

TOSHIBA



DVD VIDEO PLAYER / VIDEO CASSETTE RECORDER **SD-V296KU**

OWNER'S MANUAL



Owner's Record

The model number and serial number are on the back of your product. Record these numbers in the spaces below. Refer to these numbers whenever you communicate with your Toshiba dealer about this product.

Model number:

Serial number:

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Precautions

Setup

VCR Functions

DVD Functions



Information



Español



PRECAUTIONS

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

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
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 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.

The caution marking is located on the rear of the cabinet.

Laser Safety

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible 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.

FCC WARNING- This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

RADIO-TV INTERFERENCE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1) Reorient or relocate the receiving antenna.
- 2) Increase the separation between the equipment and receiver.
- 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4) Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCs ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

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.

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!!!

- Used up batteries do not belong in the dust bin.
- You can dispose of them at a collection point for used up batteries or special waste. Contact your council for details.



IMPORTANT SAFETY INSTRUCTIONS

This unit has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use and servicing. This unit is fully transistorized and does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus and disconnect the antenna or cable system during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Do not overload wall outlets; extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
16. Never expose the apparatus to dripping or splashing or place items such as vases, aquariums, any other item filled with liquid, or candles on top of the unit.
17. Keep your fingers well clear of the disc tray as it is closing. Neglecting to do so may cause serious personal injury.
18. Do not place anything on top of this unit.

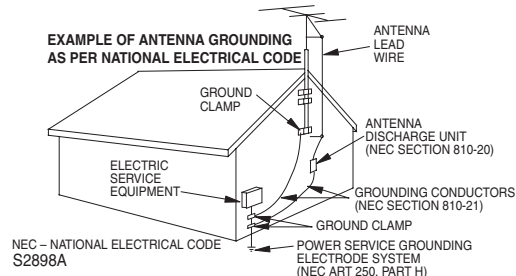


19. Do not place the apparatus on amplifiers or equipment that may produce heat.
20. Never block or cover the slots or openings in the unit. Never place the unit:
 - on a bed, sofa, rug, or similar surface;
 - too close to drapes, curtains, or walls; or
 - in a confined space such as a bookcase, built-in cabinet, or any other place with poor ventilation.
 The slots and openings are provided to protect the unit from overheating and to help maintain reliable operation.
21. Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and apparatus malfunction.
22. If the apparatus should emit smoke or an unusual odor, immediately disconnect the power cord from the wall outlet. Wait until the smoke or smell stops, then ask your dealer for a check and repair. Neglecting to do so may cause fire.
23. During thunderstorms, do not touch the connecting cables or the apparatus.
- 24.



DANGER: RISK OF SERIOUS PERSONAL INJURY OR DEATH!

- Use extreme care to make sure you are never in a position where your body (or any item you are in contact with, such as a ladder or screwdriver) can accidentally touch overhead power lines. Never locate the antenna near overhead power lines or other electrical circuits.
 - Never attempt to install any of the following during lightning activity: a) an antenna system; or b) cables, wires, or any home theater component connected to an antenna or phone system.
25. Always make sure the antenna system is properly grounded to provide adequate protection against voltage surges and built-up static charges (see Section 810 of the National Electric Code).



Do not place the unit on the furniture that is capable of being tilted by a child and an adult leaning, pulling, standing or climbing on it. A falling unit can cause serious injury or even death.

Installation Location

For safety and optimum performance of this unit:

- Install the unit in a horizontal and stable position. Do not place anything directly on top of the unit. Do not place the unit directly on top of the TV.
- Shield it from direct sunlight and keep it away from devices of intense heat. Avoid dusty or humid places. Avoid places with insufficient ventilation for proper 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 power cord with wet hands.
- Do not pull on the power cord when disconnecting it from AC outlet. Grasp it by the plug.
- If, by accident, water is spilled on this unit, unplug the power cord immediately and take the unit to our Authorized Service Center for servicing.

Moisture Condensation Warning

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

About Copyright

The unauthorized recording, use, distribution, or revision of television programs, videotapes, DVDs and other materials, is prohibited under the copyright laws of the United States and other countries, and may subject you to civil and/or criminal liability.

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

Notice for Progressive Scan Output

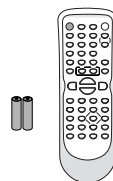
Consumers should note that not all high definition television sets are fully compatible with this product and may cause artifacts to be displayed in the picture. In case of picture problems with 480 progressive scan output, it is recommended that the user switch the connection to the "standard definition"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

Auto Power Off and Screen Saver Function (DVD Only)

If the player is left with no activity for more than 5 minutes, the screen saver will be activated, and if it is left for another 25 minutes, the unit switches from DVD to VCR mode automatically.

Supplied Accessories

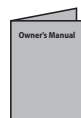
Remote control with two AA batteries



RCA Audio/Video cables



Owner's Manual



Quick Start Guide



Return Stop Sheet



Symbols Used in this Manual

The following symbols appear in some headings in this manual.



: Description refers to video cassette tapes.



: Description refers to playback of DVD-Video.



: Description refers to playback of Audio CDs.



: Description refers to playback of JPEG files.

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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 Rights Reserved.

Maintenance

SERVICING

- Please refer to relevant topics on the "Troubleshooting" on page 27 before returning the unit.
- If this unit becomes inoperative, do not try to correct the problem by yourself. There are no user-serviceable parts inside. Turn off, unplug the power plug, and please call our help line to locate an Authorized Service Center.

CLEANING THE CABINET

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

CLEANING DISCS

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center to out. Do not wipe in a circular motion.
- Do not use solvents such as benzine, thinner, commercially available cleaners, detergent, abrasive cleaning agents or antistatic spray intended for analog records.

CLEANING THE DISC LENS

- If this unit still does not perform properly although you refer to the relevant sections and to "Troubleshooting" in this Owner's Manual, the laser optical pickup unit may be dirty. Consult your dealer or an Authorized Service Center for inspection and cleaning of the laser optical pickup unit.

DISC HANDLING

- When you handle a disc hold it by its edge and try not to touch the surface of the disc.
- Always store a disc in its protective case when it is not used.

AUTO HEAD CLEANING

- Automatically cleans video heads as you insert or remove a cassette tape, so you can see a clear picture.
 - Playback picture may become blurred or interrupted while the TV program reception is clear. Dirt accumulated on the video heads after a long period of use, or the usage of rental or worn cassette tapes can cause this problem. If a streaky or snowy picture appears during playback, the video heads in your 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 call our toll free customer support line found on the cover of this manual to locate an authorized service center.

Note:

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

Note to CATV system installer:

- This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electrical Code, which provides guidelines for proper grounding - in particular, specifying that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as possible.

Table of Contents

PRECAUTIONS

Laser Safety.....	2
IMPORTANT SAFETY INSTRUCTIONS	3
Installation Location	4
Avoid the Hazards of Electrical Shock and Fire	4
Moisture Condensation Warning.....	4
About Copyright	4
Notice for Progressive Scan Output	4
Auto Power Off and Screen Saver Function (DVD Only)	4
Supplied Accessories.....	4
Symbols Used in this Manual	4
Maintenance.....	5

SETUP

Choosing a Disc / Cassette Tape	6
Playable Media.....	6
Unplayable Media.....	6
Index to Parts and Controls.....	7
Front Panel.....	7
Rear Panel.....	7
Remote Control	8
Installing the Batteries for the Remote Control	8
DVD Display Panel.....	9
VCR Display Panel.....	9
Selecting DVD or VCR Operation	9
Connections	10
Connection to RF Modulator (Not Supplied)	10
Connection to a TV.....	10
Connection to an Audio System	11
Connection to an External Tuner.....	11
Preparation for Use	12
Turning on Unit for the First Time	12
Clock Setting	12

VCR FUNCTIONS

Playback	13
When You Playback a Cassette Tape Recorded in Hi-Fi Stereo.....	13
Other Operations.....	13
Index Search	13
Time Search	13
Auto Repeat	14
Recording.....	14
Recording & One-touch Timer Recording (OTR)	14
Timer Recording.....	14
Notes for Timer Recording & One-touch Timer Recording (OTR).....	15
Satellite Link	16
Copying a Cassette Tape	16
DVD to Cassette Tape Duplication	17

