

TOSHIBA HDD & DVD / Video Cassette Recorder RD-XV48DTKB

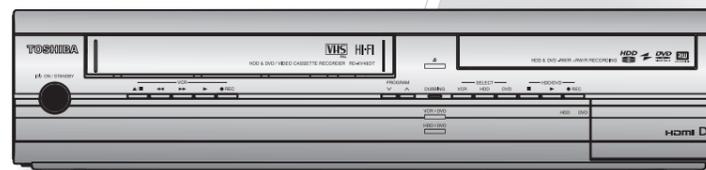
TOSHIBA



HDD & DVD / Video Cassette Recorder

RD-XV48DTKB

OWNER'S MANUAL



Introduction

Connections

Basic Setup

Recording

Playback

Editing

Function Setup

VCR Functions

Others

TOSHIBA

Printed in China

1VMN25262 / E3NG1BD ★★ ★★

© 2008 Toshiba Corporation

Introduction

Precautions

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The important note is located on the rear of the cabinet.

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 to persons.

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.

Laser Safety

This unit employs a laser. Only a qualified service personnel should remove the cover or attempt to service this unit, due to the possibility of eye injury.

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

CAUTION: VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. DO NOT STARE INTO BEAM.

LOCATION: INSIDE, NEAR THE DECK MECHANISM.

Power Supply

The power supply is connected and the unit is live when the mains cable is plugged into a 220 - 240 V \sim , 50 Hz AC outlet. To operate the unit, press [I/O] ON/STANDBY].

WARNING: **LIVE PARTS INSIDE.**
DO NOT REMOVE ANY SCREWS.

Caution

1. Do not attempt to open the cabinet. There are no parts inside you can service. Refer all servicing to qualified service personnel.
2. Slots and openings in the cabinet at the sides and underneath are provided for ventilation. To ensure reliable operation and to protect the unit from overheating, these openings must not be blocked or covered.
Avoid installation in enclosed spaces such as bookcases unless suitable ventilation is provided.
3. Keep the unit away from radiators and other heat sources.
4. Avoid use near strong magnetic fields.
5. Do not push objects of any kind into the unit through the cabinet slots or openings as they could touch electrically live parts or short circuit parts resulting in a fire or electric shock.
6. Do not spill liquid on the unit. If liquid is spilled and enters the unit, consult qualified service personnel.
7. Do not stand the unit vertically. Use the unit in a horizontal (flat) position only.
8. Before attempting to operate the unit, make sure that the timer recording mode is off.
9. This product is in Stand-by mode when turned off while the mains cable is connected.
10. Do not place any combustible objects on the device (candles, etc.).
11. Before moving the unit, be sure to remove any discs and unplug the mains cable from the AC outlet.
12. Disconnect the mains plug to shut off the unit, if you suspect a fault has developed, or if it will not be used for an extended period.
13. The mains plug shall remain readily operable.
14. Read both instruction manuals to ensure correct and safe installation and interconnection of the unit in multimedia systems.
15. Keep a distance of 20cm around the ventilation openings of the apparatus.

A NOTE ABOUT RECYCLING

This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with your local recycling regulations.

This product consists of materials which can be recycled and reused if disassembled by a specialised company. Batteries should never be thrown away or incinerated but disposed of in accordance with your local regulations concerning chemical wastes.

**Make your contribution to the environment!!!**

- Exhausted batteries do not belong in the dustbin.
- You can dispose of them at a collection point for exhausted batteries or special waste.
- Contact your council for details.



For Customer Use:

Carefully read the Model No. and Serial No. located at the back of the unit and enter the information below. Retain this information for future reference.

Model No. _____
Serial No. _____

Connection to Power

Before Switching on make sure that the voltage of your electricity supply is the same as that indicated on the rating plate.

Mains Cord

This appliance may be fitted with a non-rewireable plug. If it is necessary to change the fuse in a nonrewireable plug the fuse cover must be refitted. If the fuse cover is lost or damaged, the plug must not be used until a replacement available from the appliance manufacturer is obtained.

It is important that the colour of the replacement fuse cover corresponds with the rating marking on the base of the plug.

If the plug has to be changed because it is not suitable for your socket, or becomes damaged, it should be cut off and an appropriate plug fitted following the wiring instructions below. The plug removed must be disposed of safely as insertion into a 13A socket is likely to cause an electrical hazard. For your own safety read the following instructions carefully before attempting to connect this unit to mains.

The wires in this mains lead are coloured in accordance with the following code:

BLUE=NEUTRAL, BROWN=LIVE

Important

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

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

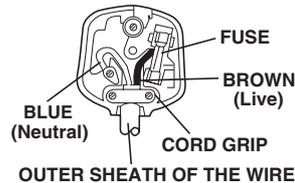
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

No connection is to be made to the earth terminal of the plug.

If a 13 Amp (BS 1363) Plug is used, a 5 Amp Fuse must be fitted, or if any other type of Plug is used a 3 or 5 Amp Fuse must be fitted, either in the Plug or Adaptor, or on the Distribution Board.

Mains Supply: 220 - 240 V~ 50 Hz - AC only

Do not make any connection to the larger pin marked with the letter "E" or by the symbol \perp or coloured green or green and yellow.

**Installation Location**

For safety and optimum performance of this unit:

- Install the unit in a horizontal and stable position.
- Keep the unit away from electronic equipment such as an amplifier, TV, etc. to prevent warping, damage, fire and malfunction.
- Shield the unit from direct sunlight and keep away from sources of intense heat. Avoid dusty or humid locations. Avoid locations with insufficient ventilation for suitable heat dissipation. Do not block the ventilation holes on the sides of the unit. Avoid locations subject to strong vibration or strong magnetic fields.

Avoid the Hazards of Electrical Shock and Fire

- Do not handle the mains cable with wet hands.
- Do not pull on the mains cable to disconnect it from AC outlet. Grasp it by the plug.
- If, by accident, water is spilled on the unit, unplug the mains cable immediately and take the unit to an authorised service centre for servicing.

Moisture Condensation Warning

Moisture condensation may occur inside the unit when it is moved from a cold place to a warm place, after heating a cold room, or under conditions of high humidity. Do not use the unit for at least 2 hours to allow the inside to dry.

About Copyright

Unauthorised copying, broadcasting, public performance and lending of discs are prohibited. This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorised by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorised by Macrovision. Reverse engineering or disassembly is prohibited.

Introduction

Connections

Basic Setup

Recording

Playback

Editing

Function Setup

VCR Functions

Others

Notice for the Progressive Scan Outputs

Consumers should note that not all high definition television sets are fully compatible with this product and may cause artifacts to be displayed in the picture. In case of picture problems with 480 or 576 progressive scan output, it is recommended that the user switch the connection to the 'standard definition' output. If there are questions regarding your TV set compatibility with this 480p or 576p product, please contact our customer service centre.



Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

"Dolby® Digital Stereo Creator enables consumers to create stereo DVD-Videos with stunning Dolby Digital sound tracks at home. The technology, when utilised instead of PCM recording, also saves recordable disc space, allowing for higher video resolution or extended recording time on each DVD. DVDs mastered using Dolby Digital Stereo Creator will play back on all DVD-Video players."

Note: This is true when the players are compatible with actual recordable DVD discs.



Manufactured under license under U.S. Patent #: 5,451,942 & other U.S. and worldwide patents issued & pending. DTS and DTS Digital Out are registered trademarks and the DTS logos and Symbol are trademarks of DTS, Inc. © 1996-2007 DTS, Inc. All Right Reserved.



HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.



DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.



DVB is a registered trademark of the DVB project

EU Conformity Statement



"This product is marked with "CE" and complies therefore with the applicable harmonized European standards listed under the Low Voltage Directive 2006/95/EC and the EMC Directive 2004/108/EC."

Responsible for CE-marking is
TOSHIBA INFORMATION SYSTEMS (U.K.) LTD,
Toshiba Court, Weybridge Business Park,
Addlestone Road, Weybridge,
Surrey, KT15 2UL, United Kingdom

Maintenance

CLEANING THE UNIT

Use a soft cloth slightly moistened with a mild detergent solution. Do not use solutions containing alcohol, spirits, ammonia or abrasives.

CLEANING DISCS

If a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the centre out. Do not wipe in a circular motion.

Do not use solvents such as benzene, thinners, commercially available cleaners, detergent, abrasives cleaning agents or antistatic spray intended for analogue records.

DISC HANDLING

Handle the discs so that fingerprints and dust do not adhere to the disc surfaces.

Always store the disc in its protective case when it is not in use.

HDD HANDLING

- HDD is a precision apparatus that is susceptible to vibration, strong impact or dirt. Depending on the installation environment or handling, the unit may become partially damaged or in the worst case, recording or replaying may not be available. Especially while the HDD is in motion, do not subject it to vibration or strong impact or pull out the power plug. And if a power failure occurs, the content of the recording / replaying programme may be lost.
- HDD rotates at high speed when in operation. Be sure that rotation has stopped and then move the unit without subjecting it to strong impact or vibration.

SERVICING

If the unit becomes inoperative, do not try to correct the problem by yourself. There are no user serviceable parts inside. Turn the unit off, unplug the mains cable, and consult your dealer or an authorised service centre.

CLEANING THE DISC LENS

If the unit does not perform correctly even though you have referred to "Troubleshooting" and the relevant sections in the Owner's Manual, the laser optical pickup unit may be dirty. Consult your dealer or an authorised service centre for inspection and cleaning of the laser optical pickup unit.

AUTO HEAD CLEANING

- Automatically cleans video heads as you insert or remove a cassette, so you can see a clear picture.
 - Playback picture may become blurred or interrupted while the TV programme reception is clear. Dirt accumulated on the video heads after a long period of use, or the usage of rental or worn tapes can cause this problem. If a streaky or snowy picture appears during playback, the video heads in the unit may need to be cleaned.
- 1 Please visit your local Audio / Video store and purchase a good quality VHS Video Head Cleaner.
 - 2 If a Video Head Cleaner does not solve the problem, please consult your dealer or an authorised service centre.

Note

- Remember to read the instructions along with the video head cleaner before use.
- Clean video heads only when problems occur.

