

TOSHIBA



DVD VIDEO PLAYER & VIDEO CASSETTE RECORDER

SD-V593SU

OWNER'S MANUAL

VHS Hi-Fi SQPB

Introduction 2

Connections 16

Basic setup 25

Playback (VCR) 32

Recording (VCR) 37

Other functions (VCR) 42

Basic playback (DVD) 45

Advanced playback (DVD) 48

Function setup (DVD) 58

Others 65



©2005 Toshiba Corporation

This device does not tape-record copy protected DVD Video Discs.

SAFETY PRECAUTIONS



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.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, do not expose this appliance to rain or moisture.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS POLARIZED PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

FCC NOTICE: 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:

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

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

CAUTION: THIS DIGITAL VIDEO PLAYER EMPLOYS A LASER SYSTEM.

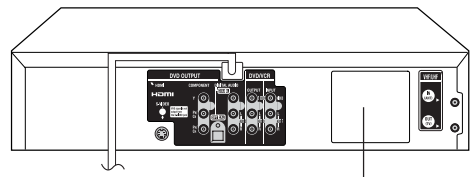
TO ENSURE PROPER USE OF THIS PRODUCT, PLEASE READ THIS USER'S GUIDE CAREFULLY AND RETAIN FOR FUTURE REFERENCE. SHOULD THE UNIT REQUIRE MAINTENANCE, CONTACT AN AUTHORIZED SERVICE LOCATION.

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

TO PREVENT DIRECT EXPOSURE TO LASER BEAM, DO NOT TRY TO OPEN THE ENCLOSURE. VISIBLE LASER RADIATION MAY BE PRESENT WHEN THE ENCLOSURE IS OPENED. DO NOT STARE INTO BEAM.

Location of the required Marking

The rating sheet and the safety caution are on the rear of the unit.



CERTIFICATION: COMPLIES WITH FDA RADIATION PERFORMANCE STANDARDS, 21 CFR SUBCHAPTER J.



IMPORTANT SAFEGUARDS

1. READ INSTRUCTIONS

All the safety and operating instructions should be read before the unit is operated.

2. RETAIN INSTRUCTIONS

The safety and operating instructions should be retained for future reference.

3. HEED WARNINGS

All warnings on the unit and in the operating instructions should be adhered to.

4. FOLLOW INSTRUCTIONS

All operating and use instructions should be followed.

5. CLEANING

Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.

Use a soft dry cloth for cleaning the exterior cabinet only.

6. ATTACHMENTS

The manufacturer of this unit does not make any recommendations for attachments, as they may cause hazards.

7. WATER AND MOISTURE

Do not use this unit near water. For example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

8. ACCESSORIES

Do not place this unit on an unstable cart, stand, tripod, bracket, or table.

The unit may fall, causing serious injury, and serious damage to the unit.

8A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

9. VENTILATION

Slots and openings in the cabinet back or bottom are provided for ventilation, to ensure reliable operation of the unit, and to protect it from overheating.

These openings must not be blocked or covered. The openings should never be blocked by placing the unit on a bed, sofa, rug, or other similar surface. This unit should never be placed near or over a radiator or heat source. This unit should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and/or the manufacturer's instructions have been adhered to.

10. POWER SOURCE

This unit should be operated only from the type of power source indicated on the rating plate. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company.

11. GROUNDING OR POLARIZATION

This unit is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

12. POWER-CORD PROTECTION

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

PORTABLE CART WARNING
(symbol provided by RETAC)



S3125A

IMPORTANT SAFEGUARDS

13. LIGHTNING

To protect your unit from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the unit due to lightning and power line surges.

14. POWER LINES

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall onto or against such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.

15. OVERLOADING

Do not overload wall outlets and extension cords, as this can result in a risk of fire or electric shock.

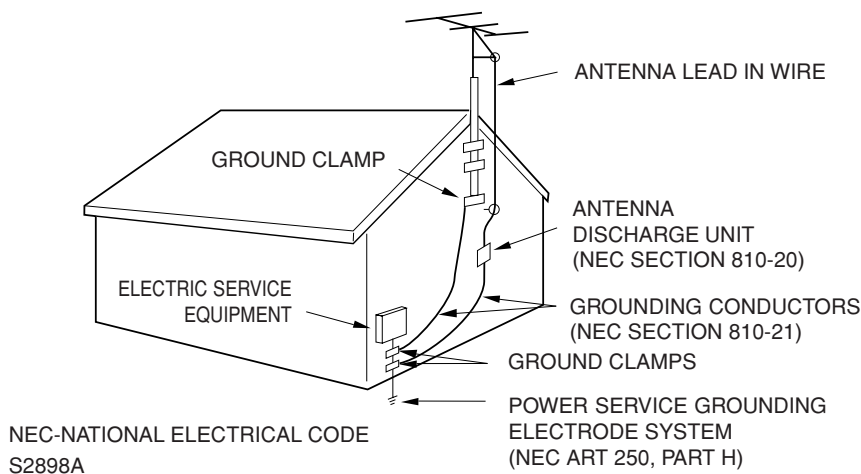
16. OBJECT AND LIQUID ENTRY

Do not push objects through any openings in this unit, as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill or spray any type of liquid into the unit.

17. OUTDOOR ANTENNA GROUNDING

If an outside antenna or cable system is connected to the unit, be sure the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges, Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING AS PER THE NATIONAL ELECTRICAL CODE



18. SERVICING

Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

For example:

- a. When the power-supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the unit.
- c. If the unit has been exposed to rain or water.
- d. If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.
- e. If the unit has been dropped or the cabinet has been damaged.
- f. When the unit exhibits a distinct change in performance, this indicates a need for service.

IMPORTANT SAFEGUARDS / Power source

19. REPLACEMENT PARTS

When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

20. SAFETY CHECK

Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.

21. HEAT

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

22. DISC TRAY

Keep your fingers well clear of the disc tray as it is closing. It may cause serious personal injury.

23. CONNECTING

When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause a product damage. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.

24. LASER BEAM

Do not look into the opening of the disc tray or ventilation opening of the product to see the source of the laser beam. It may cause sight damage.

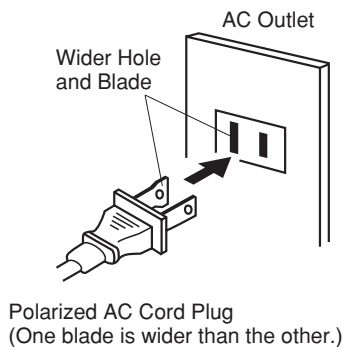
25. DISC

Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.

26. NOTE TO CABLE TV SYSTEM INSTALLER

This reminder is provided to call the Cable TV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Power source



TO USE AC POWER SOURCE

Use the AC polarized line cord provided for operation on AC. Insert the AC cord plug into a standard 120V 60Hz polarized AC outlet.

Notes:

- Never connect the AC line cord plug to other than the specified voltage (120V 60Hz). Use the attached power cord only.
- If the polarized AC cord does not fit into a non-polarized AC outlet, do not attempt to file or cut the blade. It is the user's responsibility to have an electrician replace the obsolete outlet.
- If you cause a static discharge when touching the unit and the unit fails to function, simply unplug the unit from the AC outlet and plug it back in. The unit should return to normal operation.

Precautions

Notes on handling

- When shipping the DVD/VCR, the original shipping carton and packing materials come in handy. For maximum protection, repack the unit as it was originally packed at the factory.
- Do not use volatile liquids, such as insect spray, near the DVD/VCR. Do not leave rubber or plastic products to contact the DVD/VCR for a prolonged period. They will leave marks on the finish.
- The top and rear panels of the DVD/VCR may become warm after a long period of use. This is not a malfunction.
- When the DVD/VCR is not in use, be sure to remove the disc and the video cassette turn off the power.
- If you do not use the DVD/VCR for a long period, the unit may not function properly in the future. Turn on and use the DVD/VCR occasionally.

Notes on locating

- Place the DVD/VCR on a level surface. Do not use it on a shaky or unstable surface such as a wobbling table or inclined stand. The loaded disc or the video tape may become disaligned and damage the DVD/VCR.
- When you place this DVD/VCR near a TV, radio or VCR, the playback picture may become poor and the sound may be distorted. In this case, place the DVD/VCR away from the TV, radio or VCR.

Notes on cleaning

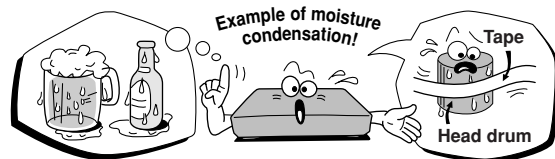
Use a soft, dry cloth for cleaning.

- Use a dry cloth to wipe.
Do not use any type of solvent, such as thinner and benzene, as they may damage the surface of the DVD/VCR.
- If you use a chemical saturated cloth to clean the unit, follow that product's instructions.

Notes on moisture condensation

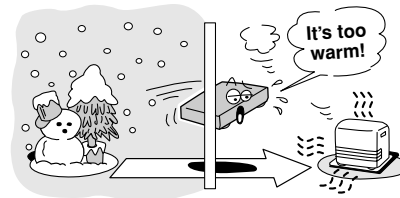
Moisture condensation damages the DVD/VCR. Please read the following carefully.

Moisture condensation occurs, for example, when you pour a cold drink into a glass on a warm day. Drops of water form on the outside of the glass. In the same way, moisture may condense on the head drum or the optical pick-up lens inside this unit, one of the most crucial internal parts of the DVD/VCR.



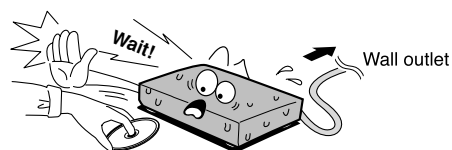
■ **Moisture condensation occurs during the following cases.**

- When you bring the DVD/VCR directly from a cold place to a warm place.
- When you use the DVD/VCR in a room where you just turned on the heater, or a place where the cold wind from the air conditioner directly hits the unit.
- In summer, when you use the DVD/VCR in a hot and humid place just after you move the unit from an air conditioned room.
- When you use the DVD/VCR in a humid place.



■ **Do not use the DVD/VCR when moisture condensation may occur.**

If you use the DVD/VCR in such a situation, it may damage discs and internal parts. Remove the disc or the video tape, connect the power cord of the DVD/VCR to the wall outlet, turn on the DVD/VCR, and leave it for two or three hours. After two or three hours, the DVD/VCR will have warmed up and evaporated any moisture. Keep the DVD/VCR connected to the wall outlet and moisture condensation will seldom occur.





Contents

Introduction

SAFETY PRECAUTIONS	2
IMPORTANT SAFEGUARDS	3
Power source	5
Precautions	6
Contents	7
Notes and Information	8
Identification of controls	12

Connections

Antenna connections	16
Cable TV connections	18
Connecting to a TV	20
Connecting to optional equipment	23

Basic setup

Setting the video channel	25
Setting the language	26
Clock setting	27
Tuner setting	30

Playback (VCR)

Loading and unloading a cassette tape	32
Cassette tape playback	33
Special playback	34
Convenience function	35

Recording (VCR)

Recording a TV program	37
One-touch Timer Recording (OTR)	39
Timer recording	40

Other functions (VCR)

Stereo recording and playback	42
Second Audio Program (SAP)	42
Duplicating a video tape	43
Recording a DVD/CD disc	44

Basic playback (DVD)

Playing a disc	45
----------------------	----

Advanced playback (DVD)

Zooming	48
Locating desired scene	48
Marking desired scenes	49
Repeat playback	50
A-B Repeat playback	50
Program playback	51
Random playback	51
Changing angles	52
Title selection	52
DVD menu	52
Changing soundtrack language	53
Setting surround sound	53
Subtitles	54
To turn off the PBC (Video CD version 2.0) ...	54
MP3/WMA/JPEG operation	55

Function setup (DVD)

Customizing the function settings	58
Temporary disabling of rating level by DVD disc	64

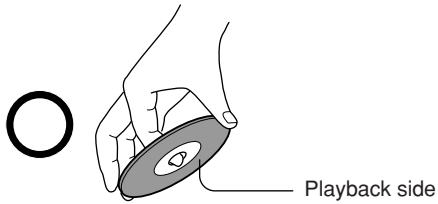
Others

Language code list	65
Multi brand remote control	66
Troubleshooting	68
Specifications	69
Limited warranty	70

Notes and Information

On handling discs

- Do not touch the playback side of the disc.

