AV2): Connection of an external device (satellite receiver, set-top box, video recorder, camcorder, etc.)
- VIDEO OUTPUT** : Connection of a TV set with a video output (Composite Video).
- AUDIO connectors ( Audio OUT )** : Connects to the AV amplifier by using 2 cords (Left, right).
- DIGITAL AUDIO OUT (OPTICAL)** : Connects to an audio component using the optical digital connection cord.
- DIGITAL AUDIO OUT (COAXIAL)** : Connects to an audio component using the coaxial digital connection cord.
- COMPONENT VIDEO OUTPUT** : Connect TV with suitable Component input
- AC INPUT** : Power supply

## 1.5 VFD ICONS



- TITLE : Displays the selected/played title number (DVD)
- TRK : Displays the selected/played track number (CDDA/MP3/JPEG/MPEG)
- DVD : Displays the type of inserted DVD disc: DVD/DVD-R/DVD-RW
- DVD R : Displays the type of inserted DVD disc: DVD+R
- DVD RW : Displays the type of inserted DVD disc: DVD+RW
- CD : Indicates that a CD disc is inserted
- (S)VCD : Indicates that a (S)VCD disc is inserted
- CHP : Displays the selected/played number of chapter (DVD)
- REMAIN : Indicates that remaining time is being displayed
-  : A Dolby Digital audio signal is available on the digital audio output
- DTS : DTS audio signal is available on the digital audio output
- PCM : A PCM audio signal is available on the digital audio output
-  Playback in progress
-  Playback/record interrupted (Pause)
- REC : Recording in progress
- TIMER : A recording (timer) has been programmed
- NICAM : The DVD recorder has detected a Nicam audio signal
- 2 CH : During playback, a HiFi/2 channel tone was detected or a HiFi/2 channel tone was received.
- 5.1 CH : During playback, a HiFi/6 channel tone was detected or a HiFi/6 channel tone was received.
- ZOOM : Zoom mode is activated
-  : A repeat mode is activated
- A → B : A → B repeat mode is activated
-  : Displays multi-angle scenes.

### Multi-function display/Text line

- Clock
- Disc/Title playing time
- Display of a programme number of TV channel/ position/ channel name/ function
- Display of information, warnings

## **1.6 MESSAGES IN THE DVD RECORDER DISPLAY**

The following messages may appear in your DVD recorder display:

OPEN	: Disc tray is open
CLOSE	: Disc tray is closing
LOAD	: Disc is being read
NO DISC	: No disc has been inserted for playback or recording. If a disc has been inserted, perhaps it cannot be read.
ERROR	: Error disc, faulty disc
UPDATE	: Updating flash
BLANK	: Inserted disc is blank
MENU	: While in file playback, file content menu is on screen
STOP	: Stop to play the content
ROOT	: In root menu for recorded content
DV IN	: DV source
COMPOSITE	: CVBS source
S-VIDEO	: S-VIDEO source
SCART-IN	: SCART source
PREPARING	: Preparing a new DVD+R or DVD+RW disc
SETUP	: Setup menu is active on screen
FINALISE	: Finalizing a DVD+R disc
FINISH	: Flash update procedure is finished





## 1.7 SUPPORTED DISCS

### Playback and Recording

DVD+RW (Digital Versatile Disc+ Rewritable)

DVD+R (Digital Versatile Disc+ Recordable)

### Playback only

Disc Types (Logos)	Recording Types	Disc Size	Max. Playing Time	Characteristics
	Audio + Video	12 cm	Single - sided; 240 min. Double - sided; 480 min.	<ul style="list-style-type: none"> <li>DVD contains excellent sound and video due to Dolby Digital and MPEG-2 System.</li> <li>Various screen and audio functions can be easily selected through the on-screen menu.</li> </ul>
		8 cm	Single - sided; 80 min. Double - sided; 160 min.	
	Audio	12 cm	74 min.	<ul style="list-style-type: none"> <li>An LP is recorded as an analogue signal with more distortion. CD is recorded as a digital signal with better audio quality, less distortion and less deterioration of audio quality over time.</li> </ul>
		8 cm	20 min.	
MP3-CD 	Audio (xxxx.mp3)	12 cm	It depends on MP3 quality	<ul style="list-style-type: none"> <li>MP3 is recorded as a digital signal with better audio quality, less distortion and less deterioration of audio quality over time.</li> </ul>
		8 cm		
PICTURE-CD 	Video (still picture)	12 cm	It depends on JPEG quality	<ul style="list-style-type: none"> <li>JPEG is recorded as a digital signal with better picture quality over time.</li> </ul>
		8 cm		

## **2. INSTALLING YOUR DVD RECORDER**

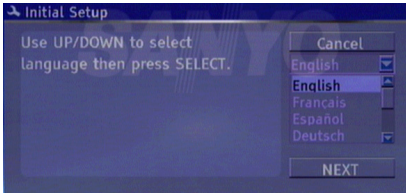
### **INTRODUCTION**

Setup encompasses setting general options such as language, clock and so on that are applicable to DVD Playing and recording functions. Other setup options apply to specific functions of the DVD recorder.

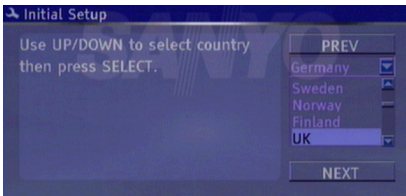
### **2.1 INSTALLATION MENU**

#### **2.1.1 Initial Setup**

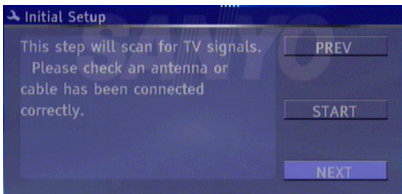
1. OSD language selection.



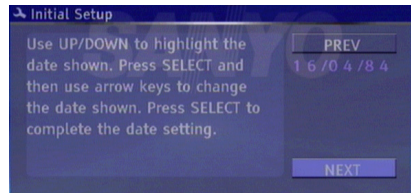
2. Country selection.



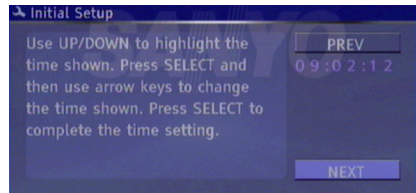
3. Automatic program search.



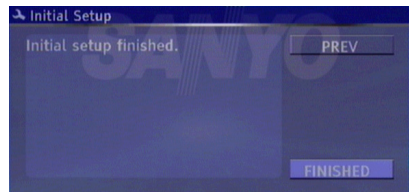
4. Use ▲/▼ keys to select the date box, and press SELECT to edit date. You can come to the place that you will change by using ◀ / ▶ keys and make the changes by using number keys and ▲/▼ keys.



5. You can also set system time with the same steps as written above.



6. Finish the initial setup.





## **2.2 SETUP MENU**

If you press **SETUP** key on the remote control, a menu will be displayed. You can use arrow keys for navigation and **SELECT** key to change highlighted option.

