

OPERATING INSTRUCTIONS

DVR-SD450 **UK**

DVD RECORDER



GB English



Problems with set-up?

Call 0870 240 7475

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Reverse engineering or disassembly is prohibited."

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"Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

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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.

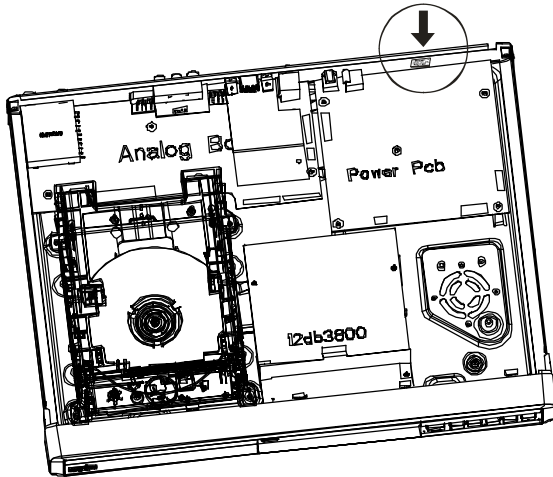
Dear Customers

We would like to thank you for purchasing this DVD Recorder with built-in FreeView Digital Terrestrial Receiver.

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

WARNING

A Laser Warning safety label has been placed inside the chassis at the location shown below.



CAUTION: INVISIBLE LASER RADIATION
WHEN OPEN AND INTERLOCKS DEFEATED.
AVOID EXPOSURE TO BEAM.

PELIGRO: RADIACION LASER INVISIBLE
CUANDO EL REPRODUCTOR ESTA ABIERTO
Y EL BLOQUEO DE SEGURIDAD
DESACTIVADO. EVITE LA EXPOSICION
DIRECTA AL RAYO.



This set complies with the EMC Directive 89/336 and with the LVD Directive 2006/95

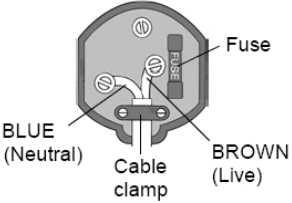
IMPORTANT SAFEGUARDS

Electrical Information

This appliance is fitted with a BS1363/A 13 amp plug. If it is not suitable for your supply sockets it must be removed and replaced with an appropriate plug. If the plug becomes damaged and/or needs to be replaced please follow the wiring instructions below. The plug removed must be disposed of immediately. It must not be plugged into a supply socket as this will be an electrical hazard. If the fuse needs to be replaced it must be of the same rating and ASTA approved to BS1362. If the plug is changed, a fuse of the appropriate rating must be fitted in the plug, adapter or at the distribution board. If the fuse in a moulded plug is replaced, the fuse cover must be refitted before the appliance can be used.

Wiring Instructions

The supply cable will be either 2-core or 3-core. Follow the appropriate wiring instructions given below. In both cases ensure that the outer sheath of the cable is firmly held by the cable clamp.

<p>2 - CORE</p>  <p>Labels in diagram: BLUE (Neutral), Cable clamp, Fuse, BROWN (Live)</p>	<p>! WARNING! Do not connect either wire to the earth terminal.</p> <p>□ This symbol indicates that this 2-core appliance is Class II and does not require an earth connection.</p> <p>The wire coloured blue must be connected to the terminal marked with the letter N or coloured black.</p> <p>The wire coloured brown must be connected to the terminal marked with the letter L or coloured red.</p>
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SAFETY INFORMATION



CAUTION

LASER CLASS 1	
Wave length:	650 nm (DVD) 790 nm (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.

	WARNING	
	RISK OF ELECTRIC SHOCK	
	<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>	

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.

Do not move your device for 20 seconds after removing AC power to ensure that the actuator is completely locked. This helps prevent the media and the heads from accidental damage due to vibration, moving or shipping.

CAUTION

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



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 needs 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.



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:

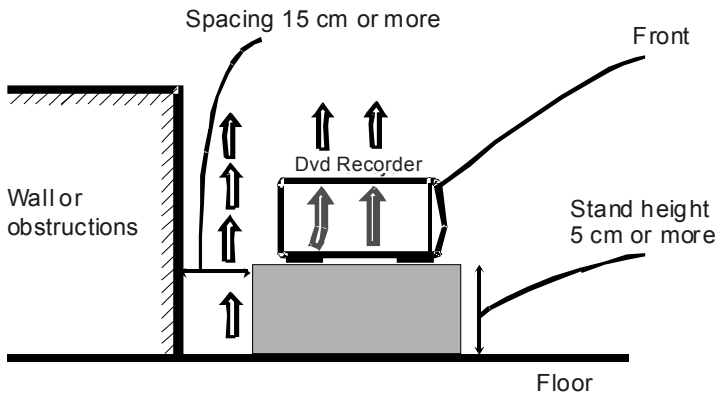
Front: No obstructions and open spacing.

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.



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

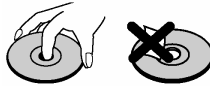
- CD-R, DVD-R, DVD+R (Recordable) and CD-RW, DVD-RW, DVD+RW (Rewritable) discs, recorded by the users, may only be used after finalization process.
- CD-R/RW, DVD-R/RW and DVD+R/RW discs may not be usable, depending on the disc features, recording conditions and damage or dirt on disc. The disc configuration 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.
- 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.

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.

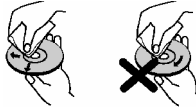
On handling discs:

- 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.

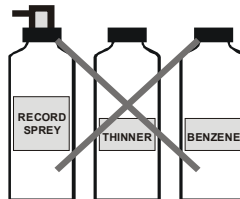
Discs that should not be used:

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.