Accessories Supplied

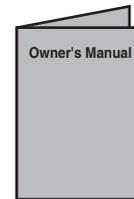
- Remote control with two R6 (AA) batteries



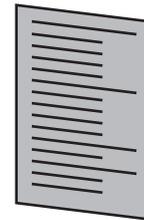
- RF cable



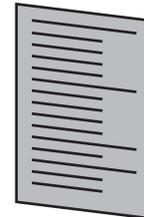
- Owner's Manual



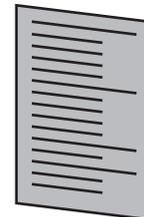
- Quick Setup Guide



- Registration card



- Helpline Sheet



Introduction

Connections

Basic Setup

Recording

Playback

Editing

Function Setup

VCR Functions

Others

Table of Contents

Introduction	2	Playback	60
Precautions	2	Basic Playback	60
Features	7	PBC Function for Video CDs	65
Guide to the Owner's Manual	8	Special Playback	66
Functional Overview	11	Search	70
Installing Batteries in the Remote Control	14	Repeat / Random / Programme Playback / Slide Show	72
Switching HDD / DVD / VCR mode	15	Selecting the Format of Audio and Video	73
Guide to On-Screen Displays	15		
Front Panel Display Guide	19		
		Editing	75
Connections	20	Guide to a Title List	75
Connections	20	Editing Discs	75
		Deleting Selected Titles	77
		Deleting All Titles in HDD	83
Basic Setup	24	Function Setup	84
Initial Setting	24	Playback	86
Channel Setting	24	Display	89
TV View Operation	31	Video	90
DVB Menu Setting	33	DivX®	91
Setting the Clock	35	HDMI	91
		Reset All	92
Recording	36	VCR Functions	93
Information on DVD Recording	36	Playback	93
Formatting a Disc	38	Recording and One-touch Timer Recording (OTR)	93
Selecting the Sound Mode	40	Search	94
Basic Recording	42	Other Operations	95
One-touch Timer Recording (OTR)	43	Hi-Fi Stereo Sound System	95
Timer Recording	43		
Timer Recording (EPG)	47		
Series Link Timer Recording	48		
Satellite Link	49		
Settings for External Equipment	50		
Information on DV Dubbing	51		
DVC to HDD / DVD Dubbing	52		
Information on Dubbing	53		
Setting a Disc to Protect	58		
Finalising Discs	59		
		Others	96
		Troubleshooting	96
		Language Code	101
		Glossary	102
		Specifications	103

Features

The following features are available with this unit.

Recording

This unit allows you to record on the HDD, a DVD-RW/+RW (rewritable) and a DVD-R/+R (one-time write). Also, this unit allows you to record to a videotape. You can choose either one for your convenience.

HDD

DVD

VCR

Recording up to 36 programmes (HDD/DVD):

You can programme the unit to record up to 36 programmes, up to a month in advance. Daily or weekly programme recordings are also possible.

One-touch Timer Recording:

[▶ Page 43] (HDD/DVD) or [▶ Page 94] (VCR)

You can set your required recording time easily. Every time [REC ●] is pressed during recording, the recording time will be increased by 30 minutes up to 8 hours. It will be turned off automatically when the recording time you set is finished.

Left channel stereo recording:

This unit can record the sound of the Left channel monaural input as Left and Right channels automatically (available only for AV3 jacks on the front panel).

HDD

DVD

Automatic Chapter mark setting: [▶ Page 39]

Chapter marks will be added to recordings as you set them in "Setup" menu before starting to record.

Automatic Playlist making:

The unit creates a Playlist automatically after recording.

HDD

160 GB hard disc:

This unit is equipped with a 160GB hard disc which allows you to record up to 267 hours (with SLP mode).

PDC: [▶ Page 45]

This system assures that the TV programme you want to record using timer recording will be recorded exactly from beginning to end even if the actual broadcasting time differs. This feature is only available for analogue channels.

DVD

Alternate recording: [▶ Page 44]

If there is no recordable disc in the unit, if the disc does not have enough space to complete the recording, or if the material is "copy-once" programme and prohibited to be recorded on a DVD in the unit, the unit will detect it and automatically record to the HDD even when DVD is selected as the recording media. This feature is available only for timer recording. Not available for one-touch timer recording.

Automatic finalising: [▶ Page 59]

You can finalise discs automatically at the end of the disc space if you set this in "Setup" menu.

Automatic Title menu making: [▶ Page 59]

The unit creates Title menus automatically when finalising discs.

Dubbing

With this unit, you can enjoy bi-directional dubbing with HDD, DVD or VCR.

HDD

DVD

High speed dubbing: [▶ Page 53]

You can dub a title much faster than the normal speed dubbing without changing the quality of the picture and sound.

Auto recording mode dubbing: [▶ Page 53]

When dubbing, if you set the recording mode to "Auto", the recording mode will automatically be adjusted so the titles will fit nicely in the remaining space of the disc.

HDD

DVD

VCR

DV dubbing:

[▶ Pages 51 - 52] (HDD/DVD) or

[▶ Page 94] (VCR)

This function helps you to easily dub the contents of the DVC (digital video camcorder) to HDD/DVD/VCR.

Playback

HDD

DVD

Theatre surround sound: [▶ Page 23]

When the unit is connected to an amplifier or a decoder compatible with Dolby Digital or DTS, you can enjoy theatre-quality surround sound from discs recorded with the surround sound system.

Quick search: [▶ Pages 70 - 71]

You can easily find the part you want to watch using the search function. Search for a desired point on a disc by title, chapter / track or time.

Variable skip: [▶ Page 67]

You can skip forward a certain time, which is specified in "Playback" menu in advance, with one-touch during playback.

Variable replay: [▶ Page 67]

You can skip back a certain time, which is specified in "Playback" menu in advance, with one-touch during playback.

Playback from Original or a Playlist:

You can play back titles using either the Original list or a Playlist.

Virtual Surround System: [▶ Page 74]

You can enjoy stereophonic space through your existing 2 channel stereo system.

HDD

Chasing Playback during Recording and Simultaneous Playback and Recording:

[▶ Pages 69 - 70]

You can play the already recorded part of the current recording or another title during recording.

Pausing a TV broadcast to resume later (Pause TV): [▶ Pages 69 - 70]

With [TIME SLIP], you can virtually pause and resume the live TV broadcast.

DVD

Playing back MP3 / JPEG / DivX® files:

[▶ Pages 61 - 64]

You can enjoy MP3 / JPEG / DivX® files which are recorded on CD-RW/-R.

DivX® files can also be recorded on DVD-RW/-R and DVD+RW/+R discs.

Introduction

Connections

Basic Setup

Recording

Playback

Editing

Function Setup

VCR Functions

Others

VCR**Quick search:** [➡ Pages 94 - 95]

You can easily find the part you want to watch using the Index or Time search functions. An index mark will be assigned at the beginning of each recording you make. For Time search function, you can go to a specific point on a tape by entering the exact amount of time you want to skip.

Editing**HDD****DVD****Adding or Deleting Chapter Marks Manually:**

[➡ Pages 78 - 79]

You can add or delete chapter marks manually.

Creating Titles to a Playlist: [➡ Page 81]

You can create a title to the Playlist.

Deleting Titles: [➡ Page 76]

You can delete titles which you do not need anymore.

Deleting a Scene of a Title: [➡ Pages 82 - 83]

You can delete a specific scene of a title.

Editing title name: [➡ Pages 77 - 78]

You can name titles or change the title name.

Combining Titles: [➡ Page 81]

You can combine two titles into a single title.

Dividing Titles: [➡ Pages 80 - 81]

You can divide a title into two new titles.

Protecting titles: [➡ Page 80]

To avoid accidental editing or erasing of titles, the protect function is useful when set to "ON" in the Original list.

DVD**Adding or Deleting chapter marks at once (Video mode DVD-RW only)**

[➡ Page 79]

You can easily add chapter marks at every selected time interval or delete all chapter marks at once for easy editing.

Hiding chapters: [➡ Pages 79 - 80]

To keep others from playing back some chapters without permission, you can hide chapters.

Compatibility**DVD****Playing back discs recorded in Video mode in any regular DVD player:** [➡ Page 59]

Discs recorded in Video mode can be played back in regular DVD players, including computer DVD drives compatible with DVD-Video playback. You will need to finalise the discs recorded in Video mode to play back in other DVD players.

Although DVD+RW / +R discs are playable in other units without finalisation in most cases, it is recommended to finalise in order to stabilise the performance.

* DVD-Video Format (Video mode) is a new format for recording on DVD-RW/-R discs that was approved by the DVD Forum in 2000. Adoption of this format is optional for manufacturers of DVD playback devices and there are DVD-Video players, DVD-ROM drives and other DVD playback devices available that cannot play back DVD-RW/-R discs recorded in the DVD-Video Format.

Others**HDD****DVD****Progressive scan system:** [➡ Pages 21, 90]

Unlike conventional interlace scanning, the progressive scan system provides less flickering and images in higher resolution than that of traditional television signals.

HDMI: [➡ Pages 21, 91 - 92]**(High-Definition Multimedia Interface)**

You can enjoy clearer audio/video output when connecting this unit to a display device with an HDMI-compatible port.

Guide to the Owner's Manual**Symbols Used in the Owner's Manual**

To show what recording mode or disc type applies to each function, the following symbols appear at the beginning of each operating item.

Symbol	Description
	Available to (internal) HDD
	Available to DVD-Videos
	Available to DVD-RW discs in Video mode
	Available to DVD-RW discs in VR mode
	Available to DVD-R discs in Video mode
	Available to DVD+RW discs
	Available to DVD+R discs
	Available to Audio CDs
	Available to Video CDs
	Available to CD-RW/-R discs with MP3 files
	Available to CD-RW/-R discs with JPEG files
	Available to DVD-RW/-R, DVD+RW/+R and CD-RW/-R discs with DivX® files
	Available to VHS tapes Use only cassettes marked VHS (VHS)

Symbols for Tuner Setting

The following is the description for the symbols for tuner setting used in this manual.

ANALOG : Settings only for the Analogue mode

DVB : Settings only for the DVB mode

Medias for Recording / Playing								
Disc Type	DVD-RW		DVD-R	DVD+RW	DVD+R	HDD		
Logo								
Format	Can be formatted in VR or Video mode		Automatically formatted in Video mode	Automatically formatted in +VR mode	Automatically formatted in +VR mode	-		
Icon	Video Mode	VR Mode						
Maximum Record Time	480 min (12 cm) 144 min (8 cm)	480 min (12 cm) 144 min (8 cm)	480 min (12 cm) 144 min (8 cm)	480 min (12 cm) 144 min (8 cm)	480 min (12 cm) 144 min (8 cm)	267 hrs (with SLP mode)		
Recordable/Playable Versions	Ver. 1.1, 1.2 Ver. 1.1/2x CPRM compatible Ver. 1.2/4x CPRM compatible		Ver. 2.0 Ver. 2.0/4x Ver. 2.0/8x Ver. 2.0/16x	1x-4x	1x-16x	-		
Compatibility	Playable on most DVD players. Finalisation necessary. (Title menu will be created)	Playable only on VR mode compatible unit. Finalisation recommended.	Playable on most DVD players. Finalisation necessary. (Title menu will be created)	Playable on DVD+RW compatible players. Finalisation recommended. (Title menu will be created)	Playable on most DVD players. Finalisation recommended. (Title menu will be created)	-		
Available Features	Recording Features							
	Record TV Programmes	✓	✓	✓	✓	✓	✓	
	Reuse by Deleting the Current Contents	✓	✓	Grey	✓	Grey	✓	
	Record 16:9 Size Pictures	✓	✓	✓	Grey	Grey	✓	
	Record Copy-once Programmes	Grey	✓*	Grey	Grey	Grey	✓	
	Create Chapters at Fixed Intervals (auto chapter)	✓	✓	✓	✓	✓	✓	
	Editing Features							
			Playlist	Original			Playlist	Original
	Scene Delete	Grey	✓	✓	Grey	Grey	✓	✓
	Edit Title Name	✓	✓	✓	✓	✓	✓	✓
	Create Chapters Wherever You Like (chapter mark)	Grey	✓	✓	Grey	✓	✓	✓
	Divide a Title	Grey	✓	Grey	Grey	✓	✓	✓
	Combine Titles	Grey	✓	Grey	Grey	Grey	✓	Grey
	Hide Chapters	Grey	Grey	Grey	✓	✓	Grey	Grey
	Delete a Title	✓	✓	✓	✓	✓	✓	✓
Deleting Selected Titles	Grey	Grey	Grey	Grey	Grey	✓	✓	
Create a Playlist	Grey	Grey	✓	Grey	Grey	Grey	✓	
Protect a Title	Grey	Grey	✓	Grey	Grey	Grey	✓	

✓: Available Grey: Not available
 * CPRM compatible disc only.

