

SHARP CORPORATION
Osaka, Japan

SHARP ELECTRONICS (U.K.) LTD.
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Manchester M40 5BE

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DV-NC65H

OPERATION MANUAL

SHARP.



The region number for this DVD player is 2.



If you require any advice or assistance regarding your Sharp product, please visit our web-site www.sharp.co.uk/support. Customers without Internet access may telephone the 08705 214277 during office hours (or (01) 676 0648 if telephoning from Ireland).



This equipment complies with the requirements of Directives 89/336/EEC and 73/23/EEC as amended by 93/68/EEC.

- If you are unable to resolve a problem using the TROUBLESHOOTING guide, do not remove the cabinet or attempt to service this Unit yourself.
- For service please contact your dealer. If this is not possible, please call our Customer Information centre for details of your nearest Sharp Service Centre.
- In the unlikely event of this equipment requiring repair during the guarantee period, you will need to provide proof of the date of purchase to the repairing company. Please keep your invoice or receipt which is supplied at the time of purchase.
- Certain replacement parts and accessories may be obtained from our main parts distributor who can be contacted at: Willow Vale Electronics Limited
Tel. 0121 766 5414. Most credit/debit cards accepted.

**SHARP Customer Helpline: Tel. 08705 274277 during office hours
(or (01) 676 0648 if telephoning from Ireland)**

**Alternatively, please visit our web-site:
www.sharp.co.uk/support**

- Specifications are subject to change without notice, as part of our policy of continuous improvement.
- No liability is accepted for any inaccuracies or omissions in this publication, although every possible care has been taken to make it complete and as accurate as possible.

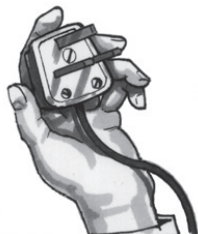


SAFETY WARNINGS

Observe all warnings for your safety and to ensure trouble free use of this Unit.





SPECIAL NOTE FOR USERS IN THE U.K.

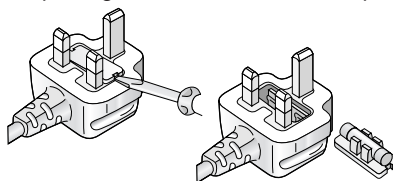


This VCR/DVD combination unit is suitable only for connection to the UK mains. The unit is fitted with a moulded 3-pin mains plug with a 3-amp fuse. The unit does not have a mains power switch. When connected to the mains, the unit will draw current at all times to power the clock. Be sure to unplug the unit when it is not to be used for several months.

The mains lead of this product is fitted with a non-rewireable (moulded) plug incorporating a 3A fuse.

Should the fuse need to be replaced, a BSI or ASTA approved BS 1362 fuse marked  or  and of the same rating as above, which is also indicated on the pin face of the plug, must be used.

Always refit the fuse cover after replacing the fuse. Never use the plug without the fuse cover fitted.



In the unlikely event of the socket outlet in your home not being compatible with the plug supplied, cut off the mains plug and fit an appropriate type.

DANGER: The fuse from the cut-off plug should be removed and the cut-off plug destroyed immediately and disposed of in a safe manner.



Under no circumstances should the cut-off plug be inserted elsewhere into a 13A socket outlet, as a serious electric shock may occur.

To fit an appropriate plug to the mains lead, follow the instructions below:

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

Blue: Neutral

Brown: Live

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

- The wire which is coloured blue must be connected to the plug terminal which is marked N or coloured black.
- The wire which is coloured brown must be connected to the plug terminal which is marked L or coloured red.

Ensure that neither the brown nor the blue wire is connected to the earth terminal in your three-pin plug.










Before replacing the plug cover make sure that:

- If the new fitted plug contains a fuse, its value is the same as that removed from the cut-off plug.
- The cord grip is clamped over the sheath of the mains lead and not simply over the lead wires.

IF YOU HAVE ANY DOUBT, CONSULT A QUALIFIED ELECTRICIAN.

About This Manual

- All mentions of "the Unit" refer to the DV-NC65H VCR/DVD COMBINATION.
- All mentions of "the Remote" refer to the remote control unit.
- The following table describes the icons used in this Operation Manual.

Icon	Meaning
	Tips and Hints for easier operation
	Functions for DVD
	Functions for Audio CD
	Quick Start Guide (the separate sheet)
	GENERAL INFORMATION
	CONNECTION AND INITIAL SETTING
	VCR, DVD SETUP
	WATCHING THE VCR, DVD
	OTHER INFORMATION

Important!

Be sure to read this Operation Manual carefully before using the Unit for the first time, and keep it on hand for future reference when you experience operational problems.

SAFETY INFORMATION

GENERAL INFORMATION

Note:

This unit can be used only where the power supply is AC 230V-240V, 50Hz. It cannot be used elsewhere.

CAUTION:

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

AS THE LASER BEAM USED IN THIS UNIT IS HARMFUL TO THE EYES, DO NOT ATTEMPT TO DISASSEMBLE THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

WARNING:

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

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

Laser Diode Properties

Material: AlGaInP

Wave length: 650 nm

Emission Duration: Continuous

Laser output: Max. 0.7 mW

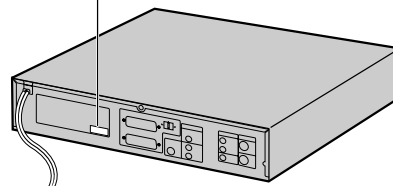
Power Lead Protection

To avoid any malfunctions of the unit, and to protect against electric shock, fire or personal injury, please observe the following.

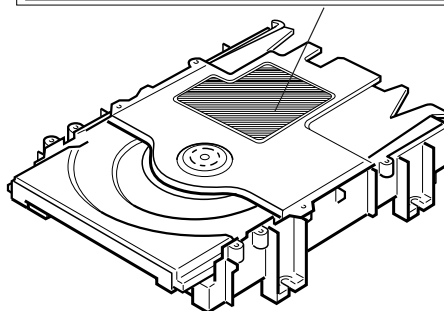
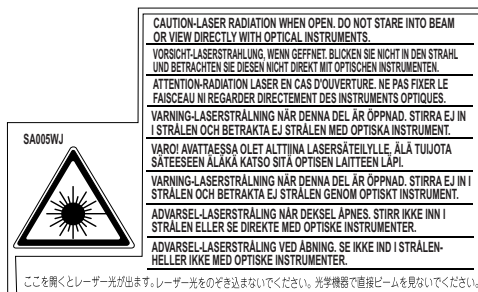
- Hold the plug firmly when connecting or disconnecting the AC power lead.
- Keep the AC power lead away from heating appliances.
- Never put any heavy object on the AC power lead.
- Do not attempt to repair or reconstruct the AC power lead in any way.

- This Unit is classified as a CLASS 1 LASER product.
- The CLASS 1 LASER PRODUCT label is located on the rear cover.
- This product contains a low power laser device. To ensure continued safety do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

**CLASS 1
LASER PRODUCT**



(Rear of product)



SAFETY INFORMATION

Location and Handling

- Do not place your Unit in enclosed spaces or do not cover it to prevent excessive temperatures inside the unit.
- Do not place the Unit in direct sunlight, or near heat sources.
- Keep the Unit away from strong magnetic fields, i.e. loudspeakers etc.
- Do not place any object containing water or other liquids on the Unit. In the event that liquid should enter the cabinet, unplug the Unit immediately and contact the retailer or service centre approved by SHARP immediately.
- Do not remove the Unit cabinet. Touching parts inside the cabinet could result in electric shock and/or damage to the Unit. For service and adjustment inside the cabinet, call a qualified dealer or service centre approved by SHARP.

Periods of no use

When the unit is not being used, switch the unit to the Standby mode.

When left unused for a long period of time, the unit should be unplugged from the household AC socket.

No Fingers or Other Objects Inside

Do not put any foreign object on the disc tray.

Stacking

Place the unit in a horizontal position, and do not place anything heavy on it.

Condensation

Moisture may form on the pickup lens in the following conditions:

- immediately after a heater has been turned on.
- in a steamy or very humid room.
- when the unit is suddenly moved from a cold environment to a warm one.

If moisture forms inside this unit, it may not operate properly.

In this case, turn on the power and wait about one hour for the moisture to evaporate.

Cleaning

Unplug your Unit before cleaning. Use a damp cloth for cleaning. Do not use cleaning fluids or aerosols which could enter the unit and cause damage, fire, or electrical shock. These substances may also deteriorate the finish of your Unit.

If there is Noise Interference on the TV While a Broadcast is being Received

Depending on the reception condition of the TV, interference may appear on the TV monitor while you watch a TV broadcast and the unit is left on. This is not a malfunction of the unit or the TV. To watch a TV broadcast, turn off the unit.

Service

Do not attempt to service this Unit yourself. Please refer any service to the nearest service centre approved by SHARP.

Copyright

Recording and playback of any material may require consent.

Please refer particularly to the provisions of the Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1958, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

- VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation.
- The VIDEO Plus+ system is manufactured under license from Gemstar Development Corporation.

Copy Protection

This Unit supports Macrovision copy protection. On DVDs that include a copy protection code, if the contents of the DVD are copied using a VCR, the copy protection code prevents the videotape copy from playing normally.

Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, 4,819,098 and 4,907,093 licensed for limited viewing uses only.

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.

Recommended Measures for Optimum Picture Excellence

The unit is a precision device that is constructed using extremely accurate technology. Soiling or friction affecting the pickup lens or disc drive can impair the image quality. In the worst case, neither video or audio will be played back. To obtain optimum picture quality, the Unit should be checked (cleaning and replacement of some parts) every 1,000 hours. Note that this period varies depending on the environment (temperature, humidity, dust, etc.) in which the Unit is used. Contact your authorized Sharp supplier for details.

Do not attempt to clean the pickup lens yourself.

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GENERAL INFORMATION

CONNECTION AND INITIAL SETTINGS

VCR SETUP

DVD SETUP

WATCHING THE VCR

WATCHING THE DVD

OTHER INFORMATION



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Types of Discs that Can Be Played on This Unit

This Unit can play back discs bearing any of the following marks:

  	DVD DVD-R / DVD-RW [8cm(3") disc/12cm(5") disc]	See NOTE 1 See NOTE 2 on the next page
	Audio CDs [8cm(3") disc/12cm(5") disc]	See NOTE 3 on the next page
	CD-R/CD-RW [8cm(3") disc/12cm(5") disc]	<ul style="list-style-type: none"> Discs recorded in MP3 file format or Audio format.
Other CDs 1) On CD-G and CD-EXTRA discs, only the sound can be played (no images). 2) Video CD, Photo CD, DVD-ROM, DVD-RW (Video recording format), DVD-Audio, SACD and CD-ROM discs cannot be used. 3) Discs with unusual shapes (heart-shaped or hexagonal discs) cannot be used. The use of such discs will cause a fault. <ul style="list-style-type: none"> This Unit will reject an incompatible disc, therefore the disc type should be checked. 		

This unit will output NTSC signals when playing "NTSC discs".

NTSC signals cannot be converted to modified PAL signals.

An NTSC TV or NTSC-compatible Multi-system TV must be used when playing NTSC discs.

NOTE 1

- DVD video players and discs are designed with region numbers which dictate the regions in which a disc can be played. If the region number on the disc you want to play does not match the region number in this Unit, you will not be able to play the disc.
- DVD R/DVD-RW discs recorded in video mode can only be played back.
- Non-finalised DVD-RW discs can not be played back.

The region number for this Unit is 2.

Samples of region number marks compatible with this Player:



Disc playable in all regions




As for the list of the region number 2 countries and the world map for all region numbers, refer to page 99.



Types of Discs that Can Be Played on This Unit



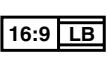


Disc Function or Operation that is Not Available

In the cases listed below, the  indicator may appear on the TV screen, which indicates that the function or operation is not available.

- When you intend to perform the function or operation on which the manufacturer restriction is imposed:
The specific functions on some DVDs are determined by the disc manufacturer. As this Unit plays disc data in accordance with the guidelines of the disc manufacturer, some functions may not be available on some discs. Be sure to read the documentation provided with the disc.
- When you intend to perform the functions or operations prohibited for the current disc:
The types of functions and operations that can be used for a particular disc vary depending on the features of that disc. Some disc functions and operations may differ from the descriptions given in this Operation Manual. In this event, follow the instructions given on the screen.