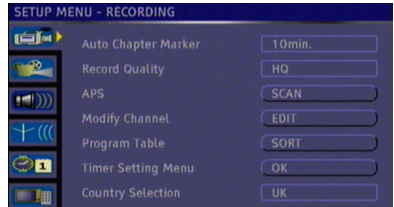
### **NOTE:**

Some Setup Menu items may not be available during playback or monitor mode.

## **2.2.1 RECORDING**

### **2.2.1.1 AUTO CHAPTER MARKER**

You can select one of the time periods (5min, 10min, 20min, 30min) for automatic chapter insertion or cancel this function by choosing "Off" option.



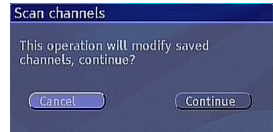
### **2.2.1.2 RECORD QUALITY**

You can choose the quality level for custom recording. Each quality level offers different recording time period, listed below:

- HQ : High Quality – 60 min
- SP : Standard Play – 120 min
- LP : Long Play – 180 min
- EP : Extended Play – 240 min
- SLP : Super Long Play – 360 min

### **2.2.1.3 APS**

Makes automatic scan of all channels preset at the antenna. Initially, it deletes current channel list. To confirm this, a warning message appears on the screen. If you choose to continue, it starts scanning channels.



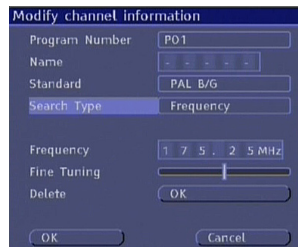
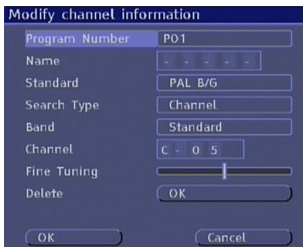
**NOTE:** APS operation may take long time.

**NOTE:** If you do not get audio properly, please see TroubleShooting part.

### **2.2.1.4 MODIFY CHANNEL**

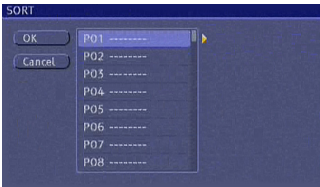
It enables to modify last tuned channel settings. You can select "Search Type" and "Band" or edit the "Name" field. The "Standard" item will be refreshed according to the tuned channel's setting. With "Channel" / "Frequency" field, you can directly enter the channel number / frequency or press arrow keys to do manual tuning.

When you select "Standard" option from "Band" field, it starts scanning with C-Band and it does not pass to S-Band after tuning C-Band. If you select "Cable" option, it starts scanning with S-Band and it scans both S-Band and C-Band channels.



**NOTE:** If you do not get audio properly, please see TroubleShooting part.

### **2.2.1.5 PROGRAM TABLE**



You can view or sort all stored programs by using this menu item. You can access Modify Channel menu (see 2.2.1.4) by pressing Select button on Program Table.

### **2.2.1.6 TIMER SETTING MENU**



You can list all pre-set timer records, edit on stored record list or set the timer for a new recording by using this menu option. This menu can also be activated by TIMER key on the remote control.

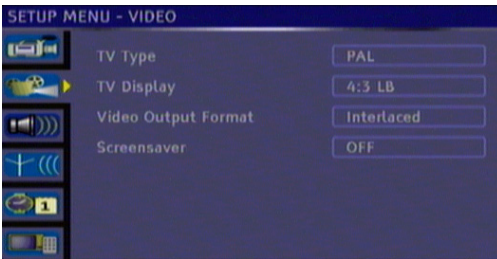
If you press SELECT on the first blank item an additional menu will appear on screen. For detailed information, please look at section 5.2 .

### **2.2.1.7 COUNTRY SELECTION**

It lists available countries and enables to select the country for tuning settings.

**NOTE:** In order to have proper tuning, channel naming and sorting facilities, please be sure that your own country is selected.

## **2.2.2 VIDEO**



### **2.2.2.1 TV TYPE**

**MULTI:** Select this option if your TV supports both NTSC and PAL.

**PAL:** Select this option if your TV supports only PAL.

**NTSC:** Select this option if your TV supports only NTSC.

### **2.2.2.2 TV DISPLAY**

TV Display controls the presentation of the picture on the screen.



**4:3 PS**



**4:3 LB**



**16:9 WS**

#### **4:3 PS: (Normal/PS Pan & Scan)**

Allows the movie to fill the entire screen of your TV, but not the right and left edges.

#### **4:3 LB: (Normal/LB Letterbox (4x3))**

Allows you to see movies in their original aspect ratio. You will see the entire frame of the movie, but it will occupy a smaller portion of the screen.

#### **16:9 WS: (Wide Widescreen (16x9))**

Choose this setting if your DVD recorder is connected to a widescreen TV.

**NOTE:** Depending on the format of the DVD disc, e.g. 2.35:1 the picture may still have black lines above and below the picture.

### **2.2.2.3 VIDEO OUTPUT FORMAT**

This menu item enables user to select video output as either "Progressive" or "Interlaced".

When progressive option is selected, a confirmation message will be displayed. If user does not press any key to confirm, selection will be discarded after a while.

**NOTE:** You can only get progressive output with progressive TV set, otherwise you will not get video properly. If your selection and the TV set does not match please use the shortcuts below:

CLEAR, CLEAR, 5: Switch to progressive

CLEAR, CLEAR, 6: Switch to interlaced

### **2.2.2.4 SCREENSAVER**

This menu option allows user to activate screensaver while the unit is not in use for a while.

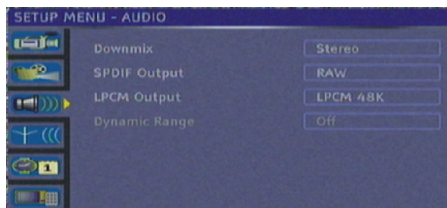
## **2.2.3 AUDIO**

### **2.2.3.1 DOWNMIX**

Downmix means mixing 5.1 channels down to two channels. Set these options to agree with the speakers installed in your home entertainment system.

**Stereo:** Two channels stereo. Use this option if you have a stereo TV or a HI-FI stereo system.

**Surround:** Surround encoded output.



### **2.2.3.2 SPDIF OUTPUT**

This item can be selected as "RAW" or "LPCM".

### **2.2.3.3 LPCM OUTPUT**

This item can be selected as "LPCM 96K" or "LPCM 48K".

Choose "LPCM 96K" if your AV amplifier/receiver is compatible with 96K sampling rate audio, otherwise leave it set to "LPCM 48K".

### **2.2.3.4 DYNAMIC RANGE**

Dynamic range adjusts frequency response. This control is useful to turn down the level of loud passages (explosions, car crashes, and etc.), while at the same time keeping soft passages loud enough to hear them clearly.