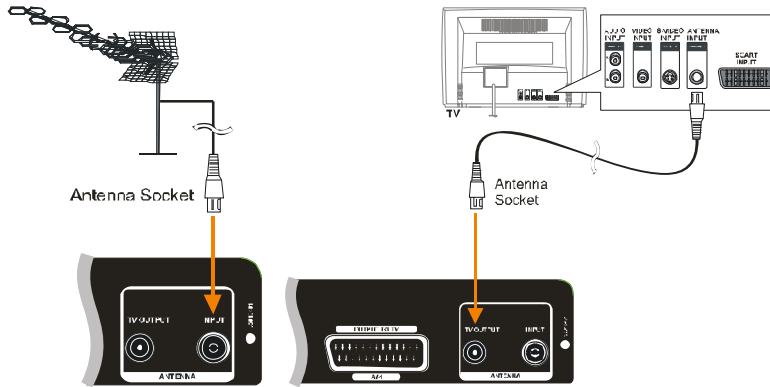


GENERAL PROPERTIES

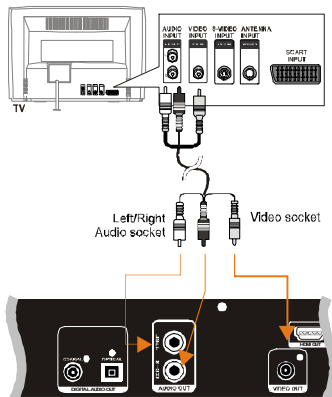
1. DVD+R/RW, DVD Video, Audio CD, CD-R/RW, MP3, JPEG playback, DVD+R/RW recording
2. Integrated FreeView Digital Terrestrial Receiver
3. Low power standby mode support
4. User-friendly OSD menu control
5. Vacuum Fluorescent Display (VFD)
6. NTSC/PAL playback (according to disc content) and recording
7. Recording in different qualities (HQ, SP, LP, EP, SLP)
8. One Touch Recording
9. Auto title menu with thumbnail index pictures
10. Finalize for DVD+R disc
11. 7 Day Electronic Program Guide (EPG)
12. Adding chapter markers
13. Appending, overwriting, deleting titles
14. Hide/unhide chapters
15. Recording with timer
16. Dolby Digital, LPCM audio via coaxial and optical digital audio outputs
17. Multiple Aspect Ratio support (16:9 Widescreen, 4:3 Letterbox, 4:3 PAN&SCAN)
18. Multi-Audio (up to 8) support (According to disc content) (For DVD)
19. Multi-Subtitle (up to 32) support (According to disc content) (For DVD)
20. Multi-Angle (up to 9) support (According to disc content) (For DVD)
21. 8 level parental control
22. Fast forward and rewind in 5 different speeds (2x, 4x, 8x, 16x, 32x Fast Forward/Backward)
23. For DVD ; frame by frame forward playback
24. For DVD ; slow forward playback (1/2x, 1/4 x, 1/8x Slow Forward)
25. Maximum 5K*5K resolution for baseline, 1280*1024 resolution for progressive JPEG playback
26. 8-320 kbit bit rate for MP3playback
27. Time Search
28. Repeat modes (Disc, Chapter, Title, Track, Folder)
29. Different play modes for Audio CD and MP3(Normal/Random/Intro)
30. Program function for Audio CD, MP3, JPEG and MPEG
31. Simultaneous playback of audio and pictures
32. 20 timer recording events
33. Pause recording
34. A → B repeat
35. FreeView Antenna input / output (loop through)
36. 2 SCART socket
37. Composite Video input/output
38. S-Video input
39. Coaxial & Optical Digital Audio outputs
40. DV INPUT
41. HDMI output
42. Component Video Output

CONNECTION

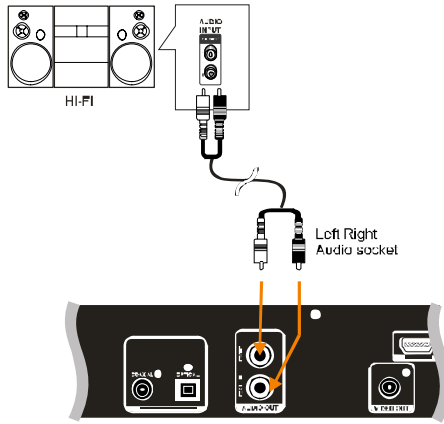
ANTENNA CONNECTION



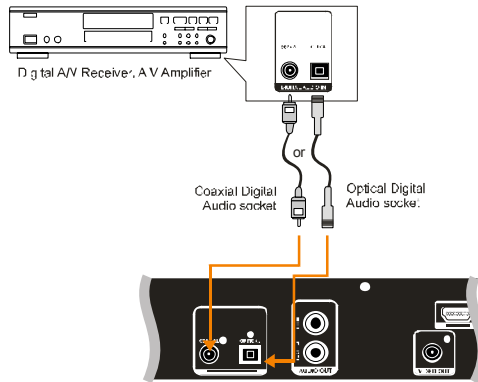
VIDEO & AUDIO OUTPUT SOCKETS



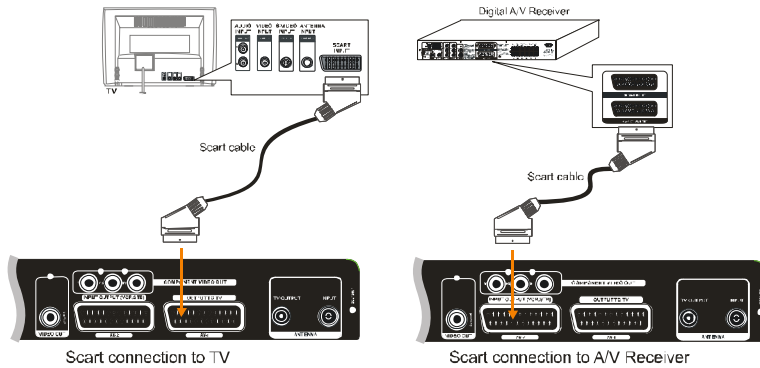
ANALOGUE AUDIO CONNECTION



DIGITAL AUDIO CONNECTION

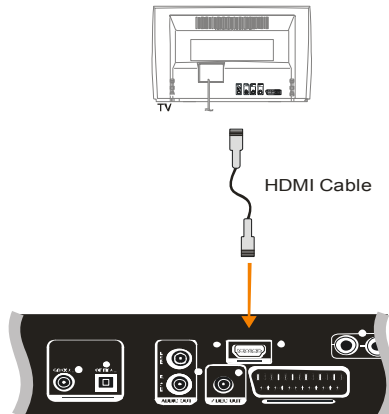


SCART CONNECTION



HDMI Output Socket

Video & audio output: HDMI socket can be used to connect the DVD recorder either to your TV set or to your AV Amplifier via HDMI cables. To make this connection, your TV set or your AV Amplifier must have HDMI input connector.

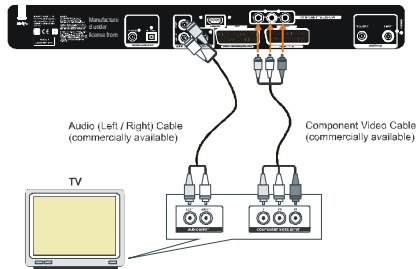


Putting into operation:

After making the necessary connections stated above, plug the power cord to the mains socket. Unit will be in standby mode. Press standby to turn on the unit. Open the disc tray with open/close button and insert a playable disc (DVD/ CD/MP3). Press open/close button again to close the disc tray and to start operating the player. Player will start playing the disc automatically.

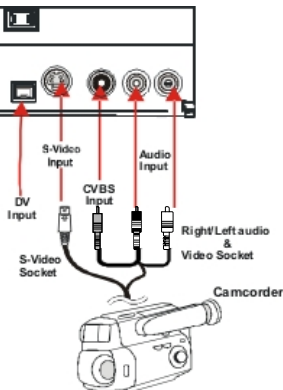
COMPONENT VIDEO & AUDIO OUTPUT CONNECTORS

- 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.