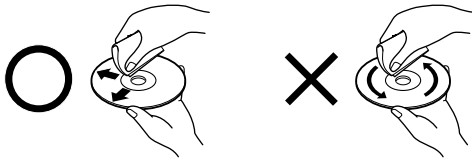


- Do not attach paper or tape to discs.



On cleaning discs

- Fingerprints and dust on the disc cause picture and sound deterioration. Wipe the disc from the center outwards with a soft cloth. Always keep the disc clean.



- Do not use any type of solvent such as thinner, benzene, commercially available cleaners or antistatic spray for vinyl LPs. It may damage the disc.

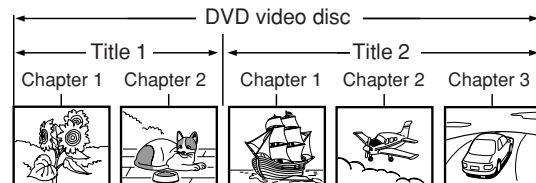
On storing discs

- Do not store discs in a place subject to direct sunlight or near heat sources.
- Do not store discs in places subject to moisture and dust such as a bathroom or near a humidifier.
- Store discs vertically in a case. Stacking or placing objects on discs outside of their case may cause warping.

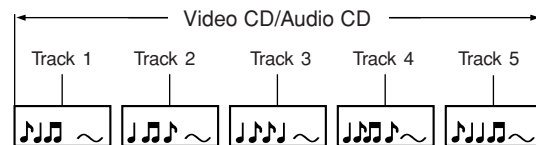
Structure of disc contents

Normally, DVD video discs are divided into titles, and the titles are sub-divided into chapters. VIDEO CDs and audio CDs are divided into tracks.

DVD video disc



Video CD/Audio CD





Each title, chapter or track is assigned a number, which is called "title number", "chapter number" or "track number" respectively.



There may be discs that do not have these numbers.





About this owner's manual

This owner's manual explains the basic instructions of this DVD/VCR. Some DVD video discs are produced in a manner that allows specific or limited operation during playback. As such, the DVD/VCR may not respond to all operating commands. This is not a defect in the DVD/VCR. Refer to instruction notes of discs.

“” may appear on the TV screen during operation. A “” means that the operation is not permitted by the DVD/VCR or the disc.

For example, sometimes it is unable to stop the playback of copyright message of the disc when the STOP () button is pressed. Alternatively, the “” may also indicate that the feature is not available for the disc.

Notes on region numbers

The region number of this DVD/VCR is 1. If region numbers, which stand for their playable area, are printed on your DVD video disc and you do not find  or , disc playback will not be allowed by the player. (In this case, the DVD/VCR will display a message on-screen.)

On Video CDs

This DVD/VCR supports Video CDs equipped with the PBC (Version 2.0) function. (PBC is the abbreviation of Playback Control.) You can enjoy two playback variations depending on types of discs.

- **Video CD not equipped with PBC function (Version 1.1)**

Sound and movie can be played on this DVD/VCR in the same way as an audio CD.

- **Video CD equipped with PBC function (Version 2.0)**

In addition to operation of a Video CD not equipped with the PBC function, you can enjoy playback of interactive software with search function by using the menu displayed on the TV screen (Menu Playback). Some of the functions described in this owner's manual may not work with some discs.

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

Notes and Information (continued)

Playable discs

This DVD/VCR can play the following discs.

	Disc Mark	Contents	Disc Size	Maximum playback time
DVD video discs		Audio + Video (moving pictures)	12 cm	Approx. 4 hours (single sided disc)
				Approx. 8 hours (double sided disc)
	8 cm		Approx. 80 minutes (single sided disc)	
			Approx. 160 minutes (double sided disc)	
Video CDs		Audio + Video (moving pictures)	12 cm	Approx. 74 minutes
			8 cm	Approx. 20 minutes
Audio CDs		Audio	12 cm	Approx. 74 minutes
			8 cm (CD single)	Approx. 20 minutes

The following discs are also available.

- DVD-R/RW discs of DVD video format
- CD-R/CD-RW discs of CD-DA, Video CD, SVCD, MP3, WMA or JPEG format
- Kodak Picture CD and FUJICOLOR CD format

Some of these discs may be incompatible.




- You cannot play discs other than those listed above.
- You cannot play discs of DVD-RAM, DVD-ROM, Photo CD, etc., or non standardized discs even if they may be labeled as above.
- Some CD-R/RWs cannot be played back depending on the recording conditions.
- This DVD/VCR uses the NTSC color system, and cannot play DVD video discs recorded in any other color system (PAL, SECAM, etc.).

Because of problems and errors that can occur during the creation of DVD and Video CD software and/or the manufacture of DVD and Video CD discs, Toshiba cannot guarantee that this DVD/VCR will play every feature of every DVD bearing the DVD logo and/or every Video 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. If you happen to experience any difficulty playing a DVD or a Video CD on a this DVD/VCR, please feel free to call our Contact listed in "How to Obtain Warranty Services" (page 71).



Playable Media cards

This unit can play the following cards.

	Card Mark	Contents	Playable card capacity
SD (Secure Digital™) memory card		MP3/ WMA/ JPEG files	32 MB – 1 GB
MMC (MultiMediaCard™)	MMC		8 MB – 1 GB
xD-Picture Card			16 MB – 512 MB
Memory Stick™			16 MB – 128 MB
Memory Stick™ (Pro)	MEMORY STICK		128 MB – 2 GB
CompactFlash® memory card (Type 1)	CF		8 MB – 4 GB

- Do not insert any cards other than those listed above as this may cause a malfunction of the unit or cards.
- Some Media cards may not be played back due to its capacity and/or manufacturer, etc.
- This unit cannot play the xD-Picture Card Type M.

Notes on Media cards

- Ensure that you insert the Media card correctly into the media card slot.
- Never remove the Media card or turn off the unit while using the Media card. Doing so may result in loss of data or damage to the Media card or the unit. **SUCH DAMAGE IS NOT COVERED BY YOUR TOSHIBA WARRANTY.**
- It is recommended that you back up your Media card data. Toshiba is not liable for any damage caused by the use of any Media card with this unit. Toshiba will not compensate for any lost data or recording(s) caused by the use of such cards.
- Media card is a precision electrical instrument. Do not bend, drop or apply strong force to it.
- Do not use or store the Media card in an environment of high static electricity or electrical interference.
- Avoid using or storing in areas of high temperature and humidity.
- Prevent contact of the metallic area on the Media card with dust, dirt, or other foreign particles. Do not touch the metallic area of the Media card with your hands or otherwise handle it with anything other than a soft, dry, lint-free, antistatic cloth.
- Use index labels made exclusively for your specific brand of Media card. Do not use commercially sold labels, which can cause a malfunction when the card is inserted or ejected.
- When ejecting the Media card after extended use it may feel warm to the touch. This is normal. The Media card is not malfunctioning.
- For instructions on using your Media card, refer to the owner's manual for your Media card.

SD is a trademark of SD Card Association.

MMC and MultiMediaCard are trademarks of Infineon Technologies AG and licensed to MMCA (MultiMediaCard Association).

xD-Picture Card™ is a trademark of Fuji Photo Film Co., Ltd.

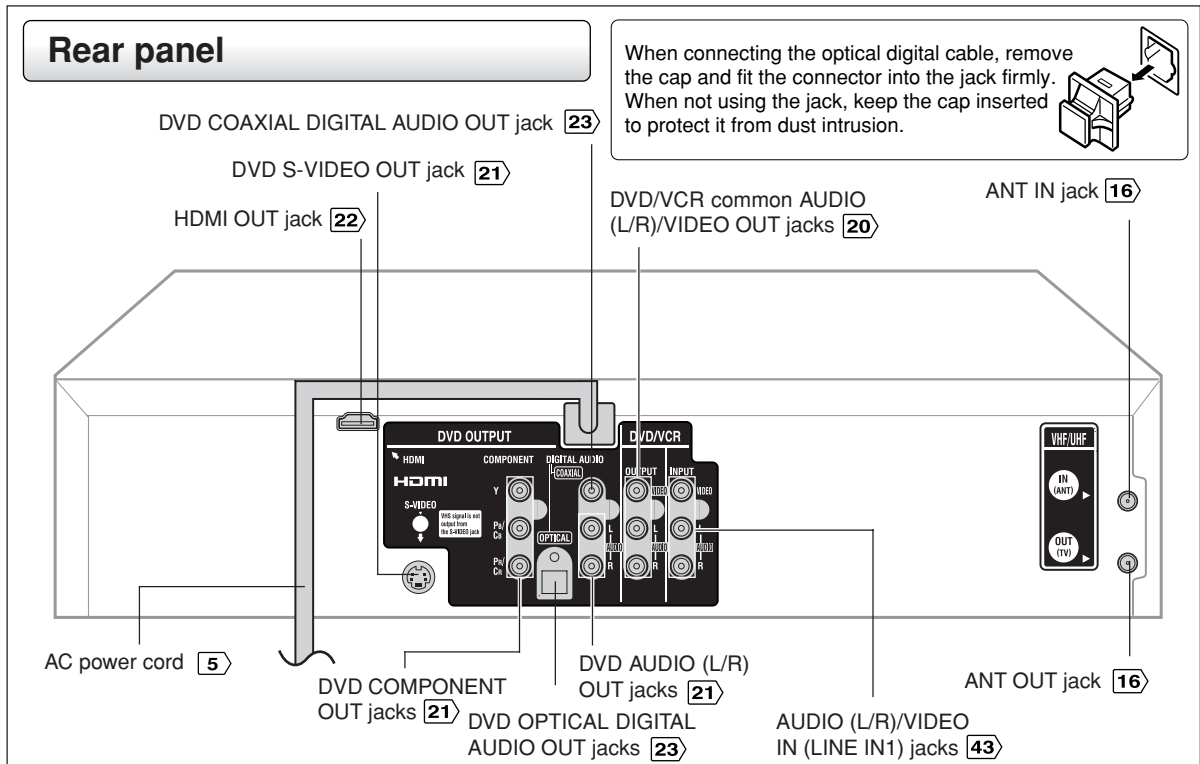
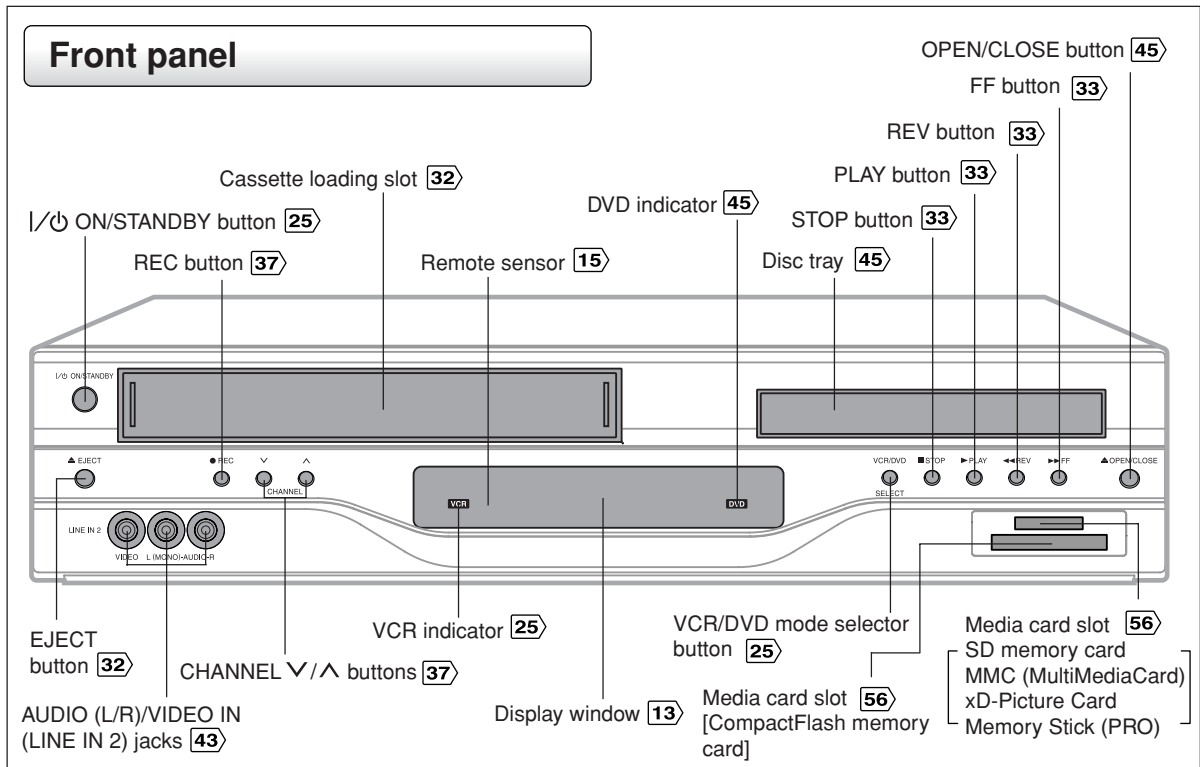
Memory Stick is a trademark of Sony Corporation.