**Full:** The range between loudest and softest is compressed to the maximum.

**Off:** There is no compression.

You can adjust the level of the dynamic range compression to different levels between off and full.

The other settings are expressed as a fraction of the full dynamic range.

## **2.2.4 LANGUAGE**

### **2.2.4.1 OSD LANGUAGE**

You can change default OSD language by this option.

### **2.2.4.2 AUDIO LANGUAGE**

You can select default audio language by this option. The selected audio language will be activated, if supported by the disc played.

### **2.2.4.3 SUBTITLE LANGUAGE**

You can select default subtitle language for DVD discs by this option. The selected subtitle language will be activated, if supported by the disc played.



### **2.2.4.4 DISC MENU LANGUAGE**

You can select default DVD disc menu language by this option. The selected DVD disc menu language will be activated, if supported by the disc played.

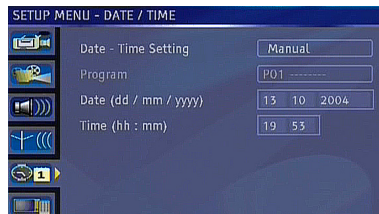
## **2.2.5 DATE / TIME**

### **2.2.5.1 DATE-TIME SETTING**

You can edit date & time settings if "Manual" option is selected. Otherwise the date and time settings are set automatically according to the selected "Program".

### **2.2.5.2 PROGRAM**

This option is used for selecting the program for automatic date/time setting. You can select one of the programs that are listed for auto date/time setting.



### **2.2.5.3 DATE (dd / mm / yyyy)**

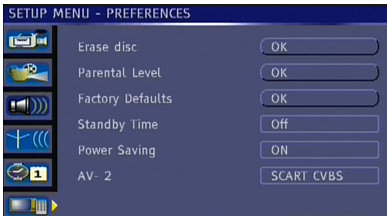
You can set date by this menu option, if the "Date - Time Setting" option is selected as "Manual".

The date format will be as "day / month / year".

### **2.2.5.4 TIME (hh : mm)**

You can set time by this menu option, if the "Date - Time Setting" option is selected as "Manual". The time format will be as "hour : minute".

## 2.2.6 PREFERENCES

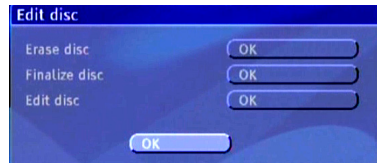


### 2.2.6.1 EDIT DISC

#### ERASE DISC

This menu option is used for erasing a recorded DVD+RW disc. A warning dialogue asking whether you want to erase or not will be displayed. Select Yes to start erasing disc, or select No to return to the Setup menu.

**NOTE:** This option is enabled if only the disc is not in use. If you're playing the disc or viewing title menu (Root), please exit from DVD mode and select this menu option for erasing the disc.



#### FINALISE DISC

This menu option is used for finalising a recorded DVD+R disc. It is not possible to do any operation on the disc after this process. A warning dialogue asking whether you want to finalise or not will be displayed. Select Yes to start finalising disc, or select No to return to the Setup menu.

#### EDIT DISC

This menu option is used for viewing Disc Edit Menu of DVD+R/RW discs. You can perform disc edit operations such as play disc, rename disc or record a new title with this menu. For the details, please refer to Section 2.4.

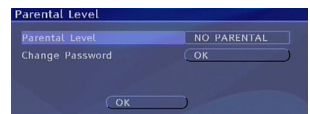
### 2.2.6.2 PARENTAL LEVEL

Parental Level menu option will not be available if the player is in RESUME (Pre-Stop) mode.

Playing some DVDs can be limited depending on the age of users. The "Parental Control" function allows playback limitation level to be set by the parent.

#### ➤ PARENTAL LEVEL

Parental level can be adjusted to one of the eight levels or "NO PARENTAL". "NO PARENTAL", "NO PARENTAL" or level "8 ADULT" adjustments let you watch all of the DVD titles ignoring that DVD disc's parental level. You can watch the DVD discs, which has the same or lower parental level than the recorder's level only.



#### ➤ CHANGE PASSWORD

The password for parental level can be set and changed by using this option. The default password is: 0000.

You have to set a XXXX digital password when it is the first time to select a parental level.

You have to enter your password every time you want to watch a movie with a higher parental setting or to change the parental level of the system.

To change the password, you will be prompted to enter your old password. After that, it becomes possible to enter a new 4-digit password.

**Enter password :** Enter your current password (four numbers you previously set in here)

**Enter new password:** Enter your choice for a new password.

**Confirm new password:** confirm new password by entering again. Select "OK".

**NOTE:** Do not forget your password. Otherwise you can use the password at last page, to enter this menu.



### **2.2.6.3 FACTORY DEFAULTS**

When you choose Factory Defaults option, after resetting all your Setup options back to factory settings, the device will switch to standby mode automatically. When the standby button is pressed to switch the device on, first time installation starts.

**CAUTION:** Parental level and parental password do not change.

### **2.2.6.4 STANDBY TIME**

You can set the standby time as 5, 15 or 30 minutes or set it off by choosing "Off" option from the menu. The unit goes to standby state if one of the time options is selected and no key press occurs for the selected time duration while in stop mode.

### **2.2.6.5 POWER SAVING**

If Power Saving is selected as "On", the unit goes into LOW POWER state instead of normal STANDBY state when you press STANDBY key on remote controller or front panel.

In LOW POWER state, the time is not displayed on VFD and only STANDBY key works on remote controller or front panel.

If Power Saving is selected as "Off", the unit always goes into normal STANDBY state on each press of STANDBY key.

### **2.2.6.6 AV-2**

This menu option allows you to set AV-2 as "Decoder" or "SCART CVBS" output.

When "Decoder" option is selected, "SCART" is removed from the available video sources list and an additional menu item ("Decoder On/Off") is added into "Modify Channel" menu.

In the "Modify Channel" menu, if you select Decoder option as "On", you can watch scrambled channels with appropriate decoder.

Otherwise, when "SCART CVBS" is selected, AV-2 continues to stay in available sources list.



## 2.3 DISC EDIT MENU

Disc Edit Menu will be activated by pressing ► key of the remote control on the disc thumbnail picture. If you press ▲ key while the first title picture is focused, you can view the disc thumbnail picture.



\* For DVD + RW



\*For DVD +R

**Play:** You can play the recorded disc from the first title.

**Rename Disc:** You can change the disc's name by this option.

**Erase Disc:** This option allows you to erase the recorded disc if it's DVD+RW.

**Record a New Title:** This option allows you to record a new title to the disc.

**Overwrite Disc:** With this option you can overwrite all titles in the disc.

**Lock Disc:** You can lock the disc in order to protect from overwriting or continuing to record. Only you can play the disc.

**Unlock Disc:** You can unlock the disc and continue to record.

**NOTE:** You can see "Unlock Disc" option if the disc is locked before.

**Make Compatible:** When you do chapter operations (add/delete marker, hide/unhide, etc.) on a title, this menu option will appear on the Disc Menu (available only with DVD+RW).