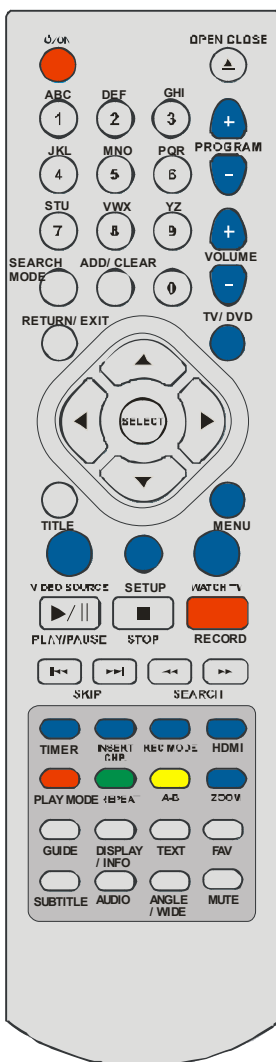
1. Connect the **COMPONENT VIDEO OUT** connectors on the DVD Recorder to the corresponding **IN** connectors on the TV, using the component video cable.
2. Connect the **Left and Right AUDIO OUT** connectors of the DVD Recorder to the audio **Left and Right IN** connectors on the TV using the audio cables.


Connect Camcorder to the Front Sockets of DVD Recorder



1. INTRODUCTION

1.1 THE REMOTE CONTROL

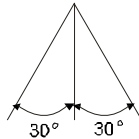
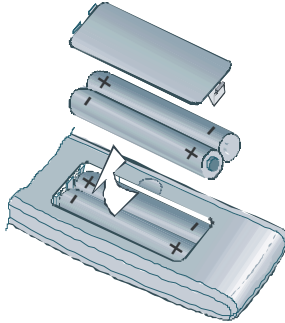


⏻/ON	: To switch the set ON or OFF.
OPEN/CLOSE	: To Open/close the disc tray.
NUMERIC KEYS (0- 9)	: 0 - 9. Also used for channel rename in FreeView mode.
PROGRAM+	: Tunes to next program while watching TV.
PROGRAM-	: Tunes to previous program while watching TV.
VOLUME+	: Increases volume
VOLUME -	: Decreases volume
SEARCH MODE	: Press to move to any desired title/chapter/track/time within the disc.
ADD/CLEAR	: Add files to make playlist in PROGRAM play mode, remove files from playlist. Also erases the number you previously entered.
RETURN / EXIT	: Returns to previous menu on a video CD. Also for CD Menu and Setup menu, it returns to the upper folder. In FreeView mode, exits from EPG menu.
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.
ARROW KEYS(◀/▶/▲/▼)	: To navigate inside menus. Left/right arrow keys are used for volume up/down in FREEVIEW mode (when digital teletext is not active).
SELECT	: Select function/value.
TITLE	: If DVD supports, to choose the title menu in DVD discs.
MENU	: Displays the DVD menu. In FreeView mode, displays FreeView system menu.
VIDEO SOURCE	: Switches the video source in the order of Tuner, SCART Input, Front CVBS, Front S-Video, DV and Disc .
SETUP	: It opens and closes the system-menu.
WATCH TV	: Switches between digital and analog mode.
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.
STOP (■)	: Stop playback/recording.
RECORD	: Records the selected video source or start dubbing and resumes paused recording. Activates One-Touch-Recording while recording is in progress.
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.
SEARCH (▶▶) (◀◀)	: Fast forward and fast backward in x2, x4, x8, x16 and x32. Slow forward in Pause state.
TIMER	: To program a recording or to alter/clear pre-programmed recordings.
INSERT CHAPTER	: Inserts a chapter manually to recording media during recording or playback of recorded content at Edit mode.
REC MODE	: Select quality and duration of recording.
HDMI	: Switches between HDMI output formats SD Progressive, 720p, 1080i and OFF modes while HDMI option is not OFF.
PLAY MODE / RED	: For MP3, CD-DA, JPEG and MPEG tracks switches between play modes. In FreeView, scrolls up a page through channel list , scrolls up through EPG program details and navigates page by page in EPG screen within two hours scale in the same day. It is used to select RED option in digital Teletext.
REPEAT / GREEN	: To play titles, chapters and tracks repeatedly. In FreeView mode, scrolls down a page through channel list , scrolls down through EPG program details, navigates within two hours scale in the same day page by page in EPG screen. It is used to select GREEN option in digital Teletext.
A-B / YELLOW	: Repeat a selection from point A to point B. In FreeView mode, gets information for previous days in EPG screen. It is used to select YELLOW option in digital Teletext.
ZOOM /BLUE	: Enlarge the image. In FreeView mode, gets Information for next days in EPG screen. It is used to select BLUE option in digital Teletext.
GUIDE	: If DVD supports, to choose the title menu in DVD discs. Display and exit EPG in FreeView mode.
DISPLAY/ INFO	: Opens Display menus. Opens Display menu Help in FreeView mode.
TEXT	: Start and stop digital text.
FAV	: It enables/disables the Favorite Mode.
SUBTITLE	: If DVD supports, changes the subtitle language, turns it on or off. Also used to switch DVB subtitles on and off if the channel provider supports.
AUDIO	: If DVD supports, switches between audio formats during DVD playback. Also used to change DVB audio language if the channel provider supports.
ANGLE/WIDE	: Selects the angle to view the scene. This only works when multiple angles are provided for a scene. Selects screen format in Freeview mode.
MUTE	: Mutes function.

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.

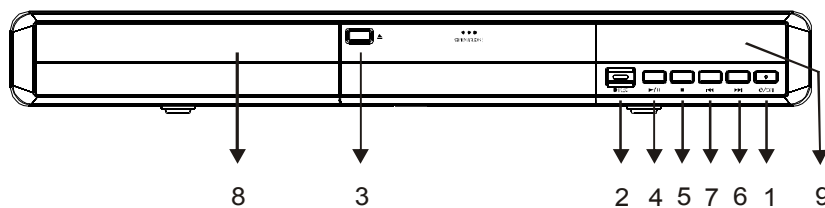
- Take the remote control of the DVD recorder and the enclosed batteries (2 x 1.5 V batteries)(R03/AAA)
- Open the battery compartment, insert the batteries as shown and then close the compartment.
- The remote control range is approximately 5 to 10 meters.




Within About 5-10m in front of the device

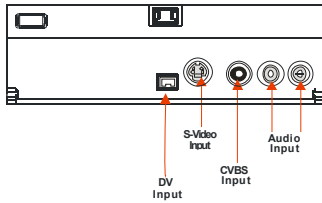


1.2 FRONT PANEL FUNCTIONS



- 1 **ON/OFF** : Switches the set ON or OFF.
- 2 **RECORD** : Records the selected video source.
- 3 **OPEN/CLOSE** (▲) : Opens/closes the disc tray.
- 4 **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.
- 5 **STOP** (■) : Stops playback/recording.
- 6 **SKIP FORWARD** (▶▶) : Plays next chapter/ title/ track/ file.
- 7 **SKIP BACKWARD** (◀◀) : Plays previous chapter/ title/ track/ file.
- 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



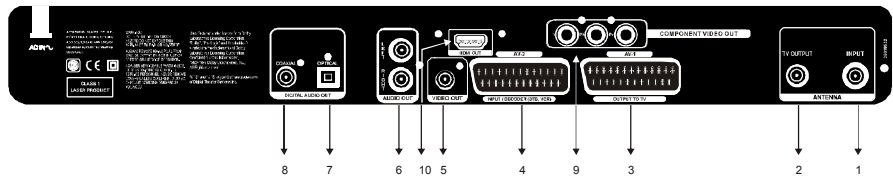
DV in: Input jack for DV connection.