Because of problems and errors that can occur during the creation of DVD and CD software and/or the manufacture of DVD and CD discs, Toshiba cannot guarantee that product will play every feature of every DVD bearing the DVD logo and/or every CD bearing the CD logo. As one of the creators of DVD technology, Toshiba DVD players are manufactured using the highest standards of quality, and as a result, such incompatibilities are rare.

DVD players with are capable of playing DVD-RW recorded in VR mode.

Introduction

Connections

Basic Setup

Recording

Playback

Editing

Function Setup

VCR Functions

Others

Discs for Playing					
Disc Type	DVD-VIDEO	CD-DA	Video CD	CD-RW	CD-R
Logo					
Icon					
Files for Playing					
Type of title	MP3	JPEG	DivX®		
Icon					
Media	CD-RW/-R	CD-RW/-R	CD-RW/-R DVD-RW/-R DVD+RW/+R		

DVD is a trademark of DVD Format/Logo Licensing Corporation.

- Official DivX® Certified product
- Plays all versions of DivX® video (including DivX® 6) with standard playback of DivX® media files.
- Discs containing the DivX® files with the DivX® GMC (Global Motion Compensation) playback feature, which is DivX® supplemental function, cannot be played back on this unit.

Unplayable Discs

The following discs will not play back on this unit.

- CD-ROM
 - Compact Disc-Interactive (CD-I)
- Video Single Disc (VSD)
- DVD-ROM
 - Unfinalised disc
- DVD contains MP3, Windows Media™ Audio or JPEG files
- DVD-RW/-R recorded in non compatible recording format
- Blu-ray Disc
 - HD DVD

On the following disc, the sound may not be heard.

- Super audio CD - Only the sound on the CD layer can be heard. The sound on the high-density super audio CD layer cannot be heard.

Colour Systems

DVDs are recorded using different colour systems throughout the world. The most common colour system, used primarily in the U.K. and other EU countries, is PAL.

This unit uses the PAL system. However, it is also possible to play back DVDs using other colour systems, such as NTSC.

Region Codes

This unit has been designed to play DVD with region 2. DVD must be labelled for ALL regions or for region 2 in order to play on the unit. You cannot play back DVDs that are labelled for other regions. Look for the symbols on the right on your DVD,  . If these region symbols do not appear on your DVD, you cannot play back the DVD in this unit. The number inside the globe refers to region of the world.

A DVD labelled for a specific region can only play back on a unit with the same region code.

Following discs are recommended for good recording quality and are proven to be compatible with this unit. However, depending on the media condition the unit may not read the disc properly.

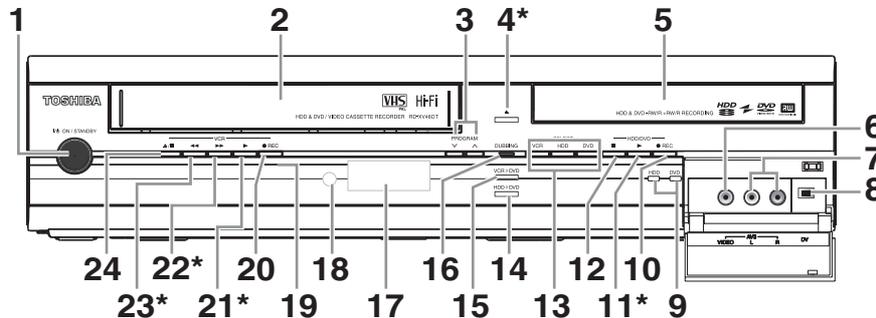
Verbatim	DVD+R 8x, DVD+RW 4x, DVD-R 8x, DVD-RW 2x
JVC	DVD-RW 4x
Maxell	DVD+R 4x/8x/16x, DVD-R 8x/16x
SONY	DVD+R 4x/8x/16x, DVD+RW 4x
TDK	DVD+R 4x/8x/16x

Performance of any other discs are not guaranteed.

- Toshiba is not liable for any damage or loss caused directly or indirectly by the malfunction of this recorder, including, without limitation, any one of the following:
 - Failure to record contents intended to be recorded by the consumer.
 - Failure to edit contents as intended by the consumer.
 - When a DVD-RW/-R, DVD+RW/+R disc created on this recorder is used (e.g., insertion, playback, recording or editing) in another DVD player, recorder or personal computer drive.
 - When a DVD-RW/-R, DVD+RW/+R disc that is used in the manner described in the immediately preceding bullet point is used again in this recorder.
 - When a DVD-RW/-R, DVD+RW/+R disc that was recorded in another DVD recorder, or in a personal computer drive is used in this recorder.
- Some functions may not work with personal computer discs.
- Discs recorded in this recorder may not operate as expected on other DVD players, recorders or personal computer drives.

Functional Overview

Front Panel



(*) You can also turn on the unit by pressing these buttons.

- 1 I/O ON/STANDBY button**
 - Press to turn the unit on and off.
- 2 Cassette compartment**
 - Insert a tape here.
- 3 PROGRAM \wedge / \vee buttons**

HDD/DVD: Press to change the channel up or down.

VCR : Press to change the channel up or down. Press to adjust the tracking during playback or in slow motion of the tape. While playback is in still mode, you can adjust the vertically blurred picture.
- 4 \blacktriangle (OPEN/CLOSE) button* (DVD)**
 - Press to open or close the disc tray.
- 5 Disc tray**
 - Place a disc when the disc tray is opened.
- 6 VIDEO input jack (AV3)**
 - Connect the video output of an external device here using a commercially available Video cable.
- 7 AUDIO input jacks (AV3)**
 - Connect the audio output of an external device here using a commercially available Audio (L / R) cable.
- 8 DV input jack (AV4)**
 - Use to connect the DV output of external device with a DV cable.
- 9 REC indicators (HDD/DVD)**
 - Lights up during HDD/DVD recording.
- 10 \bullet REC button (HDD/DVD)**
 - Press once to start a recording. Press repeatedly to start one-touch timer recording. Each press increases the recording time by 30 minutes up to 8 hours.
- 11 \blacktriangleright (PLAY) button* (HDD/DVD)**
 - Press to start or resume playback.
- 12 \blacksquare (STOP) button (HDD/DVD)**
 - Press to stop playback, recording or dubbing.
- 13 Device Select Buttons / Indicators**

VCR: Press to activate the VCR. Lights up when VCR is selected.

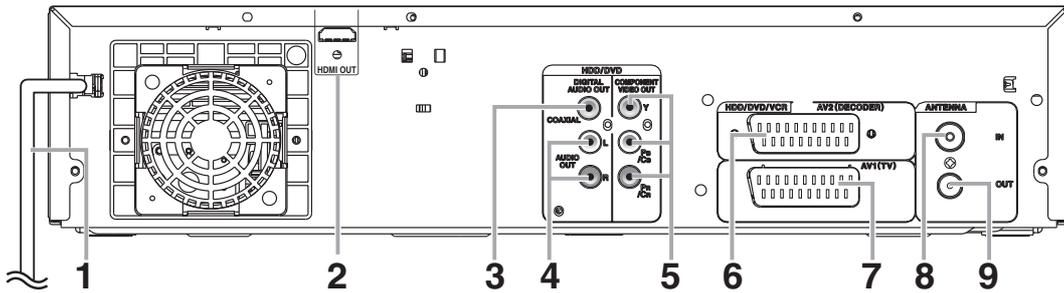
HDD: Press to activate the HDD. Lights up when HDD is selected.

DVD: Press to activate the DVD. Lights up when DVD is selected.
- 14 DUBBING HDD \blacktriangleright DVD button**
 - Press to start One Touch Dubbing from HDD to DVD.
- 15 DUBBING VCR \blacktriangleright DVD button**
 - Press to start One Touch Dubbing from VCR to DVD.
- 16 DUBBING indicator**
 - Lights up during dubbing
- 17 Display**
 - Shows information and messages. Refer to "Front Panel Display Guide" on page 19.
- 18 Infrared sensor window**
 - Receive signals from your remote control so that you can control the unit from a distance.
- 19 REC indicator (VCR)**
 - Lights up during VCR recording.
- 20 \bullet REC button (VCR)**
 - Press once to start a recording. Press repeatedly to start one-touch timer recording. Each press increases the recording time by 30 minutes up to 8 hours.
- 21 \blacktriangleright (PLAY) button* (VCR)**
 - Press to start playback. Press to turn on the unit to start playback.
- 22 $\blacktriangleright\blacktriangleright$ (FWD) button* (VCR)**
 - Press to fast forward or fast search. Press to turn on the unit to fast forward.
- 23 $\blacktriangleleft\blacktriangleleft$ (REV) button* (VCR)**
 - Press to rewind or rewind search.
 - Press to turn on the unit to rewind.
- 24 \blacktriangle / \blacksquare (EJECT/STOP) button (VCR)**
 - Press to stop playback, recording or dubbing.
 - Press to eject the videotape.

Button names described in the Owner's Manual

The instructions in this manual are described mainly with the operations using the remote control. Some operations can be carried out using the buttons on the front panel.