Since DVD+RW discs do not need to be finalised, if you have performed edit operations on a rewritable disc, in order to play the disc and see your changes on other recorders, "Make Compatible" operation must be done.

**NOTE:** Make Compatible operation may take long time.

**Finalise Disc:** It finalises the disc recorded. It is not possible to do any operation on the disc after this process (available only with DVD+R).

## 2.4 TITLE EDIT MENU

Title Menu lists all the actions you can do with the titles recorded on a recordable disc. It will be activated by pressing  $\blacktriangleright$  arrow key of the remote control on the thumbnail picture of the title.

**Play Title:** You can press SELECT and play the selected title on the disc.

**Edit Title:** You can edit the titles on the disc. A new menu is displayed on the screen, and you can insert chapter marker, hide chapter, select index picture or split title using this menu. (See Editing Title 2.6)

**Rename Title:** You can rename the title.

**Erase Title:** This option allows you to erase the selected title (available only with DVD+RW).

**Overwrite Title:** You can overwrite and record another title onto the selected title (New title cannot be longer than the overwritten one).

**Overwrite Disc:** With this option you can overwrite all titles in the disc.

**Append Title:** A new recording can be appended to the last title.



## 2.5 EDITING TITLE



**Title number :** View the number of current title / total title.

**Chapter number :** View the number of current chapter / total chapter.

**Playback operations :** Current operation status. It includes PLAY, PAUSE, STOP, Fast Forward/Backward, Slow Forward, ...

**Chapter marker :** When Insert marker is selected by pressing SELECT, a new chapter marker will be added to the current point.

When Delete marker is selected by pressing SELECT, the marker of the current chapter will be deleted.

When Delete all markers is selected by pressing SELECT, all of the chapter markers will be deleted.

**Chapter hide or unhide :** You can make a chapter invisible by selecting "Hide chapter" option. In this way, invisible chapters will be skipped during disc playback.

If the current chapter is hidden before, "Unhide chapter" will be displayed; and selecting this will make the chapter visible again.

**Index picture :** When you want to set the current frame as the title thumbnail picture of the current title, press SELECT

**Title Elapsed:** Display the title elapsed time.

To exit editing mode, press TITLE key.



### **3. PLAYBACK**

#### **3.1 Preparing For Playback (All Discs)**

- To playback a disc, turn on the TV.
- If the DVD Recorder audio outputs are connected to an A/V receiver, turn on the receiver and make the appropriate selections to play audio from the DVD Recorder. Otherwise connect audio output to TV input.
- Set options in the setup menus that are appropriate for your speaker arrangement and configuration, for the video standard (PAL or NTSC) of your television monitor, and for the video picture aspect ratio.
- For a DVD, check packaging and determine whether the parental control level and local setups are appropriate for your country. Refer to setup menus for the Country and Parental controls.
- DVDs are encoded for six different regions. Check that the region designated on the DVD packaging conforms to your region. You cannot make any changes in the setup menu that will effect the region encoding.

#### **3.2 Inserting a Disc In The Tray**

Insert a disc in the DVD Recorder tray with the shiny side down. Note that some discs shine more than others. In the case of commercial CD's, the disc identifying information is printed on the "top" side of a disc. Do not insert more than one disc in the disc tray at a time.

**NOTE:** If the disc is placed in upside down (and it is a single sided disc), the VFD display on the DVD recorder will indicate ERROR.

#### **3.3 Basic Playback (DVD, (S)VCD, CD-DA, MP3, JPEG, MPEG)**

Some playback operations and interactivity features of DVD and may be intentionally fixed by the software producer. Accordingly, some playback features may not be available. You should refer to the instructions supplied with the DVD. The simplest way to playback a disc is to follow this procedure.

1. Press on the STANDBY key.
2. Press OPEN/CLOSE (▲) to open the disc tray.
3. Place a disc onto the tray.
4. Press OPEN/CLOSE (▲)

The disc tray is automatically closed and play commences.

**DVD:** A menu may appear on the TV screen after a moment or the film may start immediately after the introduction of the movie company. You can select a specific scene to play if provided in this menu. This behavior depends on the disc content and may change. This statement assumes that parental controls are off or set in such a way to allow the disc to play unimpeded and also the region of DVD conforms to your region.

**(S)VCD:**

- **With PBC:** If disc contains a menu, it will appear on the screen after a moment. You can select a specific scene to play, if provided in this menu.
- **Without PBC:** It plays the content.

**CD-DA:** CD menu appears, tracks are listed on the screen. It starts playback of the first track automatically.

**MP3 / JPEG / MPEG :** CD menu is appeared, all files and folders are listed on the screen.

5. If a menu is active on screen, press arrow keys to navigate or press SELECT to select a menu item.

#### **3.4 Stopping Playback (DVD, (S)VCD, CD-DA, MP3, JPEG, MPEG)**

**DVD / (S)VCD :** Press STOP(■) twice.

- During normal playback press STOP(■). The unit memorizes the point where STOP(■) was pressed once (RESUME/Pre-Stop function) and a message "Press PLAY to continue" will appear on the screen. The screen displays a stationary logo or the screensaver is displayed after a timeout interval. Press PLAY/PAUSE(▶/||) again while the screensaver is not active, and play will resume from this point. If the tray is opened or the STOP(■) is pressed again, the RESUME (Pre-Stop) function will be cleared.

**CD-DA / MP3 / JPEG / MPEG :** In PLAY or PAUSE state, when the STOP (■) key is pressed once, playback is stopped permanently. Press PLAY/PAUSE(▶/||) for starting from the beginning.

### **3.5 Pausing Playback (ALL DISCS)**

1. Press the PLAY/PAUSE (▶/⏸) key any time during playback of a disc.

A “freeze frame” is created that stays on the screen until you resume playing the disc. Sound is muted during still playback.

2. To resume playback, press the PLAY/PAUSE (▶/⏸) key.

### **3.6 Removing a Disc (ALL DISCS)**

Press the OPEN/CLOSE (⏏) on the remote control or eject key on the front panel. Remove the disc and press the same key to close the tray.

### **3.7 Repeat Play**

Repeat play modes are activated by pressing REPEAT during playback and vary with media. Each time this key is pressed, a different repeat box is displayed on the screen.

In NORMAL mode the repeat mode is disabled.

**DVD:**

- CHAPTER REPEAT
- DISC REPEAT
- TITLE REPEAT
- NORMAL

**(S)VCD / CD-DA:**

- TRACK REPEAT
- DISC REPEAT
- NORMAL

**MP3 / JPEG / MPEG :**

- TRACK REPEAT
- DISK REPEAT
- FOLDER REPEAT
- NORMAL

### **3.8 Repeating a Specific Segment A to B (DVD, (S)VCD, CD-DA, MP3, JPEG, MPEG,)**

This method of repeating a segment on a disc relies on designating points on the disc to delineate where to start and end.