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).

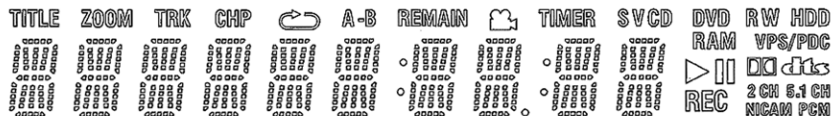
AUDIO L/R in: Left/Right audio input socket: L/R Audio inputs are used for both S-Video and CVBS.






1.4 REAR PANEL CONNECTIONS



1. **ANTENNA INPUT** : Connection of the aerial antenna.
2. **ANTENNA TV OUTPUT** : Connection of the TV set.
3. **OUTPUT TO TV** : SCART Socket 1(AV1): Connects to the scart-input connector on the TV. RGB output.
4. **INPUT / DECODER (VCR, STB)** : SCART Socket 2(AV2): Connection of an external device (satellite receiver, set-top box, camcorder, etc.)
5. **VIDEO OUTPUT** : Connection of a TV set with a video output (CVBS, Composite Video).
6. **AUDIO connectors (Audio OUT)** : Connects to the AV amplifier by using 2 cords (Left, right).
7. **DIGITAL AUDIO OUT (OPTICAL)** : Connects to an audio component using the optical digital connection cord.
8. **DIGITAL AUDIO OUT (COAXIAL)** : Connects to an audio component using the coaxial digital connection cord.
9. **COMPONENT VIDEO OUTPUT** : Connect TV with suitable Component Input
10. **HDMI CONNECTOR** : Connects to the HDMI input connectors on the TV, if the TV has HDMI connector.

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
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 program number of TV channel/ position/ channel name/ function
- Display of information, warnings





1.6 SUPPORTED DISCS

Playback and Recording

DVD+RW (Digital Versatile Disc+ Rewritable)

DVD+R (Digital Versatile Disc+ Recordable)

Playback only

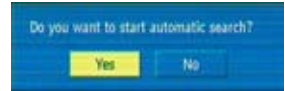
Disc Types (Logos)	Recording Types	Disc Size	Max. Playing Time	Characteristics
	Audio + Video	12 cm	Single - sided; 240 min. Double - sided; 480 min.	<ul style="list-style-type: none"> DVD contains excellent sound and video due to Dolby Digital and MPEG-2 System. Various screen and audio functions can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

INSTALLING YOUR DVD RECORDER

INSTALLATION MENU

Initial Setup

After exiting standby the system turns on FreeView mode. Since this is the first time that the receiver has been used, there are no channels stored in the receiver and the Auto search selection menu is displayed on the screen. If you do not see the APS (Automatic Programme Search) search menu on the television screen after a few minutes, refer to the Troubleshooting.



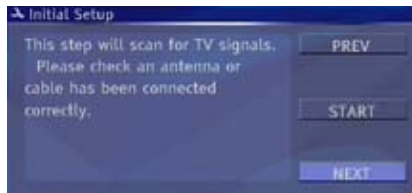
Using the **◀/▶** keys on the remote control, make sure that the YES button is highlighted in yellow, and press the **SELECT** key to start the automatic search. The FreeView receiver will automatically tune to the UHF transmission channels 21 to 68 looking for digital terrestrial TV broadcasts and displaying the names of channels found. This process may take about a few minutes.



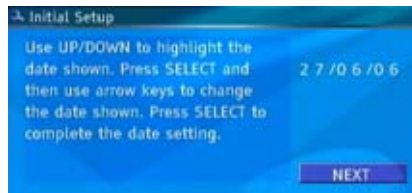
If no digital terrestrial television broadcasts are found, the receiver will display a warning message. Check that an aerial is connected to the aerial input socket of the recorder.

NOTE: Important that you must NOT turn off the recorder within 5 seconds after the automatic search since the unit is updating the program table and all channels may be lost.

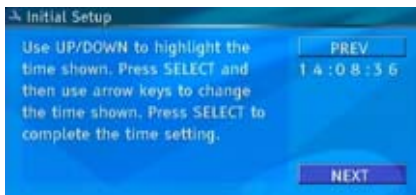
Automatic program search for Analogue channels



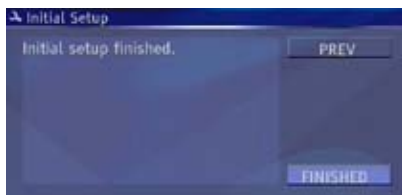
Use **▲/▼** keys to select the date box and press **SELECT** to edit date. You can come to the place that you will change by using **◀/▶** keys and make the changes by using number keys and **▲/▼** keys.



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



Finish the initial setup.



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 according to tuner mode analogue or digital.

2.1 RECORDING

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.



2.1.2 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

NOTE: This menu item will be active only in monitor mode.

2.1.3 APS

Makes automatic scan of all analogue 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 analogue channels.

NOTE: This menu item will be active only in monitor mode.

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

NOTE: APS operation may take long time.



2.1.4 MODIFY CHANNEL

It enables to modify last tuned analogue 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 analogue channels.



NOTE: This menu item will be active only in monitor mode.

2.1.5 PROGRAM TABLE

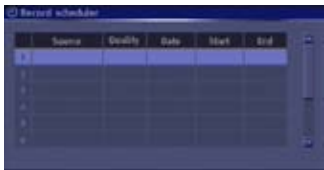


You can view or sort all stored programs by using this menu item.

You can access Modify Channel menu (see 2.2.1.4) by pressing Select button on Program Table.

NOTE: This menu item will be active only in monitor mode.

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 6.

2.2 VIDEO



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 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: (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.

2.2.3 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.

NOTE: Video output Format is disabled and switched to progressive mode in menu when HDMI cable is plugged.

If your selection and the TV set does not match please use the shortcuts below in monitor mode:

CLEAR, CLEAR, 5: Switch to progressive

CLEAR, CLEAR, 6: Switch to interlaced

2.2.4 HDMI

If you are using HDMI output you can select one of SD Progressive, 720P, 1080I options. "Off" option disables HDMI output.

In order to choose one of HDMI options press HDMI button on the remote control while the HDMI cable is plugged. Each press of HDMI key will change option.

While HDMI option is ON, only progressive video can be get from SCART output of recorder. Therefore If your TV does not support progressive mode, scrambled video may be received from SCART output. Please change SPDIF Output and downmix settings if you do not get a good video or sound.

NOTE : When HDMI cable is unplugged during playback, Power off/on may be needed

NOTE : The video may not be displayed properly in 1080i mode If your TV can not support this mode.

NOTE: The preselected resolution quality will be activated when you replug the HDMI cable.

2.2.5 SCREENSAVER

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

2.3 AUDIO

2.3.1 DOWNMIX

Downmix means mixing 5.1 channels down to two channels.

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

Surround: Surround encoded output.

2.3.2 S-PDIF OUTPUT

This item can be selected as "RAW" or "LPCM". For 5.1 channels digital output, this item should be selected as RAW.

Set these options to agree with the speakers installed in your home entertainment system.



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".

2.3.4 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.