CompactFlash is a trademark of the Compact Flash Association.

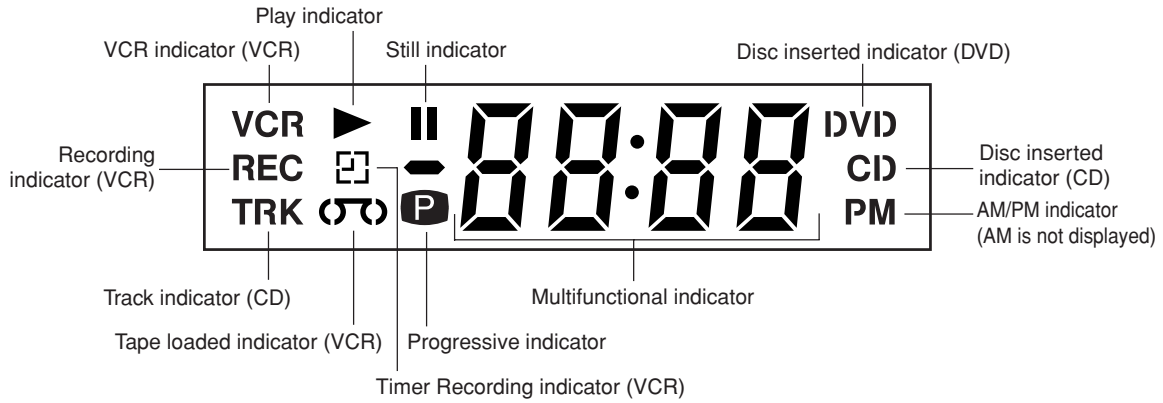
Toshiba is an authorized licensee of the CompactFlash® registered trademark.

Identification of controls

See the page in □ for details.



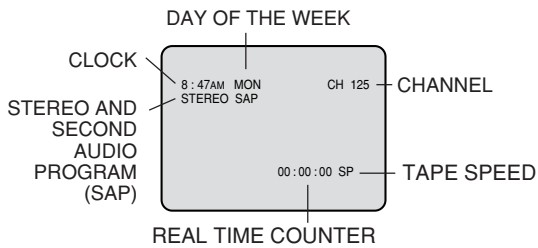
Display window



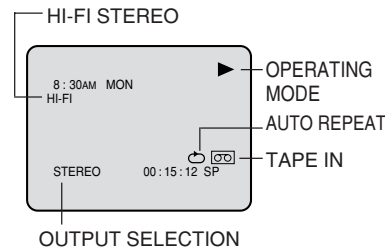
VCR operation status

Press **CALL** to display VCR operation status on the screen. To cancel the display, press **CALL** again.

While watching TV



While operating a tape

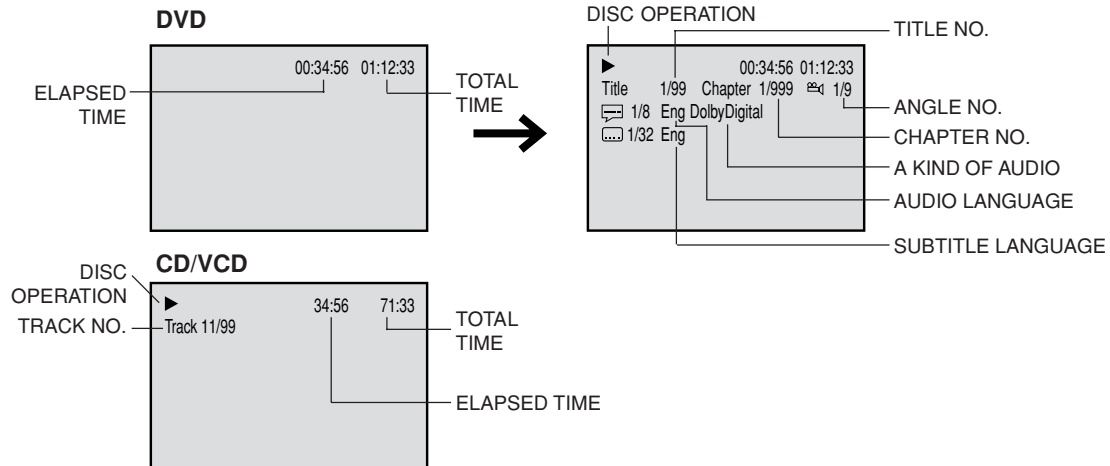


VCR Icons

- Recording : ●
- Rec/Pause : ●||
- Play : ►
- Stop : ■
- Eject : ▲

DVD/CD/VCD operation status

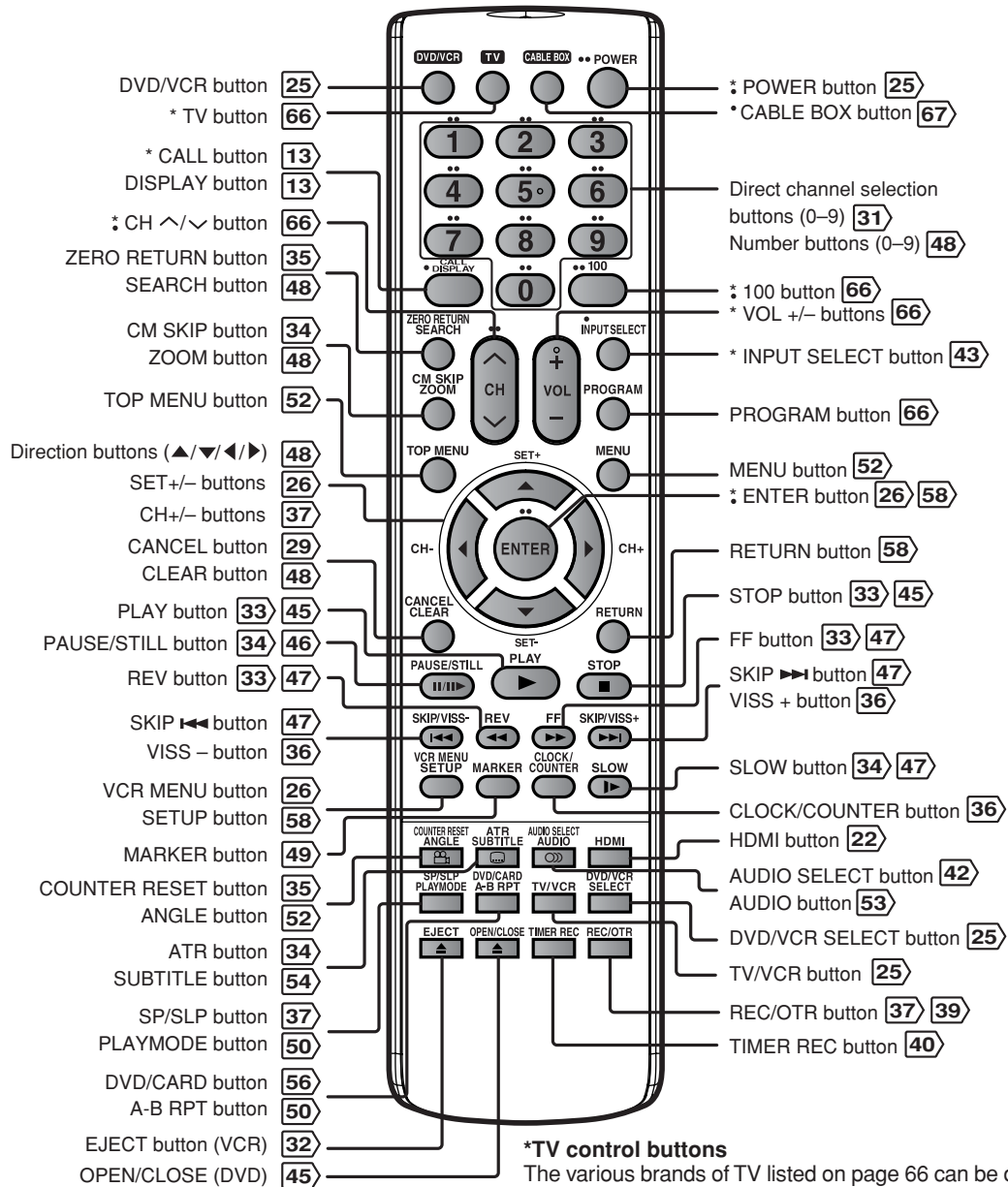
Each press of **DISPLAY**, the status display of the disc will appear on the screen and change as follows.



Identification of controls (continued)

The instructions in this manual describe the functions on the remote control. See the page in for details.

Remote control



MENU button

Use the MENU button to display the menu included on many DVD video discs. To operate a menu, follow the instructions in "DVD Menu." 52

*TV control buttons

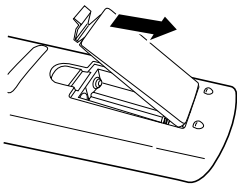
The various brands of TV listed on page 66 can be operated with this remote control. There may be some TV models that cannot be operated with this remote control. If this is the case, use the original remote control supplied with the TV.

*CABLE BOX control buttons

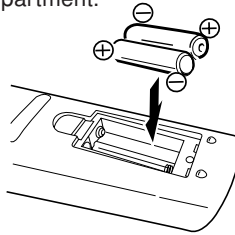
The various brands of CABLE BOX listed on page 67 can be operated with this remote control. There may be some CABLE BOX models that cannot be operated with this remote control. If this is the case, use the original remote control supplied with the CABLE BOX.

Inserting batteries

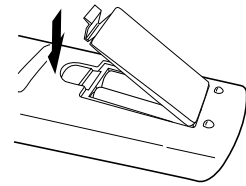
- 1** Open the battery compartment cover in the direction of the arrow.



- 2** Install two “AAA” batteries (supplied), paying attention to the polarity diagram in the battery compartment.



- 3** Replace the compartment cover.



Caution:

Never throw batteries into a fire.