1. As the disc plays, press A-B key. “A\_” is displayed.
2. At the point you want to end the segment press the A-B key again.
3. “A-B REPEAT” is displayed and the repeat play of the selection between points A and B starts.
4. To end repeat play of the segment you designated, press the A-B key.

### **3.9 Displaying a Scene With a Larger and Closer View**

The zoom in function enables you to take a closer look at the scene you are viewing that is especially a considerate function when you are watching science fiction or adventure films.

**DVD / (S)VCD:** By pressing ZOOM key consecutively you can get to “Zoom %150”, “Zoom %200” modes.

**JPEG:** In playback of the JPEG files, first press of the ZOOM key makes it goes into the ZOOM ON mode. To increase magnification press SEARCH (▶▶) key consecutively. You can get to %12, %25, %50, %100, %200, %400 and FITSCREEN modes.

Pressing ZOOM again will return to ZOOM OFF mode and the picture is now in its normal size.

**NOTE:** You can move in the picture i.e. change the zoomed location by using the (◀/▶/▲/▼) arrow keys (DVD, (S)VCD, JPEG).

### **3.10 Selecting Subtitle Language (DVD(Displaying / Changing Subtitle Language)**

**DVD:** It is possible to change the subtitle language from the one selected at the initial settings to a different language available on disc or turn it off, if available. (This operation works only with discs on which multiple subtitle languages are recorded, and also if it is not prohibited by the disc.)

Press SUBTITLE during playback.

When this key is pressed once, the first subtitle recorded on the disc will be displayed. The rest of the subtitles recorded will be displayed in sequence at each press of the SUBTITLE key.

**NOTE:**

- When the preferred language is not selected even after pressing the key several times, it means that the language is not available on the disc.
- When the recorder is restarted or the disc is changed, the subtitle selection is automatically changed back to the initial settings.
- Usually a circulation will happen while switching to another language. Thus in order to cancel the subtitle press this key a number of times until "SUBTITLE OFF" appears on the screen.

### **3.11 Changing Audio Soundtrack Language (DVD, MPEG)**

Your default language choice is determined by the language you set in the Language, Audio Language menu. Typically a DVD will have a menu that you can make a language selection from, before starting playback or after the playback begins. Moreover, using the remote control; AUDIO key allows switching between audio tracks once a DVD has started playing. It is also valid for MPEG videos.

Press AUDIO a number of times until the preferred language is selected.

**NOTE:**

- When the preferred language is not selected even after pressing the key several times, it means that the language is not available on the disc.
- When the device is turned on or the disc is removed, the language heard is the one selected at the initial settings. If the language is not recorded on the disc, only the available language on the disc will be heard.

### **3.12 Changing the Camera Angle (DVD)**


Some DVDs provide multiple shots of a selected scene each from a different camera angle, so you can choose which angle you are most interested in viewing. A small icon appears on the screen when multiple angles are available.

Press ANGLE during playback.

The current angle is changed.

Press ANGLE a number of times until the preferred viewing angle is selected.

**NOTE:**

- This function will only work on discs where different angles have been recorded. The number of recorded angles differs depending on the disc used.
- If you press ANGLE outside of a multi-angle scene on a multi-angle title, you will see that  is displayed. It means that only one angle is currently available.

### **3.13 Fast Forward / Backward**

Press **SEARCH (◀◀)** or **SEARCH (▶▶)** on the remote control during playback.

The speed of advance or reverse changes at each press of the **SEARCH (▶▶)** or **SEARCH (◀◀)** key. Pressing **SEARCH (◀◀)** key in Fast Forward state and pressing **SEARCH (▶▶)** key in Fast Backward state decreases the scan speed.

To resume the normal playback press **PLAY/PAUSE (▶/⏸)** key.

**JPEG:** In **ZOOM ON** mode; **SEARCH (▶▶)** key is used to zoom in, **SEARCH (◀◀)** key is used to zoom out the picture.

Supported speeds:

**DVD:** x2, x4, x8, x16, x32      **(S)VCD:** x2, x4, x8, x16, x32

**CD-DA :** x2, x4, x8, x16

**MP3:** x2, x4, x8, x16, x32      **MPEG:** x8, x16, x32

**NOTE:** The fast forward and backward operations are not circular. The sequence for the fast forward and backward is as follows:

(FR x32, FR x16, FR x8, FR x4, FR x2, PLAY, FF x2, FF x4, FF x8, FF x16, FF x32)

Audio is muted during fast forwarding or reversing.

### **3.14 Slow Forward Playback (DVD, (S)VCD)**

Slow-motion playback is good for searching or just observing a small section of the disc. To begin slow-motion play forward, first press **PLAY/PAUSE (▶/⏸)** once during playback. The screen suspends.

Then, press **SEARCH (▶▶)** on the remote control during playback.

You can increase or decrease the speed of the slow-motion play by pressing **SEARCH (▶▶)** or **SEARCH (◀◀)**. The speed of slow motion is displayed on the screen each time you change it.

Supported speeds: **DVD:** x1/2, x1/4, x1/8      **(S)VCD:** x1/2, x1/4, x1/8

**NOTE:**The sequence for the slow-motion is as follows:(PAUSE, SF 1/2x, SF 1/4x, SF 1/8x)

Audio is muted during slow-motion playback.

### **3.15 Skipping Ahead or Back (DVD, (S)VCD, CD-DA, MP3, JPEG, MPEG)**

#### **3.15.1 Skipping Ahead**

Press **SKIP (▶▶)** on the remote control or on the main unit during playback.

**DVD:** In any playback state, a chapter or title is skipped forward depending on the information on the disc each time the key is pressed.

**(S)VCD:**

With PBC: In any playback state, next entry point in the current track is started.

Without PBC: In any playback state, the next track is started.

**CD-DA, MP3, MPEG:**Next track is played in any playback state.

**JPEG:**Next picture is displayed.

#### **3.15.2 Skipping Back**

Press **SKIP (◀◀)** on the remote control or on the main unit during playback.

**DVD:** In any playback state, a chapter or title is skipped backward depending on the information on the disc each time this key is pressed.

**(S)VCD:** With PBC: In any playback state, previous entry point in the current track is started.

Without PBC: In any playback state, the previous track is started.

**CD-DA, MP3:** In any playback state; when the key is pressed once after 5 seconds through a track, play returns to the start of that track. Otherwise, previous track is played.

**MPEG:** Previous track is played in any playback state.

**JPEG:** Previous picture is displayed.

### **3.16 Step Forward (DVD, (S)VCD)**

Press PLAY/PAUSE (▶/⏸) once during playback.

The screen suspends.

Press SKIP (⏮) on the remote control or on the main unit during playback.

The next frame of the movie is displayed and press SKIP (⏮) for the following frames.

Audio is muted during frame advance.

To return to normal playback press PLAY/PAUSE(▶/⏸) key.