2.4 LANGUAGE

2.4.1 AUDIO LANGUAGE

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



2.4.2 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.

2.4.3 DISC MENU LANGUAGE

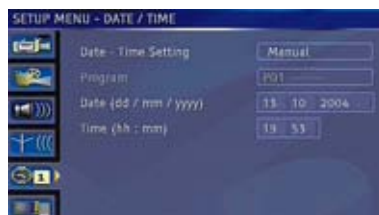
You can select default DVD disc menu language by this option. The selected DVD disc menu language will be activated, if supported by the disc played.

2.5 DATE / TIME

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".

NOTE: Date/ Time info may not be updated automatically from channels, whose name info can not be received from broadcast.



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.

2.5.3 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".

2.5.4 TIME (hh : mm)

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

2.6 PREFERENCES



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 Cancel to return.

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.

FINALIZE DISC

This menu option is used for finalizing 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 finalize or not will be displayed. Select Yes to start finalizing 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 5.



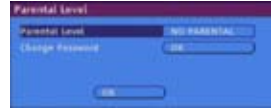
2.6.2 PARENTAL LEVEL

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

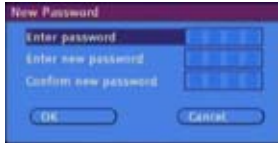
Playing some DVDs can be limited depending on the age of users. The "Parental Control" function allows playback limitation level to be set by the parent.

PARENTAL LEVEL

Parental level can be adjusted to one of the eight levels or "NO PARENTAL". "NO PARENTAL" 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 and menu lock 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.

2.6.3 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 in order to switch the device on, initial setup starts.

CAUTION: Parental level and parental password do not change. During this operation, there is no message in device display.

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.

NOTE: In analogue and freeview mode, device will not switch to standby mode.

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 ϕ /ON key on remote controller or front panel.

In LOW POWER state, the time is not displayed on VFD and only ϕ /ON 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.

NOTE: At low power mode the ventilator does not work at stand by.

2.6.6 AV-2



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

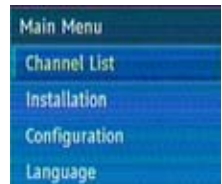
When “Decoder” option is selected, “SCART” is removed from the available video sources list and an additional menu item (“Decoder On/Off”) is added into “Modify Channel” menu.

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.

3. FREEVIEW MENU

In FreeView Mode, if you press **MENU** key on remote control, this menu will be displayed.



3.1 CHANNEL LIST

Here, you can preview any channel stored by the receiver before viewing it full screen. The complete list of channels is displayed in pages of 10 channels at a time, with their channel list number. The name and a quarter-screen preview of the channel last viewed is displayed in the top right of the screen.



DELETE

To delete a channel from the list, highlight the channel to be deleted using **▲/▼** keys, then highlight the **DELETE** button using **◀/▶** and press **SELECT**. The highlighted channel is deleted from the list after confirmation.

EDIT NAME

The channel names which appear in the channel list and the information banner are assigned by the broadcasters. You can edit the names to suit your preferences with the Edit Name function. Highlight the channel to be renamed, highlight the EDIT NAME button at the base of the screen using the **◀/▶** keys, and press **SELECT**. The highlighted channel name appears on the right of the screen with the first character highlighted by a cursor. Any of the characters

that make up a channel name can be highlighted using the **◀/▶** keys and the highlighted character changed by pressing the **▲/▼** keys to cycle through the alphabet, numbers and other characters available.

CHANNEL LOCK

Some channels broadcast material which you do not want younger members of the family to watch. Any channel can be 'locked' so that it cannot be selected for viewing without first a four-digit PIN code being entered. In this way any channel not suitable for younger viewers can be protected.

The channel lock is applied in the Channel List menu. Highlight the channel to be locked using the **▲/▼** keys. You can move through the list 10 channels in one jump using RED or GREEN. Now select the **LOCK** button at the base of the screen with the **◀/▶** keys and press **SELECT**.

NOTE: Do not forget your new password. Otherwise you can use the password which is stated at last page, to enter the locked channel.

A window requesting the PIN code is displayed and the four-digit code should be entered using the number keys on the remote control, followed by the **SELECT** key. A lock icon is then displayed alongside the channel name in the channel list.

You can now leave the Channel List screen and return to normal TV viewing by pressing **MENU**. Any attempt to change channel to the locked channel will now display the same window requesting the PIN code and the channel will only be displayed on entry of the correct code. To remove the lock on a channel, repeat the same process as to lock the channel.

FAVOURITES

Any channel can be a favourite channel and the Favourites menu is used to label those channels you want as favourites.

In channel list highlight "Favourites" by pressing **▶** key and then highlight each channel that you desire, using the **▲/▼** keys and press **SELECT**. A channel selected as a favourite appears in the main favourite list with a favourite icon next to the channel name. The favourite status of a channel can be removed by repeating this procedure. Leave the Favourites menu by pressing **MENU**.

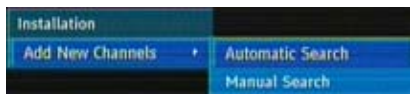
Once the desired channels have been marked as favourite channels, the favourite mode can be activated to allow easy access to them. Press the **MENU** key to display the Main Menu and highlight Configuration and press **SELECT** to open Configuration screen. Highlight the Favourite Mode line and use the **◀/▶** keys to change the status and press **SELECT** to apply the settings.

When you leave the Configuration menu by pressing **MENU** the favourite mode is activated. Now, changing channel using the **PROGRAM + /** keys will switch to only those channels marked as favourites in the channel list. Similarly, the on-screen list in the electronic program guide contains only the favourite channels. You can still access all the channels in the channel list by keying in their channel list number or by selection from the Channel List screen.

Alternatively you can switch off the favourite mode from the Favourite Mode line of the Configuration menu or by pressing FAV button on the remote control .

Hint: The favourite mode can only be activated if one or more channels in the channel list are marked as favourites. Similarly, if the favourite status is removed from all the channels in the Channel List, the favourite mode is turned off automatically.

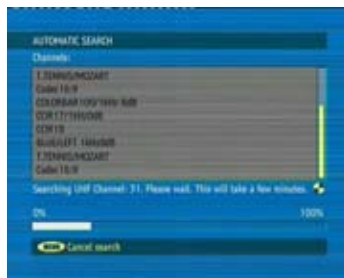
3.2 INSTALLATION



AUTOMATIC SEARCH

Although your FreeView receiver will not lose its settings or stored channels when switched off, you may wish to reinstall the receiver because you have moved to a different area with different broadcast frequencies, you wish to reinstate a channel previously deleted from the channel list, or you want to watch new channels which have started broadcasting.

Press the **MENU** key to display the Main Menu and using the **▲/▼** keys, highlight the Settings line and press **SELECT** to display Settings Menu. Then highlight Installation line and press **SELECT** to open the Installation Menu. You can either perform an automatic search or manual search to add channels.