Icons Used on DVDs

Sample Icons

	1. English 2. Chinese		1. English 2. Chinese			
Number of audio tracks		Type of subtitles recorded		Screen aspect ratio recorded	Disc with multiple camera angles	Region code indicator

NOTE 2

- This Unit supports 2-channel (L/R) audio and 5.1ch (Multi-channel) MPEG Audio 1/2 (only when the DIGITAL OUT coaxial jack is used for connection). It does not support 7.1 channel MPEG Audio Version 2.0.

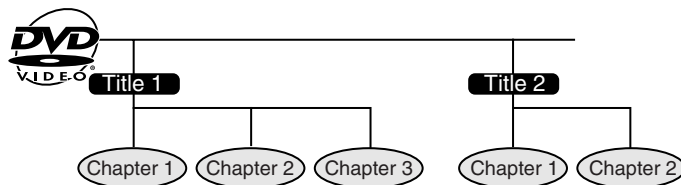
NOTE 3

- When playing back a CD-G (Graphics) or CD EXTRA disc, the audio portion will be played, but the graphic images will not be shown.

Title, Chapter and Tracks

- DVDs are divided into “titles” and “chapters”. If the disc has more than one movie on it, each movie would be a separate “title”. “Chapters”, on the other hand, are sections of titles.

Example: DVD



- Audio CDs are divided into “tracks”. You can think of a “track” as one tune on an Audio CD.

Example: Audio CD



NOTE

- Numbers identify each title, chapter, and track on a disc. Most discs have these numbers recorded on them, but some do not.

Disc Handling and Maintenance

Handling Precautions

- Hold the disc by the edges so the surface will not be soiled with fingerprints. **(A)**
Fingerprints, dirt and scratches can cause skipping and distortion.
- Do not write on the label side with a ball-point pen or other writing utensils.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Be careful not to drop or bend the disc.
- Do not install more than 1 disc on the disc tray.
- Do not try to close the disc tray when the disc is not installed properly. **(B)**
- Be sure to store the disc in its exclusive case when not in use. Then store upright.
- Do not stick paper or adhesive labels to the disc.

If the Surface is Soiled **(C)**

Wipe gently with a soft, damp (water only) cloth.

When wiping discs, always move the cloth from the center hole toward the outer edge.

(If you wipe the discs using a circular motion, circular scratches are likely to occur, which will cause noise.)

If the playing surface of a disc is soiled or scratched, the Unit may decide that the disc is incompatible and eject the disc tray, or it may fail to play the disc correctly. Wipe any soiling off the playing surface with a soft cloth.

If the Disc is Brought from a Cold to a Warm Environment, Dew May Form on the Disc

Wipe the dew off with a soft, dry, lint-free cloth before using the disc.

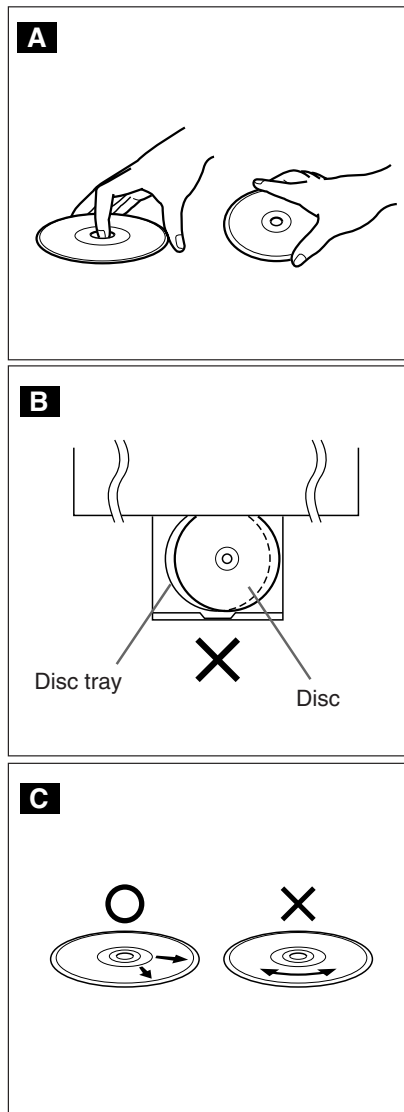
Improper Disc Storage

You can damage discs if you store them in the following places:

- Areas exposed to direct sunlight
- Humid or dusty areas
- Areas directly exposed to a heat outlet or heating appliance

Maintenance

- Be sure to turn the Unit off and disconnect the AC power cord before maintaining the Unit.
- Wipe this Unit with a dry soft cloth.
If the surfaces are extremely dirty, wipe clean with a cloth which has been dipped in a weak soap-and-water solution and wrung out thoroughly and then wipe again with a dry cloth.
- Never use alcohol, benzine, thinner, cleaning fluid or other chemicals. And do not use compressed air to remove dust.




Features

■ Common Features

- A DVD, AUDIO CD player and VCR all in one.
- Simultaneous VCR recording and DVD playback.

■ VCR

-  Hi-Fi Stereo Sound/Double-Azimuth 4-Heads
- 1 minute Rewind (E-180)
- S-VHS Simple Playback
- HQ (High Quality) Circuitry
- Simple Recording Timer
- Sharp Super Picture



■ DVD

- Plays DVD and Audio CD discs as well as CD-R/CD-RW discs recorded in MP3 file format
- Advanced Surround provides high-quality surround sound
- Digital Gamma correction and Digital Super Picture functions
- Dolby Digital*¹, DTS*², MPEG Audio digital out capability
- High-quality digital images
- High-quality digital sound

*¹ Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.


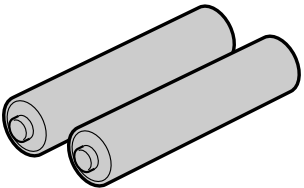
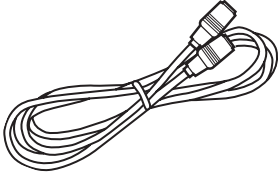

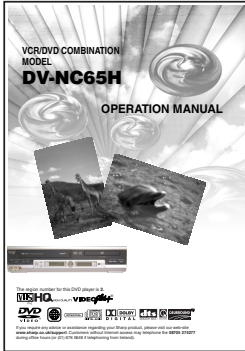
*² "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.

Disc Features and this Operation Manual

- The types of functions and operations that can be used for a particular disc vary depending on the features of that disc. In some cases, these functions and operations may differ from the descriptions given in this Operation Manual. In this event, follow the instructions given on the screen. This Operation Manual only covers basic disc operations.
- **For some operations, the  or  indicator may appear on the TV screen. This indicates that the operation described in this Operation Manual is not permitted for the current disc.**

Accessories

**CHECK THAT ALL THESE ACCESSORIES ARE SUPPLIED WITH THE UNIT.
CONTACT YOUR DEALER IF ANY ARE MISSING.**

 <p>Remote control unit</p>	 <p>Two batteries (R6 UM/SUM-3 or AA) for the Remote</p>	 <p>Round coaxial cable (75 Ohm)</p>
	 <p>SCART lead (FULL Type)</p>	
	<p>Quick Start Guide</p>	 <p>Operation Manual</p>

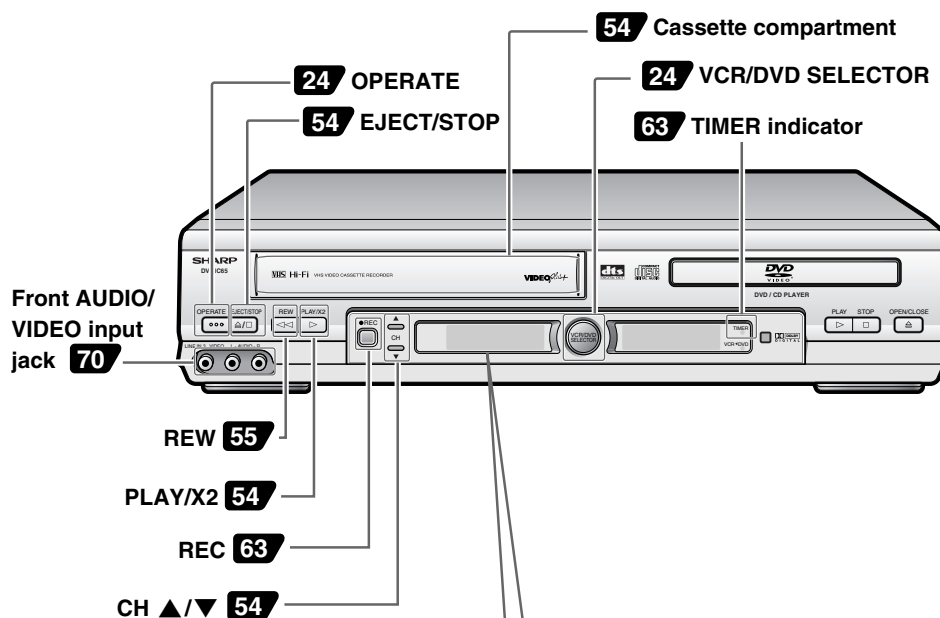
Remote Control

- The Remote Control must be pointed towards the Unit to operate.
- Do not expose to liquid or shock.
- May not function if the Unit is in direct sunlight or any other strong light.
- Replace both alkaline batteries (type AA/R6/UM3) if the Remote Control fails.
- Remove the batteries and keep in a safe place if you do not plan to use the Unit for several months.
- Remove and dispose of flat batteries safely and promptly.
- Incorrect use of batteries may cause them to leak or burst.

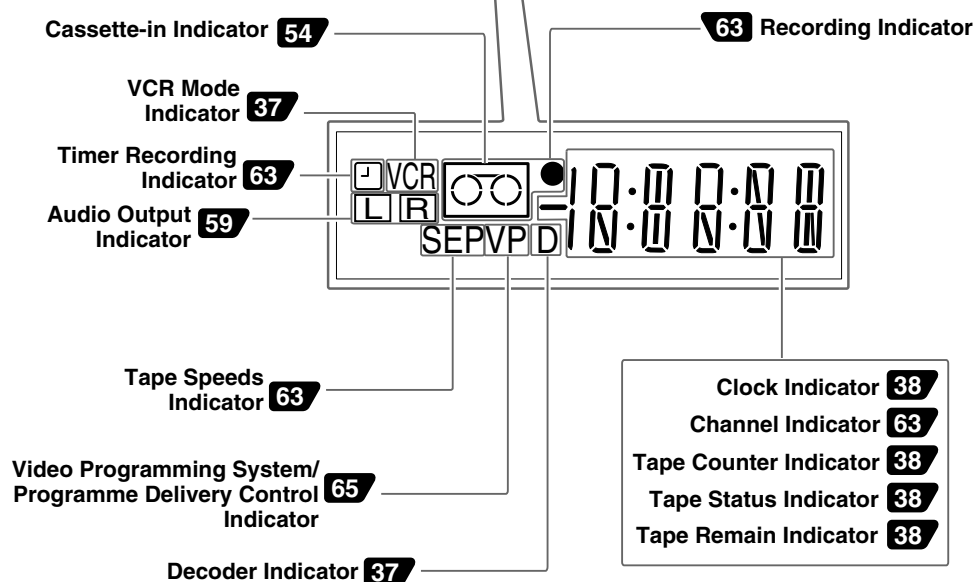
Major Components

VCR Main Unit (Front)

Numbers in **■** refer to the main pages in this Operation Manual where the topic is explained.