### **3.17 Locating A Specific Title or Chapter, Using The MENU or TITLE Button (DVD)**

Some DVD discs have unique menu structures called DVD menus. For example, DVD's programmed with complex content, provide guide menus, and those recorded with various languages, provide menus for audio and subtitle language. Although the DVD menus' content and operation differ from disc to disc, the following explains basic operations when this feature is used.

To play a specific title on a DVD, you can use the MENU or TITLE key to display a menu to make your title and chapter selection. The procedure described here is general in nature. If the steps do not seem appropriate for the DVD you are attempting to play, disregard these instructions and follow the instructions that appear on the screen.

1. During normal playback, press MENU or TITLE.

The screen displays a menu. The menu may not contain all the chapters in the movie title. However, the disc creators provide additional menus to navigate, which cover all the chapters. Use the arrow keys to navigate on menus.

2. Position the screen highlight over your selection and press SELECT. Alternatively, you can press the number of the desired chapter.

### **3.18 Browsing For A Specific Chapter/Title (DVD)**

Press SEARCH MODE on the remote control during playback "once" for titles (if more than one title is available) and "two times" for chapters (if more than one chapter is available).

The chapter/title search box is displayed on the screen. You can see the total numbers of titles/chapters as --/xx.

Enter the number of the title or chapter using number keys.

The selected title or chapter is played just after you enter number and wait for 4-5 seconds.

#### **NOTE:**

- If you attempt to enter a number greater than the total number of titles/chapters, it clears the numbers entered, displays (chapter/title) / xx and continues to play.
- If you wait more than five seconds without pressing any number, the operation is cancelled.

### **3.19 Moving To A Specific Elapsed Time (DVD, (S)VCD)**

#### **DVD:**

You can view the DVD starting from any time point you want.

Press SEARCH MODE on the remote control "three times" during playback.

The title is played beginning from the desired time just after you enter the time and press SELECT key, if not prohibited by the DVD.

**(S)VCD:** You can view (S)VCD according to the disc or track time any time you want.

Press SEARCH MODE on the remote control "once" during playback for disc time search. In order to start from any time within a track, press SEARCH MODE "two times" during playback.

The time search box is displayed on the screen. You can see total runtime of the track or disc as ---:---/xx:xx:xx

Enter the time using number keys.

The track or disc is played beginning from the desired time just after you enter the time and wait for 4-5 seconds or press SELECT key.

#### **NOTE:**

- If you attempt to enter a number greater than the total time, it clears the numbers entered and continues to play.
- If you wait more than five seconds without pressing any key for selecting scenes by time operation is cancelled.

### **3.20 Browsing For A Specific Track/Time (CD-DA, MP3, MPEG, JPEG)**

Press SEARCH MODE on the remote control.

Enter the number of the track you want to play by using number keys.

The selected track is played just after you enter number and wait for 4-5 seconds or press SELECT key.

Second press of SEARCH MODE key on the remote control will make you time search of the playing media (except JPEG). (Only in playback state)

The time search box is displayed on the screen. You can see total runtime of the track as --:--:--/xx:xx:xx.

Enter the time using number keys.

The track is played beginning from the desired time just after you enter the time and wait for 4-5 seconds or press SELECT key.

### **3.21 Checking Elapsed/Remaining Time (except JPEG)**

To determine how long a file has been playing, you can check the elapsed time by pressing DISPLAY key. You will see the display menu on the screen and you can select track's/chapter's elapsed/remaining time or disc's/title's elapsed/remaining time from the menu option. The chosen time style will also be shown on the VFD. To close the display menu press DISPLAY again.

### **3.22 Changing Audio Format**

Press AUDIO on the remote control at tuner mode to change audio format between Mono / Stereo / Dual A / Dual B if the TV channel supports more than one format.

### **3.23 Playback Control ((S)VCD)**

If a video CD has "playback control" written on the disc or jacket, it means that particular scenes or information can be selected for viewing interactively with TV screen using the menu screen.

TITLE key is dedicated to PBC "playback control" during playback. You can change PBC mode with TITLE key or with PBC menu item on the Display menu.

PBC option will be on by default.

### **3.24 Playback Modes (CD-DA, MP3, JPEG, MPEG)**

Press PLAY MODE on the remote control.

Display menu will appear on the screen and pressing PLAY MODE consecutively, you can change playing options of the tracks as below.

#### **CD-DA, MP3:**

##### *Program*

You can prepare a playlist with this option. The same type of files can be arranged to build a playlist (Only valid for CD-DA, MP3, JPEG and MPEG files).

Select files with ▲ / ▼ keys and add file with PLAYLIST + /- key on remote control to make the playlist. To remove added files from playlist, come upon to file with ◀ key and press PLAYLIST + /- key on remote control.

Press PLAY MODE key to switch to the program mode. It starts playing the playlist immediately.

All playback operations are available in the playlist you prepared.

##### *Random*

When this play mode is selected, the tracks in the current folder will be played once in a random order.

##### *Intro Play*

Intro menu is used for introducing the content of the disc. It plays only for first 10 seconds of each track and then passes to the next track.

##### *Normal*

Tracks in the current folder will be played sequentially.

#### **JPEG, MPEG:**

Intro mode is not available with JPEG and MPEG files. But other options are the same.

### **3.25 Simultaneous Playback (JPEG, MP3)**

If your disc has both MP3 and JPEG files, you can listen MP3 audios while viewing JPEG files.

When you start slideshow of the JPEG files, you can select and listen to an MP3 file simultaneously. You can control these two types separately by using their relational display menus. If AUDIO is selected as TYPE you can control MP3 playback options. Similarly, if PICTURE is selected you can control JPEG playback options.

## **4. MANUAL RECORDING**

### **4.1 General Information**

With this DVD recorder, you can record on two types of DVD.

**DVD+RW** : This disc can be recorded and erased multiple times.

**DVD+R** : This type of disc can only be recorded until the disc is full or you finalise the disc. After that, it is not possible to make further recordings on the same disc.

**NOTE:** If the disc was previously recorded, formatted or erased on any other recorder or PC, please first erase the disc with this device, before starting record operation.

### **4.2 Recording Setup**

From the setup menu, choose Recording to set up the recording quality and auto chaptering periods. Recording qualities that may be chosen are: HQ (High Quality), SP (Standard Play), LP (Long Play), EP (Extended Play), SLP (Super Long Play). You can also change record qualities by pressing RECORD MODE key on the remote control.

Auto chapter durations are: 5, 10, 20, 30 minute, it can be deactivated also by choosing OFF.

### **4.3 Selecting Source**

Video input source modes: TV Tuner, SCART, Front CVBS, S-Video, DV. Please checkout your setup before starting a record process and assemble the correct configurations for starting record process.

Press VIDEO SOURCE on the remote control. The type of source changes for every press of the VIDEO SOURCE key.

### **4.4 How To Initiate And Stop Recording Process?**

After being sure about your device setup and general recording setup, be sure there is a recordable DVD in tray. Now you are ready to record. Then press RECORD key on your remote control or front panel of device. Recording process will start. To stop the recording process, press STOP button.