DVD FUNCTIONS

Playback	17
On-Screen Display	18
JPEG Playback	19
Search Functions	20
Using Track Search.....	20
Using Title / Chapter Search	20
Using Time Search.....	20
Marker Setting	20
Repeat / Random / Programmed Playback	21
Repeat Playback	21
Repeat A-B Playback.....	21
Random Playback.....	21
Programmed Playback.....	21
Special Settings	22
Subtitle Language	22
Audio Language.....	22
Camera Angles.....	22
Black Level Setting	22
Stereo Sound Mode.....	22
Virtual Surround	22
DVD Setting	23
LANGUAGE Setting	23
DISPLAY Setting	24
AUDIO Setting.....	24
PARENTAL Setting	25
OTHERS Setting	26
Reset to the Default Setting (Except for PARENTAL Setting)	26





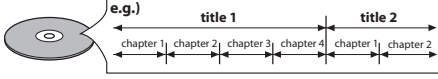






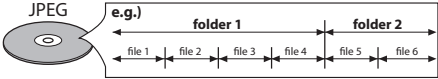


INFORMATION

Troubleshooting.....	27
Specifications	28
Language Code List	28
LIMITED WARRANTY.....	29
Español	32

SETUP

Choosing a Disc / Cassette Tape

Playable Media

Type of media	Mark (logo)	Region code	Recorded signals	Media size	Tape speed and disc types
cassette tape		—	analog video	tape width 1/2 inches (12.65mm)	SP: 1-5/16 inch/sec. (33.40 mm/sec.) SLP: 7/16 inch/sec. (11.12 mm/sec.)
DVD-video *1, 2, 3, 5, 8		 or 	digital video (MPEG2)	5 inches (12 cm) or 3 inches (8 cm)	
DVD-RW DVD-R *1, 3, 4, 5, 6, 7, 8, 9	 	—			
DVD+RW DVD+R *1, 3, 4, 5, 7, 8	 	—			
Audio CD *3, 5, 8		—	digital audio or JPEG	5 inches (12 cm) or 3 inches (8 cm)	 
CD-RW CD-R *3, 4, 5, 7, 8	 	—			

 is a trademark of DVD Format/Logo Licensing Corporation.

If you cannot play back a disc which bears one of the marks above, check the following.

- *1: This unit conforms to the NTSC color system. Discs recorded in other color systems such as PAL cannot be played back.
 - *2: Certain DVD-video does not operate as described in this manual due to the intentions of the disc's producers.
 - *3: Scratched or stained discs may not be played back.
 - *4: Some discs cannot be played back because of incompatible recording conditions, characteristics of the recorder or special properties of discs.
 - *5: You can play back discs which bear the marks above. If you use nonstandardized discs, this unit may not play them back. Even if they are played back, the sound or video quality will be compromised.
 - *6: You may play back the unfinalized DVD-RW/-R recorded in the video format on our brand's DVD recorder. However, depending on the recording status of a disc, the disc may not be played back at all or normally (the picture or sound may not be smooth, etc.). In this case, you need to finalize the disc with the DVD recorder. Refer to the manual accompanying the DVD recorder.
 - *7: If the recorded portion of the disc is too small (less than 2-3/16 inches (55 mm) across), it may not play back properly.
 - *8: Do not glue paper or put stickers on to the disc. These may damage the disc, and the unit may not read it correctly.
 - *9: Discs recorded in the VR (video recording) format cannot be played back.
- 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 assure that this DVD player will successfully play every disc bearing the DVD and CD logos. If you happen to experience any difficulty playing a DVD and/or CD disc on this DVD player, please contact Toshiba Customer Service.

Unplayable Media

NEVER play the following discs as malfunction may result!

DVD-RAM, DVD-audio, CD-i, photo CD, DVD with region codes other than 1 or ALL, DVD-ROM for personal computers, CD-ROM for personal computers, DVD-RW/-R in VR mode, DVD or CD with MP3/WMA files, HD DVD, Blu-ray Disc

On the following disc, the sound MAY NOT be heard.

super audio CD

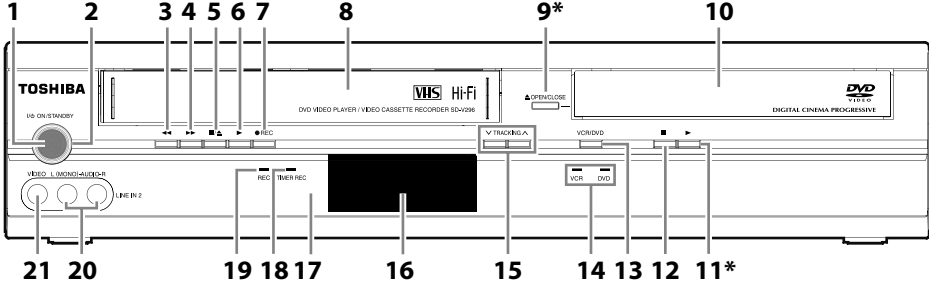
Note:

- Only the sound recorded on the normal CD layer can be delivered. The sound recorded on the high density super audio CD layer cannot be delivered.

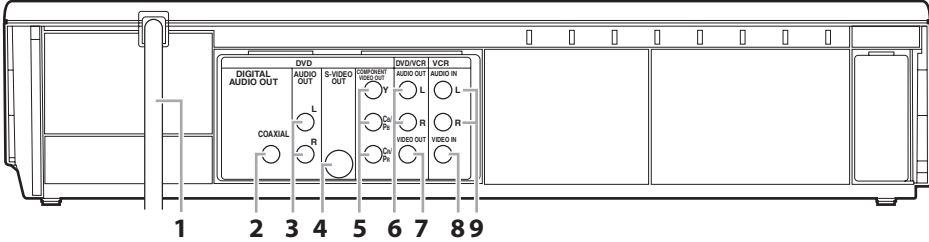
Any other discs without compatibility indications

Index to Parts and Controls

Front Panel

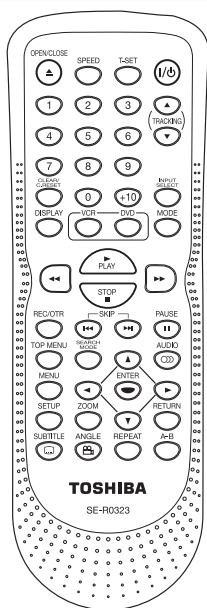
- 
- (*) The unit can also be turned on by pressing these buttons or by inserting a cassette tape.
1. **I/O ON/STANDBY button**
Press to turn on and off the unit.
 2. **POWER ON indicator**
This indicator will light up when the power is on and turn off when the power is off.
 3. **◀◀ (REW) button (VCR only)**
Press to rewind the cassette tape, or to view the picture rapidly in reverse during playback (rewind search).
 4. **▶▶ (FWD) button (VCR only)**
Press to rapidly advance the cassette tape, or to view the picture rapidly in forward during playback (forward search).
 5. **■ / ▲ (STOP/EJECT) button (VCR only)**
■ (STOP) button
Press to stop cassette tape playback or recording.
Press to stop the proceeding timer recording in VCR.
▲ (EJECT) button
When the unit is in stop mode, press to remove the cassette tape from the cassette compartment.
 6. **▶ (PLAY) button (VCR only)**
Press to start playback.
 7. **● REC button (VCR only)**
Press once to start a recording. Press repeatedly to start the one-touch timer recording.
 8. **Cassette compartment (VCR only)**
Insert a cassette tape here.
 9. **▲ OPEN/CLOSE button (DVD only)***
Press to open or close the disc tray.
 10. **Disc tray (DVD only)**
Place a disc when it is open.
 11. **▶ (PLAY) button (DVD only)***
Press to start or resume playback.
 12. **■ (STOP) button (DVD only)**
Press to stop playback or recording.
Press to stop the proceeding timer recording in DVD.
 13. **VCR/DVD button**
Press to select the component you wish to operate.
 14. **VCR/DVD indicator**
Lights up when the VCR/DVD output mode is selected.
 15. **TRACKING ∨ / ∧ buttons (VCR only)**
Press to adjust the tracking during playback or in slow motion of the cassette tape.
While playback is in still mode, you can stabilize the picture.
 16. **Display**
Refer to "DVD Display Panel" and "VCR Display Panel" on page 9.
 17. **Remote control sensor**
Receive signals from your remote control so that you can control the unit from a distance.
 18. **TIMER REC indicator (VCR only)**
Lights up when a timer recording or OTR (One-touch Timer Recording) has been set.
Blinks when a timer recording or OTR (One-touch Timer Recording) has been finished or if the unit could not complete the recording due to some error.
 19. **REC indicator (VCR only)**
Lights up during a recording, OTR (One-touch Timer Recording) or timer recording.
Blinks when a recording is paused.
 20. **AUDIO input jacks (L2) (VCR only)**
Use to connect external device with an RCA audio cable.
 21. **VIDEO input jack (L2) (VCR only)**
Use to connect external device with an RCA video cable.