MANUAL SEARCH

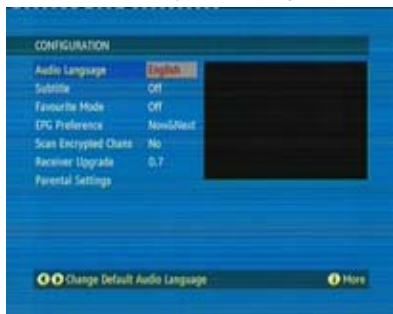


The FreeView receiver can search for channels automatically (searching all the broadcast frequencies for free-to-air channels) or manually (searching one specified broadcast frequency only for any channels to be found there).

This is for searching for digital channels on a single broadcast frequency. The frequency channel number (21-68) is entered in the box at the top left of the screen and the received signal level and signal quality can be observed on the two bar graphs at the bottom. When **SELECT** is pressed, the receiver searches that frequency and display a list of the channels found before returning to the Installation menu.

3.3 CONFIGURATION

Many aspects of your FreeView receiver can be set up to reflect your circumstances and preferences. The Configuration menu screen is accessed from the Settings Menu. Press the **MENU** key to display the Main Menu and use **▲/▼** keys to highlight Settings line then press **SELECT** key to open Settings menu. Again use **▲/▼** keys to highlight Configuration line and press **SELECT** key to open configuration menu screen. By means of this menu you can configure the unit.



AUDIO LANGUAGE

Change Audio language by using **◀/▶** key.

SUBTITLE (Only for FreeView)

Digital terrestrial television channels can be broadcasted with subtitles displayed on-screen for the hard-of-hearing. This function enables the automatic display of subtitles whenever subtitle information is broadcast.

Highlight the Subtitle line in the Configuration menu and use **◀/▶** keys to cycle through the On and Off options. Exit from this menu by pressing the **MENU** key.

NOTE: Audio and subtitle settings set in FreeView mode are not effective in DVD mode.

FAVOURITE MODE

This function enables or disables the favourite channel list mode. In this mode you can also choose favourite channel list.

EPG PREFERENCE

Highlight the line in the configuration Menu and use the **◀/▶** keys to cycle through the Now & Next and 7-Day options.

SCAN ENCRYPTED CHANNELS

You can prefer scanning encrypted channels by selecting YES, or prefer skipping them by selecting NO from this menu.

RECEIVER UPGRADE

This device has stable and convenient software. Nevertheless, in order to improve the performance or for the sake of adapting to new technologies, a newer software may be released. One of the ways to update your device with new software is Over Air Download (OAD). This device has BCC compliant OAD feature. When a new software is available and broadcasted, this device can search, download and update its software either by your command or automatically, over-night. Every night between 3:00 am and 03:30 am, device searches for new software. If a newer version is available, it will download and update the system automatically. The next time you start your device, new software will be activated. Note that if you set a timer from a freeview channel between that interval, OAD process will be automatically postponed to next day.

You can also search for new software manually, at any time. To search for new software manually, go to Freeview Menu>Settings>Configuration and select Receiver upgrade. Your device start searching for a new version and if it finds, it will download and update the system automatically. After update is completed, to activate new software all you have to is to pull the plug out and then plug in.

PARENTAL SETTINGS

This function controls menu protection. For changing PIN code, please refer to section 2.5.2.

Menu Lock

Simply locking a channel will not deflect a determined would-be viewer. Re-installing the complete channel list, for example, will bypass the channel lock. However, the menus can be locked out of use too, to prevent this.

With the Menu Lock line highlighted, use **◀/▶** to cycle the menu lock setting through Disabled, Main Menu and Installation. The Main Menu setting will lock out the complete menu system; the Installation Menu setting locks only the Installation menu and the Disabled setting allows free access to any of the menus.

You must return to normal TV viewing by pressing the **MENU** key (three times) to activate the lock. Now any attempt to access the locked menus will display the PIN request window and the menus will only be displayed on entry of the correct PIN code.

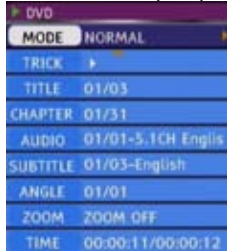
3.4 LANGUAGE

Select LANGUAGE from Main Menu and then highlight one of the audio and/ or subtitle options, supplied by the current broadcast, using ▲/▼ keys and press **SELECT**.

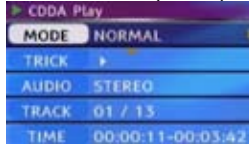
4. DISPLAY MENUS

Display menus are activated by pressing **DISPLAY** key while disc is in playback.

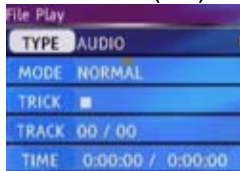
DISPLAY MENU (DVD)



DISPLAY MENU (CD-DA)



DISPLAY MENU (MP3)



DISPLAY MENU (JPEG/STILLPICTURE)



NOTE: When there is a recordable disc in disc tray, if you press VIDEO SOURCE button the source of video changes, by pressing DISPLAY key, display menu appears on the screen.

5. 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 finalized, 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.

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

When a DVD+R disc run out of space, disc is automatically finalized after finishing recording. Therefore, further editing will not be possible.

6. 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 **▶** 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 or select index picture using this menu. (See Editing Title 7)

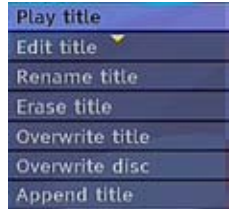
Rename Title: You can rename the title.

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 title and this feature is available only for rewritable DVDs. To overwrite a title, select overwrite title option from menu and press record button after selecting source.

Overwrite Disc: With this option you can overwrite all titles in the disc(available only with DVD+RW).

Append Title: A new recording can be appended to the last title(available only with DVD+RW).



7. 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.

8. PLAYBACK

8.1 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.

8.2 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 **NO DISC**.

8.3 Basic Playback (DVD, 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 behaviour 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.

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. Max 2500 files or folders can be 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.

8.4 Stopping Playback (DVD, CD-DA, MP3, JPEG, MPEG)

DVD: 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.

8.5 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.

8.6 Removing a Disc (ALL DISCS)

Press **▲** on the remote control or eject key on the front panel. Remove the disc and press the same key to close the tray.

8.7 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, TITLE REPEAT, DISC REPEAT, NORMAL

CD-DA: TRACK REPEAT, DISC REPEAT, NORMAL

MP3/ JPEG / MPEG : TRACK REPEAT, FOLDER REPEAT, DISC REPEAT, NORMAL

8.8 Repeating a Specific Segment A to B (DVD, CD-DA, MP3, JPEG)

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.

8.9 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: 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 go 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.

To start slide show again, press **PLAY/PAUSE** (▶/||) key.

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

8.10 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 to 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.

NOTES:

- 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.

8.11 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.

8.12 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.

NOTES:

- 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.

8.13 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

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.

8.14 Slow Forward Playback (DVD)

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

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.

8.15 Skipping Ahead or Back (DVD, CD-DA, MP3, JPEG, MPEG)

8.15.1 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.

CD-DA, MP3, MPEG:

Next track is played in any playback state.

JPEG: Next picture is displayed.

8.15.2 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.

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.

8.16 Step Forward (DVD)

Press **PLAY/PAUSE** (▶/||) once during playback.