#### **OTR (One Touch Recording)**

Pressing RECORD during recording, it starts the sleep timer according to the record quality. The timer list is circular so after the maximum recording time, it returns back to the beginning. OTR time periods are followed as:

HQ: 30 min, 60 min

SP: 30 min, 60 min, 90 min, 120 min

LP : 30 min, 60 min, 90 min, 120 min, 150 min

EP : 30 min, 60 min, 90 min, 120 min, 150 min, 180 min, 210 min, 240 min

SLP : 30 min, 60 min, 90 min, 120 min, 150 min, 180 min, 210 min, 240 min, 270 min, 300 min, 330 min, 360 min

### **4.5 How To Watch Another Channel At TV During Recording?**

This feature is valid only for scart connection to TV. Press TV/DVD key on remote control. This will disable the scart output of the unit. By using program ▲/ ▼ or numerical keys of your TV remote control and press SELECT, you can watch other channels. In order to enable the scart output of the DVD recorder, press TV/DVD key again.

### **4.6 Inserting Chapter**

INSERT CHAPTER key on the remote control divides current chapter into two chapters from the moment you press this key.

## 4.7 Pause Recording

In order to pause recording process, press PLAY/PAUSE(▶/⏸) key. Press RECORD key to resume recording.

**NOTE:** If you try recording to a pre-recorded DVD+RW disc that is recorded on different platform or PC, a warning message will be appeared. This message explains that the disc is not compatible and it has to be erased. Select Yes to erase disc or No to cancel erase and record operation.

## 5. TIMER RECORDING

### 5.1 General Information

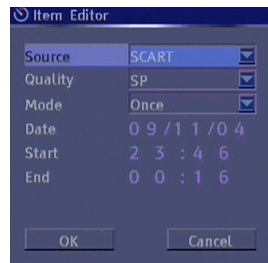
You can use programmed recording (timer) to automatically start and stop a recording at a later time. The DVD Recorder will switch to the selected program number and begin recording at the selected time.

To make a programmed recording, your DVD recorder needs to know:

- the program number of the TV channel
- the recording quality (HQ, SP, LP, EP, SLP)
- the mode of the recording (once, daily, weekly)
- the date you want to make the recording
- the start and stop time of the recording

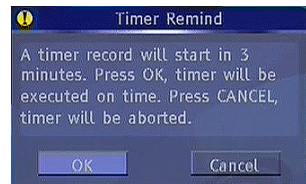
### 5.2 How To Create Recording Item

- Press TIMER key on the remote control or select Timer Setting Menu from Setup menu
- Press SELECT on the first blank item to program recording
- Set the source of recording
- Set the quality of recording
- Set the mode of recording
- Set the recording time (start and stop time for recording process)



### 5.3 How To Check, Change or Delete A Programmed Recording (Timer)

- Switch on the TV set.
- Press TIMER key on the remote control or select Timer Setting Menu from Setup menu.
- In order change any parameter of the recorded item, choose the related record item, press SELECT key, a popup menu will appear, you can edit from here in order to change any field.
- To delete the record item, repeat the steps 1 and 2 focus on the related item, press CLEAR key; the record item will be deleted from the list.



**NOTE:** In order to activate timer recording, unit should be set to normal STANDBY state. If unit is already turned on manually at the start time of a timer event, timer recording won't work.

**NOTE:** You can program up to 10 timer recording events.

## 6. DV

### 6.1 PLAYBACK FROM DV INPUT

You can connect a camcorder or digital camera to DV input of the unit's front panel. For playback, you must connect the device to the recorder and press VIDEO SOURCE key until switching to the right source. First you will see a blank screen. You can do playback operations like play, pause, stop, fast forward/backward, forward, rewind etc. using your remote control or the device itself. If the DV device is a camcorder, you can view camera mode with this connection on TV screen.

**NOTE:** Some DV compliant devices may not be supported.



## **6.2 RECORDING FROM DV INPUT**

Recording from DV input is also available. For this operation you must switch to DV source with the **VIDEO SOURCE** key on the remote control (in monitor mode). You can record content of the DV device or the camera mode of the DV device to a DVD disc. Recording operations like record, pause, stop, etc. are the same with steps explained in Manual recording section.

**NOTE:** Some DV compliant devices may not be supported.

## **7. LIMITATIONS AND SOME OTHER FEATURES**

### **Recorder Features And Limitations**

1. This DVD recorder cannot record any disc recorded before by another machine unless it is erased (available only with DVD+RW).
2. In one disc, you can keep 49 titles.
3. There is no time search on a pre-recorded disc, so use auto chaptering as much as possible.
4. You cannot record PAL/NTSC in the same disc.
5. You must finalise DVD+R to play on DVD recorder. If you don't do it, you may not play it with other devices.
6. Maximum recording time depends on the record quality option you choose.
7. Timer will be active only when the device is at normal STANDBY state.

## 8. SPECIFICATIONS

Power Requirements	220 – 240 Volt ~50Hz (Auto Adjustable)	
Power Consumption	Low Power Standby	1.33 Watt
	Maximum	32 Watt
Supported Recording Media	DVD	DVD+R DVD+RW
Supported Playback Media	DVD	DVD-Video DVD-R (DVD Video or data) DVD-RW (DVD Video or data) DVD+R (DVD Video or data) DVD+RW (DVD Video or data)
	CD	CD-Audio CD-R CD-RW (S)VCD Kodak Picture CD Copy Protected Audio CD
	Audio recording Format	Stereo Rec.
Video Type	MPEG-2 Video Standard Decoding (MPEG-1 supported) Full-screen video display of 720x576 (PAL) & 720x480 (NTSC) 50 and 60 Hz frame refresh rates (PAL&NTSC) Digital bit stream processing rate up to 10.08 Mb/s/sec Line resolution more than 500 lines	
Video Input	Front	DV in (IEEE1394) Cinch Socket Composite video in S-Video in (Mini DIN)
	Rear	Via SCART Aerial in
Video Output	CVBS	PAL / NTSC(Negative synchronized), 1Vpp@75 ohm (loaded) Through Full Euroscart Output (Pin-16 control)
	Aerial	
	YPbPr	Component YPbPr video output through RCA outputs. Component YPbPr video is available if Progressive Scan option is enabled.
Audio Type	Dolby Digital Decoding MPEG Multichannel (Up to 5.1 channel) Decoding LPCM (24 bit 96 kHz, 48kHz downsampling) MP3	
Audio Input	Front	Cinch Socket Stereo Analog L/R
	Rear	SCART (Analog L/R)
Audio Output	Digital Audio Outputs	S/PDIF (AC-3 or DTS encoded 5.1 channel digital audio) Coaxial and/or Optical
	Analog Outputs	24 Bit / 192 kHz DAC
		2 RCA jack outputs (Left / Right)
		Left / Right Audio Outputs of Full Euroscart
	2 Vrms (0 dB fs, 1kHz)	
TV Broadcasting	PAL	
	SECAM	
	B/G	
	DK	
	I/I'	
	L/L'	
Receiving Channels	VHF (Band I/III)	
	UHF (Band U)	
	HYPERBAND	
	Cable TV	B/G : S01-S41 / S75-S79 D/K : S01-S41
Number of Preset Channels	100	
Copy-Protection	Macrovision 7.1	
Dimensions	430 (W) x 50 (H) x 325 (D)	
Weight (Device) (kg)	3.6	
Weight (Device+case) (kg)	4.6	

## **9. TROUBLESHOOTING GUIDE**

### **The picture quality is poor(DVD)**

- Make sure the DVD disc surface is not damaged(Scratch, fingerprint etc.)
- Clean the DVD disc and try again.
- Ensure that the DVD disc is in the tray with the label uppermost.
- A damp DVD disc or condensation may effect the equipment. Wait for 1 or 2 hours in Stand-by to dry the equipment.