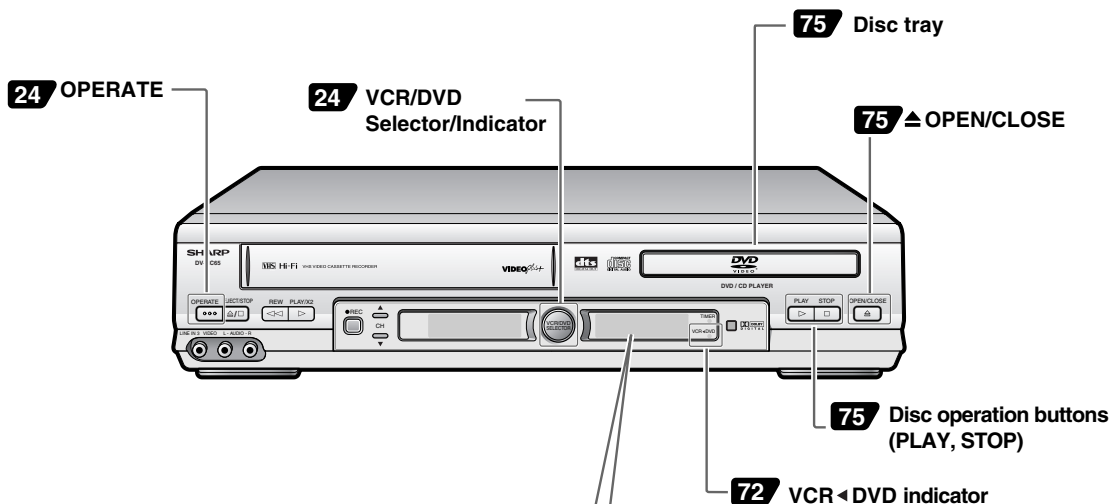
VCR Front Panel Display



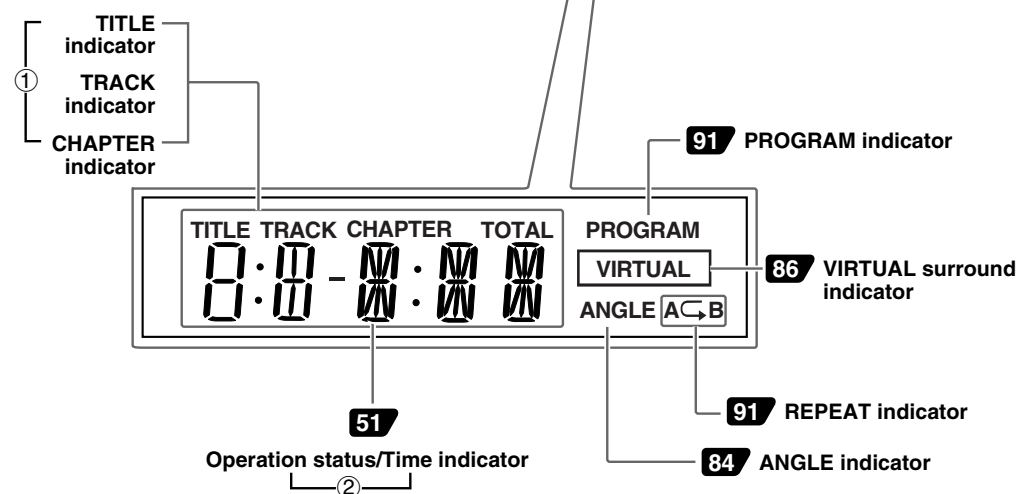


DVD Main Unit (Front)

Numbers in  refer to the main pages in this Operation Manual where the topic is explained.



DVD Front Panel Display




You can toggle between ① and ② by pressing the remote control unit's **DISPLAY** button (page 51).

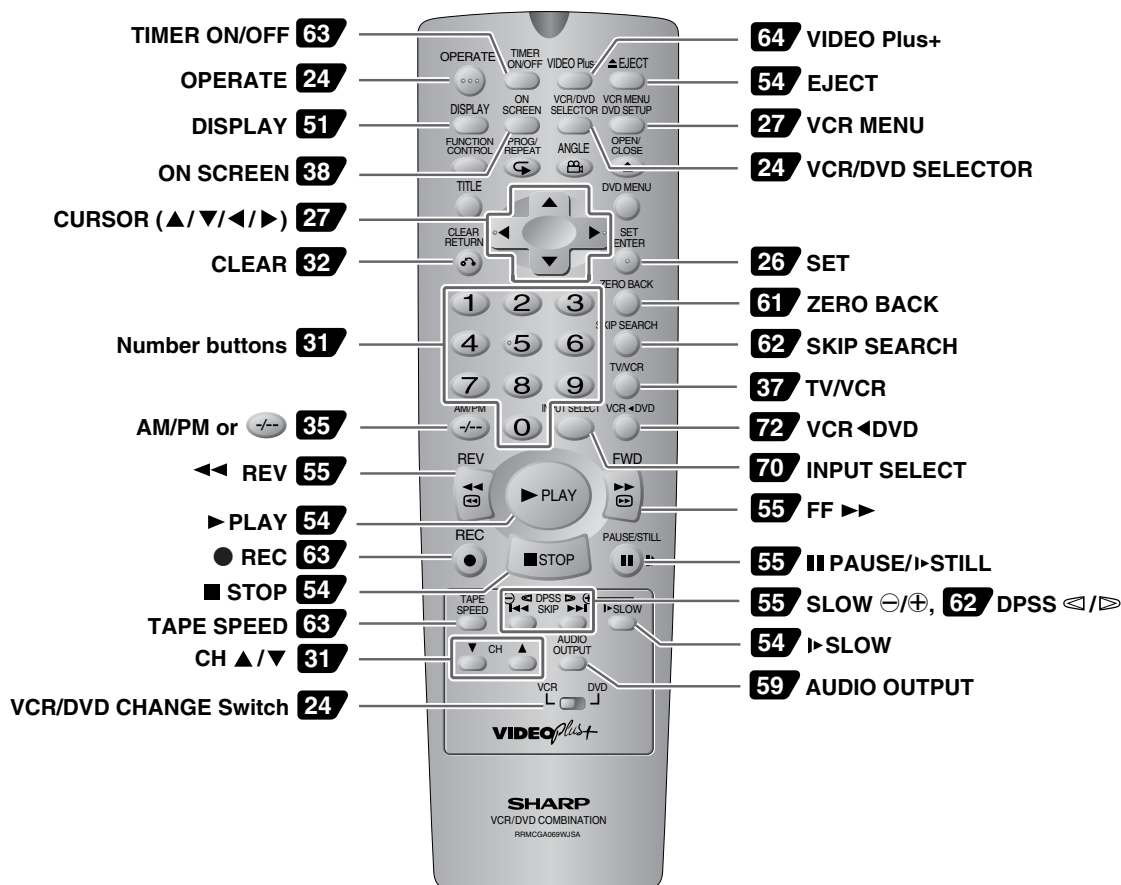


Major Components

Remote (VCR Operation Buttons)

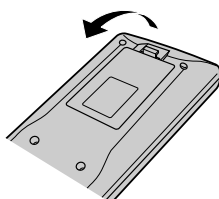
- The explanations on this page use the **VCR/DVD CHANGE Switch** in the **VCR** position.

Numbers in  refer to the main pages in this Operation Manual where the topic is explained.

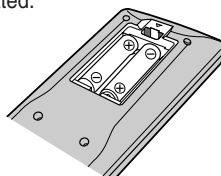


Loading the Batteries

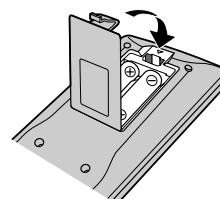
- 1 Open the battery cover by pulling the lid in the direction of the arrow.



- 2 Load the batteries. Load the two batteries (R6 UM/SUM-3 or AA) supplied with the Remote so that the battery poles \ominus and \oplus are positioned as indicated.



- 3 Close the battery cover by lowering the lid in the direction of the arrow.



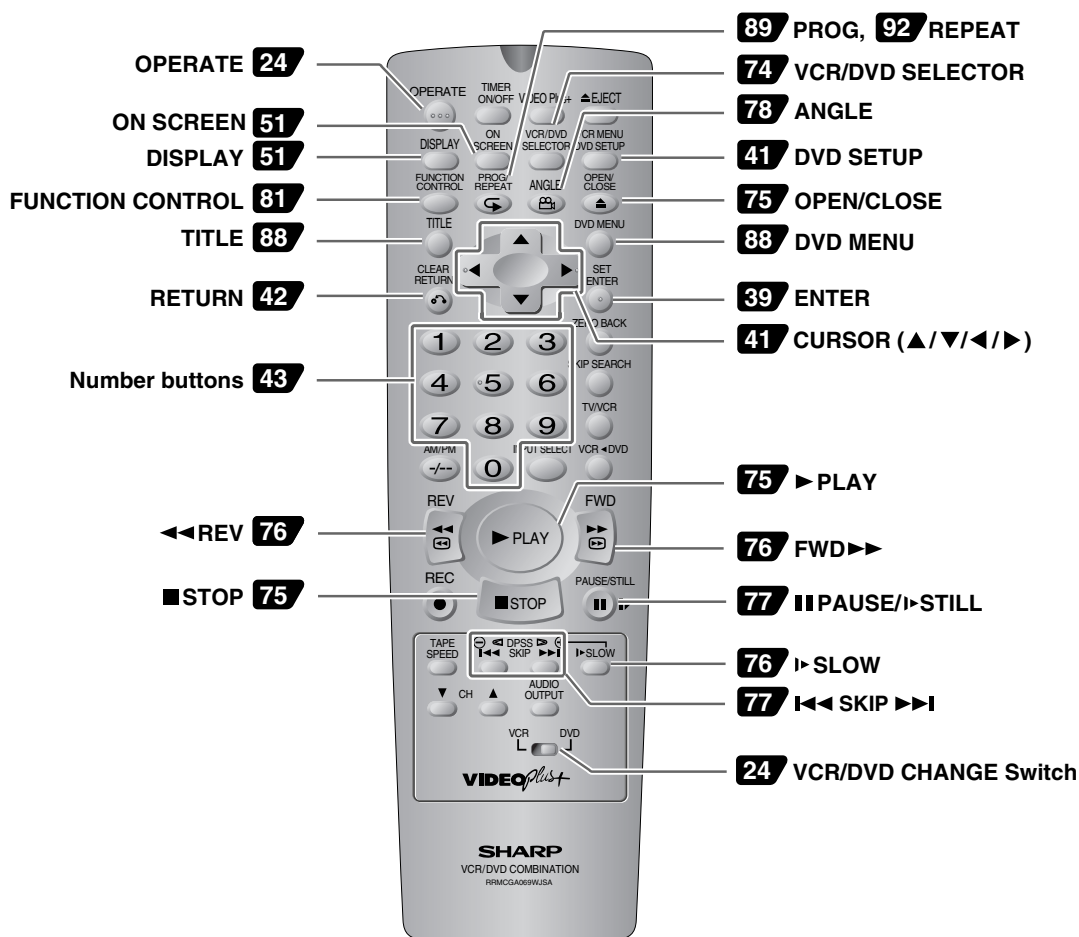


Major Components

Remote (DVD Operation Buttons)

- The explanations on this page use the **VCR/DVD CHANGE Switch** in the **DVD** position.

Numbers in **[]** refer to the main pages in this Operation Manual where the topic is explained.



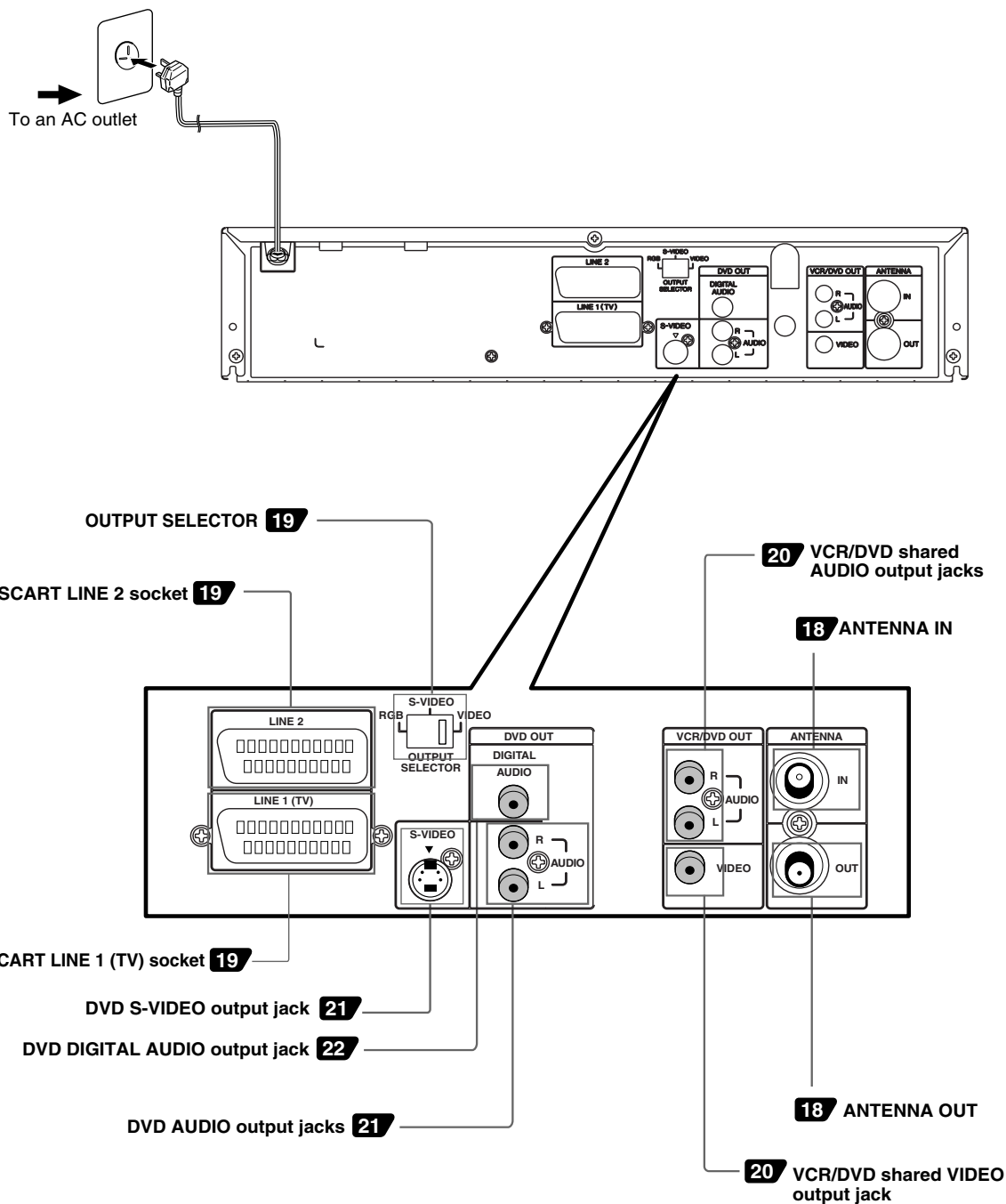
NOTE

- Do not subject the Remote to shock, water or excessive humidity.
- The Remote may not function if the Unit sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries, or mix brands in use.
- Remove the batteries if you do not use the Remote for an extended period of time.