Notes:

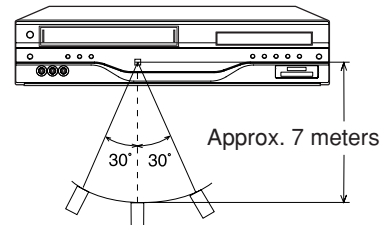
- Be sure to use AAA size batteries.
- Dispose of batteries in a designated disposal area.
- Batteries should always be disposed of with the environment in mind. Always dispose of batteries in accordance with applicable laws and regulations.
- If the remote control does not operate correctly, or if the operating range becomes reduced, replace batteries with new ones.
- When necessary to replace batteries in the remote control, always replace both batteries with new ones. Never mix battery types or use new and used batteries in combination.
- 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.

Remote control basics

- Press **DVD/VCR** to Operate the DVD/VCR.
- Press **POWER** to turn the DVD/VCR on or off.
- Select your desired operating mode (DVD or VCR) using **DVD/VCR SELECT**. (DVD or VCR indicator on the front panel will show you which mode is selected.)
- Press **CH +** or **CH -** to move through the channels one channel at a time.
- The **▲/▼/◀/▶** are also used to navigate on-screen menu system.
- You can directly access specific channels using **Direct channel selection buttons (0-9)**.
- Each press of **DVD/VCR SELECT** on the remote control, switches the screen between the VCR screen (VCR mode) and the DVD screen (DVD mode).

Operation

- Aim the remote control at the remote sensor and press control buttons to operate.
- Operate the remote control within 30° angle on either side of the remote sensor, up to a distance of approx. 7 meters.

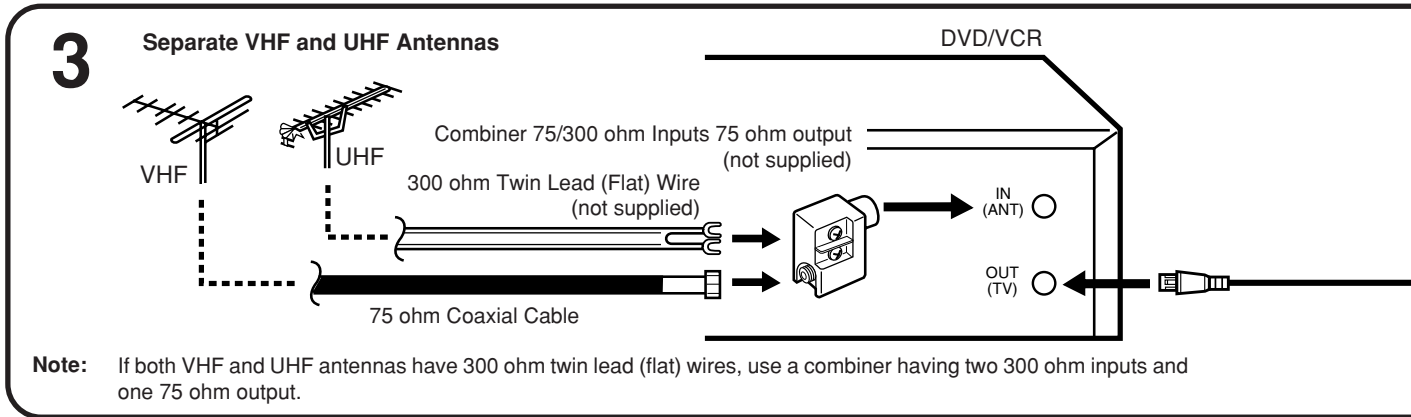
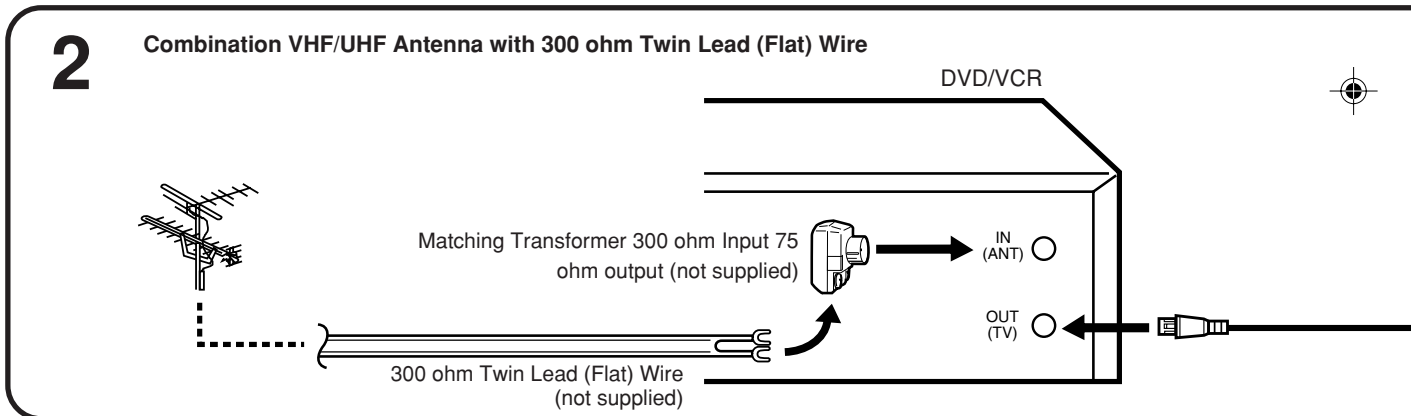
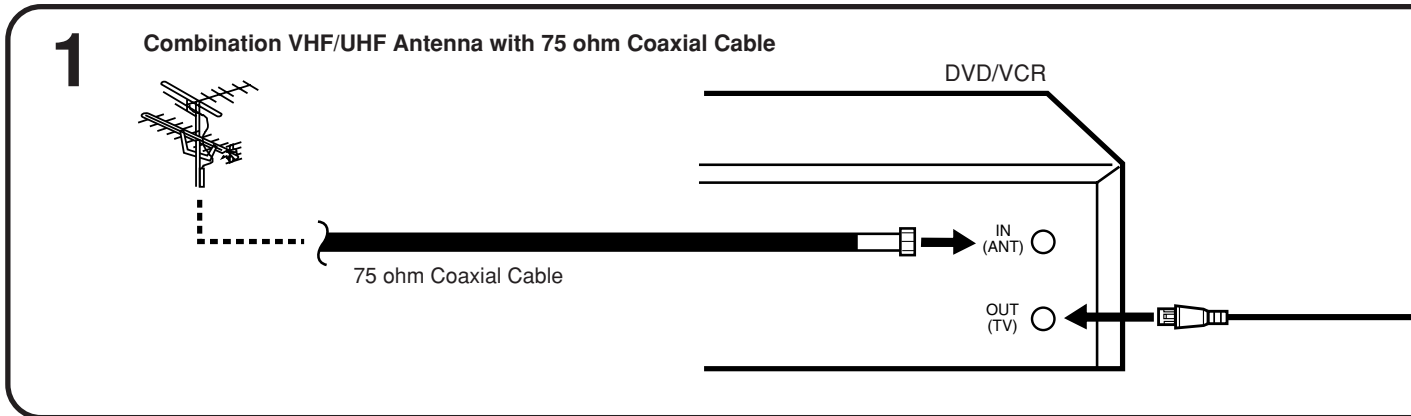


Antenna connections

If you are using an antenna system, follow these instructions. If you are a Cable TV subscriber, skip ahead to page 16 for the proper connections.

Antenna to DVD/VCR connection

The DVD/VCR must be connected "between" the antenna and the TV. First, disconnect the antenna from the TV and connect it to the DVD/VCR. Then connect the DVD/VCR to the TV. Below are 3 common methods of connecting an antenna system to a DVD/VCR. Find the type of antenna system you are using and follow the connection diagram.



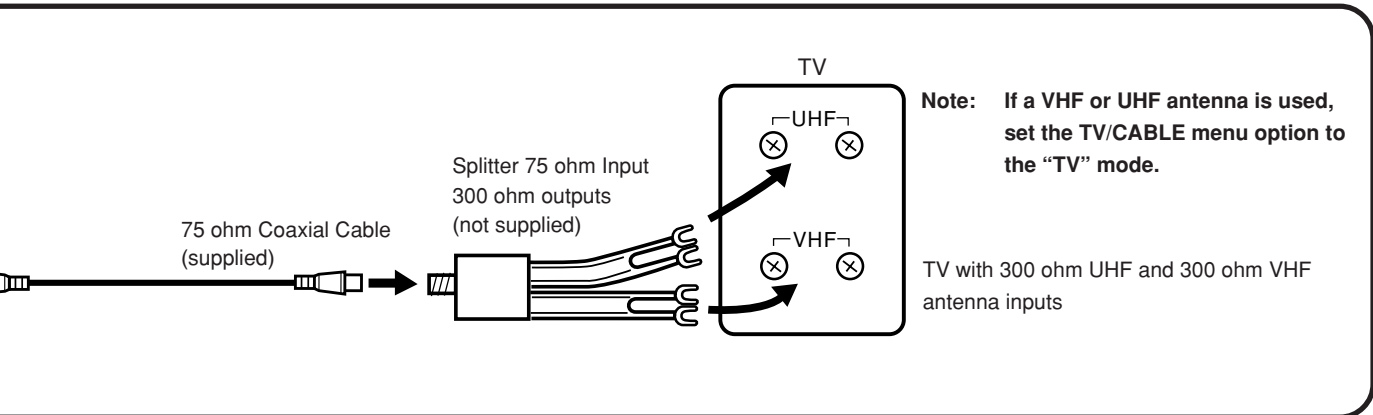
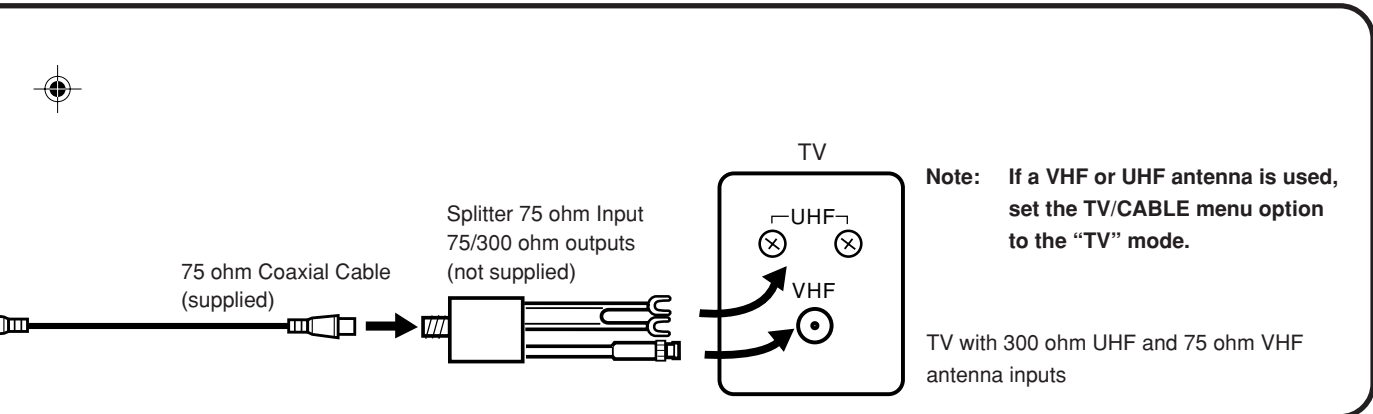
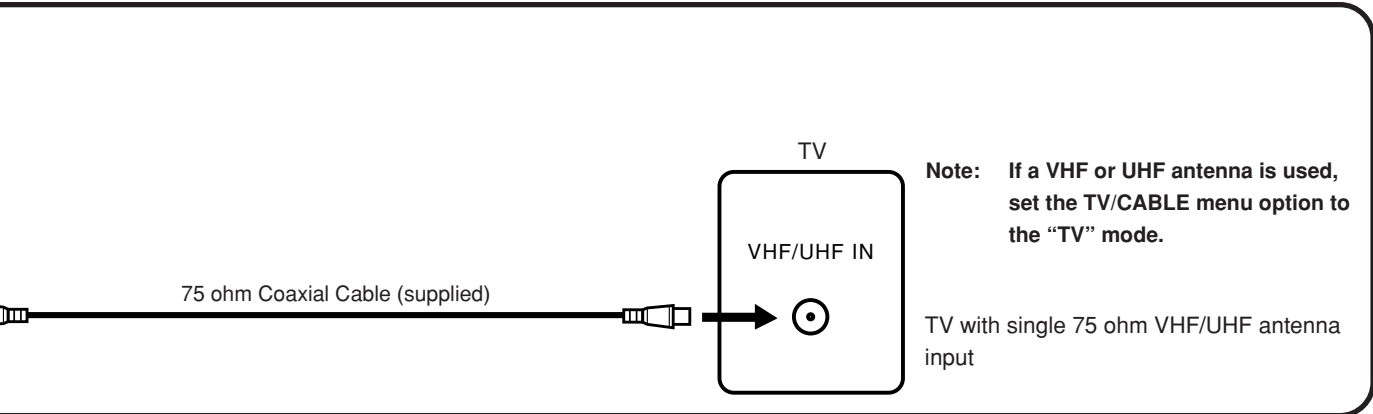
- Notes:**
- A clear picture will not be obtained by the DVD/VCR unless the antenna signal is good. Connect the antenna to the DVD/VCR properly.
 - For better quality recording, an indoor antenna or a telescopic antenna is not recommended. The use of an outdoor type antenna is required.
 - If you are not sure about the connection, please refer to qualified service personnel.