### **Disc does not play**

- No disc in the machine.  
Place a disc in the tray.
- Disc incorrectly loaded.  
Ensure that the DVD disc is in the tray with the label uppermost.
- Wrong type of disc. The machine cannot play CDROMs etc.  
Use disc in supported formats .
- The region code of the DVD must match that of the recorder.

### **Wrong OSD language**

- Select the language in the setup menu.

### **The language for the sound or subtitles on a DVD cannot be changed**

- Multilingual sound and/or subtitles not recorded on the DVD.
- Try to change the sound or subtitles using DVD's title menu. Some DVD's do not allow the user to change these settings without using the disc's menu.

### **Some functions(Angle, Zoom etc.) do not work**

- These functions are not available on the DVD.
- Angle can only be changed when the angle symbol is displayed.

### **The picture colors are not OK**

- Check the video output mode and select the appropriate mode.

### **No picture**

- Check if the recorder is connected to TV properly and that all connections between the DVD recorder and other attached equipment are secure.

### **No sound**

- Check the volume is set to an audible level.
- Make sure you have not switched the sound off accidentally.

### **Distorted sound**

- Check that the appropriate listening mode is selected.

### **No response from remote control**

- Make sure the remote control is in the correct mode.
- Check the batteries are fitted correctly.
- Change the batteries.

### **Record key does not start recording**

- Make sure there is a recordable (DVD+RW or DVD+R) disc inside the recorder.
- If you wish to record from RF input, check the program table to see the available channels. You may need to do an APS (Automatic program search) again to record, if the automatic search after installation has failed to find channels.
- If you wish to record from the SCART, CVBS, S-Video or DV input source, make sure that the record source is active and sending signals.
- To record from a DVD player the DVD should not be copy protected.
- If there is no space left on the disc you will see the error message "disc is full." Erase some titles to create space for new recordings.

**“No signal” message is received**

- Make sure the antenna is connected to RF input and there is TV broadcast on some channels.
- If you are using SCART, CVBS, S-Video or DV video inputs, make sure the record source is properly connected and switched on.

**Timer recording does not work**

- Make sure that the system time and record start time are set correctly.  
Time will be displayed when the recorder switches to standby in power saving off mode.
- Make sure that the program number of the scheduled record is on the program list.  
You will not be able to record, if the program number found during APS does not contain an active channel.

**Edit disc option is disabled**

- Make sure that the recorder is in “full stop mode”.

**Note For DV Operation**

- If any device connected through DV input, can not be recognized automatically at any time, please pull out and in the DV cable.

**Your country doesn't exist in "Country Selection" list in setup menu.**

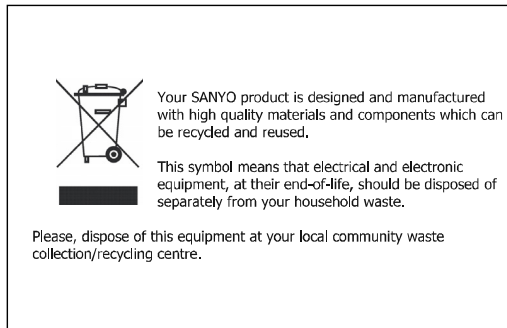
- Select "Other" option.

**Audio is not proper in tuner mode.**

- Make sure right country is selected before APS or manual search.
- Make sure right audio standard is set for related program in Modify Channel menu.
- Change Standard option manually if needed.

**If nothing works**

- If you have tried the above solutions and nothing seems to work, try switching your DVD off and on again. If this does not work, contact your supplier or your initiating service. **Never attempt to repair a defective DVD recorder yourself.**



Cut this information box out and keep in a safe place.

**If You Forget The Password:**

Press 3, 3, 0, 8.  
Then please set your personal password.

## **GUARANTEE TO CUSTOMER**

Sanyo Europe Ltd. (the Company) guarantees to the initial retail purchaser that if this equipment is or becomes defective and that, in the opinion of the Company, the defect is due to faulty material or workmanship the Company will, for a period of 12 calendar months from the date of sale to the original purchaser repair or replace, at its sole option, free of charge, any such defective component part of the equipment, always provided that: -

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1. The equipment has at all times been used in accordance with the operating instructions issued by the Company, and has not been connected to an electrical mains supply for which it has not been adjusted.
  2. Accidental damage, or damage caused by negligence or misuse by the user, including leakage from exhausted batteries, is specifically excluded.
  3. Unauthorised repairs, or any modification to the equipment which has not been expressly approved by the Company, shall render this guarantee null and void.
  4. Failure due to fair wear and tear of any item, such as batteries, record playing styli, and tape recording, playback and erase heads is specifically excluded.
- 

This guarantee is not transferable and is only applicable within the United Kingdom (and the Republic of Ireland). Nothing in this express guarantee affects the statutory rights available to the purchaser of this equipment.

Note: This guarantee supersedes any other form of guarantee that may inadvertently have been enclosed with or attached to the product. (August 1978).

*Dear Customer*

Thank you for buying Sanyo. This equipment should give you many years of pleasure and faithful service but in the event that a fault occurs, the following notes for your guidance may be helpful:-

1. PLEASE RETAIN YOUR PURCHASE RECEIPT WHICH WILL BE REQUIRED FOR SERVICE DURING GUARANTEE.
  2. If your Sanyo equipment proves faulty during the period of guarantee, take it or send it back to the dealer who originally supplied it together with this guarantee and the proof of purchase. We have made arrangements with our approved dealers under which they will carry out in-guarantee service repairs on our behalf. In this way, we hope to reduce to a minimum the amount of time you will be without your equipment.
  3. If for some reason it is impossible to return the equipment to the original supplies, please contact our Consumer Relations Department at the address below for further advice.
  4. Should the equipment require servicing after the expiry of the guarantee period, take or send it to the original supplier or any other Sanyo dealer. He will be pleased to give you a quotation for the repair. If you are in any doubt about what to do, write to us at the address below or telephone:
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Consumer Relations Department,  
Sanyo Europe Ltd.,  
18 Colonial Way, Watford  
WD24 4PT  
Tel: Watford 246363