Major Components

Main Unit (Rear)



Basic Connection

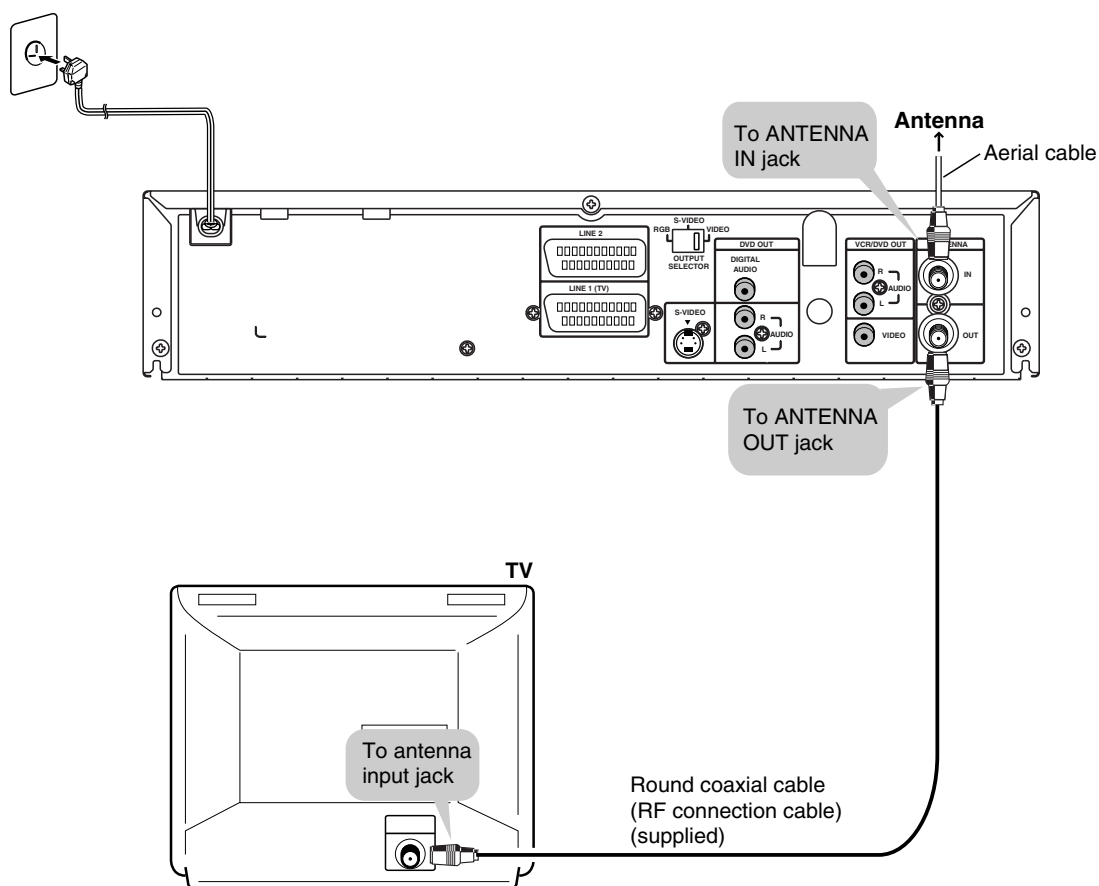
! Caution:

- Be sure to turn off the Unit and equipment to be connected before connecting.
- Read through the operation manual for the equipment to be connected.
- Be sure that the colours of the jacks and plugs match up when using a VIDEO/AUDIO lead (commercially available).
- Be sure to keep the Unit connection leads separate from the TV aerial lead when you install the Unit, because it may cause electrical interference when you are watching television programmes.

Connecting to ANTENNA IN/ANTENNA OUT

The connection method differs depending on the type of TV.

! The signal from ANTENNA OUT will only be the Television Signal. A scart lead MUST be used to view the units' playback signal.

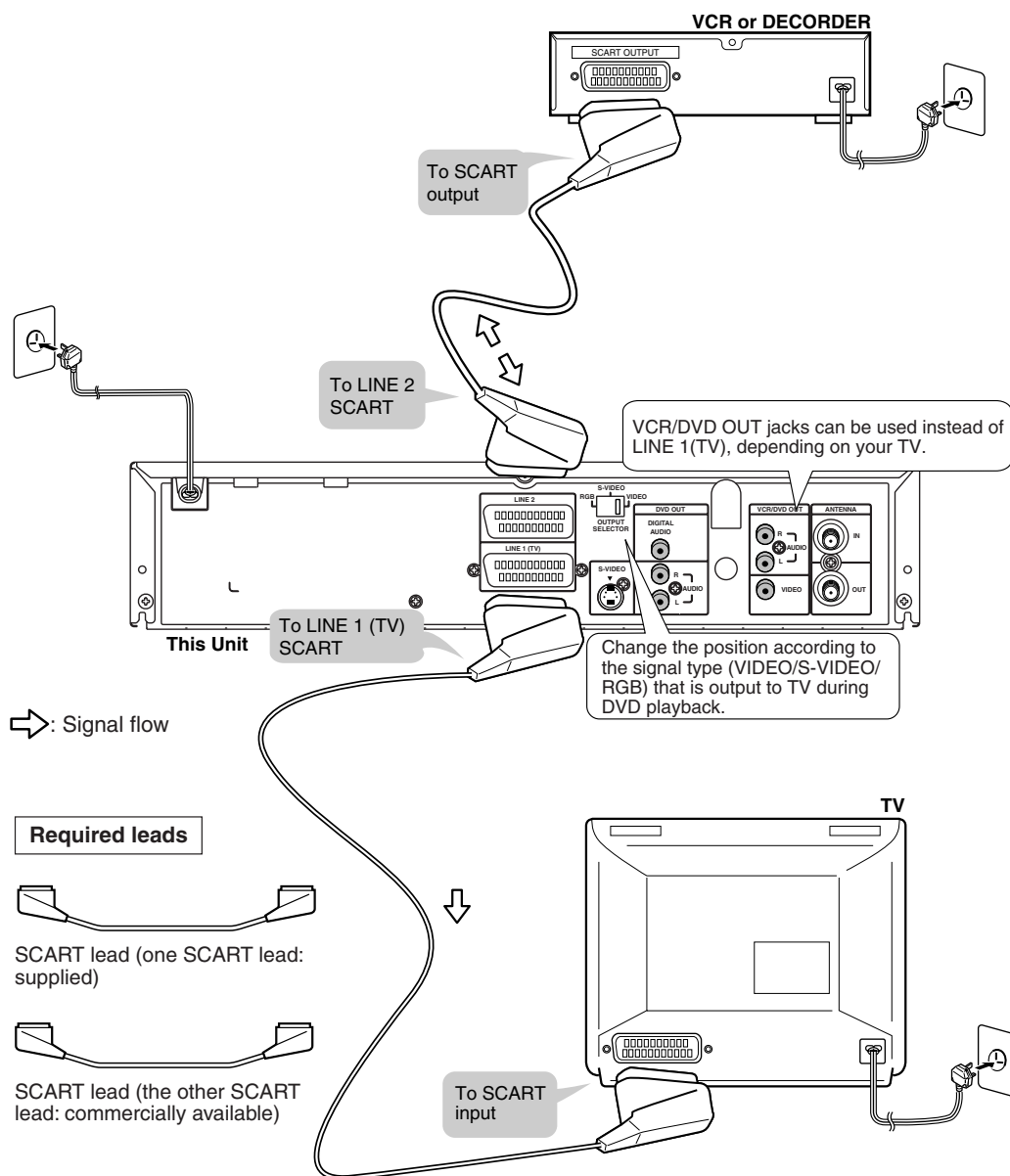




Basic Connection

Connecting a TV with LINE 1 (TV) Output and LINE 2 Input SCARTS

! Use the SCART leads (one SCART lead: supplied) to connect the Unit to your TV and VCR or DECODER.

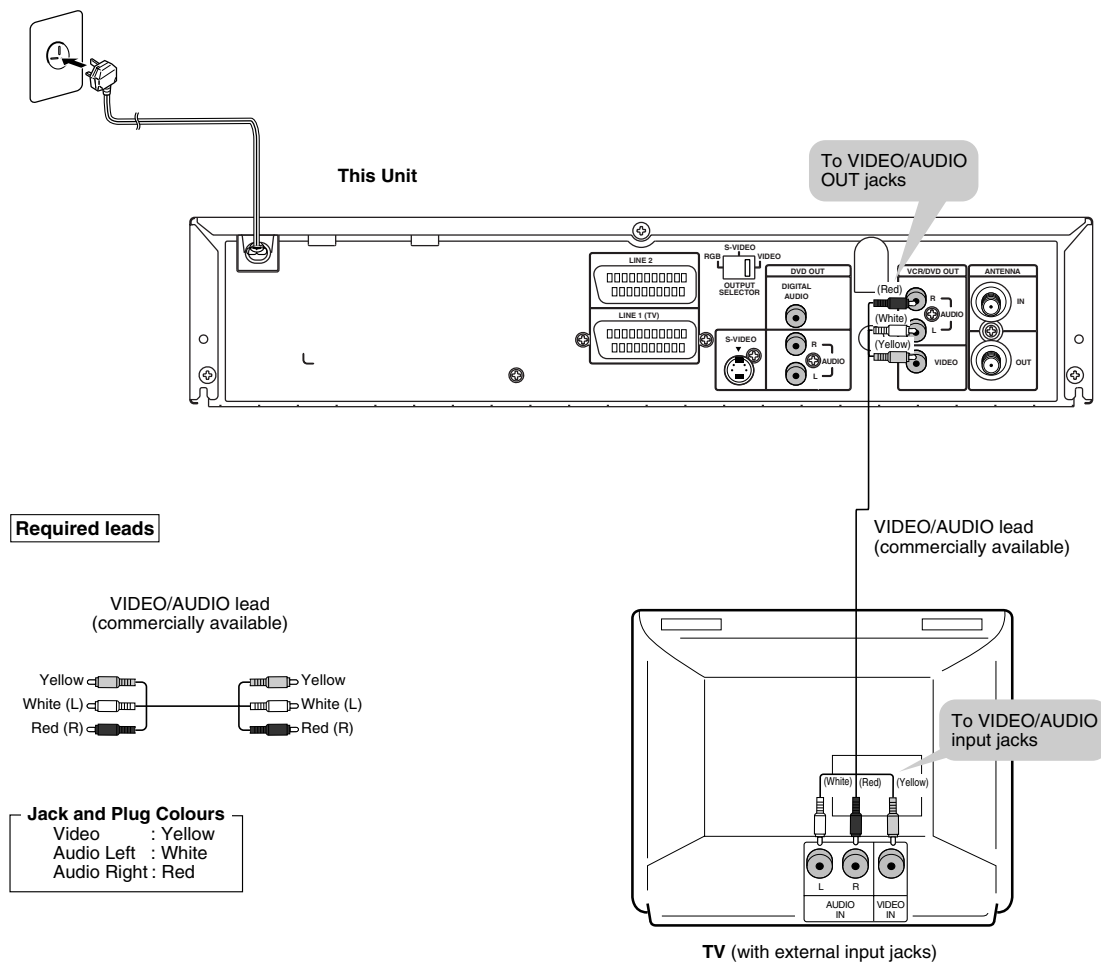


The factory default setting for the OUTPUT SELECTOR is "VIDEO". If your TV supports the higher quality modes S-VIDEO or RGB via the SCART, then please set the selector for your preference.