Rear Panel

- 
1. **AC Power Cord**
Connect to a standard AC outlet to supply power to this unit.
 2. **COAXIAL DIGITAL AUDIO OUT jack (DVD only)**
Use to connect an AV receiver, Dolby Digital decoder or other device with a coaxial digital input jack with a digital coaxial cable.
 3. **AUDIO OUT jacks (DVD only)**
Use to connect a TV monitor, AV receiver or other device with an RCA audio cable.
 4. **S-VIDEO OUT jack (DVD only)**
Use to connect the S-video input of a TV monitor, AV receiver or other device with an S-video cable.
 5. **COMPONENT VIDEO OUT jacks (DVD only)**
Use to connect a TV monitor with component video inputs with a component video cable.
 6. **AUDIO OUT jacks**
Use to connect a TV monitor, AV receiver or other device with an RCA audio cable.
 7. **VIDEO OUT jack**
Use to connect a TV monitor, AV receiver or other device with an RCA video cable.
 8. **VIDEO IN jack (L1) (VCR only)**
Use to connect external device with an RCA video cable.
 9. **AUDIO IN jacks (L1) (VCR only)**
Use to connect external device with an RCA audio cable.
- Note:**

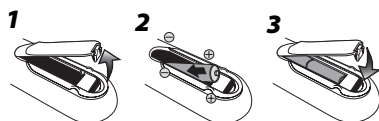
 - Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Remote Control



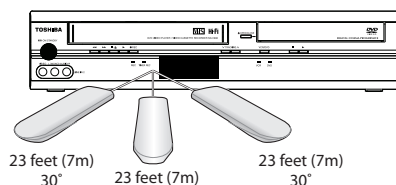
Installing the Batteries for the Remote Control

Install two AA batteries (supplied) matching the polarity indicated inside battery compartment of the remote control.



Keep in mind the following when using the remote control:

- Make sure that there are no obstacles between the remote control and the infrared sensor window on the unit.
- The maximum operable ranges from the unit are as follows.
 - **Line of sight:** approx. 23 feet (7m)
 - **Either side of center:** approx. 23 feet (7m) within 30°

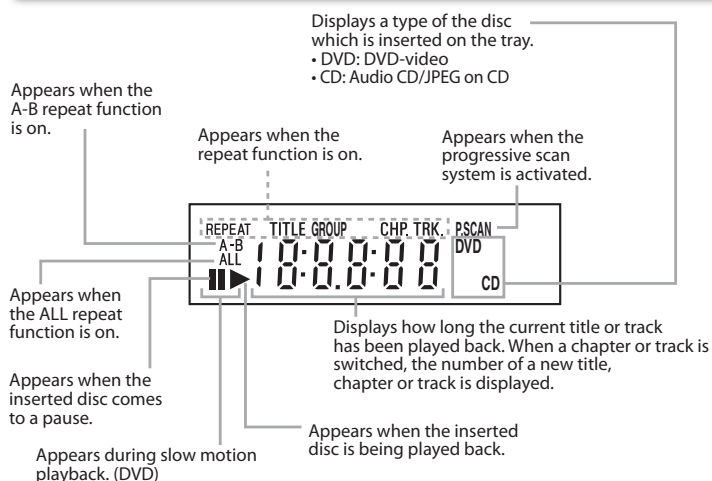


Note:

- Do not mix alkaline and manganese batteries.
- Do not mix old and new batteries.
- Always remove batteries from remote control if they are dead or if the remote control is not to be used for an extended period of time. This will prevent battery acid from leaking into the battery compartment.
- If you turn off this unit, [OPEN/CLOSE ▲] on the remote control is not available. Be sure to use [OPEN/CLOSE ▲] or [■/▲ (STOP/EJECT)] on the unit.

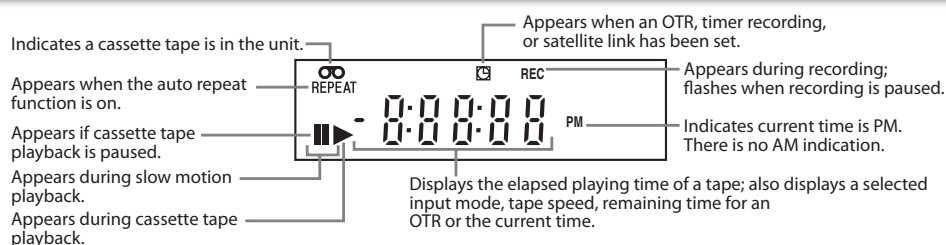
Media	DVD mode		VCR mode
	DVD	CD PEG	VHS
Button (Alphabetical order)			
I/O	• To turn the unit on/off.	• To turn the unit on/off.	• To turn the unit on/off.
1 2 3 4 5 6 7 8 9 0 +10	• To select chapter or title directly.	• To select track or file directly.	—
◀ ▶	• To search forward/backward through a disc. • To begin slow forward/reverse playback in the pause mode.	• To search forward/backward through a disc. (CD)	• To forward/backward a tape. • To begin slow forward playback in the pause mode.
A-B	• To repeat between your chosen point of A and B.	• To repeat between your chosen point of A and B. (CD)	—
ANGLE	• To select camera angles on a disc.	• To rotate a picture 90 degrees clockwise. (JPEG)	—
AUDIO	• To select audio languages on a disc.	• To select "STEREO", "L-ch" or "R-ch". (CD)	• To select "HIFI" or "MONO" mode during playback. (Hi-Fi tapes only)
CLEAR	• To clear the markers. • To clear numbers entered incorrectly. • To cancel the point A for A-B repeat setting.	• To clear the markers. (CD) • To remove status number in program input. • To clear numbers entered incorrectly. • To cancel the point A for A-B repeat setting. (CD)	• To exit the VCR menu. • To reset the tape counter.
DISPLAY	• To display the current disc mode.	• To display the current disc mode.	• To display the current time, tape counter, "DISC", "L1" or "L2".
DVD	• To select DVD output mode. • To activate DVD mode.	• To select the DVD output mode. • To activate DVD mode.	—
ENTER	• To move the cursor and determine its position.	• To move the cursor and determine its position. • To skip files. (JPEG)	• To select an item on the VCR menu. • To advance to the next VCR menu. • To go back one step during clock and timer programming.
INPUT SELECT	—	—	• To select input "DISC", "L1" or "L2".
MENU	• To call up the disc menu on a disc.	• To call up the file list. (JPEG)	—
MODE	• To set black level on/off. • To set virtual surround on/off.	• To program the playing order or play randomly. • To set virtual surround on/off. (CD) • To activate the Slide Show mode. (JPEG)	—
OPEN/CLOSE	• To open or close the disc tray.	• To open or close the disc tray.	• To eject the cassette tape from the cassette compartment.
PAUSE	• To pause disc playback. • To advance playback one frame at a time.	• To pause disc playback.	• To pause tape playback or recording. • To advance playback one frame at a time.
PLAY	• To begin disc playback.	• To begin disc playback.	• To begin tape playback.
REC/OTR	—	—	• To start recording or one-touch timer recording (OTR).
REPEAT	• To play back a chapter or title repeatedly.	• To play back a track or disc repeatedly. (CD) • To play back a file, folder or disc repeatedly. (JPEG)	• To select the repeat mode on/off.
RETURN	• To return to the previous operation in menu.	• To return to the previous operation in menu.	—
SEARCH	• To search chapter, title or time. • To set or search the markers.	• To search track. • To search time. (CD) • To set or search the markers. (CD)	• To call up the index or time search menu.
SETUP	• To call up the DVD setup menu.	• To call up the DVD setup menu.	• To call up the VCR menu.
SKIP	• To skip chapters or titles.	• To skip tracks or files.	—
SPEED	—	—	• To select the recording speed.
STOP	• To stop playback.	• To stop playback.	• To stop playback or recording.
SUBTITLE	• To select subtitles on a disc.	—	—
T-SET	—	—	• To put the VCR into standby mode for a timer recording.
TOP MENU	• To call up the top menu on a disc.	• To return to the top file of the highest hierarchy in the program and file list. (JPEG)	—
TRACKING	—	—	• To adjust the tracking manually during playback.
VCR	—	—	• To select the VCR output mode. • To activate VCR mode.
ZOOM	• To magnify part of a picture. (2x/4x)	• To magnify part of a picture. (2x) (JPEG)	—

DVD Display Panel



	No disc inserted or cannot read
	Tray open
	Tray closed
	Loading the Disc

VCR Display Panel



Selecting DVD or VCR Operation

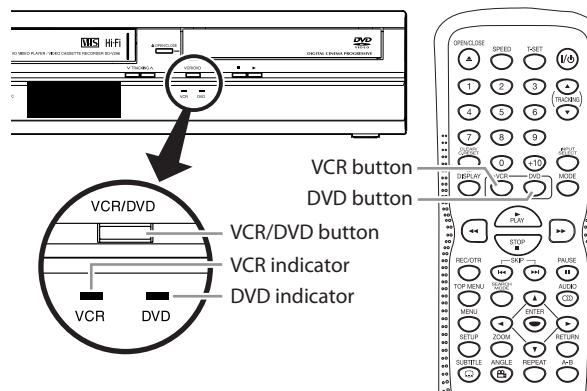
You must first select either DVD or VCR operation.