DVD/VCR to TV connection

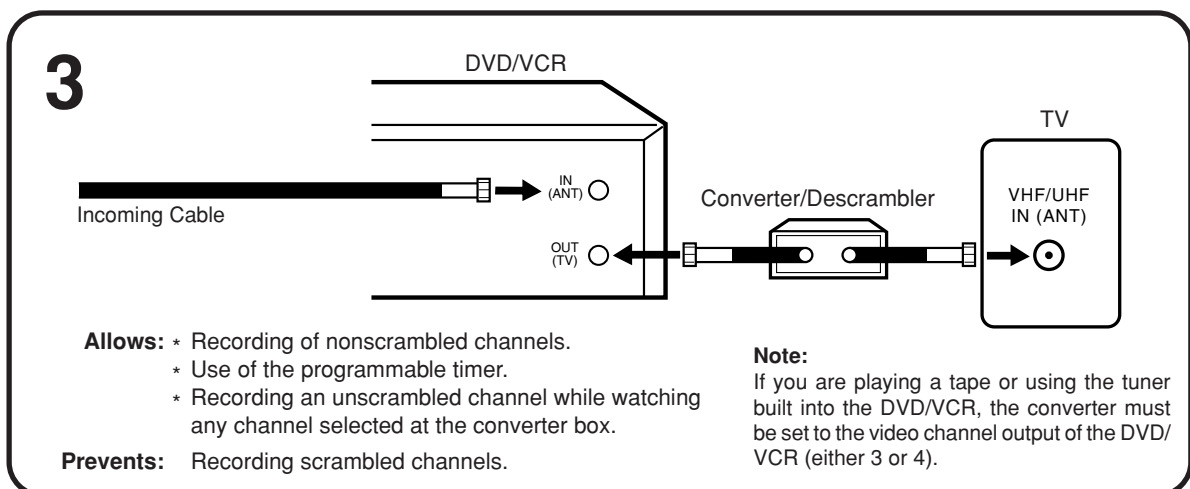
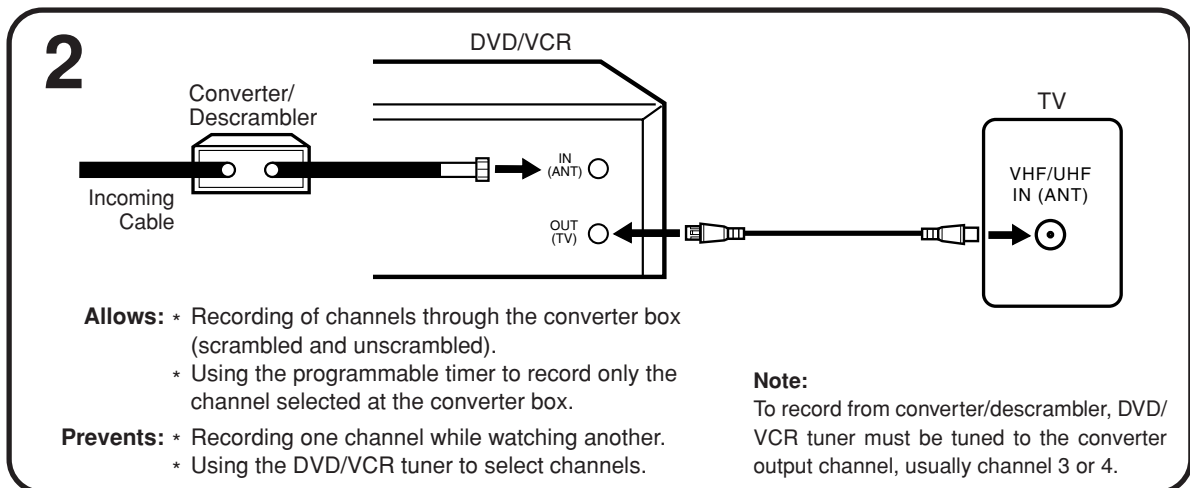
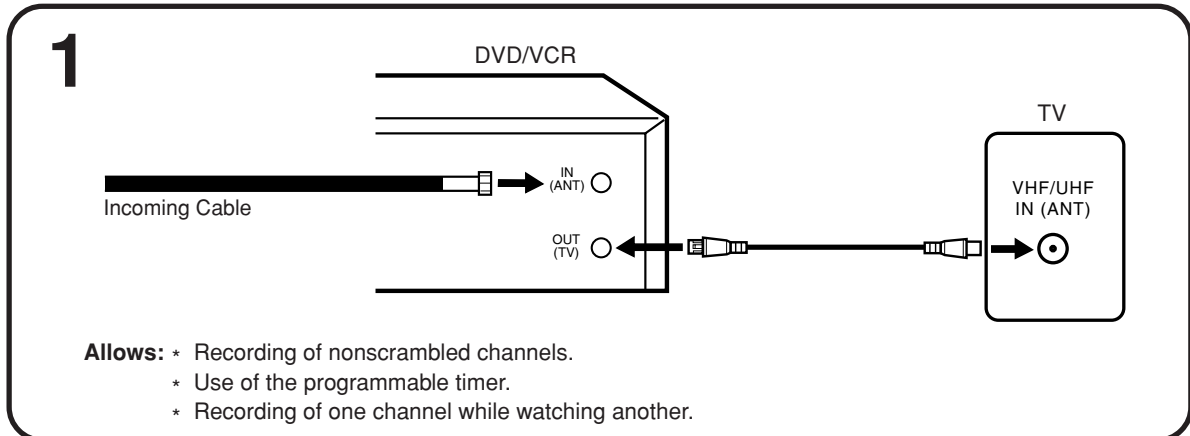
After you have connected the antenna to the DVD/VCR, you must connect the DVD/VCR to the TV. Below are 3 common methods of connecting your DVD/VCR to a TV. Find the type of TV you are using and follow the connection diagram.

This DVD/VCR has a single 75 ohm output for connection to a TV. If your TV has separate VHF and UHF antenna inputs (numbers 2 and 3 below), use a splitter to connect the DVD/VCR to the TV for VHF and UHF reception.



Cable TV connections

Many cable companies offer services permitting reception of extra channels including pay or subscription channels. This DVD/VCR has an extended tuning range and can be tuned to most cable channels without using a cable company supplied converter box, except for those premium channels which are intentionally scrambled. If you subscribe to a premium channel which is scrambled, you must have a descrambler box for proper reception.



Note: Whenever a Converter/Descrambler box is placed before the DVD/VCR, you must tune the DVD/VCR to the output of the Converter/Descrambler box, usually channel 3 or 4.



IMPORTANT: Make sure the TV/CABLE menu option is set to the "CABLE" mode.

This DVD/VCR cannot receive scrambled programs since it does not contain a descrambler. In order to receive scrambled programs, your existing descrambler must be used. Descrambler boxes are available from cable companies. Consult your local cable company for more information concerning connection to their descrambler equipment. There are many ways to connect your DVD/VCR to a cable system. Below are six common methods of connection.

4

Allows:

- * Recording of one channel while watching another.
- * Using the programmable timer to record only the channel selected at the converter box.
- * Recording of all channels through the converter box.

Prevents:

- * Watching scrambled channels while recording another channel.
- * Using the DVD/VCR tuner to select channels.

5

Allows:

- * Recording of nonscrambled channels.
- * Recording of one channel while watching another.
- * Watching premium channels through the converter while recording nonscrambled channels.
- * Using the programmable timer.

Prevents: Recording scrambled channels.

6

Allows:

- * Recording of all channels through the converter box.
- * Recording a scrambled or unscrambled channel while watching another (scrambled or unscrambled) channel.
- * Using the programmable timer to record only the channel selected at the converter box.

Prevents: Using the DVD/VCR tuner to select channels.



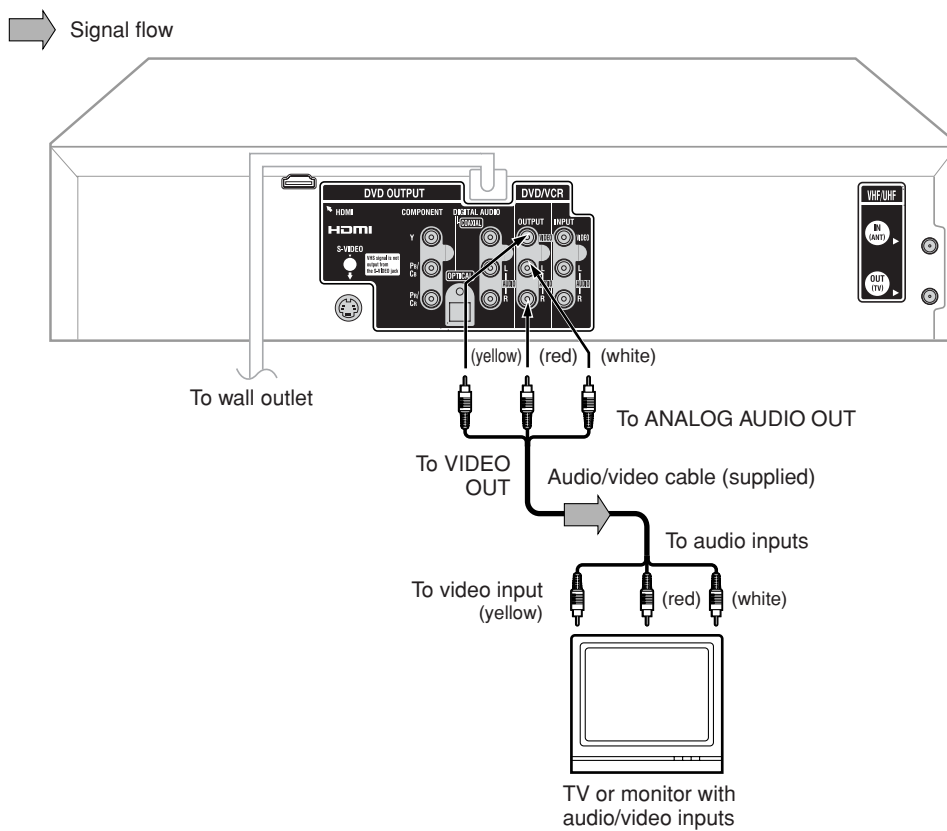
Connections

Connecting to a TV

Connect the DVD/VCR to your TV.