Rear Panel

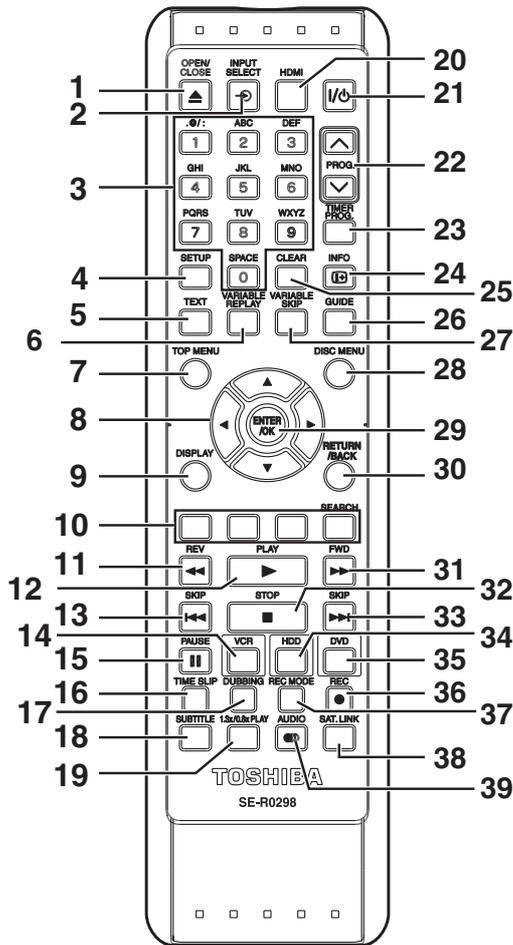


- 1 Mains cable**
 - Connect to a standard AC outlet.
- 2 HDMI OUT jack (HDD/DVD)**
 - Connect to a display with an HDMI compatible port. Use a commercially available HDMI cable.
- 3 DIGITAL AUDIO OUT (COAXIAL) jack (HDD/DVD)**
 - Connect to an amplifier with a digital input jack such as a Dolby Digital decoder, DTS decoder or MPEG decoder. Use a commercially available Coaxial cable.
- 4 AUDIO OUT (L/R) jacks (HDD/DVD)**
 - Connect to the audio input jacks on your TV. Use a commercially available Audio cable.
- 5 COMPONENT VIDEO OUT jacks (HDD/DVD)**
 - Connect to the component video input jacks on your TV. Use a commercially available Component Video cable.
- 6 AV2 (DECODER) socket (HDD/DVD/VCR)**
 - Connect to VCR, camcorder, or other Audio-Video equipment. Use a commercially available Scart cable.
- 7 AV1 (TV) socket (HDD/DVD/VCR)**
 - Connect to the Scart socket on your TV. Use a commercially available Scart cable.
- 8 ANTENNA IN**
 - Connect to an antenna or a cable.
- 9 ANTENNA OUT**
 - Connect to the Aerial jack on your TV, cable box or direct broadcast system to output the signal received at ANTENNA IN. Use the supplied RF cable.

Note

- Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.
- **This unit does not have an RF modulator.**

Remote Control



- 1 OPEN/CLOSE \blacktriangle button (DVD/VCR)**
 - Press to open or close the disc tray.
 - Press to remove the videotape from the unit.
- 2 INPUT SELECT \curvearrowright button**
 - Press to select the DVB, analogue mode or appropriate input.
- 3 Number buttons**
 - Press to select channel numbers.
 - Press to select a title / chapter / track on the display.
 - Press to enter values for settings in "Setup" menu.
 - Press to enter the characters in edit function.
- 4 SETUP button**
 - Press to display "Setup" menu in stop mode.
- 5 TEXT button**
 - Press to switch Teletext on or off.
- 6 VARIABLE REPLAY button (HDD/DVD)**
 - Replays by the amount of time set in advance.
- 7 TOP MENU button (HDD/DVD)**
 - Press to display the Title list.
- 8 Direction \blacktriangle / \blacktriangledown / \blacktriangleleft / \blacktriangleright buttons**
 - Press to move the cursor and determine items or settings.
- 9 DISPLAY button**
 - Press to display the On-Screen Display.

- 10 RED/GREEN/YELLOW/BLUE button**
 - Press to follow the DVB instruction displayed on-screen.
- SEARCH (BLUE) button (VCR)**
 - Press to call up the index or time search menu.
- 11 REV $\blacktriangleleft\blacktriangleleft$ button (HDD/DVD)**
 - During playback, press to fast reverse.
 - When playback is paused, press to reverse slowly.
- (VCR)**
 - Press to rewind the videotape.
 - Press to view the picture rapidly in reverse during the playback mode.
- 12 PLAY \blacktriangleright button**
 - Press to start or resume playback.
- 13 SKIP $\blacktriangleleft\blacktriangleleft$ button (HDD/DVD)**
 - During playback, press twice in quick successions to skip to the previous chapter or track.
 - When playback is paused, press to play reverse step by step.
- 14 VCR button**
 - Press to select the VCR output mode.
- 15 PAUSE \parallel button**
 - Press to pause playback or recording.
- 16 TIME SLIP button (HDD)**
 - Press to virtually pause and resume the live TV broadcast.
- 17 DUBBING button**
 - During playback, press to start dubbing right away.
 - In stop mode, press to display "Dubbing" menu.
- 18 SUBTITLE button**
 - During DVD playback or watching a DVB channel which has subtitle information, press to call up the Subtitle menu.
- 19 1.3x/0.8x PLAY button (HDD/DVD)**
 - During playback, press to playback in a slightly faster/slower speed.
- 20 HDMI button**
 - Press to set the HDMI connector's video signal output mode.
- 21 I/O ON/STANDBY button**
 - Press to turn on or off the unit.
- 22 PROG. \wedge / \vee buttons**
 - Press to change the channel up or down.
- 23 TIMER PROG. button**
 - Press to display the timer programme setting menu.
- 24 INFO $i+$ button**
 - Press to display the DVB programme information.
- 25 CLEAR button (HDD/DVD)**
 - Press to clear the password once entered.
 - Press to cancel the programming for a disc.
 - Press to clear the selecting marker number in the marker setup mode.
 - Press to clear the programme once entered in the CD programme playback mode.
- (VCR)**
 - Press to reset the tape counter.
- 26 GUIDE button**
 - Press to call up the EPG list in DVB mode.

27 VARIABLE SKIP button (HDD/DVD)

- Skips by the amount of time set in advance.

28 DISC MENU button (HDD/DVD)

- Press to display the Disc menu during playback.
- Press to change the Original and Playlist on the TV screen.

29 ENTER/OK button

- Press to acknowledge or approve a menu selection.
- While watching a DVB channel, press to display the "Quick select" menu.

30 RETURN/BACK button

- Press to return to the previously displayed menu screen.

31 FWD ►► button

- When playback is paused, press to forward slowly. (HDD/DVD)
- During playback, press to fast forward. (VCR)
- Press to advance the videotape rapidly.
- Press to view the picture rapidly in forward during playback.

32 STOP ■ button

- Press to stop playing back or recording.

33 SKIP ►►| button (HDD/DVD)

- During playback, press to skip to the next chapter or track.
- When playback is paused, press to advance step by step.

34 HDD button

- Press to select the HDD output mode.

35 DVD button

- Press to select the DVD output mode.

36 REC ● button

- Press once to start a recording.
- Press repeatedly to start a One-touch Timer Recording.

37 REC MODE button

- Press to switch the recording mode.

38 SAT.LINK button (HDD)

- Press to activate the Satellite Link Timer Recording.

39 AUDIO ◯ button

- For analogue channels when receiving a bilingual broadcast, press to change the audio out setting to "Main", "Sub" or "Main/Sub".
- Press to change the bilingual audio source of an external equipment to "Main", "Sub" or "Main/Sub". (Available only when the "External Input Audio" in "Setup" menu is set to "Bilingual" in advance.)
- Press to select the sound mode for DVB channels. (HDD/DVD)
- Press to display the audio menu during playback. (VCR)
- During playback of Hi-Fi videotape, press to change the audio out setting to "STEREO", "LEFT", "RIGHT" and "MONO".

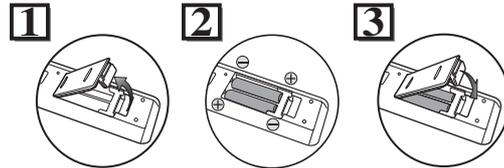
Button names described in the Owner's Manual
The instructions in this manual are described mainly with the operations using the remote control. Some operations can be carried out using the buttons on the front panel.

Note

- If you turn off this unit, [OPEN/CLOSE ▲] on the remote control is not available. Be sure to use [▲ OPEN/CLOSE] or [▲ / ■ EJECT/STOP] on the unit.

Installing Batteries in the Remote Control

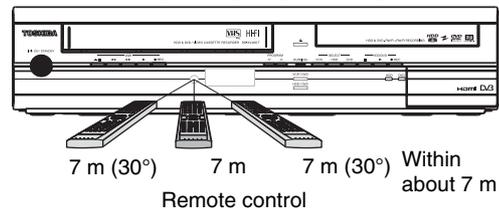
Install two R6 (AA) batteries (supplied) into the remote control, carefully match with the polarity indicated inside the battery compartment.

**Caution**

- Incorrect use of batteries can result in hazards such as leakage and bursting.
- Do not mix new and old batteries together.
- Do not use different kinds of batteries together.
- Make sure that the plus (+) and minus (-) ends of each battery match the indications inside the battery compartment.
- Remove batteries if the equipment will not be used for a month or more.
- When disposing of used batteries, please comply with governmental regulations or the public instructions for environmental protection that apply in your country or area.
- Do not recharge, short-circuit, heat, burn or disassemble batteries.

About the Remote Control

- Make sure there is no obstacle between the remote control and the remote control sensor on the unit.
- Use within the operating range and angle as shown.



- The maximum operable range as follows:

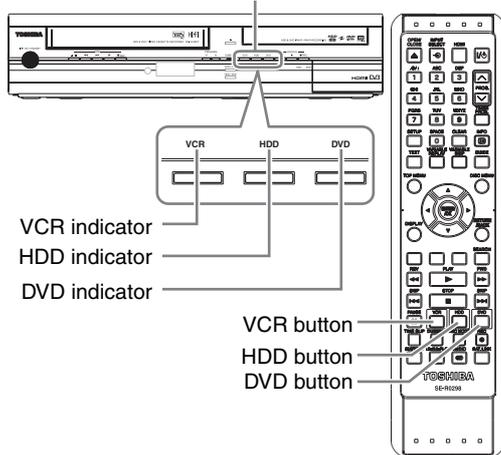
Line of sight: approximately 7 m
Either side of centre: approximately 7 m within 30 degrees

- Remote control operation may become unreliable if the remote control sensor of the unit is being exposed by the strong sunlight or fluorescent light.
- Remote controls for different devices can interfere with each other. Be careful when using remote controls for other equipment located close to the unit.
- Replace the batteries when the operating range of the remote control reduces.

Switching HDD / DVD / VCR mode

Because this unit is a combination of HDD, DVD and VCR recorder, you must select which component you want to operate first.

Device Select Indicators



VCR indicator
HDD indicator
DVD indicator

VCR button
HDD button
DVD button

HDD

Press **[HDD]** on the remote control or the front panel. (Verify that the HDD indicator is lit in blue.)

DVD

Press **[DVD]** on the remote control or the front panel. (Verify that the DVD indicator is lit in green.)

VCR

Press **[VCR]** on the remote control or the front panel. (Verify that the VCR indicator is lit in orange.)