VCR MODE

Press **[VCR]** on the remote control. (Verify that the VCR indicator is lit.)

DVD MODE

Press **[DVD]** on the remote control. (Verify that the DVD indicator is lit.)



Precautions

Setup

VCR Functions

DVD Functions

Information

Español

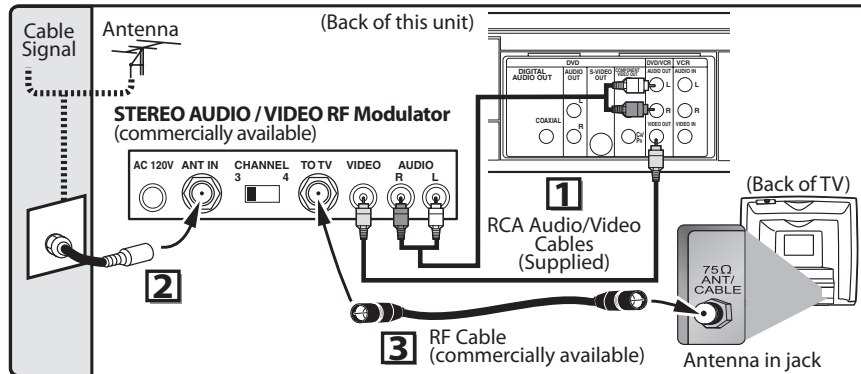
Connections

If your TV has AUDIO/VIDEO input jacks, see the section "Connection to a TV" on this page. If not, it is still possible to connect this unit to your TV by using a STEREO AUDIO/VIDEO RF modulator (commercially available). In this case, follow the instructions below.

Connection to RF Modulator (Not Supplied)

- 1) Disconnect the power cords of the devices from the AC outlet.
- 2) Connect the AUDIO/VIDEO output jacks of this unit to the AUDIO / VIDEO input jacks of your RF modulator by RCA Audio/Video cables.
- 3) The antenna input jack of your TV may have been already occupied. If so, disconnect the RF cable from your TV and then connect the RF cable to your RF modulator (usually marked "ANT IN").
- 4) Connect your RF modulator to your TV by another RF cable.
- 5) Set your RF modulator's channel 3/4 switch to either 3 or 4, whichever the TV channel is least used in your area. If your RF modulator has a modulator/antenna switch, set it according to your RF modulator's manual.
- 6) Plug in the power cords of the devices to the AC outlet.
- 7) Turn on your TV and choose the same channel as you set the RF modulator's channel 3/4 switch to. For more details, follow the instructions supplied with the RF modulator.

If your TV does not have AUDIO / VIDEO input jack.



Note:

- The quality of picture may become poor if the unit is connected to an RF modulator.

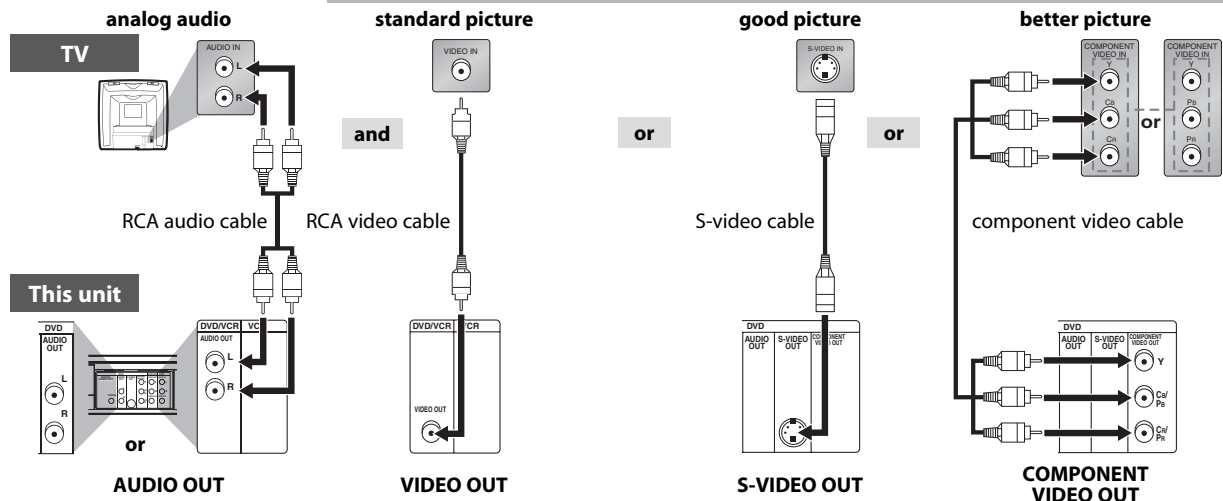
Connection to a TV

If your TV does not have AUDIO/VIDEO input jack, see the section "Connecting to RF Modulator (Not Supplied)" on this page.

VCR and Basic DVD Connection

Available for DVD only

DVD's picture quality



Supplied cables used in this connection are as follows:

- RCA audio cable (L/R) x 1
 - RCA video cable x 1
- Please purchase the rest of the necessary cables at your local store.

Note:

- Connect this unit directly to your TV. If RCA audio/video cables are connected to a VCR, pictures may be distorted due to the copy protection system.
- DIGITAL AUDIO OUT (COAXIAL), DVD AUDIO OUT, S-VIDEO OUT and COMPONENT VIDEO OUT jacks are only useful in DVD mode.

After connecting to your TV:

Press the input selector button (usually TV/VIDEO, INPUT or AUX) on your TV to switch an appropriate external input channel (usually near channel 0) for viewing the picture from this unit. If the picture does not appear, also refer to the manual accompanying your TV.

If your TV is compatible with 525 (480) progressive scanning, and you want to enjoy that high quality picture for DVD playing:

You must select the connection COMPONENT VIDEO OUT above and progressive scanning mode. To set the mode, set "PROGRESSIVE" to "ON" in "DISPLAY" menu, so that the "P. SCAN" on the front panel display appears. Refer to pages 23-24 for more details.

If your TV is not compatible with progressive scanning:

Use this unit in interlace mode and set "PROGRESSIVE" to "OFF" either in "DISPLAY" menu or by pressing and holding [▶ (PLAY)] on the front of the unit on the DVD side for more than 5 seconds, so that the "P. SCAN" on the front panel display disappears.

Connection to an Audio System

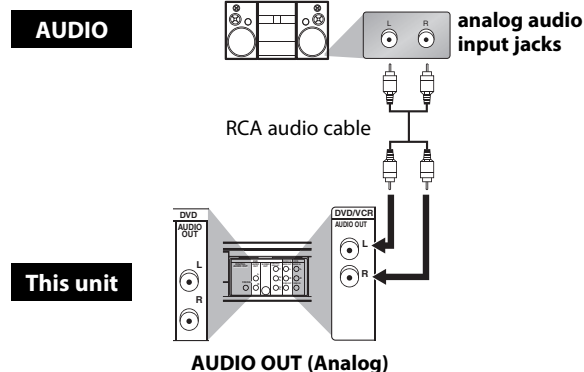
If using this DVD player to play back a DVD in a Dolby Digital Multi-channel surround or DTS surround format, the DVD player outputs a Dolby Digital or DTS data stream from its COAXIAL DIGITAL AUDIO OUT jack.

By hooking up the player to a Dolby Digital or DTS decoder, you can enjoy more convincing, realistic ambience with powerful and high-quality surrounding sound of a professional standard which can be heard in movie theaters.

Use a commercially available digital audio coaxial cable for the audio connections.