The screen suspends.

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

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.

8.17 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.

8.18 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.

8.19 Moving To a Specific Elapsed Time (DVD)

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.

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.

NOTES:

- 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.

8.20 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.

8.21 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.

8.22 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, MP3files).

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

8.23 Simultaneous Playback (JPEG, MP3)

If your disc has both MP3and JPEG files, you can listen MP3audios while viewing JPEG files.

When you start slideshow of the JPEG files, you can select and listen to an MP3file simultaneously.

You can control these two types separately by using their relational display menus. If AUDIO is selected as TYPE you can control MP3playback options. Similarly, if PICTURE is selected you can control JPEG playback options.

9. FREEVIEW FEATURES

9.1 Digital Teletext

Many digital terrestrial television channels not only broadcast video and sound for programs but also pages of information on the programs, the weather, news and many other topics. This digital teletext can be displayed by the FreeView receiver.

Some channels are entirely given over to digital teletext and carry no normal TV program at all. These dedicated digital teletext channels will not give a quarter-screen display in the Channel List screen. When such a channel is selected, after a brief pause, they will usually display the opening page of information automatically.

Other channels have digital teletext pages broadcast alongside the television program and often include a reduced-size broadcast picture within digital teletext pages. These usually require the **TEXT** button to be pressed to activate the digital teletext pages.

In both cases, moving through the different pages of information is accomplished in a variety of ways, dependent on the individual broadcasters, but including use of the **▲/▼/◀/▶** and **SELECT** keys to select items from on-screen menus, and the coloured keys to jump directly to particular pages.

You can exit any digital teletext channel by changing channel in any of the normal ways. You can leave the digital teletext function of a combined digital teletext/program channel, to return to normal television viewing of that channel, by pressing the **TEXT** key.

Hint: Calling for the information banner or any menu on-screen stops the receiver from displaying the digital teletext pages and they are temporarily replaced by a blank picture while the banner or menu is displayed.



9.2 Widescreen

TV sets are available with screens of the standard (4:3) format and widescreen (16:9) format. Digital terrestrial television broadcasts are also made in both standard and widescreen formats.

You can use **ANGLE/WIDE** key to change display format (aspect ratio). With a widescreen TV set displaying a standard format program, the **ANGLE/WIDE** key switches between displaying the picture with black bars down the sides, and enlarging the picture so that it fills the whole width of the screen but the top and bottom are cropped off.

With a standard format TV displaying a widescreen program, the **ANGLE/WIDE** key switches between displaying the picture with black bars at the top and bottom of the screen, and filling the whole height of the screen but cropping the sides off according to instructions broadcast with the program (called 'pan and scan').

The effect of the **ANGLE/WIDE** key on the screen display is cancelled by pressing **ANGLE/WIDE** again. (Only for FreeView)

9.3 Subtitle

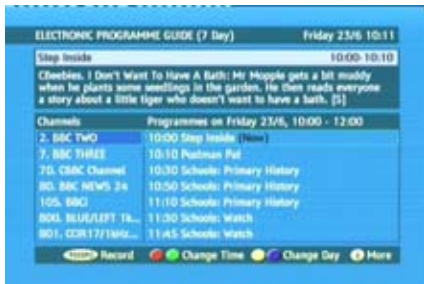
Subtitle key shows/hides subtitles of channel. When the subtitle key is pressed, subtitle ON/OFF message is displayed.

NOTE: This feature is available only if the channel provider supports.

9.4 Electronic Program Guide (7- Day - EPG)

In no menu mode, EPG Menu is reached by pressing **GUIDE** key and quitted by pressing **GUIDE** key again. In EPG Menu all channels are displayed. Current program is highlighted. Use **▲/▼** keys to change channels.

Some, but not all, channels send information about the current and next events. Please note that event information is updated automatically. If there is no event information data available in channels, only channel names with "No Information" banner are displayed. If you highlight an event, short event description, extended event description, start and finish times of event are displayed on the screen. In EPG Menu, you can easily see the extended help information by pressing **DISPLAY/ INFO** key and by pressing this key again you can close this window.



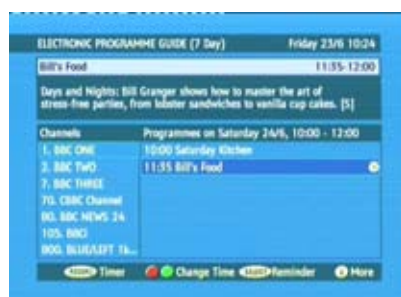
If you press **SELECT** when a next event is highlighted, an info banner appears asking for setting Reminder or Record. If you select "Reminder", a reminder is set for the highlighted program and a clock appears on the screen. Program reminders can be set to signal that a program is about to start when you are watching another channel. If you set reminder to a program, then you will be asked for switching to that channel when the reminder time is reached. When the current program is highlighted, the current view is switched to the highlighted channel by pressing **OK** key.

Press **MENU** key to view the 7 day EPG. Press **▲/▼** to navigate in Channels or Programs. Use **◀/▶** key to

navigate through the channel and program list. Using **RED/GREEN** keys you can change schedule time. By pressing **YELLOW/BLUE** you can advance the schedule backward/forward of a day. If you press **DISPLAY/ INFO** key you can see easily the detailed help information and by pressing **DISPLAY/ INFO** key again you can exit Help menu.

NOTE: When info banner is active and **SELECT** key is pressed, Now & Next EPG appears on the screen. By means of **YELLOW** and **BLUE** buttons you can achieve previous and next time. Only when info banner runs you can get information with **BLUE** and **YELLOW** keys.

The starting time for EPG is the current time. You can see the event information for the next two hours. By pressing **▲/▼** key, you can go to the next/previous hours. If you press **SELECT** when a next event is highlighted, a reminder is set for the highlighted program and a clock appears on the screen. Program reminders can be set to signal that a program is about to start when you are watching another channel. If you set reminder to a program, then you will be asked for switching to that channel when the reminder time is reached.



10. MANUAL RECORDING

10.1 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.

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. Nevertheless, if you try to record to such a disc, a warning message will appear. This message explains that the disc is not compatible and it has to be erased. Select Yes to erase the disc or No to cancel erase and record operations.

DVD+R

This disc can only be recorded until the disc is full or you finalize the disc. After that, it is not possible to make further recordings on the same disc.

10.2 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.

10.3 Selecting Source

Video input source modes: Digital Channels, Analogue Channels, SCART, Front CVBS, Front S-Video and 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.

Press Watch TV button switch between analogue and freeview mode.

10.4 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)

Every press of **RECORD** key will increase recording time for 30 minutes after recording has been started. 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

10.5 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.

10.6 Inserting Chapter

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

10.7 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.

11. TIMER RECORDING

11.1 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 input source you want to make recording (FreeView program number, Scart, Composite, S-Video)
- 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

You can also set timer for recording by electronic program guide (EPG) in FreeView mode.

NOTE : At least 1 min is required between two succeeding record settings.

NOTE: If a timer is set at between 03:00 and 03:30 AM, your device would not make OAD and not search for new SW in the air.