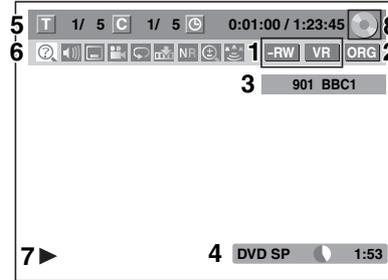
Guide to On-Screen Displays

DISPLAY Menu

HDD

DVD

With a disc inserted into the unit, press **[DISPLAY]** to display the On-Screen Display. The menu shows information about what is recorded on the disc.



This is an example screen for explanation. Displayed items vary depending on the actual mode.

- 1 Indicates a disc type and format mode. (DVD mode only)**
- 2 Indicates a type of titles for HDD and VR mode DVD-RW disc.**
- 3 Indicates a channel number, station name (analogue channel only) or selected external input mode.**
- 4 Indicates a media, recording mode and possible recording time left.**
- 5 Indicates the current title number/total number of titles, the current chapter number/total number of chapters, and time lapse of the current title playback/total duration of the title.**
- 6 Each icon means:**
 - : Search
 - : Audio
 - : Subtitle
 - : Angle
 - : Repeat
 - : Marker
 - : Noise Reduction
 - : Zoom
 - : Surround
- 7 Indicates an operation status.**
- 8 Indicates the component in use.**
 - : HDD
 - : DVD

Note

- For some descriptions on this manual, only one disc type is indicated as an example.

Introduction

Connections

Basic Setup

Recording

Playback

Editing

Function Setup

VCR Functions

Others

Press **[DISPLAY]** while the On-Screen Display is displayed to display the following information.

<Title / File Name Information>

File name information



(only when a CD with MP3/JPEG/DivX® files is in playback)

Title name information



(only when DVD+RW/+R, VR mode DVD-RW/-R, unfinalised Video mode DVD-RW/-R disc or HDD is in playback)

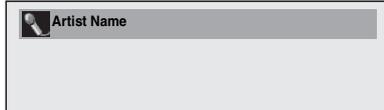
<MP3 Tag Information>

(only when a CD with MP3 files is in playback)

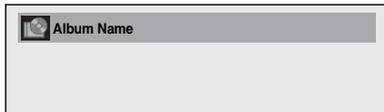
Title name information



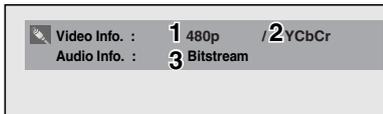
Artist name information



Album name information



<HDMI Information>

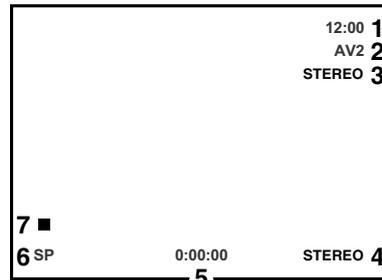


(only for the images output through the HDMI output)

- 1 Indicates the resolution of the HDMI output image.**
- 2 Indicates the HDMI video format.**
- 3 Indicates the HDMI audio format.**
- “- -” will be displayed, when it does not have any information.

VCR

Press **[VCR]** first.
Press **[DISPLAY]** to display the On Screen Display.



This is an example screen for explanation.
Displayed items are depending on the actual mode.

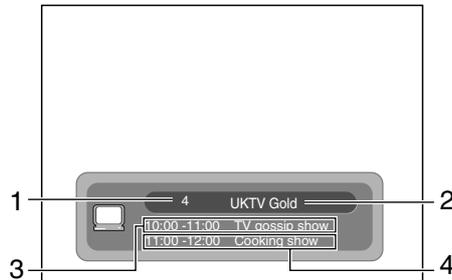
- 1 Current time**
- 2 Position number**
- 3 Audio status of the receiving broadcast or external equipment**
- 4 Audio status of the currently playing back videotape**
- 5 Tape counter**
- 6 Recording or playing back speed**
- 7 Status of the current tape**

While in the VCR mode, the On Screen Display of the VCR mode is displayed.

INFO Menu

DVB

Press **[INFO (i+)]** while viewing a DVB programme to display the programme information.

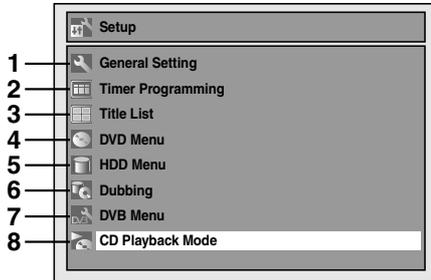


- 1 Channel number**
- 2 Channel name**
- 3 Current programme information**
- 4 Next programme information**

The window will automatically exit after 3 seconds, or press **[INFO (i+)]** to exit.

Main Menu

Press **[SETUP]** to display the main menu. Then use **[▲ / ▼]** to select a menu and press **[ENTER/OK]** to display the sub menu. These menus provide entries to all main functions of the unit.



1 General Setting:

To go to General Setting menu.

2 Timer Programming:

To programme a timer recording.

3 Title List:

To call up the title list.

4 DVD Menu:

To set up the DVD disc setting.

5 HDD Menu:

To set up the HDD setting.

6 Dubbing:

- To dub the content of the HDD to DVD or vice versa.
- To dub the content of the HDD to VCR or vice versa.
- To dub the content of the DVD to VCR or vice versa.
- "Dubbing" is available only when a recordable disc or videotape is loaded.

7 DVB Menu:

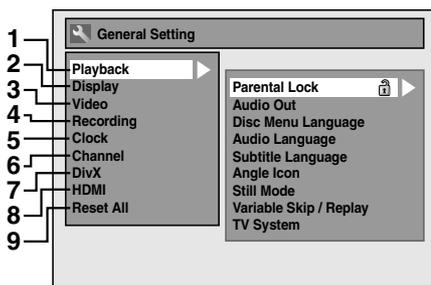
To set up the DVB setting.

8 CD Playback Mode:

To set up the CD playback setting.

- "CD Playback Mode" is available only when an audio CD, a video CD, a CD-RW/-R with MP3 / JPEG / DivX® files is inserted into the unit.

General Setting



1 Playback:

To set up the unit to play discs as you prefer.

2 Display:

To set up the OSD screen as you prefer.

3 Video:

To set up the video setting.

4 Recording:

To set up the unit to record to discs as you prefer.

5 Clock:

To set up the clock of the unit as you need.

6 Channel:

To adjust the channel setting of the unit as you prefer.

7 DivX:

To set up the setting for the DivX® playback.

8 HDMI:

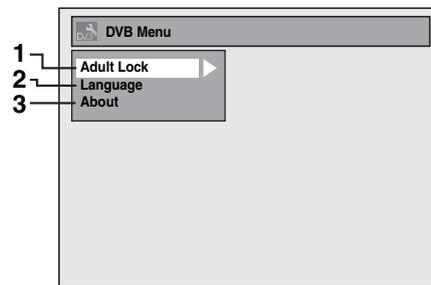
To set up the HDMI connection setting.

You cannot select if the HDMI cable is not connected.

9 Reset All:

To reset all settings to the factory default.

DVB Menu



1 Adult Lock:

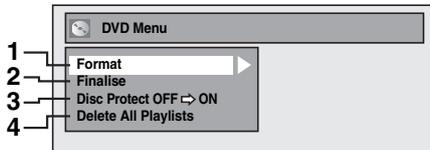
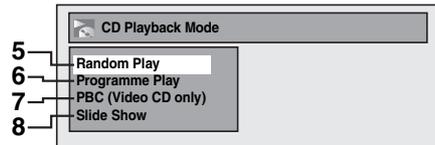
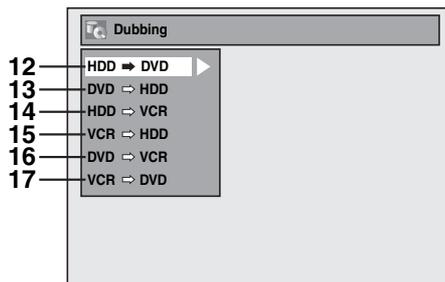
To set the Pincode for "Adult Lock".

2 Language:

To set up the language for audio, subtitle and teletext.

3 About:

To check the current DVB system software version of this unit.

DVD Menu / CD Playback Mode / HDD Menu / Dubbing**<DVD Menu menu>****<CD Playback Mode menu>****<HDD Menu menu>****<Dubbing menu>****1 Format (DVD-RW, DVD+RW only):**

Allows you to format the disc.

2 Finalise:

Allows you to finalise a disc containing recorded titles.

3 Disc Protect (VR mode DVD-RW, DVD+RW/+R disc only):

Allows you to protect a disc from accidental editing or recording.

4 Delete All Playlists (VR mode DVD-RW disc only):

Allows you to delete all Playlists.

5 Random Play:

Allows you to activate the random playback feature.

6 Programme Play (Audio CD/Video CD only):

Allows you to activate the programme playback feature.

7 PBC (Video CD only):

Allows you to select images or information on the menu screen by activating PBC (playback control) function.

8 Slide Show (JPEG files only):

Allows you to select the display time of the slide show mode.

9 Delete All Titles:

Allows you to delete all titles, including the protected titles in the HDD title list.

10 Delete All Unprotected Titles:

Allows you to delete all unprotected titles in the HDD title list.

11 Delete All Playlists:

Allows you to delete all Playlists for HDD.

12 HDD → DVD:

Allows you to dub from HDD to DVD.

13 DVD → HDD:

Allows you to dub from DVD to HDD.

14 HDD → VCR:

Allows you to dub from HDD to VCR.

15 VCR → HDD:

Allows you to dub from VCR to HDD.

16 DVD → VCR:

Allows you to dub from DVD to VCR.

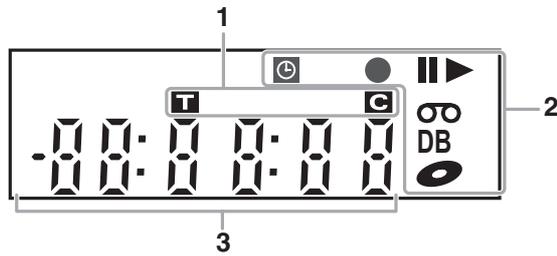
17 VCR → DVD:

Allows you to dub from VCR to DVD.

Note

- Items in the Dubbing menu may be greyed out depending upon what media is loaded into the unit, and copy protection that may be present.

Front Panel Display Guide



1 Title / Track and Chapter number

- T** : Title / track number
- C** : Chapter number

2 Current status of the unit

- ||** : Appears when disc playback is paused. Appears during step by step playback.
- ▶** : Appears when playing back a disc.
- ||▶** : Appears during slow forward / reverse playback.
- ⏻** : Appears when the timer programming or One-touch Timer Recording (OTR) is set and is operating, or appears when the unit goes into the Satellite Link standby mode. Flashes when timer programming was not executed because of some error.
- : Appears when recording. Flashes when recording being paused.
- Ⓛ** : Appears when a videotape is in this unit.