Note: This method transports VHS and DVD-video signals. For enhanced DVD-video performance, we recommend you also connect the S-video, ColorStream® component video or HDMI outputs to your TV/monitor. **21** **22**

Connecting to a TV



- Make sure following setting.

On-screen display	Select:	Page
"Digital Out"	"PCM" or "Raw"	61

Notes:

- Refer to the owner's manual of the connected TV as well.
- When you connect the DVD/VCR to your TV, be sure to turn off the power and unplug both units from the wall outlet before making any connections.
- If your television set has one audio input, connect the left and right audio outputs of the DVD/VCR to a Y cable adapter (not supplied) and then connect to your TV.
- Connect the DVD/VCR directly to your TV. If you connect the DVD/VCR to a VCR, TV/VCR combination or video selector, the playback picture may be distorted as DVD video discs are copy protected.





S-video output

An S-Video connection is superior to Video (Yellow) output. Use this method for DVD playback when the connected television has S-Video input, and does not have component video inputs.

Component video outputs

PROGRESSIVE outputs

Some TVs or monitors are equipped with component video inputs that are capable of reproducing a progressively scanned video signal. Connecting to these inputs allows you to view the highest quality pictures with less flicker.

INTERLACED outputs

Some TVs or monitors are equipped with component video inputs. Connecting to these inputs allows you to enjoy the highest quality DVD picture playback.

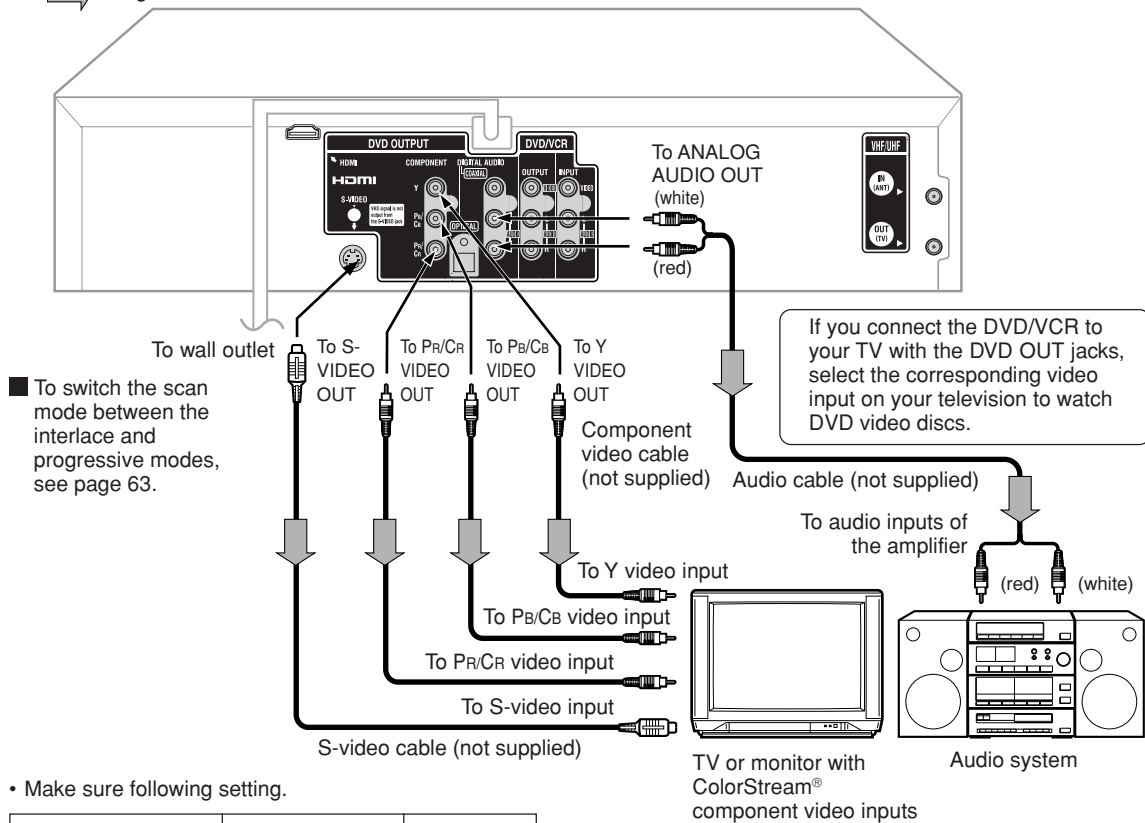
Notes:

- Actual labels for component video inputs may vary depending on the TV manufacturer. (ex. Y, R-Y, B-Y or Y, CB, CR)
- In some TVs or monitors, the color levels of the playback picture may be reduced slightly or the tint may change. In such a case, adjust the TV or monitor for optimum performance.

Connecting to an audio system and TV equipped with S-video input/component video inputs

The S-video output and component video output transports the DVD-video signal exclusively and will deliver enhanced DVD video picture performance.

➔ Signal flow



On-screen display	Select:	Page
"Digital Out"	"PCM" or "Raw"	61

Notes:

- Refer to the owner's manual of the connected equipment as well.
- When you connect the DVD/VCR to other equipment, be sure to turn off the power and unplug all of the equipment from the wall outlet before making any connections.
- If you place the DVD/VCR near a tuner or radio, the radio broadcast sound might be distorted. In this case, place the DVD/VCR away from the tuner and radio.
- The output sound of the DVD/VCR has a wide dynamic range. Be sure to adjust the receiver's volume to a moderate listening level. Otherwise, the speakers may be damaged by a sudden high volume sound.
- Turn off the amplifier before you connect or disconnect the DVD/VCR's power cord. If you leave the amplifier power on, the speakers may be damaged.
- When connecting to a TV using the Video or S-video jack, make sure that the Progressive indicator "P" on the display window is not lit. If it is lit, the Video and S-video outputs do not feed the correct signals and you cannot see any picture. To turn off the Progressive indicator, select PROGRESSIVE scan Off 63.



Connecting to a TV (continued)

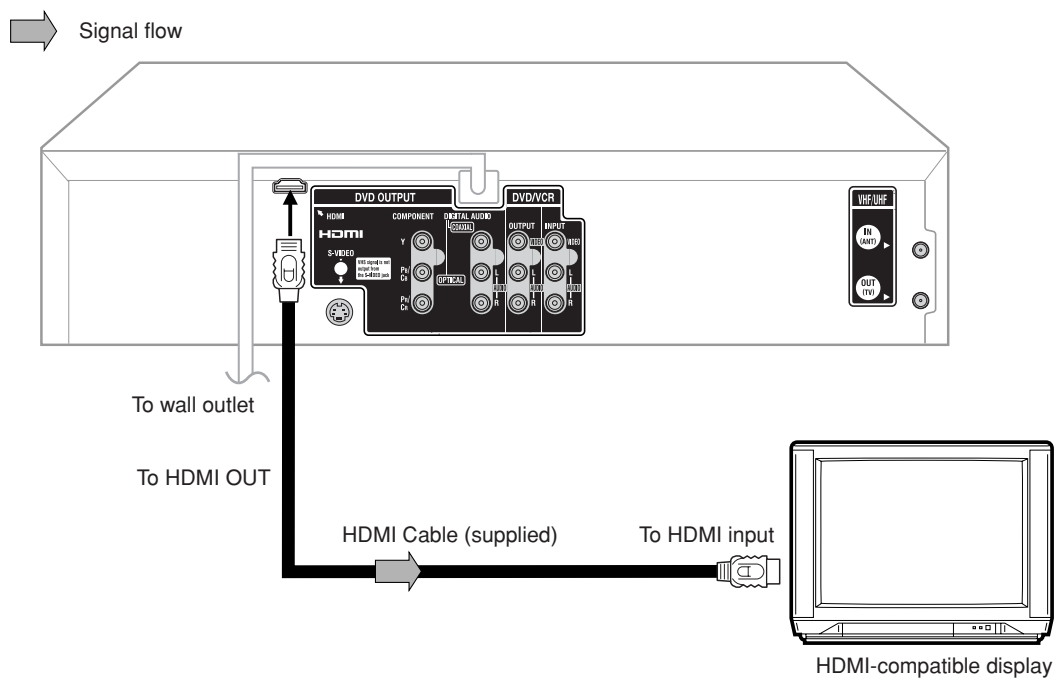
About HDMI

HDMI (High Definition Multimedia Interface) supports both video and audio on a single digital connection for use with DVD players, DTV, set-top boxes, and other AV devices. HDMI was developed to provide the technologies of High Bandwidth Digital Content Protection (HDCP) as well as Digital Visual Interface (DVI) in one specification. HDCP is used to protect digital content transmitted and received by DVI-compliant or HDMI-compliant displays.

HDMI has the capability to support standard, enhanced, or high-definition video plus standard to multi-channel surround-sound audio. HDMI features include uncompressed digital video, a bandwidth of up to 2.2 gigabytes per second (with HDTV signals), one connector (instead of several cables and connectors), and communication between the AV source and AV devices such as DTVs.

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

Connecting to a display (Using the HDMI cable)



Switching the video quality (HDMI mode) using HDMI button on the remote control

Press **HDMI** on the remote control to receive suitable video quality. The video quality is required to match your TV having HDMI feature and suitable quality, please check your TV owner's manual.

Pressing **HDMI** changes the video quality as follows:

480p → 720p → 1080i
 ↑
 └──────────┘

- Make sure following setting.

On-screen display	Select:	Page
"Digital Out"	"PCM"	61

Notes:

- Refer to the Owner's manual of the connected TV as Well.
- When you connect the DVD/VCR to your TV, be sure to turn off the power and unplug both units from the wall outlet before making any connections.
- If you have a HDMI (with HDCP) equipped monitor or display, you can connect it to the DVD/VCR using the supplied HDMI cable.
- The HDMI connector outputs uncompressed digital video, as well as almost every kind of digital audio that the DVD/VCR is compatible with, including DVD-Video, Video CD, CD and MP3.
- No sound will be output from the HDMI cable if the Digital Out is not set to PCM 61.








Connecting to optional equipment

You can enjoy high quality dynamic sounds of DVD video discs or audio CDs by connecting the DVD/VCR to optional audio equipment.

For connection to your TV, see "Connecting to a TV" **20** **21** **22**.

• This selection uses the following reference mark.

-  : Front speaker
-  : Rear speaker
-  : Sub woofer
-  : Center speaker
-  : Signal flow

Connecting to an amplifier equipped with a Dolby Digital decoder

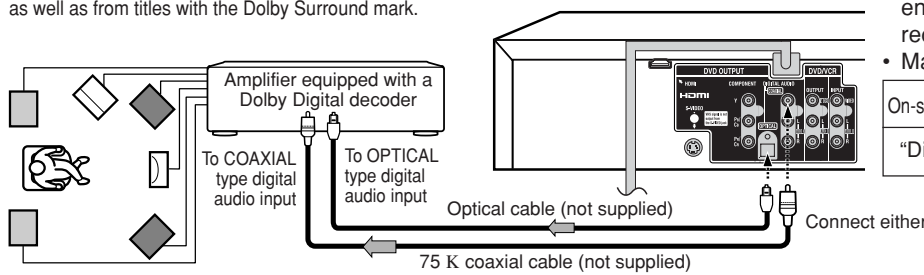
Dolby Digital

Dolby Digital is the surround sound technology used in theaters showing the latest movies, and is now available to reproduce this realistic effect in the home. You can enjoy motion picture and live concert DVD video discs encoded via the Dolby Digital recording system with this dynamic realistic sound by connecting the DVD/VCR to a 6 channel amplifier equipped with a Dolby Digital decoder or Dolby Digital processor. If you have a Dolby Pro Logic Surround decoder, you will obtain the full benefit of Pro Logic from the same DVD movies that provide full 5.1-channel Dolby Digital soundtracks, as well as from titles with the Dolby Surround mark.