Basic Connection

Connecting a TV Equipped with VIDEO/AUDIO Input Jacks



- You will not be able to hear all of the sound being output by the Unit if you use the VIDEO/AUDIO lead shown above to a monaural TV that has only one AUDIO input jack.

NOTE

- Be sure that the colours of the jacks and plugs match up when connecting the lead.
- Connect the Unit directly to the TV. If you attempt to view video on a TV connected via a VCR, the copy protection function will scramble the picture.
- If you want to listen to the audio through audio equipment, connect only VIDEO lead to the TV.

DVD Audio Connections

Connecting a TV Equipped with S-VIDEO Input Jacks

When you want to achieve a better video image by connecting a TV equipped with an S-VIDEO input connector to the Unit, you should use an S-VIDEO lead (commercially available) to connect the TV to the Unit.



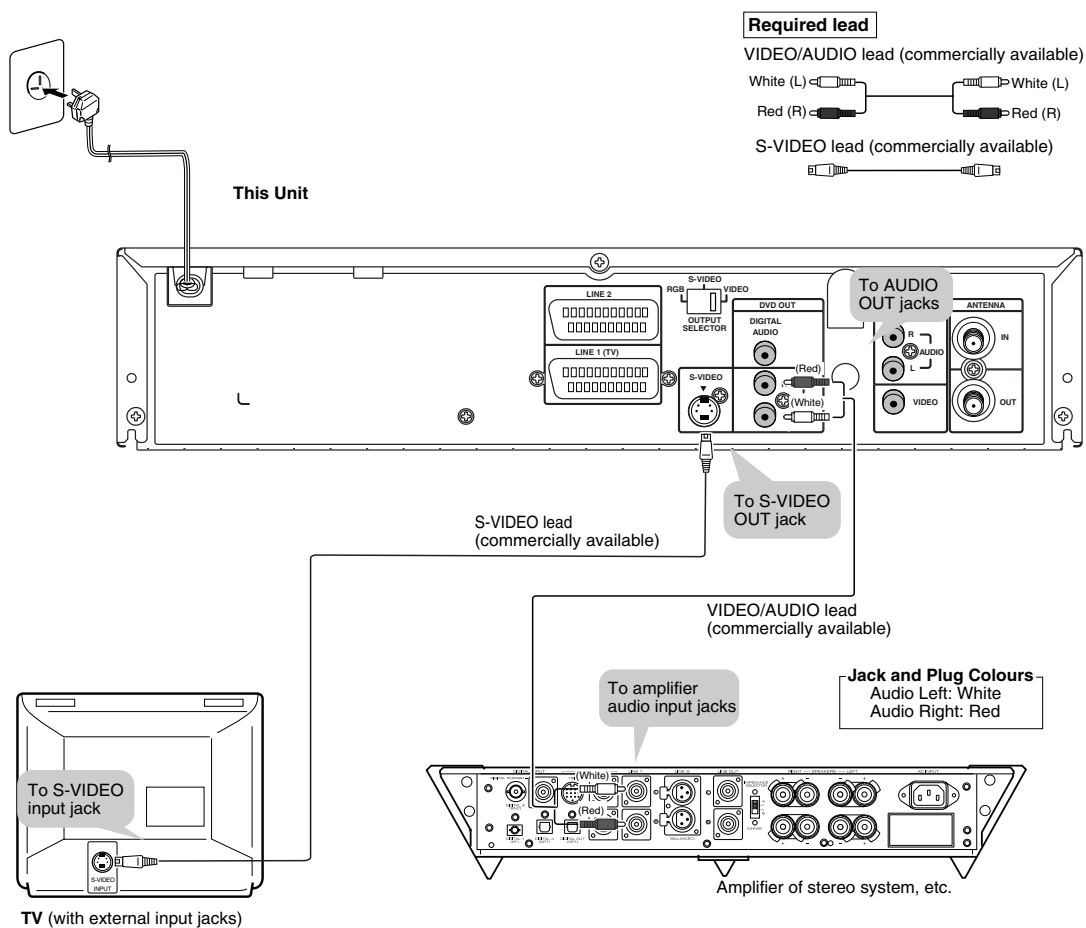
Please note, if the Output Selector Switch is set to RGB, no signal will be output from the S-VIDEO socket.

Connecting to Audio Equipment

Connecting the Unit to audio equipment provides normal stereo sound plus powerful stereo sound enhanced by Dolby Digital (5.1 channel), DTS, and MPEG Audio.

Playing 2 channel audio

■ Analogue Connection



If the Unit is set to OPERATE ON, the DVD signals will be output from the DVD OUT jacks at all times. (The DVD signals will be output from the DVD OUT jacks also when using the VCR.)

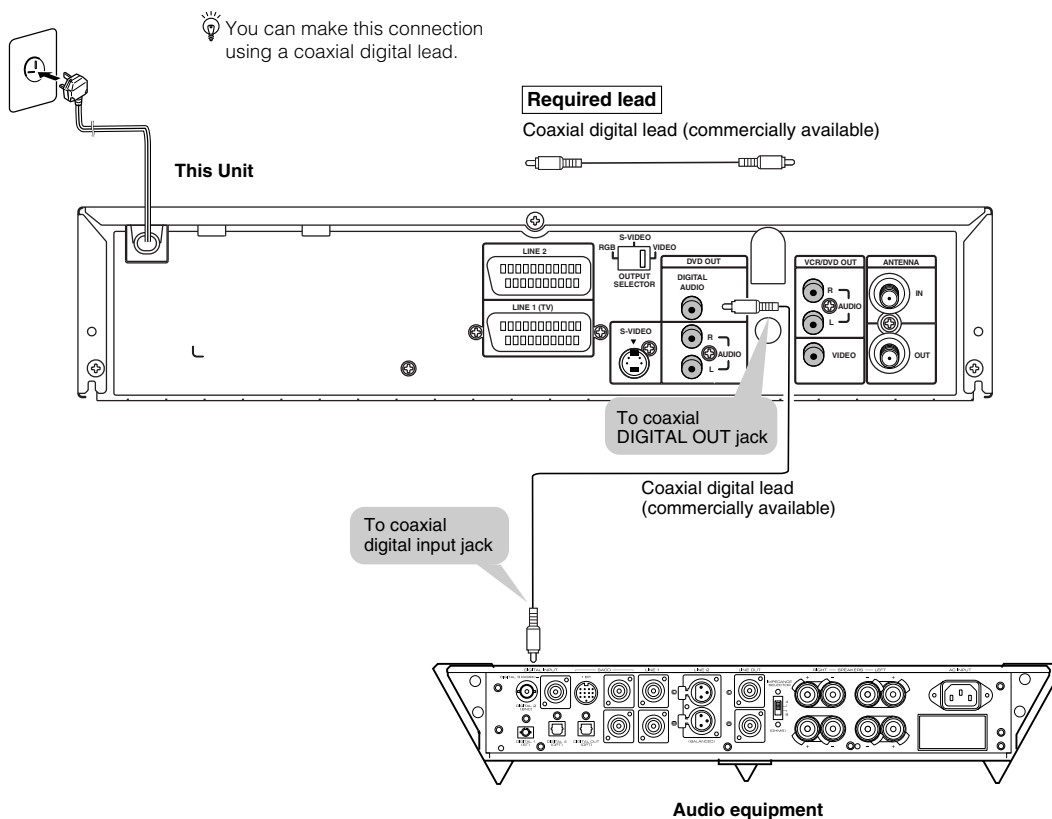


DVD Audio Connections

Playing Dolby Digital (5.1 channel), DTS or MPEG audio

Connecting an amplifier with a Dolby Digital/DTS/MPEG Audio digital surround processor or a Dolby Digital/DTS/MPEG Audio surround processor to your Unit's coaxial digital jack provides richer and more powerful audio play.

■ Connection to a processor or amplifier with a coaxial digital input jack



Digital Connection to an MD to Record a CD

Some Audio CDs have a short silent section between musical tracks. When sound from discs such as these is digitally recorded by connecting the Unit directly to a digital recorder (such as an MD player), the music may be recorded continuously and track numbers may be lost.

■ Digital Connection to Audio Equipment or MD Player without a Dolby Digital Decoder

• Audio CD

Play the disc as you normally would, with the audio mode set to "L+R" (see page 85). With a digital connection, audio of a disc recorded with DTS sounds abnormal in this case.

• DVD

With a digital connection, audio cannot be produced from a DVD recorded with Dolby Digital (5.1 channel), Dolby Surround (Pro Logic), DTS or MPEG Audio, so you should use an analogue connection to play such discs. Discs with linear PCM audio should play normally.

NOTE

- This connection is not possible if the processor or amplifier to which you want to connect does not have a coaxial digital input jack.

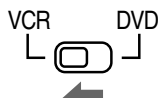
Preparations Before Using the Product

Preparing to Watch a VCR or a DVD

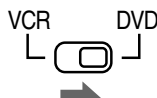
- 1 Turn on the TV and switch the TV channel to the external "VIDEO" or "AV" channel connected to the DVD/VCR shared output jacks.
- 2 Press **OPERATE**.
 - The product is turned on.
- 3 Press **VCR/DVD SELECTOR** on the remote control to switch to the "VCR" mode or "DVD" mode.
 - The VCR/DVD SELECTOR on the product lights up in orange for "VCR" or green for "DVD".



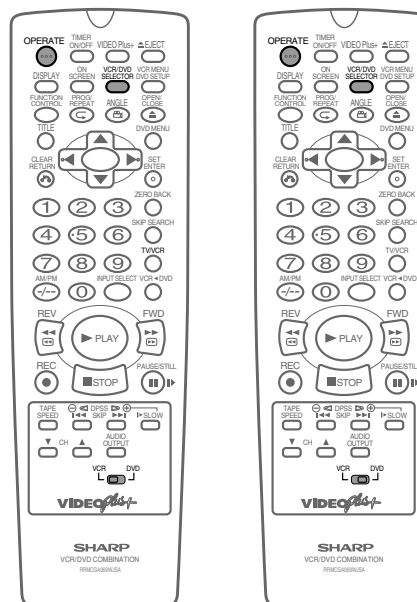
- Each time **VCR/DVD SELECTOR** is pressed, the mode changes between "VCR" mode and "DVD" mode.
 - The mode can be switched by pressing the **VCR/DVD SELECTOR** on the product.
- 4 Move the **VCR/DVD** change switch on the remote control to either "VCR" or "DVD".



The VCR functions on the remote will now take priority.



The DVD functions on the remote will now take priority.



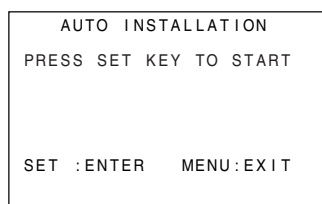
VCR Setup

VCR Auto Installation	26
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VCR Reset	38

VCR Auto Installation

This Unit automatically tunes the TV channels for your area, then using Teletext information sorts the TV channels into a standard order and sets the clock. If the Unit has not previously been tuned-in, instructions will be given on screen to guide you through this procedure.

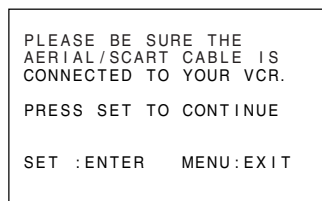
- 1 Press **OPERATE**.
- 2 The screen below should now be displayed on your TV screen.



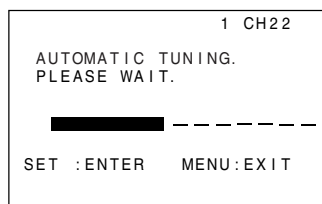
NOTE

- If the AUTO INSTALLATION screen does not appear when you switch on your VCR or you wish to reset your Unit and start the installation again, refer to **VCR RESET** on page 38.

- 3 Press **SET** to continue with the installation.
- 4 Ensure your Aerial/Scart cables are connected to your Unit and then press **SET** to confirm.



- 5 All available terrestrial channels will be automatically installed. (Auto install may take a few minutes.)



- 6 Once Auto Installation is complete, the MOVE menu screen will appear showing all the channels the Unit was able to tune in.