Ⓛ : Appears when a disc is in this unit.

DB : Appears during dubbing.

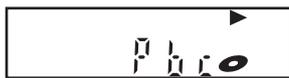
3 Displays the following

- Playback time
- Current title / chapter / track number
- Recording time / remaining time
- Clock
- Channel number
- One-touch Timer Recording (OTR) remaining time
- Selected HDMI output mode

Display Messages



The disc tray is opening.



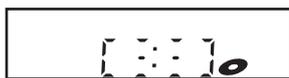
The PBC function of the Video CD is activated.



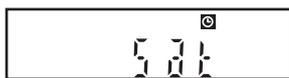
The disc tray is closing.



A disc is loading.



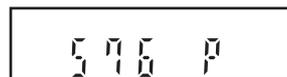
Data is being recorded on a disc.



Appears when the Satellite Link Recording is in standby.



Appears when HDMI output mode (480p) is selected.



Appears when HDMI output mode (576p) is selected.



Appears when HDMI output mode (720p) is selected.

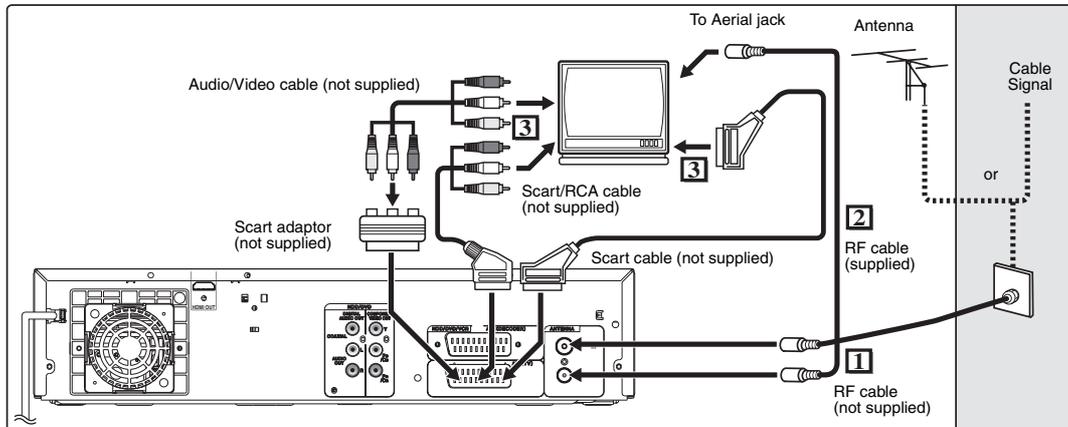


Appears when HDMI output mode (1080i) is selected.



Appears when HDMI output mode (1080p) is selected.

Connections



Connections

Connecting to a TV

Connect the unit to a TV after considering the capabilities of your existing equipment.

Before installation, unplug your TV and this unit.

- 1 Connect the antenna or cable to the **ANTENNA IN** jack of this unit.
- 2 Connect the **ANTENNA OUT** jack of this unit to the **Aerial jack** of your TV. Use the supplied RF cable.

Using the Scart socket

- 3 Connect **AV1 (TV) Scart socket** of this unit to the **Scart socket** of your TV. Use a commercially available **Scart cable**.

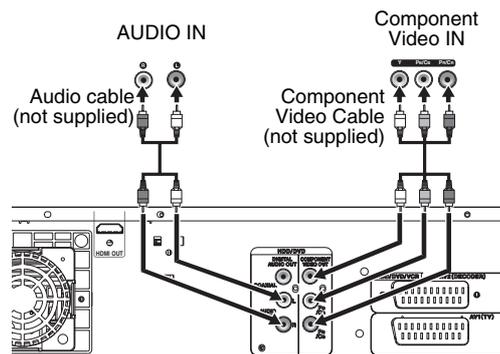
Note

- If your TV does not have a Scart socket, use a commercially available Scart adaptor or Scart/RCA cable to connect.
- Connect this unit directly to the TV. If the AV cables are connected to a VCR, pictures may be distorted due to the copy protection system.
- When changing the "Video Out" setting ("SCART (RGB)", "Component (Interlace)" or "Component (Progressive)"), connect to the corresponding jack on the TV. If the setting is changed, for example, to "Component (Interlace)" or "Component (Progressive)" while the scart cable is connected to the TV, a distorted video signal may result.

Using the COMPONENT VIDEO OUT jacks and the AUDIO OUT (L/R) jacks

If your TV has Component Video input jacks, use a Component Video cable and an Audio cable (to connect the AUDIO OUT (L/R) jacks).

- Component connection provides the better quality picture.
- 3 Connect the **COMPONENT VIDEO OUT** jacks of this unit to the **Component Video input jacks** of your TV. Use a commercially available **Component video cable**.
 - 4 Connect the **AUDIO OUT (L/R) jacks** of this unit to the **analogue Audio input jacks** of your TV. Use a commercially available **Audio cable**.



- After you have made the connections, set the "Video Out" setting. (See page 90.)

Selecting Progressive Scan (576p/480p or Interlaced 576i/480i) Playback

- If your TV is compatible with progressive scanning (576p/480p), connect the TV to the COMPONENT VIDEO OUT jacks of this unit and set "Video Out" setting to "Component (Progressive)" in "Setup" menu (See page 90.). Next, set your TV to the progressive scan mode.
- If your TV is not compatible with progressive scan, set "Video Out" setting to "Component (Interlace)".
- Use a commercially available adaptor if the Video input jacks of your TVs or monitors are the BNC type.
- Only component and HDMI connections are compatible with the Progressive Scan.

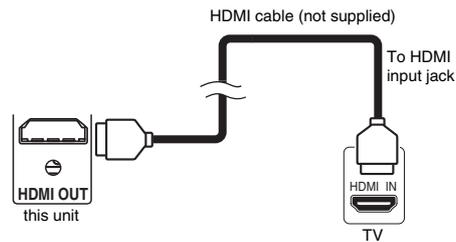
Connecting to a TV with an HDMI Compatible Port

[HDMI CONNECTION]

A simple 1-cable connection with a device having an HDMI (high-definition multimedia interface) connector allows digital transfer of both digital video signals and multi-channel audio signals. This is the best method to connect this unit. It can minimise the deterioration of image quality.

Use the HDMI cable (commercially available) for connection.

Connect the HDMI output jack of this unit to the HDMI input jack of TV.



Selecting HDMI mode

Press **[HDMI]** to select the HDMI output mode. The output mode changes as follows every time **[HDMI]** is pressed. 576p (PAL) / 480p (NTSC) → 720p → 1080i → 1080p (An HDMI mode that is not supported by the display device will be skipped.)

Actual Output Modes by Media

Audio recording format of the disc		Dolby Digital / DTS / MPEG setting of this unit	Actual output
DVD-video	Dolby Digital	PCM	2channel PCM
		Stream	Dolby Digital
	LPCM	PCM	2channel PCM
		Stream	2channel PCM
	DTS	ON	DTS
		OFF	-
MPEG	PCM	2channel PCM	
	Stream	MPEG	
DivX®	Dolby Digital	PCM	2channel PCM
		Stream	Dolby Digital
	MP3	PCM	2channel PCM
		Stream	2channel PCM
	MP2	PCM	2channel PCM
		Stream	MPEG

For Audio CD, Video CD and MP3 files, 2 channel PCM will be output regardless of the "Dolby Digital" setting.

If the connected device is not compatible with HDMI BITSTREAM, audio will be output as PCM even if you select "Stream" in "Dolby Digital" setting. (See page 87.)

Copyright protection system

To play back the digital video images of a DVD via an HDMI connection, it is necessary that both the player and the display device (or an AV amplifier) support a copyright protection system called HDCP (high-bandwidth digital content protection system). HDCP is copy protection technology that comprises data encryption and authentication of the connected AV device. This unit supports HDCP. Please read the operating instructions of your display device (or AV amplifier) for more information.

* HDMI: High Definition Multimedia Interface

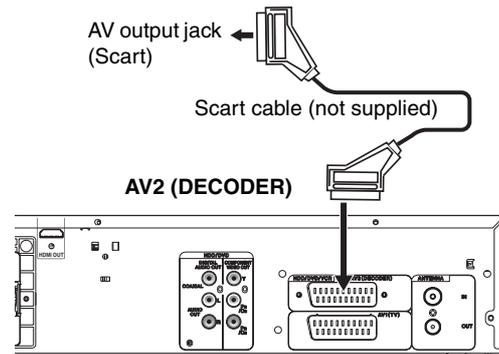
Note

- Because HDMI is an evolving technology, it is possible that some devices with an HDMI input may not operate properly with this unit.
- When using an HDCP-incompatible display device, the image will not be viewed properly.
- This unit does not support Regza link or CEC control.
- The audio signals from the HDMI connector (including the sampling frequency, the number of channels and bit length) may be limited by the device that is connected.
- Among the monitors that support HDMI, some do not support audio output (for example, projectors). In connections with device such as this unit, audio signals are not output from the HDMI output connector.
- When this unit's HDMI connector is connected to a DVI-D compatible monitor (HDCP compatible) with an HDMI-DVI conversion cable, the signals are output in digital RGB.
- If the connected equipment is not compatible with HDMI BITSTREAM, DTS sound will not be output.
- When the power failure occurs, or when you unplug the unit, some problems in the HDMI setting might occur. Please check and set the HDMI setting again.

Connecting to an External Equipment

This unit has four input terminals which can be selected using [INPUT SELECT] on the remote control, AV1 or AV2 on the rear panel and AV3 or AV4 on the front panel. Be sure that all the units are switched off before making connections.

Recording from a DVD player, VCR, Satellite Box or other Audio-Video equipment with a Scart output socket (AV2)



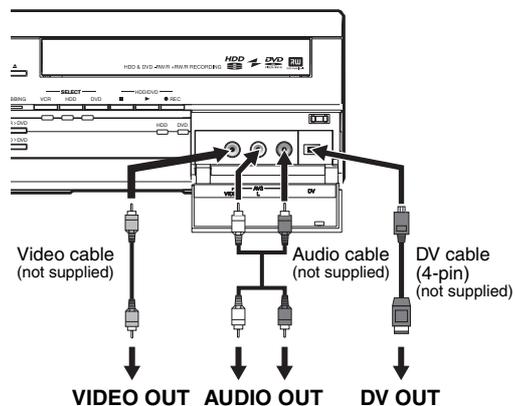
Note

- When you record a TV programme from a Satellite Box, you must connect a Scart cable to AV2 (DECODER). (See page 49.)
- When AV2 is connected, the signal from the AV2 will be output automatically. If you want to monitor the signal from other input, you must press [DISPLAY] first. Then, select the desired input to monitor with [INPUT SELECT].