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

- Use DVD video discs encoded via the Dolby Digital recording system.
- Make sure following setting.

On-screen display	Select:	Page
"Digital Out"	"PCM" or "Raw"	61



Connecting to an amplifier equipped with Dolby Surround Pro Logic

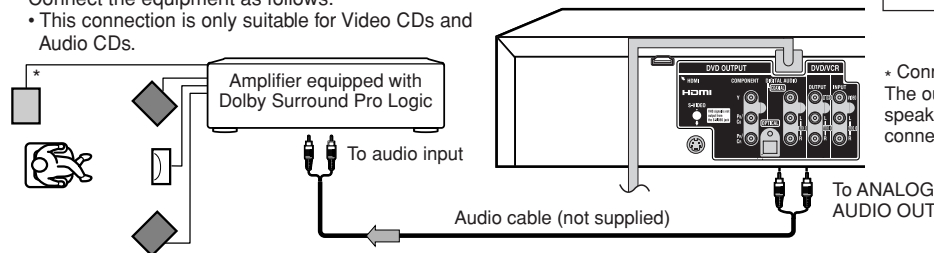
Dolby Surround Pro Logic

You can enjoy the dynamic realistic sound of Dolby Surround Pro Logic by connecting an amplifier and speaker system (right and left front speakers, a center speaker, and one or two rear speakers).

- With an amplifier equipped with Dolby Digital
Connect the equipment the same way as described in "Connecting to an amplifier equipped with a Dolby Digital decoder." Refer to that amplifier's owner's manual and set the amplifier so you can enjoy Dolby Surround Pro Logic sound.
- With an amplifier not equipped with Dolby Digital
Connect the equipment as follows.
 - This connection is only suitable for Video CDs and Audio CDs.

• Make sure following setting.

On-screen display	Select:	Page
"Digital Out"	"PCM" or "Raw"	61



* Connect one or two rear speakers. The output sound from the rear speakers will be monaural even if you connect two rear speakers.

Connecting to an amplifier equipped with a DTS decoder

Digital Theater Systems (DTS)

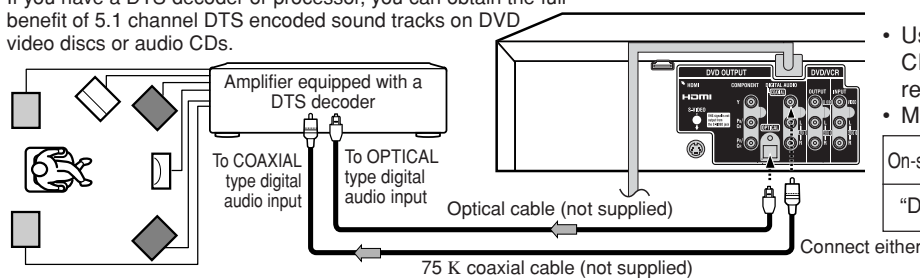
DTS is a high quality surround technology used in theaters and now available for home use, on DVD video discs or audio CDs.

If you have a DTS decoder or processor, you can obtain the full benefit of 5.1 channel DTS encoded sound tracks on DVD video discs or audio CDs.

"DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

- Use DVD video discs or audio CDs encoded via the DTS recording system.
- Make sure following setting.

On-screen display	Select:	Page
"Digital Out"	"Raw"	61



Connecting to optional equipment (continued)

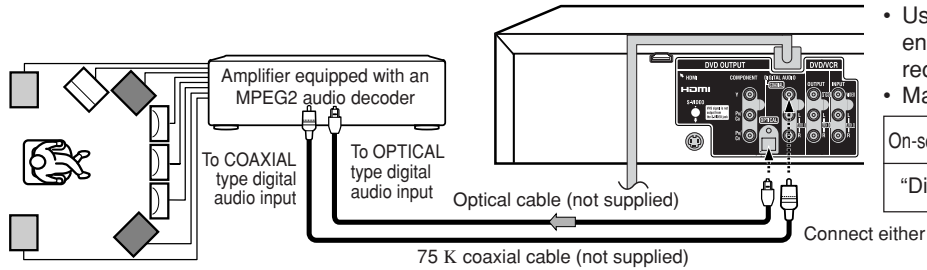
Warning

When playing DTS-encoded discs (audio CDs), excessive noise may be output from the analog stereo jacks. To avoid possible damage to the audio system, you should take proper precautions when the ANALOG AUDIO OUT (L/R) jacks of the DVD/VCR are connected to an amplification system. (Do not leave the ANALOG AUDIO OUT (L/R) wires dangling.) To enjoy DTS Digital Surround™ playback, an external 5.1 channel DTS Digital Surround™ decoder system must be connected to the COAXIAL DIGITAL AUDIO OUT jack of the DVD/VCR.

Connecting to an amplifier equipped with an MPEG2 audio decoder

MPEG2 sound

You can enjoy motion picture and live concert DVD video discs encoded via the MPEG2 recording system with dynamic realistic sound by connecting an amplifier equipped with an MPEG2 audio decoder or MPEG2 audio processor.



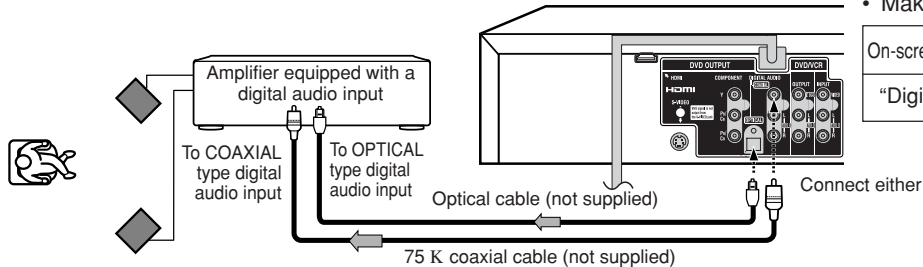
- Use DVD video discs encoded via the MPEG2 recording system.
- Make sure following setting.

On-screen display	Select:	Page
"Digital Out"	"PCM" or "Raw"	61

Connecting to an amplifier equipped with a digital audio input

2 channel digital stereo

You can enjoy the dynamic sound of 2 channel digital stereo by connecting an amplifier equipped with a digital audio input and speaker system (right and left front speakers).



- Make sure following setting.

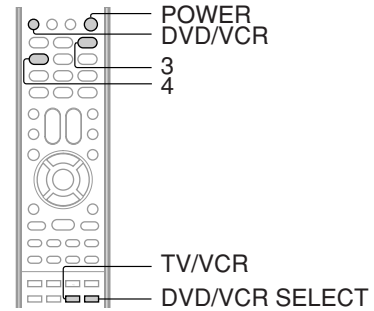
On-screen display	Select:	Page
"Digital Out"	"PCM" or "Raw"	61

Notes:

- DO NOT connect the OPTICAL or COAXIAL DIGITAL AUDIO OUT jack of the DVD/VCR to the AC-3 RF input of a Dolby Digital Receiver. This input on your A/V Receiver is reserved for Laserdisc use only and is incompatible with the OPTICAL or COAXIAL DIGITAL AUDIO OUT jack of the DVD/VCR.
- Connect the OPTICAL DIGITAL AUDIO OUT jack of the DVD/VCR to the "OPTICAL" input of a Receiver or Processor.
- Connect the COAXIAL DIGITAL AUDIO OUT jack of the DVD/VCR to the "COAXIAL" input of a Receiver or Processor.
- Refer to the owner's manual of the connected equipment as well.
- When you connect the DVD/VCR to other equipment, be sure to turn off the power and unplug all of the equipment from the wall outlet before making any connections.
- The output sound of the DVD/VCR has a wide dynamic range. Be sure to adjust the receiver's volume to a moderate listening level. Otherwise, the speakers and your hearing may be damaged by a sudden high volume sound.
- Turn off the amplifier before you connect or disconnect the DVD/VCR's power cord. If you leave the amplifier power on, the speakers may be damaged.

Setting the video channel

When a TV is connected with the 75 ohm coaxial cable only. To view playback of a recorded tape or DVD disc, or to watch a program selected by the VCR's channel selector, the TV must be set to channel 3 or 4 (video channel).

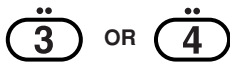


Setting the video channel

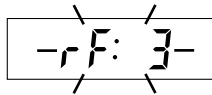
1 Press DVD/VCR to operate the DVD/VCR.



2 Press and hold 3 or 4 on the remote for 3 seconds in standby mode.



The video channel will start to flash for 3 seconds in the display window.



3 Press POWER to turn on the DVD/VCR.



4 Press DVD/VCR SELECT selector to select the VCR mode.



The VCR indicator on the front panel will light.

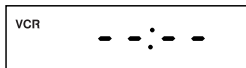


5 Turn ON the TV and set to CH 3 or 4 to correspond with the channel selected in step 2.

6 Press TV/VCR to select the VCR position.



The VCR indicator will appear in the display window.



7 Select any channel to receive a TV station in your area. The channel number will appear on the screen for about 4 seconds.

For a push-button TV tuner

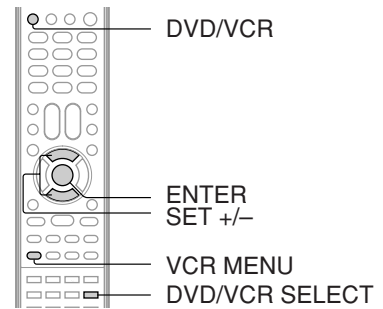
If CH 3 or 4 corresponding to the video channel cannot be tuned on your TV, proceed as follows: set the VCR 3/4 channel selector and the TV to CH 3 or 4, play back a prerecorded tape and tune the TV to receive a sharp color picture from the video cassette recorder. Refer to your TV owner's manual for details.

Note:

If the unit does not operate properly, or No key operation (by the unit and/or the remote control): Static electricity, etc., may affect the player's operation. Disconnect the AC power cord once, then connect it again.

Setting the language

You can choose from three different languages (English, French and Spanish) for the on-screen displays.

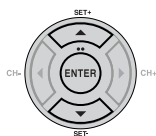


Setting the language

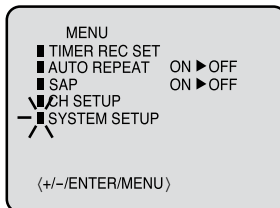
Preparation:

- Turn ON the TV and select to the corresponding video input.
- Press **DVD/VCR** to operate the DVD/VCR.
- Press **DVD/VCR SELECT** to select the VCR mode. (The VCR indicator will light.)

1 Press VCR MENU.



The VCR menu screen will appear. Press **SET +** or **-** to select "SYSTEM SETUP", then press **ENTER**. If you use the unit for the first time and press **VCR MENU**, instead of the main menu screen the "SYSTEM SETUP" menu screen in step 2 may appear.



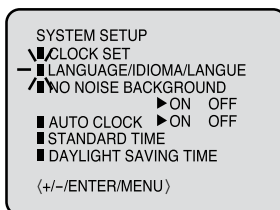
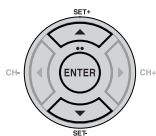
4 Press VCR MENU until the MENU screen is cleared.



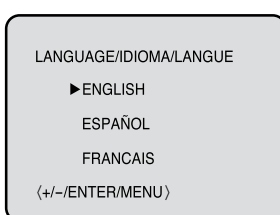
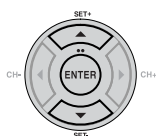
Notes:

- Both the VCR and the DVD have their own player menus **58**.
- If no buttons are pressed for more than 60 seconds, the VCR MENU screen will return to normal TV-operation automatically.