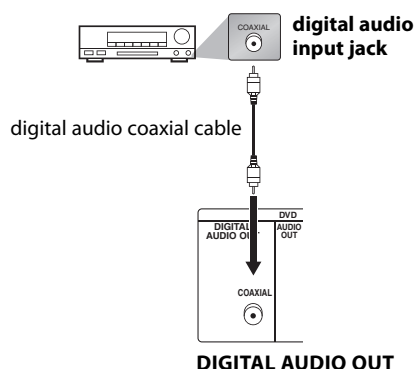
Method 1

Stereo system



Method 2

AV amplifier with a built in decoder (AV control center), Dolby Digital decoder, DTS decoder, MD deck or DAT deck



• Method 1 DVD Player + Stereo system

• Method 2 DVD Player + AV amplifier with a built in decoder (AV control center), Dolby Digital decoder, DTS decoder, MD deck or DAT deck

Supplied cables used in this connection are as follows:

- RCA audio cable (L/R) x 1
- Please purchase the rest of the necessary cables at your local store.

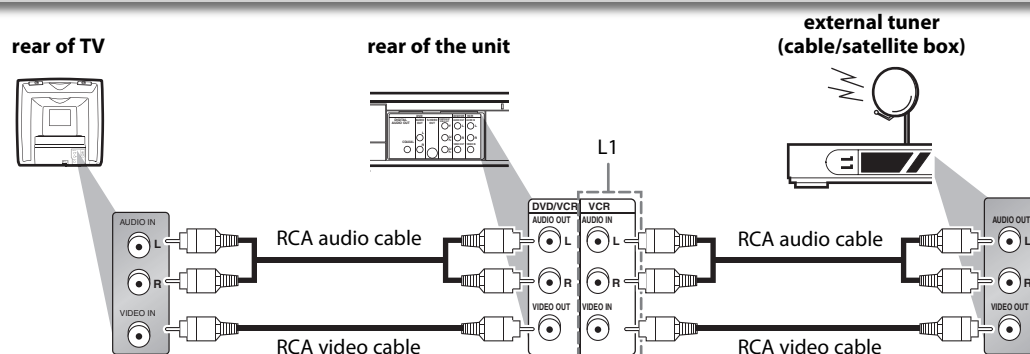
Note:

- Be sure to turn off the power of all components in the system before connecting another component.
- Refer to the Instruction Manuals for your TV, stereo system and any other components to be connected to the DVD player.

Note (for method 2 only):

- When using an AV amplifier with a built in decoder (AV control center), Dolby Digital, or DTS decoder as shown in the Method 2, set "DOLBY DIGITAL" or "DTS" to "BITSTREAM" accordingly for audio output in the setup mode (refer to pages 23-24). Set it to "PCM" or "OFF" for the decoder that is not used currently. Playing back a DVD using incorrect settings may generate noise distortion, and may also damage the speakers.
- The audio source on a disc in a Dolby Digital Multi-channel surround format cannot be recorded as digital sound by an MD deck or DAT deck.
- Set "Dolby Digital" to "PCM" and "DTS" to "OFF" for audio output in the setup mode for connecting to an MD deck or DAT deck (refer to pages 23-24).
- Harsh noise that could harm your ears or the speakers is generated when a DVD recorded in DTS is played while using a decoder, etc., that is not DTS-compatible.
- When playing a copyright-protected 96kHz PCM DVD, the digital sound will be down sampled at 48kHz, even if you set "DOWN SAMPLING" to "OFF" (refer to pages 23-24).

Connection to an External Tuner



Using the unit with an external tuner

1. Connect RCA audio and video cables to the audio and video output jacks of your external tuner and to the audio and video input jacks at the rear of the unit.
2. Press **[INPUT SELECT]** on your remote control until "L1" is displayed on your TV.

Note:

- Your cable/satellite box can be accessed only by connecting it to L1 (rear panel jacks) of the unit. Even if the unit is turned off, the signal from the external tuner is output to the TV through the unit.

L1: Rear panel terminals
L2: Front panel terminals

Refer to "Front Panel" and "Rear Panel" on page 7 for more information.

Supplied cables used in this connection are as follows:

- RCA audio cable (L/R) x 1
 - RCA video cable x 1
- Please purchase the rest of the necessary cables at your local store.

Special note when connected to an external tuner:

- Only the active channel on your external tuner may be viewed or recorded when connected to this unit. Do not change channels during a recording. You cannot record on channel while viewing another.
- Always use the LEFT (white) audio output jack from the external tuner to ensure that the audio is mixed down correctly to mono for this unit. If you use the RIGHT (red) jack, you will record the right audio only.

EN

- 11 -

Preparation for Use

Turning on Unit for the First Time

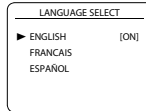
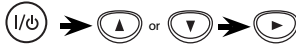


Please note: most instructions in this manual refer to remote control use.

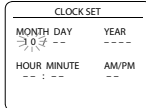
- 1 Be sure your TV's input is set to VIDEO. (Name may vary with TV manufacturer. See your TV manual for details.)



- 2 Select your on-screen language. Then press [▶] to continue.

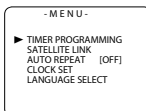


- 3 When "CLOCK SET" menu appears, go to step 2 in "Clock Setting" on this page.

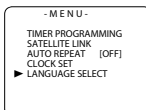


To Change the Selected On-screen Language

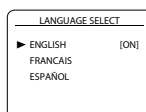
- 1 Press [SETUP] until the main menu appears.



- 2 Select "LANGUAGE SELECT". Then press [▶] to go to next step.



- 3 Select "ENGLISH", "FRANCAIS" or "ESPAÑOL". Then press [SETUP].



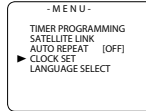
Note:

- If you accidentally select Spanish or French and need English: Press [SETUP] and choose "SELEC. IDIOMA" or "SELECTION LANGUE". Press [▶] and select "ENGLISH". Finally, press [SETUP].

Clock Setting

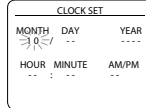


- 1 Press [SETUP] and select "CLOCK SET". Then press [▶] to go to next step.

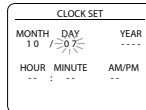


- If the clock is not set, "CLOCK SET" menu appears when you press [SETUP]. In this case, go to step 2.

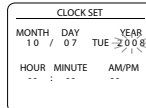
- 2 Select the current month. Then press [▶] to go to next step.



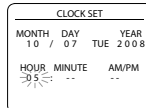
- 3 Select the current day. Then press [▶] to go to next step.



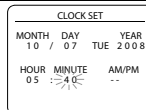
- 4 Select the current year. Then press [▶] to go to next step.



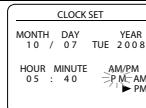
- 5 Select the current hour. Then press [▶] to go to next step.



- 6 Select the current minute. Then press [▶] to go to next step.



- 7 Select "AM" or "PM".



- 8 Press [SETUP] to exit "CLOCK SET" menu.



Note:

- To go back, press [◀] during steps 2 to 7.
- Clock setting will be lost after a power failure, or this unit has been unplugged for more than 30 seconds.

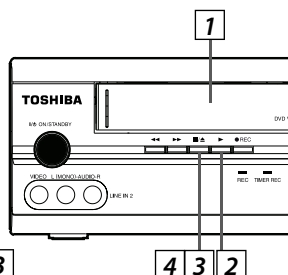
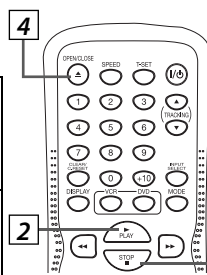
VCR FUNCTIONS

Playback

Before: Turn on the TV.



- 1 Insert a cassette tape into this unit.
- 2 To start playback
- 3 To stop playback
- 4 To eject the cassette tape



Note:

- When a cassette tape without a record tab is inserted, the unit will start playback automatically.
- Tracking will be automatically adjusted upon playback. To adjust the tracking manually, use [TRACKING ▲ / ▼] ([TRACKING ▼ / ▲] on this unit) during playback.

When You Playback a Cassette Tape Recorded in Hi-Fi Stereo

Press [AUDIO] on the remote control, then select "HIFI" or "MONO".

- During playing back non Hi-Fi tapes, [AUDIO] on the remote control is not available.

Your selection	HIFI		MONO
Type of recorded tape	L-channel	R-channel	
Hi-Fi tapes recorded in Hi-Fi stereo	L	R	L+R

Other Operations

To cue or review picture during playback (picture search)

Use [FWD] or [REW] ([FWD] or [REW]) on this unit.

- Press it again and the unit will search in super high speed. (in the SLP mode only)

To freeze the picture on TV screen during playback (still mode)

Press [PAUSE]. Each time you press the button, the picture will be forwarded by one frame.

- If the picture begins to vibrate vertically in the still mode, stabilize the picture by using [TRACKING ▲ / ▼] ([TRACKING ▼ / ▲] on this unit).
- If the picture is distorted or rolling vertically, adjust the vertical hold control on your TV if equipped.