11.2 To Set a Recorder or Reminder by EPG (Now / Next)

- During watching any FreeView channel, press GUIDE button to open EPG(Now/Next) page.
- If you want to set a recorder or reminder for next event, press **▶** arrow key to highlight and press SELECT key to activate reminder or press RECORD key to activate timer event
- The display will ask to choose about recording or reminder. If you select Reminder, you can see clock icon near event name that you want to be reminded. (Reminder option only works while you are watching TV, it is disabled at standby or any other mode.)
- If you select Record, it asks for quality of recording that you want to set. After selecting one of them, it puts a red icon near event name and turns back to EPG (Now/Next) page. Also if you want to verify timer record, you may see event in Timer List by pressing **TIMER** key.
- To close EPG page and turn back monitor mode, press **GUIDE** key.

11.3 To Set a Record or Reminder by EPG (7 Day)

- When watching any FreeView channels, press **GUIDE** key then MENU key to open EPG (7 Day) page.
- If you want to set a record or reminder for any event, use navigation and coloured keys to highlight and press SELECT key to activate reminder or press RECORD key to activate timer event. (Use **DISPLAY/ INFO**) button for more help.
- The display will request if you want to record this event or set a reminder. If you select Reminder, you can see clock icon near event name that you want to be reminded. (Reminder option only works watching TV, it is disabled at standby or any other mode.)
- If you select Record, it asks for quality of recording that you want to set. After selecting one of them, it puts a red icon near event name and turns back to EPG (7 Day) page. Also if you want to verify timer record, you may see event in Timer List by pressing **TIMER** key.
- Other record events may be selected by repeating points 2, 3 and 4 above. In case two record timers overlap, a warning message will be displayed.
- To complete the record time event ,turn off the recorder by pressing the **STANDBY** key on the remote. At the programmed time the recorder will power up and record is selected channel and power off again once completed.

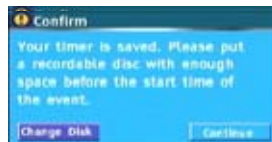
NOTE: Very important that there is sufficient disc space to cover the recorded time.

11.4 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)



NOTE: When you finish creating an item, the device will ask you whether you want to put a recordable disc or not, if there is no recordable disc in loader. If you select "Change Disc" option, you should place a disc in tray. If you select "Continue" option, you will skip placing a disc in tray process but timer recoding will be set.



11.5 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.

NOTE: You can program up to 20 timer recording events.

12. DV

12.1 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.

12.2 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. 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.

13. 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 finalize 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.

14. SPECIFICATIONS (FOR DVD)

Power Requirements	220 – 240 Volt ~50Hz (Auto Adjustable)	
Power Consumption	Low Power Standby	3 Watt
	Maximum	40 Watt
Supported Recording Media	DVD	DVD+R DVD+RW
Supported Media Playback	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 Kodak Picture CD Copy Protected Audio CD
	Audio recording Format	Stereo Recording
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/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)
	RGB+CVBS	Through Full Eurocart Output (Pin-16 control)
	YPbPr	Component YPbPr video output through RCA outputs.Component YPbPr video is available if Progressive Scan option is enabled.
	HDMI	SD Progressive/720p/1080i resolution
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) Optical and/or Coaxial.
	Analog Outputs	24 Bit / 192 kHz DAC
		2 RCA jack outputs (Left / Right)
		Left / Right Audio Outputs of Full Eurocart
		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	

15. SPECIFICATIONS (FOR FreeView)

SYSTEM

Processor	NEC μ PD61115 32bit RISC MIPS @ 166MHz
Flash memory	2 Mbyte
DDRRAM	16 Mbyte
MHEG-5 engine	compliant with ISO/IEC 13522-5 and
UKEngine	Profile1

Object carousel support compliant with ISO/IEC **13818-6** and UK DTT Profile

RECEPTION

Frequency range	474-850 MHz
Signal level	-35 dBm to -79,2dBm
Transmission stds.	DVB-T, MPEG-2
Demodulation	COFDM with 2K/8K FFT mode

FEC	all DVB modes
Video	MP@ML, PAL, 4:3/16:9
Audio	MPEG Layer I&II 16 / 22.05 / 24 / 32 / 44.1 / 48kHz

16. TROUBLESHOOTING GUIDE (FOR DVD)

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.
- If VFD shows "TV", TV mode is active, press TV/DVD key to return DVD mode.

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.

Switch to a source, but there is no signal

- Make sure the antenna is connected to Aerial 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".

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.**

NOTE: Please note that you may experience compatibility problems during playback or editing of the discs that are recorded on other DVD Recorder Brands.

17. TROUBLESHOOTING GUIDE (FOR FreeView)

Problem	Possible Cause	What to do
No signal found	Aerial is disconnected Aerial is damaged/misaligned Out of digital signal area	Check serial lead Check aerial Check with dealer
No picture or sound	Tuned to digital teletext channel	Retune to another channel
No responses to remote control	Receiver off Handset not aimed correctly Front panel obstructed Handset batteries exhausted	Plug in and turn on receiver Aim handset at front panel Check for obstructions Replace handset batteries
Forgotten channel lock code		Please look at last page
Forgotten menu lock code		
The remote will not operate FreeView	The batteries in your remote control need replacing There is an obstruction blocking the signal path between the remote control and the receiver.	Replace the batteries Check that there is nothing in the way of the path between the remote control and receiver.
After moving your Recorder to another room/location you cannot receive FreeView	The aerial feed may be routed via a feeder distribution box which will prevent FreeView reception.	Try using another aerial
No video at Top Up Tv channels.	Top Up Tv channels requires Conditional Access Module. This feature is not supported in this product.	

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.

THE GUARANTEE

The seller of this equipment (the vendor) warrants to the initial retail purchaser that if the equipment becomes defective, and the defect is shown to be due to faulty materials or workmanship within a period of 12 Months from the date of sale to the original purchaser it will be repaired (or at the vendors sole option) replaced free of charge, always providing that: The equipment has at all times been used in accordance with the operating instructions issued by the manufacturer, and has not been connected to an electrical supply for which it has not been properly adjusted.

Unauthorised repairs or modifications, which have not been expressly approved by the manufacturer, shall render this guarantee null and void.

This guarantee is not transferable and is only applicable in the UK.

Nothing in this express warranty affects the statutory rights available to the purchaser of this equipment

EXCLUSIONS

SANYO shall not be liable for any removal or installation or re-installation of the equipment.

The warranty does not cover Failure due to fair wear and tear of any item.

Cosmetic items, remote controls or parts and consumable items such as lamps, filters, batteries, tapes, cables or connectors.

Accidental damage or damage caused by negligence or misuse by the user.

Failure caused by lightning strike, storage or operation outside the specified environment, incorrect installation, lack of routine maintenance outlined in the operating instructions supplied with the unit, incorrect fitting of lamps, filters, batteries or other consumables or parts.

Units not originally supplied by SANYO Europe Ltd through a UK Reseller.

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 WARRANTY.
 - 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 supplier, please contact our Customer 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.
-

Customer Relations Department,
SANYO Europe Ltd.
SANYO House,
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Watford, Hertfordshire, WD24 4PT.
Tel: 01923 246363



SANYO Electric Co., Ltd.