2 Press SET + or - to select "LANGUAGE", then press ENTER.

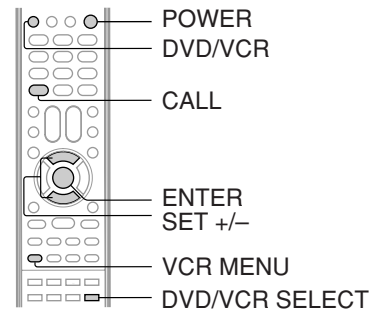


3 Press SET + or - to select the desired language: English (ENGLISH), Spanish (ESPAÑOL) or French (FRANCAIS), then press ENTER.



Clock setting

The AUTO CLOCK function will automatically set the built-in clock (Month, Day, Year and Time) when the DVD/VCR is connected to an Antenna or Cable system and it is turned off. The DVD/VCR searches for a station in your area containing the necessary AUTO CLOCK setting signals. Once received, it will take approximately 4 minutes for the clock to set itself automatically.



AUTO CLOCK setting

Preparation:

- Turn ON the TV and select the corresponding video input.
- Press **DVD/VCR** to operate the DVD/VCR.
- Press **DVD/VCR SELECT** to select the VCR mode. (The VCR indicator will light.)

1 Connect the Antenna or Cable system.

- If you use a cable box, turn it on.

2 Plug the AC power cord to the AC outlet.

3 Make sure the DVD/VCR is turned off.

••POWER



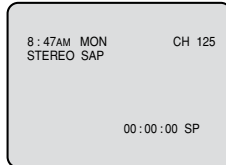
- Depending on the reception condition it may take approx. thirty minutes.
- If you press **POWER**, the Auto Clock set is not programmed.

4 Wait at least three minutes and press POWER.

••POWER



5 Press CALL to check the clock setting on the on screen display.



6 If the clock is not set, check the antenna condition. The AUTO CLOCK may not function properly if the reception condition is not good.

AUTO CLOCK adjustment

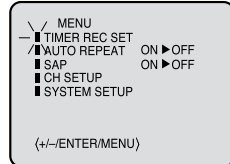
The auto clock adjustment will be updated at 6:00 AM, 12:00 PM and 6:00 PM everyday when the DVD/VCR turned off.

- If you use a cable box and you want AUTO CLOCK adjustment to be performed, the cable box must be left on.
- The AUTO CLOCK adjustment is not effective when there is a difference of more than 5 minutes exists between the built-in clock time and the actual time.

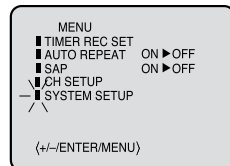
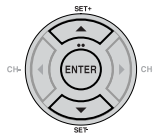
To set AUTO CLOCK to off

When shipped from factory the AUTO CLOCK is set to "ON". But if you do not want AUTO CLOCK setting:

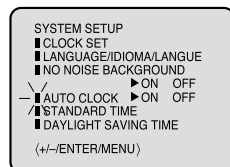
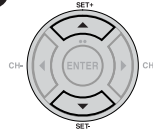
1 Press VCR MENU.



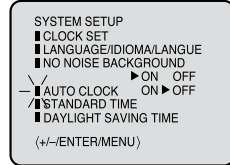
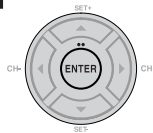
2 Press SET + or - to select "SYSTEM SETUP", then press ENTER.



3 Press SET + or - to select "AUTO CLOCK".



4 Press ENTER to select "OFF".



5 Press VCR MENU repeatedly to return to the normal screen.




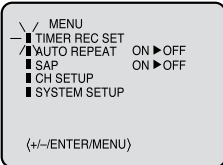
- When the AUTO CLOCK is set to "OFF", the AUTO CLOCK adjustment does not function.
- Set the clock manually **[29]**.

Clock setting (continued)

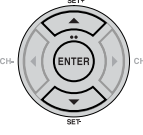
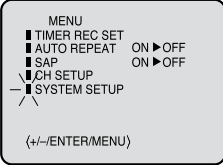
To set STANDARD TIME

In the rare event that you live within broadcast range of two stations in two different time zones, the DVD/VCR may recognize the wrong station for the AUTO CLOCK setting. To correct the situation:

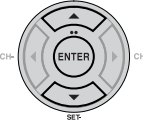
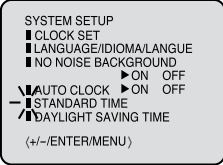
- 1 Press VCR MENU.**

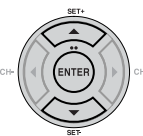
(+/-)ENTER/MENU
- 2 Press SET + or - to select "SYSTEM SETUP", then press ENTER.**

(+/-)ENTER/MENU
- 3 Press SET + or - to select "STANDARD TIME", then press ENTER.**





(+/-)ENTER/MENU
- 4 Press SET + or - to select your time zone, then press ENTER.**



ATLANTIC	: GMT-4hours
EASTERN	: GMT-5hours
CENTRAL	: GMT-6hours
MOUNTAIN	: GMT-7hours
PACIFIC	: GMT-8hours
ALASKA	: GMT-9hours
HAWAII	: GMT-10hours
AUTO	: AUTO SET

(GMT: Greenwich Mean Time)
- 5 Press VCR MENU until the MENU screen is cleared.**


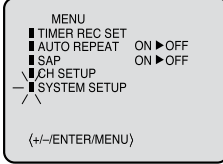


- Notes:**
- To be able to select the standard time, the clock must first be set by AUTO CLOCK once.
 - If you live in Newfoundland and the AUTO CLOCK does not function properly, set the AUTO CLOCK menu option to "OFF" and set the clock manually.

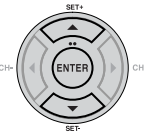
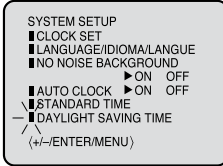
To set DAYLIGHT SAVING TIME

You can set the DAYLIGHT SAVING TIME automatically or manually.


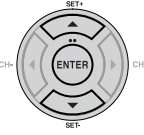
- 1 Press VCR MENU.**

(+/-)ENTER/MENU
- 2 Press SET + or - to select "DAYLIGHT SAVING TIME", then press ENTER.**

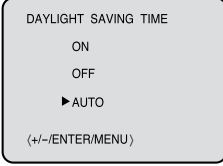



(+/-)ENTER/MENU
- 3 Press SET + or - to select one of the options, then press ENTER. Press VCR MENU until the MENU screen is cleared.**

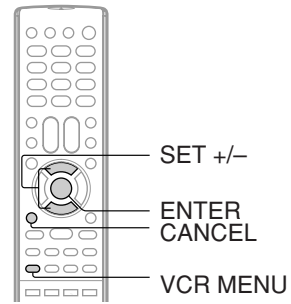
ON:	for manual setting (forward one hour)
OFF:	for manual setting (back one hour)
AUTO:	for automatic setting (read XDS in the signal)

When you want to set the DAYLIGHT SAVING TIME manually, on the first Sunday in April you set to "ON", and on the last Sunday in October you set to "OFF".



(+/-)ENTER/MENU

- Notes:**
- When shipped from factory, the DAYLIGHT SAVING TIME is set to "AUTO" position.
 - When the clock is not set, DAYLIGHT SAVING TIME setting is not available.
 - When there is no DAYLIGHT SAVING TIME in your area, always select "OFF" position in step 3.



If the AUTO CLOCK process did not set the date and time correctly, you must set them manually for timer recording and DAYLIGHT SAVING TIME.

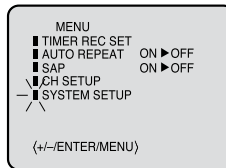
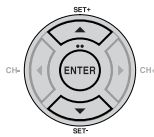
Manual clock setting

EXAMPLE: Setting the clock to "8:30 AM" March, 26 (SAT), 2005.

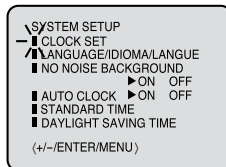
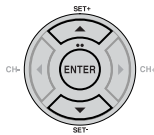
1 Press VCR MENU.



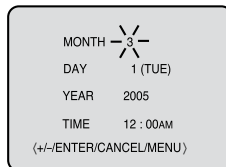
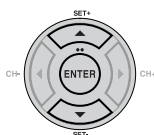
2 Press SET + or – to select "SYSTEM SETUP", then press ENTER.



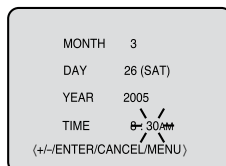
3 Press SET + or – to select "CLOCK SET", then press ENTER.



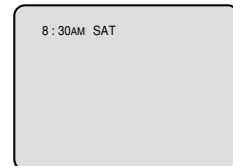
4 Press SET + or – to set the month, then press ENTER.



5 Set the day, year and time as in step 4.



6 After setting the clock, date and time starts functioning automatically.



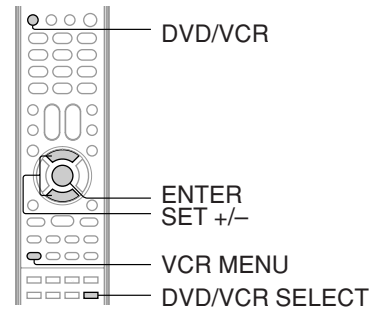
To make corrections any time during the process
Press **CANCEL** repeatedly until the item you want to change blinks, then press **SET + or –**.

Note:
After a power failure or disconnection of the power, the timer settings will be lost. In this case, reset the present time.

Basic setup

Tuner setting

This DVD/VCR is equipped with a channel memory feature which allows channels to skip up or down to the next channel set into memory, skipping over unwanted channels. Before selecting channels, they must be programmed into the DVD/VCR's memory. In addition to normal VHF and UHF channels, this DVD/VCR can receive up to 113 Cable TV channels. To use this DVD/VCR with an antenna, set the TV/CABLE menu option to the TV mode. When shipped from the factory, this menu option is in the CABLE mode.

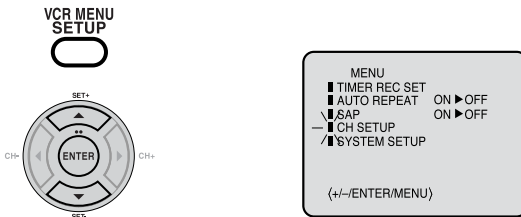


TV/CABLE selection

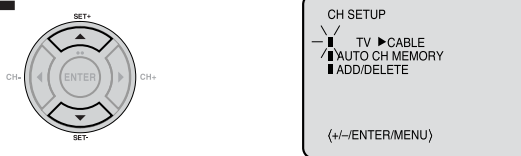
Preparation:

- Turn ON the TV and select to the corresponding video input.
- Press **DVD/VCR** to operate the DVD/VCR.
- Press **DVD/VCR SELECT** to select the VCR mode. (The VCR indicator will light.)

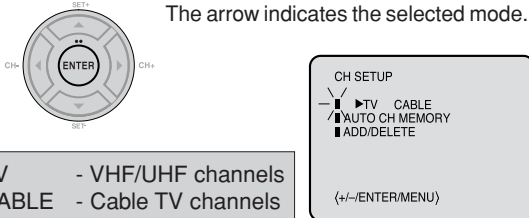
1 Press **VCR MENU**. Press **SET + or -** to select "CH SETUP", then press **ENTER**.



2 Press **SET + or -** to select "TV/CABLE".



3 Press **ENTER** to select the TV or CABLE mode.



4 Press **VCR MENU** until the menu screen is cleared.

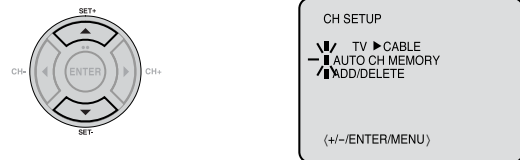


Note:

You can't select "CH SETUP" if you set the channel to "L1" or "L2".

Setting channels automatically

1 Repeat left step 1 and press **SET + or -** to select "AUTO CH MEMORY".



2 Press **ENTER**.

Auto tuning will begin. The channel display will count up and when finished, the screen returns to normal.