To reset the cassette tape counter (counter reset)

Press [DISPLAY] to display the cassette tape counter on the TV.

Press [CLEAR/C.RESET] to reset the counter to "0:00:00".

To play back in slow motion (slow mode)

Press [PAUSE] during playback, then press [FWD] ([FWD]) on this unit.

- If you want to change speed in slow mode, press [FWD] or [REW] ([FWD] or [REW]) on this unit, slow speed will be more fast or slow mode.
- If the noise bars appear on the TV screen, you can reduce it by using [TRACKING ▲ / ▼] ([TRACKING ▼ / ▲] on this unit).

To rewind the cassette tape automatically (auto rewind)

When a cassette tape reaches its end during playback, fast-forward or recording (except timer recording and one-touch timer recording), the cassette tape will automatically rewind to the beginning. After rewinding finishes, the unit will eject the cassette tape.

Note:

- To prevent damage to the cassette tape, still or slow mode will automatically stop after 5 minutes.
- To return to playback from the picture search, still or slow mode, press [PLAY].

Index Search

To search by index mark. The index mark will be made automatically at the beginning of each recording.

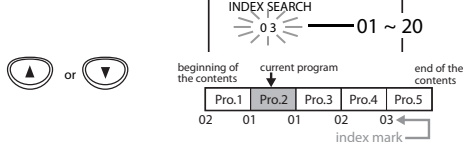


• Insert a cassette tape into this unit.

- 1 Press [SEARCH MODE] once.



- 2 To select index mark



- 3 To rewind



To fast forward



- 4 When index mark is reached, playback automatically begins.



Note:

- The time gap between index marks should be more than 1 minute for SP mode, 2 minutes for LP mode and 3 minutes for SLP mode.

Time Search

To search by length of time.



• Insert a cassette tape into this unit.

- 1 Press [SEARCH MODE] twice.



- 2 Select the desired length of time for fast forwarding or rewinding.



0:01 ~ 9:59

(1 minute ~ 9 hours and 59 minutes)

- 3 To rewind



To fast forward



- 4 When selected length of time is reached, playback will start automatically.



Note for Index Search & Time Search:

- These functions are not available during recording.
- Press [STOP] to stop the search.
- If a cassette tape ends during a search, your search will be canceled and the cassette tape will rewind to the beginning.

Auto Repeat

The unit will automatically rewind the cassette tape when it has reached the end and will automatically start playback unless you press [STOP ■] or you turn off the unit.



- 1 Press [SETUP], and choose "AUTO REPEAT".



- M E N U -
TIMER PROGRAMMING
SATELLITE LINK [OFF]
▶ AUTO REPEAT [OFF]
CLOCK SET
LANGUAGE SELECT

- 2 Press [▶] to "AUTO REPEAT" to set "ON" or "OFF".



Press [SETUP] to exit.

- M E N U -
TIMER PROGRAMMING
SATELLITE LINK [ON]
▶ AUTO REPEAT [ON]
CLOCK SET
LANGUAGE SELECT

Note:

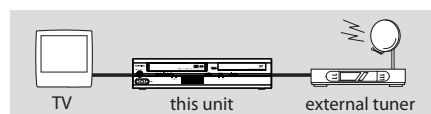
- The auto repeat function can also be set "ON" or "OFF" by pressing [REPEAT] on the remote control.
- To cancel auto repeat function, follow step 1 above. Then, press [▶] so that "OFF" appears beside "AUTO REPEAT". Press [SETUP] to exit.
- The auto repeat playback will start automatically if you select "AUTO REPEAT" to "ON" in the stop mode.

Recording

This unit has no tuner system so it cannot receive TV broadcasts without external tuner or such devices.

Note:

- You can also set to external tuner. Refer to "Satellite Link" on page 16.



Recording & One-touch Timer Recording (OTR)



- 1 Insert a recordable cassette tape.



- 2 Press [INPUT SELECT] until "L1" or "L2" is displayed on the TV screen. Select "L1" to activate rear input jacks. Select "L2" to activate front input jacks.



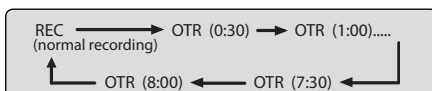
See note on the right.

- 3 Press [SPEED] to select the desired tape speed.



Tape speed	Recording / playback time		
Type of tape	T60	T120	T160
SP mode	1hour	2hours	2-2/3hours
SLP mode	3hours	6hours	8hours

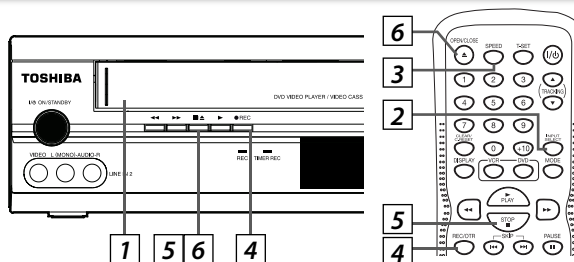
- 4 Press [REC/OTR] until desired recording time is selected.



- 5 Press [STOP ■] to stop recording.



- 6 Press [OPEN/CLOSE ▲] to eject the recorded cassette tape.



To stop recording temporarily (pause mode)

Press [PAUSE ■].

- During the recording in pause mode, 5 ■ marks appear on the TV screen. Each ■ mark represents 1 minute.
- Press it again to resume recording.
- Pause mode will be automatically canceled after 5 minutes to prevent damage to the cassette tape and the video head.

Note:

- Do not change the external tuner's channel while you are recording. You **CANNOT** watch one channel and record another at the same time.
- Connect your external tuner to the L1 (rear panel) jacks of the unit. Connect camcorders and other such devices to the L2 (front panel) jacks. Refer to page 11.

Accidental Erasure Prevention

To prevent accidental recording, remove erase-protection tab of the cassette tape. To record on it later, cover the hole with adhesive tape.

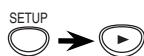


Timer Recording



- Insert a recordable cassette tape.
- Make sure to turn on the external tuner.

- 1 Press [SETUP]. Select "TIMER PROGRAMMING".



- M E N U -
TIMER PROGRAMMING
SATELLITE LINK [OFF]
▶ AUTO REPEAT [OFF]
CLOCK SET
LANGUAGE SELECT

PROG
DATE
START TIME
END TIME
L1/L2
REC SPEED

Available program number flashes.



- 2 Select an empty program number. Then press [▶] to go to next step.



PROGRAM NUMBER
DATE
START TIME
END TIME
L1/L2
REC SPEED







3 Select "ONCE", "DAILY" (Mon-Fri), or "WEEKLY".
Then press **[▶]** to go to next step.

 or  **[▶]**

PROGRAM NUMBER 1
▶ ONCE
DAILY
WEEKLY





4 Select the desired date.
Then press **[▶]** to go to next step.

 or  **[▶]**
 or  **[▶]**

ONE TIME PROGRAM
PROGRAM NUMBER 1
DATE 10/07 TUE
START TIME 07:30
END TIME 08:30
L1/L2
REC SPEED

• You can program the unit to record up to 8 programs, for up to a year in advance.

5 Select the desired starting time (hour/minute).
Then press **[▶]** to go to next step.

 or  **[▶]**
 or  **[▶]**

ONE TIME PROGRAM
PROGRAM NUMBER 1
DATE 10/07 TUE
START TIME 07:30
END TIME 08:30
L1/L2
REC SPEED


6 Select "AM" or "PM".
Then press **[▶]** to go to next step.

 or  **[▶]**

ONE TIME PROGRAM
PROGRAM NUMBER 1
DATE 10/07 TUE
START TIME 07:30 PM
END TIME 08:30
L1/L2
REC SPEED

AM PM

7 Repeat the procedure in steps 5 and 6 to set the ending time.





8 Select "L1" or "L2".
Then press **[▶]** to go to next step.

 or  **[▶]**

ONE TIME PROGRAM
PROGRAM NUMBER 1
DATE 10/07 TUE
START TIME 07:30 PM
END TIME 08:30
L1/L2
REC SPEED

L1 L2


9 Select recording speed.
Then press **[SETUP]**.

 or  **[SETUP]**

ONE TIME PROGRAM
PROGRAM NUMBER 1
DATE 10/07 TUE
START TIME 07:30 PM
END TIME 08:30
L1/L2
REC SPEED SP
L1 SP
L2 SP
SLP

• To set another program after step 9, press **[▶]**.
Then continue with step 2.

10 Press **[T-SET]** to set the timer standby mode.



• TIMER REC indicator on this unit lights up and the unit goes to the DVD mode.

Note:

- To go back one step, press **[◀]** during steps 3 to 9.
- Select "L1" to activate rear input jacks. Select "L2" to activate front input jacks.