Recording from a camcorder or other Audio-Video equipment with no Scart output socket (AV3 / AV4)

Connect to AUDIO / VIDEO input jacks on the front panel using an RCA Audio/Video cables. When connecting a DV-camcorder, use DV input jack of AV4 (Front).

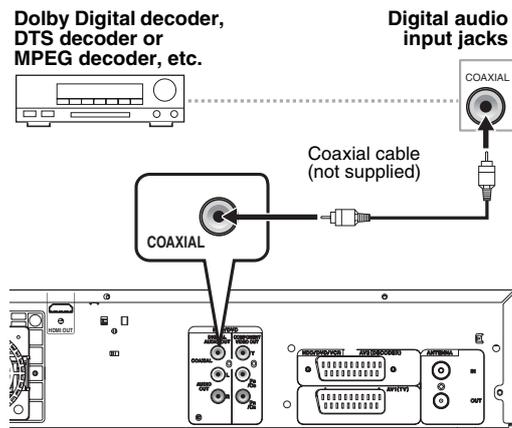
AV3 / AV4 (Front)



Note

- When connecting an external device of monaural output to this unit, use AUDIO L jack of AV3.

Digital Audio for Better Sound Quality



The connections illustrated above are optional for better sound.

1 For clear digital sound quality, use the DIGITAL AUDIO OUT (COAXIAL) jack to connect your digital audio equipment.

If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.

Connecting a Dolby Digital™ decoder, DTS decoder or MPEG decoder

- Connecting multi-channel Dolby Digital decoder allows you to enjoy the Multi-channel Dolby Digital surround system as well as DTS decoder, Multi-channel surround system.
- After connecting to a Dolby Digital decoder, set "Dolby Digital" to "Stream" in "Audio Out" menu. (See pages 86 - 87.)
- After connecting to a DTS decoder, set "DTS" to "ON" in "Audio Out" menu. (See pages 86 - 87.)
- After connecting to a MPEG decoder, set "MPEG" to "Stream" in "Audio Out" menu. (See pages 86 - 87.)

Connecting to an MD deck or DAT deck

- The audio source recorded in Dolby Digital Multi-channel surround format cannot be recorded using an MD or DAT deck as a digital sound.
- If not connected to a Dolby Digital decoder, set "Dolby Digital" to "PCM" in "Audio Out" menu. Playing back a DVD using incorrect settings may generate noise distortion and damage speakers.
- Set "Dolby Digital" and "MPEG" to "PCM" and set "DTS" to "OFF" in "Audio Out" menu for connecting to an MD or DAT deck.
- You can use AUDIO OUT (L/R) jacks for the connection of your audio system.

After You Have Completed Connections

Switch the input selector on your TV to an appropriate external input channel. For details, refer to the Owner's Manual of your TV.

Note

- Connect this unit directly to the TV. If the AV cables are connected to a VCR, pictures may be distorted due to the effects of the copy protection system.

Introduction

Connections

Basic Setup

Recording

Playback

Editing

Function Setup

VCR Functions

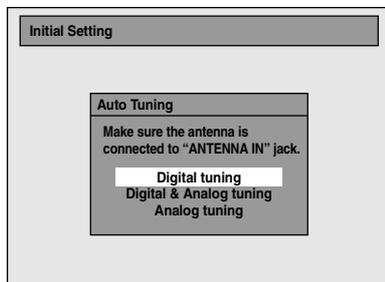
Others

Basic Setup

Initial Setting

When you turn on this unit for the first time, you need to follow these steps.

- 1 Press [I/⏻ ON/STANDBY].
- 2 Turn the TV on. Select the input to which the unit is connected.
- 3 Select your desired channel preset type using [▲ / ▼]. Then press [ENTER/OK].



The unit will start getting channels available in your area.

Digital tuning:

Only the DVB channels receivable in your area are automatically scanned and memorised.

Digital & Analog tuning:

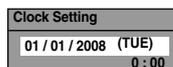
Both analogue and DVB channels receivable in your area are scanned and memorised automatically.

Analog tuning:

Only the analogue channels receivable in your area are automatically scanned and memorised.

- If no channel has been memorised, the antenna confirmation display will appear. Press [ENTER/OK] to start auto scanning again or press [RETURN/BACK] to cancel the initial settings.

- 4 After finishing channel setting, "Clock Setting" will appear.



- The current date and time will appear automatically.
- If the current date and time is correct, press [RETURN/BACK] to exit.
- If you want to adjust the current date and time, press [ENTER/OK] and follow to step 5 in "Manual Clock Setting" on page 35.

Channel Setting

You can retune this unit or edit the channel setting by the following methods.

Auto Tuning (DVB & ANALOG)

Programme the tuner to scan both analogue and DVB channels you can receive in your area.

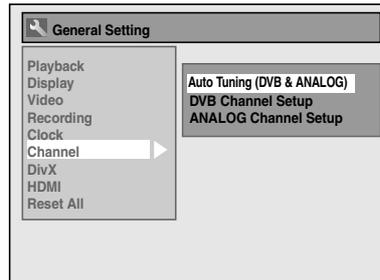
- 1 In stop mode, press [SETUP]. Select "General Setting" using [▲ / ▼], then press [ENTER/OK].

General Setting menu will appear.

- 2 Select "Channel" using [▲ / ▼], then press [ENTER/OK].

- 3 Select "Auto Tuning (DVB & ANALOG)" using [▲ / ▼], then press [ENTER/OK].

The unit will start storing channels available in your area.



Wait for several minutes to finish channel storing.

- Analogue channels will be stored in channel 901-999 after it is scanned by this unit.

- 4 Press [SETUP] to exit.

You can select only the channels memorised in this unit by using [PROG. ▲ / ▼].

To cancel auto tuning

Press [RETURN/BACK] or [SETUP] during scanning.

Note

- The selection will be affected by how you receive TV channels in your local area.
- If the auto tuning is cancelled during scanning, some channels not yet tuned may not be received.
- You cannot change the channel when this unit is in any recording mode (normal recording, One-touch Timer Recording or timer recording).

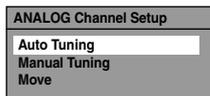
Auto Tuning (ANALOG)

ANALOG

Programme the tuner to scan only the analogue channels you can receive in your area.

- 1** In stop mode, press [SETUP]. Select "General Setting" using [▲ / ▼], then press [ENTER/OK].
- 2** Select "Channel" using [▲ / ▼], then press [ENTER/OK].
- 3** Select "ANALOG Channel Setup" using [▲ / ▼], then press [ENTER/OK].
- 4** Select "Auto Tuning" using [▲ / ▼], then press [ENTER/OK].

The unit will start storing channels available in your area.



Wait for several minutes to finish channel storing.

- Analogue channels will be stored in channel 901-999 after it is scanned by this unit.

5 Press [SETUP] to exit.

You can select only the channels memorised in this unit by using [PROG. ^ / v].

To cancel auto tuning

Press [RETURN/BACK] or [SETUP] during scanning.

Note

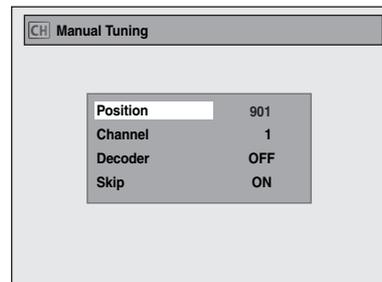
- The selection will be affected by how you receive TV channels in your local area.
- If the auto tuning is cancelled during scanning, some channels not yet tuned may not be received.
- You cannot change the channel when this unit is in any recording mode (normal recording, One-touch Timer Recording or timer recording).
- Sorting of TV channels from 901 to 906 will be performed automatically as follows.
901: BBC1 902: BBC2 903: ITV
904: CH4 905: CH5 906: SKY NEWS
- If you are using a satellite receiver, or a cable box, turn it on and select SKY NEWS before commencing tuning. If the SKY NEWS channel is not available to you, choose another channel that you can recognise easily, and move this reception to preset 906 after the automatic tuning has finished. Instructions on page 26 explain how to move channels.

Manual Tuning (ANALOG)

ANALOG

You can preset an analogue channel manually and individually.

- 1** In stop mode, press [SETUP]. Select "General Setting" using [▲ / ▼], then press [ENTER/OK].
- 2** Select "Channel" using [▲ / ▼], then press [ENTER/OK].
- 3** Select "ANALOG Channel Setup" using [▲ / ▼], then press [ENTER/OK].
- 4** Select "Manual Tuning" using [▲ / ▼], then press [ENTER/OK].
- 5** Select "Position" using [▲ / ▼], then press [▶].



6 Select the position number you want to use using [the Number buttons] or [▲ / ▼], then press [◀].

- You can select position number 901-999.
- With [the Number buttons], you only need to enter the last 2-digit numbers.

7 Select "Channel" using [▲ / ▼], then press [▶].

8 Press [▲ / ▼] to start scanning.

- The tuner will begin to search up or down automatically. When a channel is found, the unit will stop searching and the picture will appear on the TV screen.
- You can select a desired channel number using [the Number buttons]. Refer to the following Channel Plan table and press the three digits to select the channel number.
(To select channel 4, press [0] first and then press [0] and [4]. Or press [4] and then "-- 4" appears and wait for 2 seconds.)
- If this is the channel you want, press [◀].

Channel Plan	
CH Indication	TV Channel
01 - 10	IRA-IRJ, GAP
21 - 69	E21 - E69
74 - 78	X, Y, Z, Z+1, Z+2
80 - 99, 100	S1 - S20, GAP
121 - 141	S21 - S41

This unit can receive the Hyper and Oscar frequency bands.

- If “Skip” is set to “ON”, select “Skip” using [▲ / ▼], then press [▶]. Select “OFF” using [▲ / ▼], then press [◀].
- If you want to decode scrambled signals, select “Decoder” using [▲ / ▼], then press [▶]. Select “ON” using [▲ / ▼], then press [◀].
- To store another channel, repeat steps 5 to 8.

9 Press [SETUP] to exit.

Skip a Preset Channel

ANALOG

You can set the unit to skip channels. You can no longer receive or watch when you access channels using [PROG. ^ / v].

- 1 Follow steps 1 to 4 in “Manual Tuning (ANALOG)” on the previous page.
- 2 Select “Position” using [▲ / ▼], then press [▶].
- 3 Select the position number you want to skip using [the Number buttons] or [▲ / ▼], then press [◀].
- 4 Select “Skip” using [▲ / ▼], then press [▶].
- 5 Select “ON” using [▲ / ▼], then press [◀].
 - To skip another channel, repeat steps 2 to 5.
- 6 Press [SETUP] to exit.

Move

ANALOG

You can replace two channels.

- 1 In stop mode, press [SETUP]. Select “General Setting” using [▲ / ▼], then press [ENTER/OK].
- 2 Select “Channel” using [▲ / ▼], then press [ENTER/OK].
- 3 Select “ANALOG Channel Setup” using [▲ / ▼], then press [ENTER/OK].
- 4 Select “Move” using [▲ / ▼], then press [ENTER/OK].
- 5 Select the position number that you wish to move the channel to using [▲ / ▼], then press [ENTER/OK].