VCR Auto Installation

- 7** If you wish to move any channels, press **▲/▼/◀/▶** to highlight the channel to be moved. Then press **SET** to confirm.

	MOVE	1 / 5
1CH50	7 13	
2BBC1	8 14	
3BBC2	9 15	
4ITV	10 16	
5CH4	11 17	
6CH5	12 18	
CLEAR: CHANNEL SORT		
▲▼◀▶: SELECT		
SET : ENTER MENU: EXIT		

- 8** Press **▲/▼/◀/▶** to highlight the new position for the channel. Then press **SET** to confirm.

	MOVE	1 / 5
1BBC1	7 13	
2BBC2	8 14	
3ITV	9 15	
4CH4	10 16	
5CH5	11 17	
6CH50	12 18	
SELECTED: CH50		
▲▼◀▶: SELECT		
SET : ENTER MENU: EXIT		

- 9** If any more channels are to be moved, repeat this procedure from step 7.

- 10** Press **VCR MENU** to exit if you are satisfied with the channel order.

- The correct time and date should now be displayed on your TV screen for approximately 2 seconds. If the clock is not automatically set, the "CLOCK" screen will appear. Refer to **Manual Clock Setting** on page 35.

TIME DATE YEAR
11:03AM 19/02 02

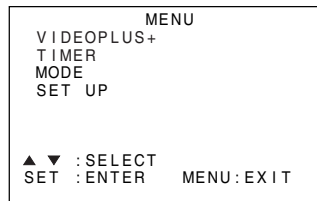


VCR Setup

Menu Screen

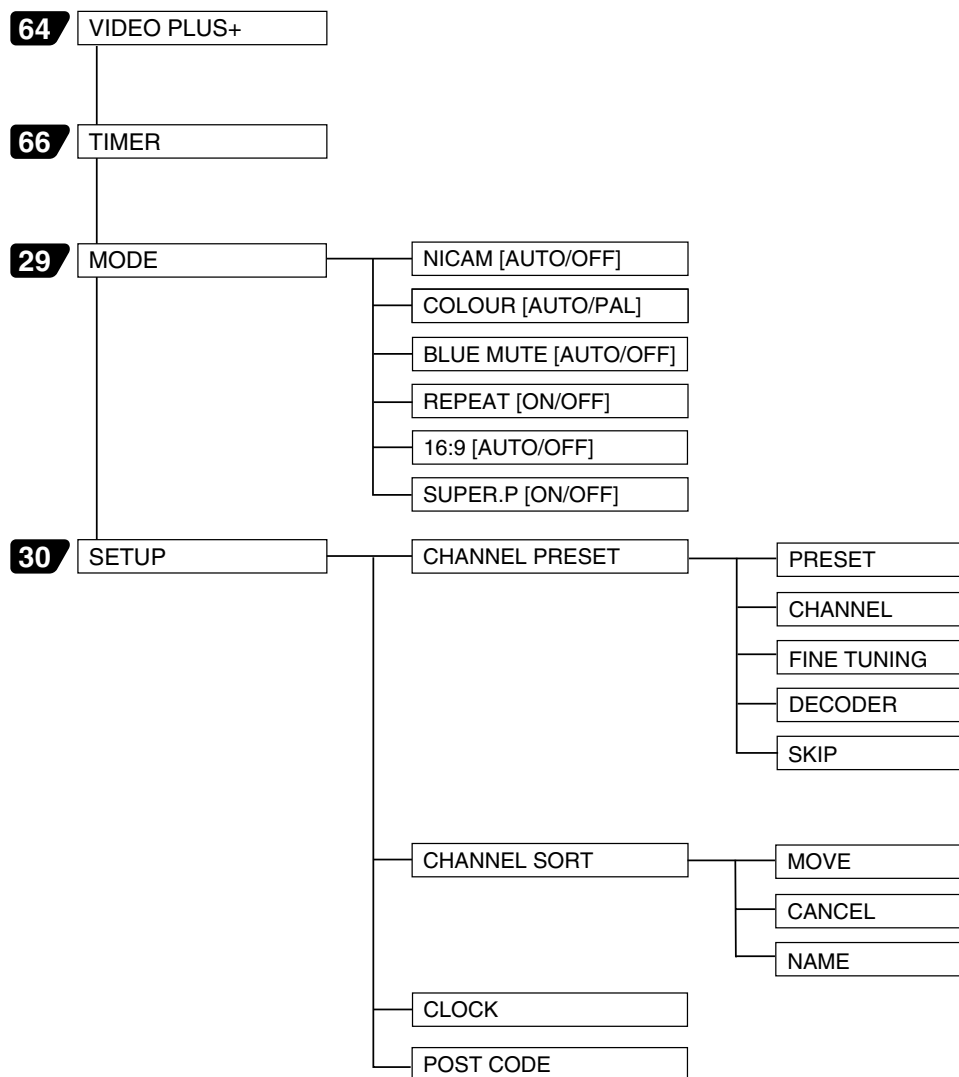
The MENU screen is a home screen used to select various screen functions. A sub-menu will appear once you select an item for the menu. See the following pages for details on each menu procedure.

Menu Screen



MENU item list

Main Menu



- Numbers in **64** refer to the pages where the setting procedures are described.



VCR Setup

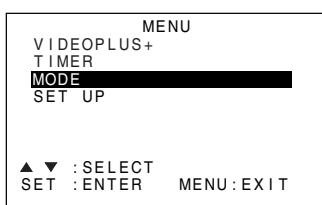
Mode Selection

You can use the Mode selection screen to select the mode for basic features.

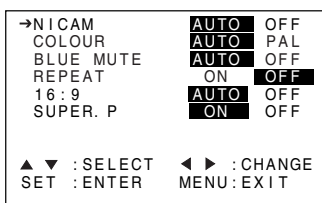
Preparation

- Press **OPERATE**. Then move the **VCR/DVD CHANGE Switch** to **VCR**.

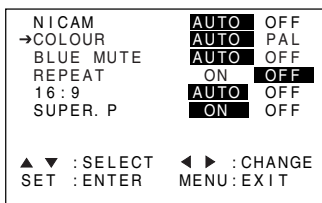
- Press **VCR MENU** to display the menu screen.
- Select "MODE" with **▲ / ▼** and then press **SET**.



- Example: When you change the NICAM settings. Set "NICAM" mode to "AUTO" or "OFF" with **◀ / ▶**. Then press **▼**.
(See **NICAM Hi-Fi STEREO SOUND** on page 59.)



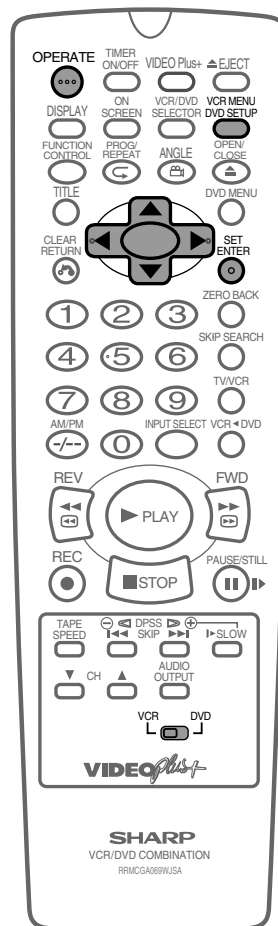
- Set "COLOUR" mode to "AUTO" or "PAL" with **◀ / ▶**. Then press **▼**.
(See **COLOUR** on page 57.)
 - You can change the BLUE MUTE, 16:9, SUPER.P and REPEAT settings the same way (See on pages 57, 58, 60 and 61).



- Press **SET** to enter.
 - The screen returns to MENU screen, and press **MENU** to return to normal.

NOTE

- If you press **VCR MENU** to exit the mode selection screen in Step 5, the data will not be stored. Be sure to press **SET** to store the data.





VCR Setup

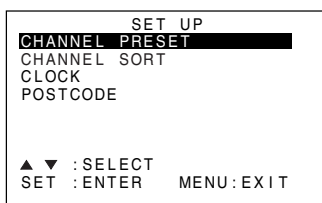
Manually Tuning Channel Setting

It should not be necessary to tune in a broadcast channel manually except in unusual circumstances such as poor signal. To manually tune in a channel, follow the procedure below.

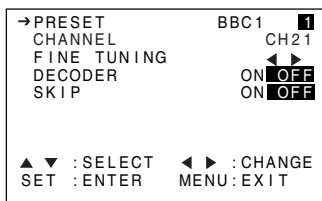
Preparation

- Press **OPERATE**. Then move the **VCR/DVD CHANGE Switch** to **VCR**.
- Ensure the Video channel is selected on the TV.

- 1 Press **VCR MENU**. Press **▲ / ▼** to select **SET UP**. Press **SET** to confirm.
- 2 "CHANNEL PRESET" will be highlighted. Press **SET** to confirm.



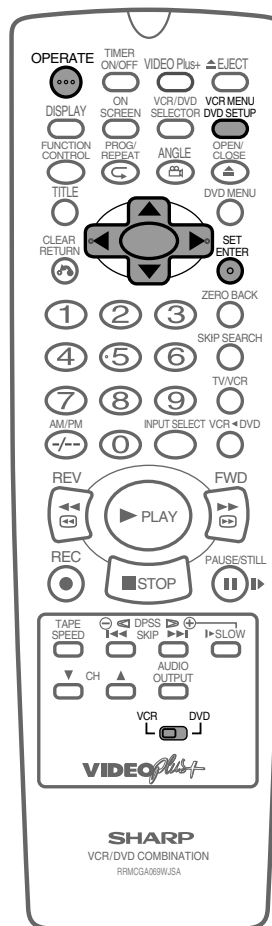
- 3 "PRESET" will be selected. Press **◀ / ▶** to choose the required VCR preset channel.



- 4 Press **▲ / ▼** to select "CHANNEL".
- 5 Press **◀ / ▶** to start tuning in either direction. Tuning will stop when a channel is received. If it is not the desired channel, press **◀ / ▶** to continue tuning.
- 6 Press **▲ / ▼** to select "FINE TUNING". Press and hold **◀ / ▶** until the sharpest colour picture is obtained.

IMPORTANT NOTE:

- 7 Press **▲ / ▼** to select "DECODER". This is preset to OFF. If you connect a decoder, as shown previously, you must use **◀ / ▶** to turn the decoder function ON. Refer to **DECODER SWITCHING OPERATION** on page 37.

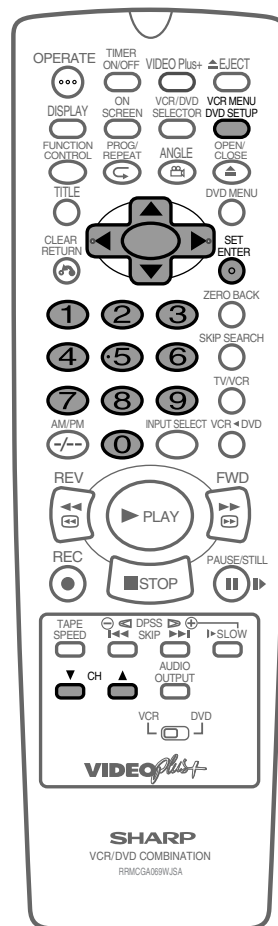


Continue on next page



VCR Setup

- 8 Press **▲** / **▼** to select "SKIP" then **◀** / **▶** to select "ON" or "OFF".
 - The SKIP function determines whether the channel can be selected when using the **CH** **▲** / **▼** instead of the number buttons.
- 9 Press **SET** to store this channel. The Unit will increment to the next channel up.
 - If any more channels are to be tuned in, repeat this procedure.
 - Once all the channels have been tuned in. Press **VCR MENU** to return to the normal screen.



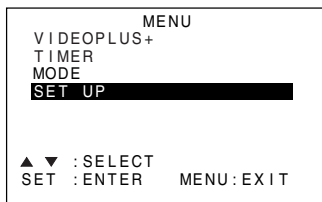


VCR Setup

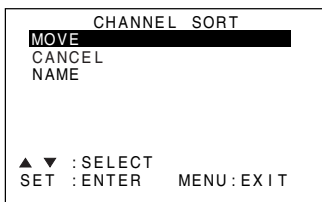
Channel Sort

When your Unit tunes in broadcast channels automatically, it sorts them into a standard order using teletext information. You can change the order of the channel with the following procedure.

- 1 Press **VCR MENU**.
- 2 Press **▲ / ▼** to select "SET UP". Press **SET** to confirm.