To check, correct or cancel a timer program

- 1) Press **[T-SET]** then, **[VCR]** on the remote control.
- 2) Press **[SETUP]** to call up the main menu.
- 3) Select "TIMER PROGRAMMING" by using **[▲ / ▼]**, then press **[▶]**.
- 4) Select the program number which you want to check by using **[▲ / ▼]**. The details of the program you selected will appear on the TV screen.
 - Go to the digit you want to change by using **[◀ / ▶]**. Then, enter correct numbers by using **[▲ / ▼]**.
 - You may cancel the entire program by pressing **[◀]** while the program number blinks.
- 5) Press **[SETUP]** to exit.
- 6) Press **[T-SET]** to return to the timer standby mode.

To cancel a timer recording in progress

Press **[■/▲ (STOP/EJECT)]** on the unit.

Note:

- You cannot stop a started Timer Recording with **[STOP ■]** on the remote control.

Notes for Timer Recording & One-touch Timer Recording (OTR)

- If a cassette tape is not in the unit or does not have the erase-protection tab, TIMER REC and "📺" indicator on this unit blinks and timer recording cannot be performed. Please insert a recordable cassette tape.
- When timer recordings are set, TIMER REC and "📺" indicator on this unit lights up. To use the VCR as usual until the time for the recording, press **[T-SET]** so that TIMER REC and "📺" indicator lights off.

After an one-touch timer recording or a timer recording has been set, this unit operates as follows:

- If a cassette tape runs out before an one-touch timer recording or a timer recording is finished, the unit ejects the cassette tape. Press **[T-SET]** on the remote control or **[■/▲ (STOP/EJECT)]** on the unit, then press **[VCR]** to activate the VCR function again.
- Once the unit turns to the timer standby mode, no VCR functions are available until **[T-SET]** is pressed.
- To cancel the timer standby mode, press **[T-SET]** on the remote control or **[■/▲ (STOP/EJECT)]** on the unit, then press **[VCR]** to activate the VCR function again.

When an one-touch timer recording or a timer recording is completed...

- If auto power off for DVD has been activated and there are timer recordings on standby, the unit turns off automatically, and TIMER REC and "📺" indicator on this unit lights to indicate the unit is in the timer standby mode.
- TIMER REC and "📺" indicator on this unit flashes if there are no more timer recordings on standby.
- If auto power off for DVD has **NOT** been activated, the unit goes to the DVD mode and all the VCR functions will be unavailable. All the DVD functions are available during one-touch timer recording, timer standby mode and timer recording.
- Press **[■/▲ (STOP/EJECT)]** on this unit or **[T-SET]** on the remote control to use the VCR when the unit is turned off.
- Press **[VCR/DVD]** on this unit or **[VCR]** on the remote control to use the VCR when the unit is turned on. In case timer recording is in standby mode, press **[■/▲ (STOP/EJECT)]** on this unit or **[T-SET]** on the remote control, and then press **[VCR/DVD]** on this unit or **[VCR]** on the remote control.

If you want to use the DVD player during a timer recording or while TIMER REC and "📺" indicator on this unit is on or blinking.

- Press **[II/⏻ (ON/STANDBY)]** to turn on the unit. Press **[DVD]** on the remote control to choose DVD mode, then continue with the other DVD features as described in this manual.

Note for timer recording:

- If there is a power failure or the unit is unplugged for more than 30 seconds, clock setting and all timer programs will be lost.

Satellite Link

You can set the unit to start recording whenever it detects a video signal from the external tuner.

Preparing for the Satellite Link Timer Recording:


Preparation on the tuner

- Satellite link accepts only the connection from L1 (rear) with the external tuner. (The connection from L2 cannot read any signals from the external tuner.)
- The external tuner should be equipped with some kind of timer function. Using timer function of the tuner, set it to output audio/video signals when it comes to the time you want to start recording, and stop output audio/video signals when it comes to the time you want to finish recording. Refer to the tuner's manual on how to set the timer.
- Make sure to turn off the tuner when you finish setting.



- 1 Press [SPEED] to select the desired tape speed.

SPEED



SP

Tape speed	Recording / playback time		
Type of tape	T60	T120	T160
SP mode	1hour	2hours	2-2/3hours
SLP mode	3hours	6hours	8hours

- 2 In stop mode, press [SETUP].



- 3 Select "SATELLITE LINK". Then press [▶] to go to next step.



- MENU -
▶ TIMER PROGRAMMING
SATELLITE LINK
AUTO REPEAT (OFF)
CLOCK SET
LANGUAGE SELECT

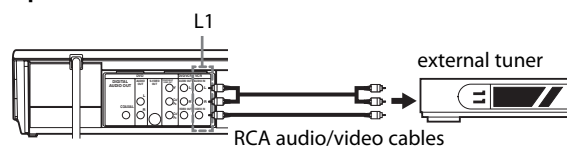
- 4 Set the desired start hour. Then press [▶] to go to next step.



SATELLITE LINK
00 00 AM

- The hour can be selected from 1-12 with AM or PM.
- When the external tuner signal is stopped, recording will be stopped.

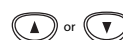
Preparation on this unit



Note:

- Please purchase the necessary cables at your local store. (Refer to page 7.)

- 5 Set the desired start minutes. If you wish to go back to the left, press [◀].



SATELLITE LINK
01 : 00 PM

- 6 Press [▶] to set satellite link standby mode.



SATELLITE LINK
01 : 30 PM
[ON]

- TIMER REC indicator on this unit lights up and the unit goes to the DVD mode. If you do not use DVD function, turn off the unit.
- Satellite unit must be turned on for VCR satellite link to start. If an external tuner is not set to output signals, satellite link will remain in standby mode.

To cancel the satellite link function in standby mode:

Press [T-SET] on the remote control or [■/▲ (STOP/EJECT)] on this unit.

To cancel the satellite link function while the satellite link recording is in progress:

Press [■/▲ (STOP/EJECT)] on this unit.

Note:

- You cannot stop the satellite link recording with [STOP ■] on the remote control.

Note:

- If you have not set the clock, "CLOCK SET" menu will appear at step 2. Refer to "Clock Setting" on page 12.
- You cannot set the ending time for the satellite link timer recording on this unit.
- Recording picture will be distorted if the copy protection signal is being detected during satellite link timer recording.
- When a regular timer recording and the satellite link timer recording are overlapped, those recordings are recorded as illustrated below.

e.g.) In case of the satellite link timer recording is overlapped on the existing timer recording.

timer recording	
satellite link	
recording result	

e.g.) In case of the timer recording is programmed in the middle of the satellite link timer recording

timer recording	
satellite link	
recording result	

e.g.) In case of the timer recording is overlapped on the existing satellite link timer recording.

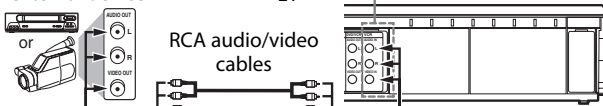
timer recording	
satellite link	
recording result	

Copying a Cassette Tape

Warning: Unauthorized recordings of copyrighted cassette tapes may be an infringement of copyright laws.

- 1 Insert a pre-recorded cassette tape into another external device for playback.
- 2 Insert a recordable cassette tape into this unit for recording.
- 3 Press [SPEED] on the remote control to select recording speed (SP or SLP).
- 4 Press [INPUT SELECT] on the remote control to select L1 or L2. Choose L1 if device is connected to rear input jacks, or L2 if connected to the front. Refer to "Front Panel" and "Rear Panel" on page 7 for more details.
- 5 Press [● REC] on the unit.
- 6 Press "PLAY" button on the external device.
- 7 To stop recording, press [■/▲ (STOP/EJECT)] on this unit, then stop playback of the external device.

output jacks of external device



You can use a video disc player, cable/satellite box or other audio/video component with audio/video output jacks.

Note:

- For best results during dubbing, use buttons on this unit whenever possible. The remote control might affect another device's operation.
- Always use video-quality shielded cables with RCA-type connectors. Standard audio cables are not recommended.
- L2 input jacks are on the front of this unit.
- Please purchase the necessary cables at your local store. (Refer to page 7.)

DVD to Cassette Tape Duplication

This will be possible only if the DVD is not copy protected.
Before you begin:

- Insert a cassette tape in the cassette compartment. Make sure the tape's record tab is intact and the tape is long enough to record the DVD.
- Insert the DVD you want to copy in the disc tray.
- Turn on the TV and set it to the correct Video In channel. (Check your TV owner's manual for details.)