You cannot select a position number where “--” appears next to the number, because “Skip” is set to “ON” for that position number.
- 6 Move the channel to another position number using [▲ / ▼], then press [ENTER/OK].
 - To move another channel, repeat steps 5 to 6.
- 7 Press [SETUP] to exit.

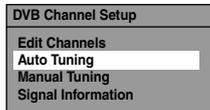
Auto Tuning (DVB)

DVB

You can programme the tuner to scan only the DVB channels that you can receive in your area.

- 1** In stop mode, press [SETUP]. Select “General Setting” using [▲ / ▼], then press [ENTER/OK].
- 2** Select “Channel” using [▲ / ▼], then press [ENTER/OK].
- 3** Select “DVB Channel Setup” using [▲ / ▼], then press [ENTER/OK].
- 4** Select “Auto Tuning” using [▲ / ▼], then press [ENTER/OK].

The unit will start storing channels available in your area.



The tuner scans and memorises all the active DVB channels (TV / Radio) in your area.



- Press [ENTER/OK] after Auto Tuning is completed, then the lowest memorised DVB channel appears on the screen.

5 Press [SETUP] to exit.

You can use [PROG. ▲ / ▼] for the memorised DVB channels.

Note

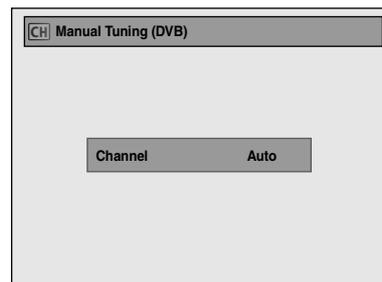
- If you press [RETURN/BACK] during the scanning, the screen will return to the previous displayed menu, and Auto Tuning will be cancelled.
- If you press [SETUP] during the scanning, this operation will stop and the lowest memorised DVB channel will appear on the TV screen.

Manual Tuning (DVB)

DVB

You can preset a DVB channel manually and individually.

- 1** Follow steps 1 to 3 in “Auto Tuning (DVB)” on this page.
- 2** Select “Manual Tuning” using [▲ / ▼], then press [ENTER/OK].
- 3** Select your desired position number using [▲ / ▼], then press [ENTER/OK].



- The tuner will begin to search up or down automatically. When a DVB channel is found, the unit will stop searching.
- When “Auto” is selected the unit will search for the channels which have not been stored in channels memory.

4 Press [SETUP] to activate the setting.

Introduction

Connections

Basic Setup

Recording

Playback

Editing

Function Setup

VCR Functions

Others

Select a Channel

You can select a channel using **[the Number buttons]**.

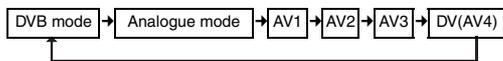
- e.g.) 6 ch: Press **[6]**, then wait for 2 seconds or press **[0]**, **[0]**, **[6]**.
 15 ch: Press **[1]**, **[5]**, then wait for 2 seconds or press **[0]**, **[1]**, **[5]**.

You can also select a channel using **[PROG. ^ / v]**.

- You can only select channels 1 to 999.
- Analogue channels will be stored in channel 901-999 and DVB channels will be stored in channel 1-900 after it is scanned by this unit.

To switch DVB, analogue and external input (AV1/AV2/AV3/DV(AV4)) mode.

You can switch between DVB, analogue and external input (AV1/AV2/AV3/DV(AV4)) mode by pressing **[INPUT SELECT ↻]** repeatedly. The mode changes as follows:



- You can also switch the mode by using **[PROG. ^ / v]**.
- You can select any DVB channels using **[the Number buttons]** when you are in analogue or external input (AV1/AV2/AV3/DV(AV4)) mode.
- You can select any analogue channels using **[the Number buttons]** when you are in DVB mode.

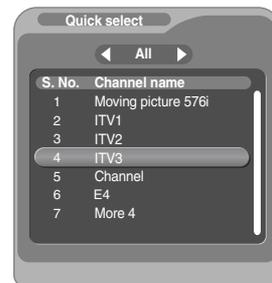
Quick Select

DVB

With “Quick select” menu, you can select your favourite DVB channel quickly. Refer to “Edit Group Lists” on page 29.

1 Press [ENTER/OK] while watching a DVB channel.

- “Quick select” menu will appear.



2 Press [◀ / ▶] to select your favourite group list. (“All”, “Group1” - “Group8”)

- “All” shows a list of all the memorised DVB channels.
- If the favourite group does not have any channels, the group will be skipped.

3 Select the DVB channel you want to watch using [▲ / ▼], then press [ENTER/OK].

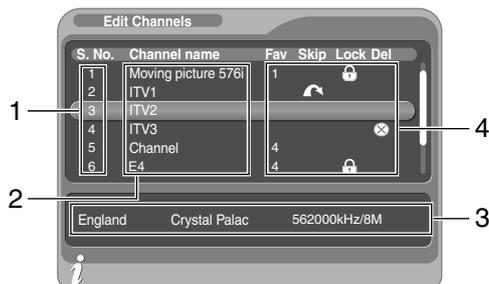
4 Press [RETURN/BACK] to exit.

Edit Channels (DVB)

DVB

With “Edit Channels” menu, you can see all the memorised DVB channels and sort them into the group lists (“Quick select”) or set the viewer limitation (“Adult Lock”), etc.

- 1 Follow steps 1 to 3 in “Auto Tuning (DVB)” on page 27.
- 2 Select “Edit Channels” using [▲ / ▼], then press [ENTER/OK].
 - “Edit Channels” menu will appear.



- 1 Channel numbers
- 2 Channel names
- 3 Channel information
- 4 Channel setting

- 3 Press [SETUP] to exit.

Note

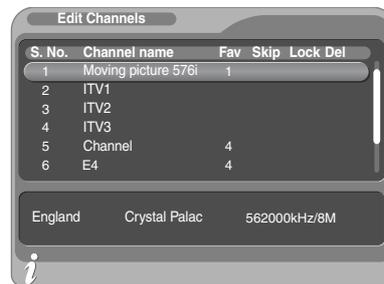
- Press [INFO] to display the user guide. You can see each explanation of the buttons which can be used in “Edit Channels” menu. Press [RETURN/BACK] to return to “Edit Channels” menu.

Edit Group Lists

DVB

You can sort each DVB channel into 8 different favourite group lists (“Group1” - “Group8”). With “Quick select” menu, you can select your favourite DVB channel quickly. Refer to “Quick Select” on page 28.

- 1 Follow steps 1 to 2 in “Edit Channels (DVB)” on page 29.
- 2 Select the DVB channel you want to add to the favourite group list using [▲ / ▼], then select the number of the favourite group list you want to add to using [the Number buttons] ([1] - [8]).



- The number you selected will appear.
- Press [0] to cancel from the favourite group list.

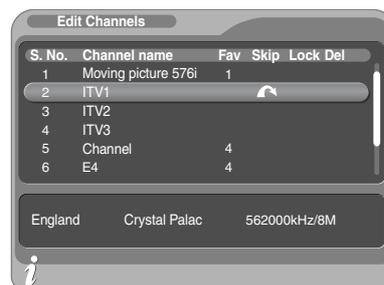
- 3 Press [SETUP] to exit.

Skip Channels

DVB

You can set the unit to skip the unwanted DVB channels when you use [PROG. ▲ / ▼].

- 1 Follow steps 1 to 2 in “Edit Channels (DVB)” on this page.
- 2 Select the DVB channel you want to skip using [▲ / ▼], then press [GREEN].



- “” will appear.
- Press [GREEN] to cancel. “” will disappear.

- 3 Press [SETUP] to exit.

Introduction

Connections

Basic Setup

Recording

Playback

Editing

Function Setup

VCR Functions

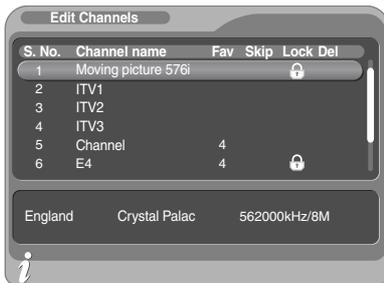
Others

Adult Lock

DVB

You can set the unit to limit the access to the DVB channels.

- 1 Follow steps 1 to 2 in “Edit Channels (DVB)” on page 29.
- 2 Select the DVB channel you want to limit the access to using [▲ / ▼], then press [YELLOW].



- “” will appear.
- Press [YELLOW] to cancel. “” will disappear.

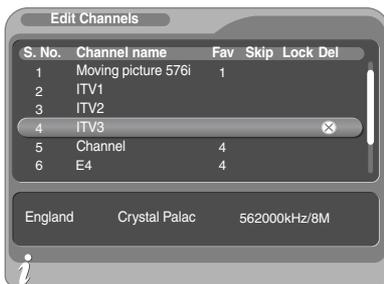
- 3 Press [SETUP] to exit.
 - Once you turn off the unit, Pincode will be required to view the locked channels.
 - To set the Pincode, refer to “Pincode Setting for Adult Lock” on page 33.

Delete Channels

DVB

You can delete the DVB channels from the memorised DVB channels.

- 1 Follow steps 1 to 2 in “Edit Channels (DVB)” on page 29.
- 2 Select the DVB channel you want to delete using [▲ / ▼], then press [BLUE].



- “” will appear.
- Press [BLUE] to cancel. “” will disappear.

- 3 Press [SETUP] to exit.
 - The channel has been deleted from the “Edit Channels” menu.

Channel Move

DVB

You can change the order of the DVB channels when you use [PROG. ^ / v] by swapping positions of two channels.

- 1 Follow steps 1 to 2 in “Edit Channels (DVB)” on page 29.
- 2 Select the DVB channel of which you want to change the position using [▲ / ▼], then press [ENTER/OK].
- 3 Select the channel you want to swap the position with using [▲ / ▼], then press [ENTER/OK].
 - The two channels swap positions.
- 4 Press [SETUP] to exit.

Edit Channel Names

DVB

You can edit the DVB channel names as you want.

- 1 Follow steps 1 to 2 in “Edit Channels (DVB)” on page 29.
- 2 Select the DVB channel of which you want to edit the name to using [▲ / ▼], press [RED].
 - Name editing display will appear.



- 3 Edit the name using [the Number buttons].

- Press [the Number buttons] repeatedly until the desired letter appears.
- Press [◀ / ▶] to move the cursor left or right.
- Press [RED] to select alphabet or numbers.
- Press [GREEN] to select capital or lower case letters.
- Press [YELLOW] to move the letter on the cursor to the right.
- Press [BLUE] to delete the letter on the cursor, and move the cursor to the left.

- 4 After completion, press [ENTER/OK].

- 5 Press [SETUP] to exit.

Note

- You can enter up to 19 letters.