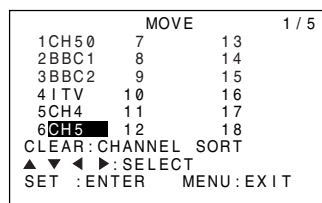


- 3 Press **▲ / ▼** to select "CHANNEL SORT". Press **SET** to confirm.

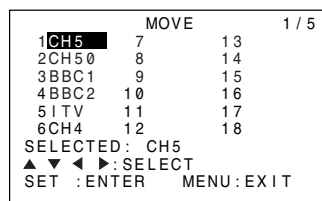


- 4 The MOVE position will be highlighted. Press **SET** to confirm.

- 5 Press **▲ / ▼ / ◀ / ▶** to highlight the channel to be moved. Press **SET** to confirm.



- 6 Press **▲ / ▼ / ◀ / ▶** to highlight the new position for the channel. Press **SET** to confirm.

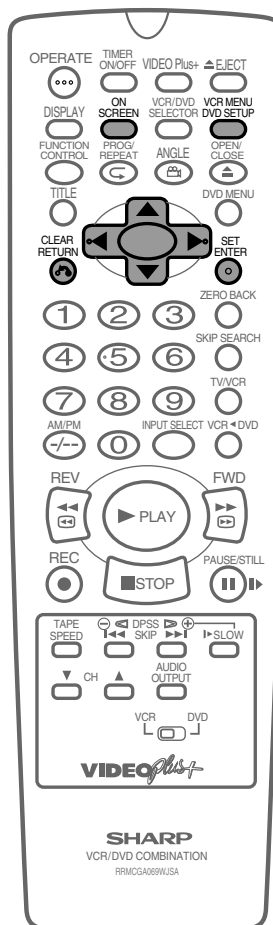


- 7 If any more channels are to be moved, repeat the procedure from step 5.

- 8 When all the channels are in your preferred order, either press **CLEAR** to return to the CHANNEL SORT menu or press **VCR MENU** to return to the normal screen.

NOTE

- If when moving channels the picture becomes unclear and the on-screen display is unreadable, **ON SCREEN** can be used to toggle between a blue background and the normal picture.
- The blue background will be shown until either another channel is selected or **ON SCREEN** is pressed again.

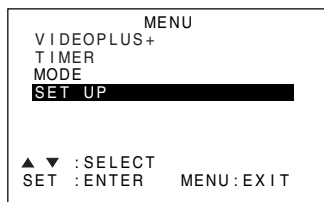




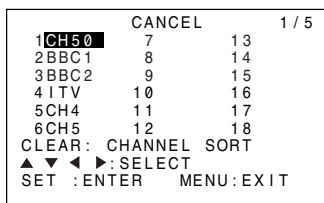
Deleting Channels

If there is a channel you wish to delete from the VCR memory, you can follow the procedure below.

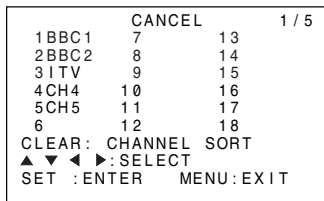
- 1 Press **VCR MENU**.
- 2 Press the **▲ / ▼** to select "SET UP". Press **SET** to confirm.



- 3 Press **▲ / ▼** to select "CHANNEL SORT". Press **SET** to confirm.
- 4 Press **▲ / ▼** to select "CANCEL". Press **SET** to confirm.
- 5 Press **▲ / ▼ / ◀ / ▶** to highlight the channel to be cancelled.



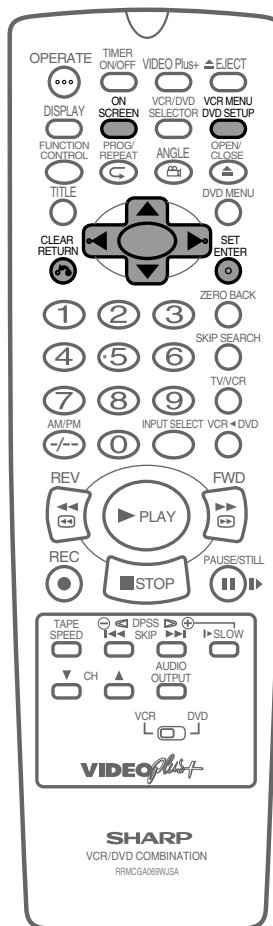
- 6 Press **SET** twice to cancel the channel.



- 7 When all the channels you wish have been cancelled, either press **CLEAR** to return to the CHANNEL SORT menu or press **VCR MENU** to return to the normal screen.

NOTE

- If when deleting channels the picture becomes unclear and the on-screen display is unreadable, **ON SCREEN** can be used to toggle between a blue background and the normal picture.
- The blue background will be shown until either another channel is selected or **ON SCREEN** is pressed again.

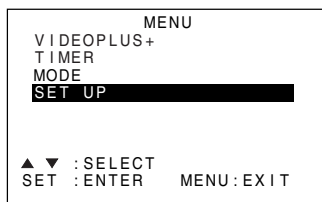




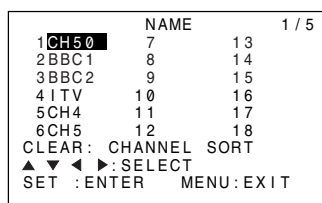
Re-naming Channels

When your Unit tunes in broadcast channels automatically, it names them using teletext information. You can change the name of a channel with the following procedure.

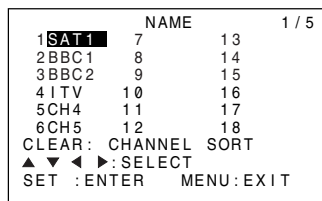
- 1 Press **VCR MENU**.
- 2 Press **▲ / ▼** to select "SET UP". Press **SET** to confirm.



- 3 Press **▲ / ▼** to select "CHANNEL SORT". Press **SET** to confirm.
- 4 Press **▲ / ▼** to select "NAME". Press **SET** to confirm.
- 5 Press **▲ / ▼ / ◀ / ▶** to highlight the channel to be re-named. Press **SET** to confirm.



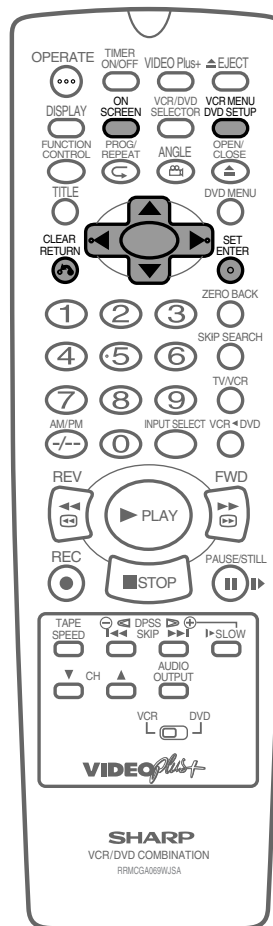
- 6 To enter a new channel name use **▲ / ▼** to scroll through the characters and **◀ / ▶** to move to the next position. Press **SET** to confirm.



- 7 If any more channels are to be re-named, repeat the procedure from step 5.
- 8 When all the channels are named correctly, either press **CLEAR** to return to the CHANNEL SORT menu or press **VCR MENU** to return to the normal screen.

NOTE

- If when re-naming channels the picture becomes unclear and the on-screen display is unreadable, **ON SCREEN** can be used to toggle between a blue background and the normal picture.
- The blue background will be shown until either another channel is selected or **ON SCREEN** is pressed again.





Clock Setting

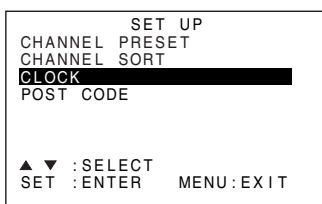
Manual Clock Setting

The clock will normally be set using teletext information when your Unit automatically tunes in the broadcast channels. If for any reason teletext signals are not present, your Unit will not be able to set the clock. This procedure will allow you to set the clock manually.

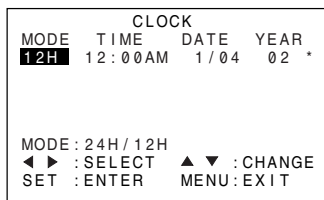
Preparation

- Press **OPERATE**. Then move the **VCR/DVD CHANGE Switch** to **VCR**.

- Press **VCR MENU**.
- Press **▲ / ▼** to select "SET UP". Press **SET** to confirm.
- Press **▲ / ▼** to select "CLOCK." Press **SET** to confirm.



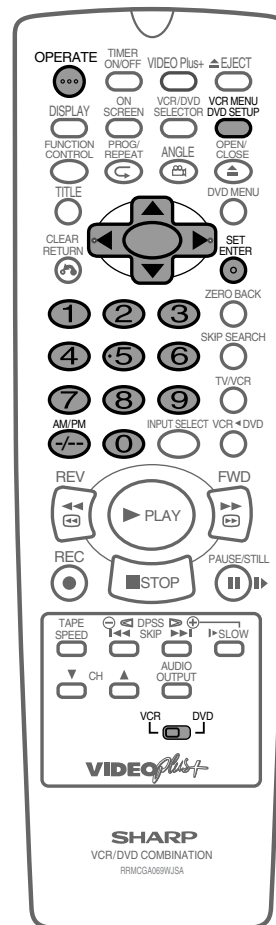
- Press **▲ / ▼** to select either 12 or 24 hour clock.



- Press **◀ / ▶** to select "TIME". Enter the time using the number buttons or **▲ / ▼**. If the minutes or hours are less than 10, enter leading 0. If using the 12 hour clock enter AM or PM by pressing **AM/PM** on the Remote.
- Press **◀ / ▶** to select "DATE". Enter the date using the number buttons or **▲ / ▼**. For example, for 1st April enter **01 04**.
- Press **◀ / ▶** to select "YEAR". Enter the last two digits of the year using the number buttons or **▲ / ▼**. For example, for 2002 enter **02**. For the year 2003 enter **03**.

8 Auto Clock Setting

Press **◀ / ▶** to select **★**. Press **▲ / ▼** to change between **AUTO CLOCK** on/off (**★** is "ON", **—** is "OFF"). Then press **SET** to confirm.



NOTE

- If **AUTO CLOCK** is set to **OFF** (— is **OFF**) then you will need to update the clock for daylight saving.

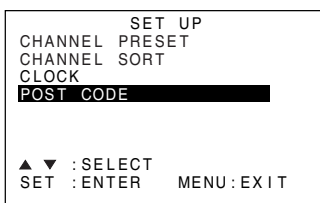


VCR Setup

Post Code Security

This feature should allow the Police to identify you as the owner of the Unit if it is stolen. Each time the Unit is turned on, your postcode will be displayed for 5 seconds. Your postcode cannot be changed or removed without first entering the correct PIN - number. If you wish to use this function, follow the procedure below.

- 1 Press **VCR MENU**.
- 2 Press **▲ / ▼** to select "SET UP". Press **SET** to confirm.
- 3 Press **▲ / ▼** to select "POSTCODE". Press **SET** to confirm.



- 4 Enter your desired PIN number using the number buttons or **▲ / ▼**. This must be a 4 digit number in the range 0000 - 9999.
- 5 To enter your postcode use **▲ / ▼** to scroll through the characters and the **◀ / ▶** buttons to move to the next position. Press **SET** to confirm, then press **VCR MENU** to return to a normal screen.
- 6 Write your PIN number in the box provided for future reference.

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IMPORTANT: Please keep your Operation Manual separate from your VCR.

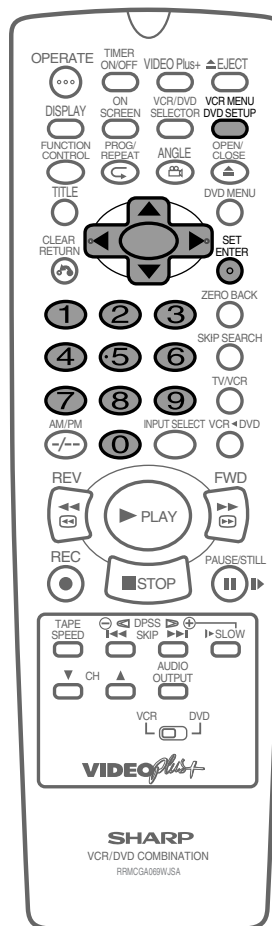
Changing POST CODE PIN NUMBER

If you wish to change your PIN number at any time:

- 1 Follow steps 1 to 3 above.
- 2 Enter your current PIN number. Press **SET** to confirm
- 3 Press **◀** re-select PIN number.
- 4 Enter your new PIN number. Press **SET** to confirm, then press **VCR MENU** to return to a normal screen.