1 Press **[DVD]**. Press **[PLAY ►]** to play back the disc, then press **[PAUSE II]** at the point where you want to start the recording.

2 Press **[VCR]** so VCR indicator lights up on the front panel. Press **[INPUT SELECT]** repeatedly until "DISC" appears on the TV screen.



3 Press **[SPEED]** repeatedly until the desired tape speed (SP or SLP) appears briefly on the screen. For details about tape speed, refer to page 16.

4 Press **[REC/OTR]** to start recording. "REC" will appear on the display panel.

5 Press **[DVD]**. Press **[PLAY ►]** to play back the disc.
• To pause the recording, press **[VCR]**, then press **[PAUSE II]** once. REC indicator on this unit will flash.
• To resume recording, press **[REC/OTR]** or press **[PAUSE II]** again. REC indicator on this unit will light up again.
• To stop recording, press **[VCR]**, then press **[STOP ■]**.

Note:

- A Timer Recording or Satellite Link is not available during DVD to cassette tape duplication.

DVD FUNCTIONS

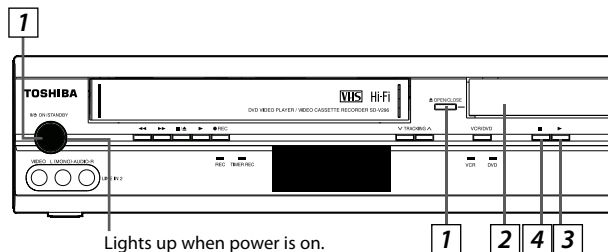
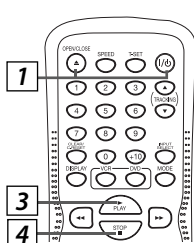
Playback

Before:

Turn on the TV, amplifier and any other components which are connected to this unit. Make sure the TV and audio receiver (not supplied) are set to the correct channel.



1 	2 Insert a disc with label facing up.
3 To start playback 	4 To stop playback



Lights up when power is on.

Note:

- When you play a JPEG-format disc, details on page 19.
- "⊘" may appear at the top-right on the TV screen when the operation is prohibited by the disc or this unit.
- Some DVD may be played from title 2 or 3 due to specific programs.
- Some discs may not start playback automatically. Then, press **[PLAY ►]** to start playback.
- During the playback of a 2-layered disc, pictures may stop for a moment. This happens while the 1st layer is being switched to the 2nd layer. This is not a malfunction.
- You can change the on-screen language for DVD function in "PLAYER MENU" menu. Refer to page 23.

Disc Menu



Some discs contain menus which allow you to customize DVD playback. Use **[▲ / ▼ / ◀ / ▶]** to select an item, then press **[ENTER]** (or **[PLAY ►]**).

Calling Up a Menu Screen during Playback



- Press **[MENU]** to call up the disc menu.
- Press **[TOP MENU]** to call up the title menu.

Note:

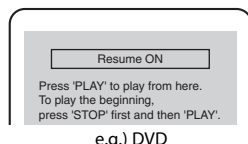
- Menu operations may vary depending on the disc. Refer to the manual accompanying the disc for details.

Resume Playback



Press **[STOP ■]** during playback. Resume message will appear on the TV screen.

Press **[PLAY ►]**, playback will resume from the point at which playback was stopped.



Note:

- To cancel resume, press **[STOP ■]** one more time in the stop mode.
- For JPEG, playback will resume from the beginning of the track at which playback was stopped.
- The resume playback information stays on even when the power is turned off, as long as the disc stays in the unit.

Paused and Step-by-Step Playback



Press **[PAUSE II]** during playback. To continue playback, press **[PLAY ►]**.



The disc goes forward by one frame each time **[PAUSE II]** is pressed in the pause mode. To continue playback, press **[PLAY ►]**.

Note:

- For DVD, set "STILL MODE" to "FIELD" in "DISPLAY" menu if pictures in the pause mode are blurred. Refer to pages 23-24.

To use [SKIP ◀◀ / ▶▶]



Press **[SKIP ▶▶]** once to skip to the next title, chapter or track. Press **[SKIP ◀◀]** twice (once for JPEG) in quick succession to skip back to previous title, chapter or track. For JPEG files, **[◀ / ▶]** is also available.

Fast Forward / Reverse Search



Press **[▶▶]** or **[◀◀]** repeatedly during playback to select the required forward or reverse speed. To continue playback, press **[PLAY ►]**.

Note:

- For DVD, fast forward or reverse search speed is different depending on the disc. Approximate speed is 1(2x), 2(8x), 3(20x), 4(50x), 5(100x).
- For audio CD approximate speed is 1(2x), 2(8x), 3(30x).

Slow Forward / Reverse Search



Press **[▶▶]** or **[◀◀]** repeatedly in the pause mode to select the required forward or reverse speed. To continue playback, press **[PLAY ▶]**.

Note:

- Slow forward or reverse speed is different depending on the disc. Approximate speed is 1(1/16x), 2(1/8x), 3(1/2x).
- Set "STILL MODE" to "FIELD" in "DISPLAY" menu if pictures in the slow playback mode are blurred. Refer to pages 23-24.

Zoom



- 1) Press **[ZOOM]** during playback.
- 2) Press **[ZOOM]** repeatedly to select the required zoom factor: 2x, 4x or off.



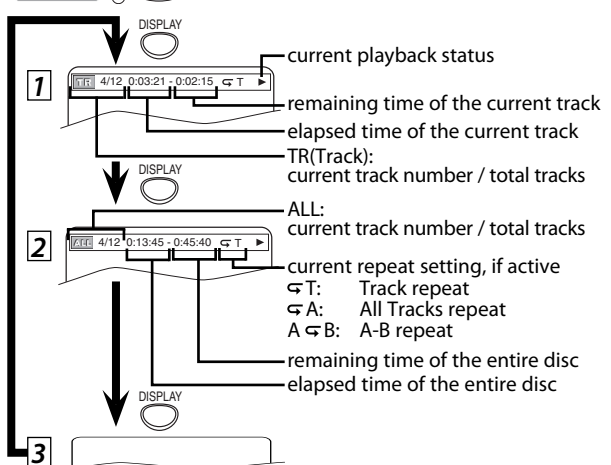
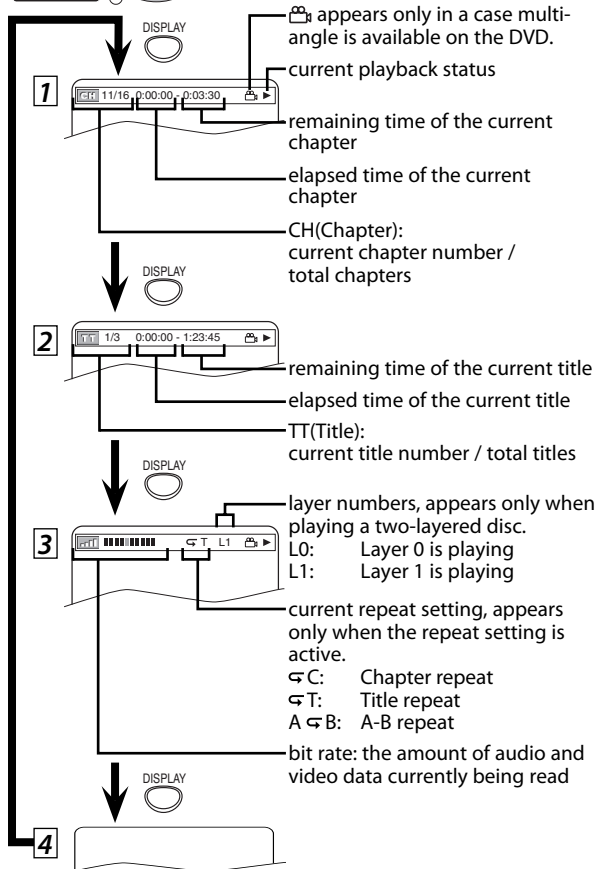
- 3) Use **[▲ / ▼ / ◀ / ▶]** to slide the zoomed picture across the TV screen.
- 4) To exit zoom mode, press **[ZOOM]** to select OFF.

Note:

- Zoom function does not work while the disc menu is displayed.
- 4x zoom is not available on some discs.
- It may take several seconds to slide the zoomed picture.
- Only 2x zoom is available on JPEG files.
- Navigation screen is not available on JPEG.
- You cannot pan through the zoomed picture on some JPEG files.

On-Screen Display

You can check the information about the current disc by pressing **[DISPLAY]** on the remote control.



Note:

- When you are playing a disc in program or random mode, **[PROGRAM]** (or **[RANDOM]**) will be displayed instead of **[2]**.