NOTE

- Your Postcode can be changed at any time, but you must first enter your correct PIN number. If the wrong PIN number is entered, an ERROR message will appear. Re-enter the correct number.





Decoder Switching Operation

If you have a separate decoder connected to the Unit's L2 input as previously shown in the "Basic Connection" section, you will need to set the decoder function to ON in order to record the unscrambled signal and/or watch it on your TV. Now, when the Unit receives a scrambled signal it is output via LINE 2 terminal to the decoder. The decoder then outputs the unscrambled signal back to LINE 2 terminal and the signal can be recorded. The Unit outputs the descrambled signal to your TV through the LINE 1 terminal and you can watch the unscrambled picture.

When making recording using a separate decoder connected as shown, remember to leave the decoder function ON.

If you connect a decoder unit to this Unit, the decoder unit provides a switching signal which will automatically allow your TV to display the unscrambled signal routed through the Unit. To use this feature make sure that the Unit is connected to both TV and decoder unit by the SCART leads. Then:

- Press **OPERATE** to place the Unit in STAND-BY mode.
- OR
- Press **TV/VCR** to place the Unit in "VCR mode". The "VCR" indicator appears on the VCR Front Panel display.

Selecting the Output From the VCR

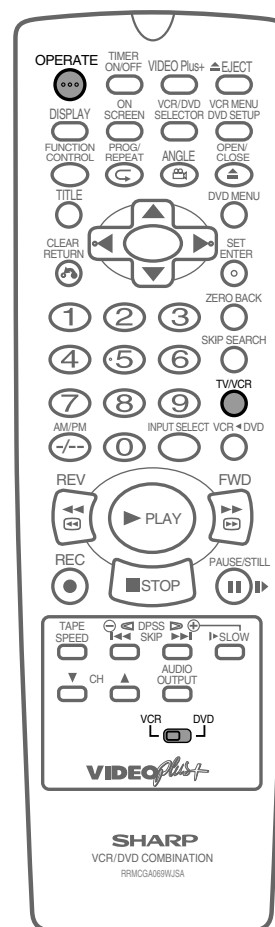
If your VCR is connected to your TV with a scart lead, when you start to play a video tape the VCR will automatically switch its output so that the playback picture is shown on the TV. In this case, "VCR" will appear on the VCR display.

You can manually override this by pressing **TV/VCR** on the remote control. Now the TV broadcast channel will be seen on the TV screen and "VCR" will disappear from the VCR display.

- Pressing **TV/VCR** again will return the TV picture to the playback picture.
- While in DVD mode, the unit will override this function.

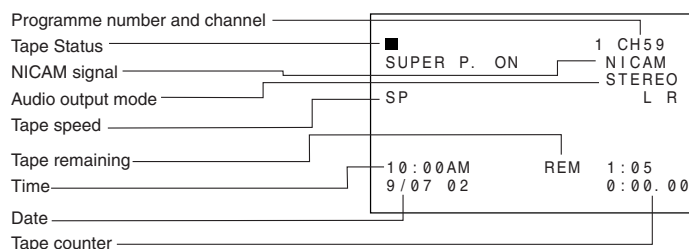


▲EJECT / ■STOP
OPERATE



VCR Display Information

All the information you need on the VCR status will be summarised on the on-screen display. If you are recording, playing back a tape or watching a broadcast on the video channel, you can call up three standard on-screen displays. The display can be selected by pressing **ON SCREEN** on the Remote, 1, 2, 3 or 4 times.



NOTE

- If the clock is not set, the time and date will not be displayed.
- When tape playback mode, "channel" is not displayed

Each time **ON SCREEN** on the Remote is pressed, the display on the TV screen changes the mode in the following sequence:

→ **AUTO mode** → **FULL mode** → **Counter mode** → **OFF mode** →

- **AUTO mode**..... The current mode and channel number will be displayed for 3 seconds when an operation or number button is pressed.
- **FULL mode** All the active features will also be shown on screen.
- **Counter mode** This display will show the tape counter and amount of tape remaining.
- **OFF mode** This will remove the display from the screen.

Each time **DISPLAY** on the Remote is pressed, the VCR Front Panel Display changes the mode in the following sequence:

→ **Clock mode** → **Channel position mode***1 → **Tape counter mode** → **Tape remain mode** →

- **Clock mode**..... The current time will be displayed.
- **Channel position mode**..The channel position will be displayed.*1
- **Tape counter mode**.....The current tape position will be displayed.
- **Tape remain mode**.....The amount of video tape remaining will be displayed.

*1 When in tape playback mode, "channel" is not displayed

NOTE

- The default time and date will not be displayed if the clock has not been set.
- The VCR will return to Tape counter mode each time it is switched on.
- If you are recording from this VCR to another, make sure you remove the display from the screen otherwise it will be recorded.
- When power ON, channel position is displayed.
- Usually use the "channel position".

VCR Reset

- 1 Select **VCR/DVD CHANGE Switch** to **VCR**.
- 2 Press **OPERATE**.
- 3 Press and hold **VCR MENU** and **CH ▼** together on the Remote Control for 10 seconds.
 - VCR reset is now complete.

DVD Setup

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Setting the MPEG	47
Setting the CINEMA VOICE	48
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Setting SUB TITLE, AUDIO and MENU languages from 8 languages	49
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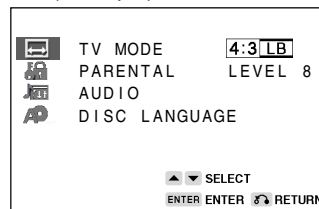
DVD Setup

About the SETUP Screen

This section describes how to specify various basic settings using the SETUP screen. The list below shows all the items you can set and adjust. See the following pages for details on each setup procedure.

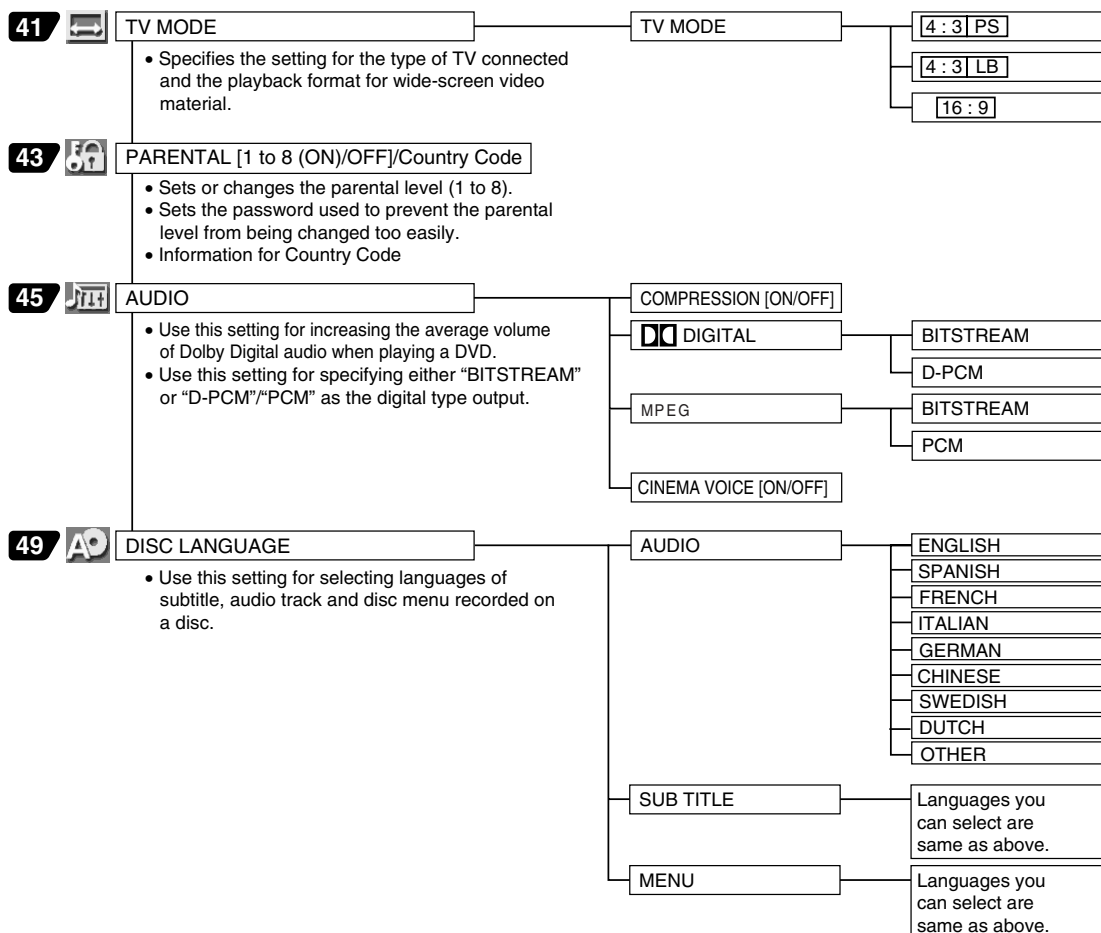
- The setting procedures described on the following pages are available only in STOP mode.
- The OSD (On Screen Display) screens used in this Operation Manual are purely for the purposes of explanation. The actual displays may differ slightly from what is shown here.

(Example) DVD MODE



Setup item list

Main Menu



- Numbers in **41** refer to the pages where the setting procedures are described.



TV MODE Setting

Preparation

- Press **OPERATE**. Then move the **VCR/DVD CHANGE Switch** to **DVD**.

- While this Unit is stopped, press **DVD SETUP** to display the **SETUP** screen.

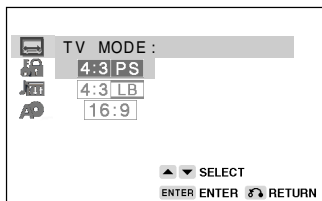
- Use **▲** or **▼** to select the “ TV MODE SETUP”.



- Press **ENTER** and then use **▲** or **▼** to select “TV MODE”.

- Press **ENTER** to display the items you can select.

- Use **▲** or **▼** to select **4:3 LB**, **4:3 PS** or **16:9**.
(Example) Selecting **4:3 PS**.



Continue on next page →

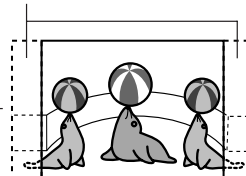




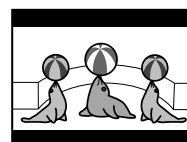
DVD Setup

- **4:3 PS** — (Pan & Scan mode): When wide-screen video material is played, this mode clips the right and left sides of the image so that it can be viewed on a conventional TV screen.
- Some wide-screen DVDs that do not permit Pan & Scan mode playback are automatically played in letterbox mode (black bands top and bottom).

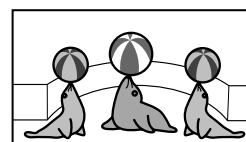
Cut off when a wide-screen video image is played.



- **4:3 LB** — (Letterbox mode): When wide-screen video material is played in this mode on a conventional TV screen, black bands appear at the top and bottom of the screen.



- **16:9** — (Wide-screen TV): This is the correct mode for playing wide-screen videos on a wide-screen TV.
- You must also set the screen mode on your wide-screen TV to "FULL".



- 6** Press **ENTER** to confirm the "TV MODE" setting.
- When you have completed the setting above, press **RETURN** to exit the SETUP screen.

The actual appearance of the image depends on the screen mode setting of your wide-screen TV.



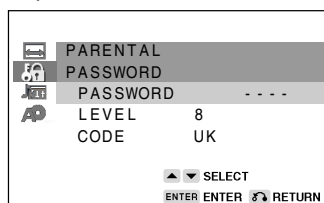
Parental Level Setting

Certain discs come preset with country codes and parental level settings defined for particular countries. Discs equipped with the parental lock function are rated according to their content. The rated content allowed by a parental lock level and the way a DVD can be controlled vary from disc to disc. Some discs, for example, may let you edit out scenes and replace them with scenes suitable for children. You can also use the parental lock to completely disable playback of the DVD.

Preparation

- See **Preparing to Watch a DVD on page 24**.

- 1 Press **DVD SETUP** to display the SETUP screen.
- 2 Use **▲** or **▼** to select the **PARENTAL SETUP** and then press **ENTER**.
 - The password specification and verification screen appears.



- If you have already set your password, **- - - -** (password verification display) appears.

- 3 Use the number buttons (**0** to **9**) to enter a 4-digit password.

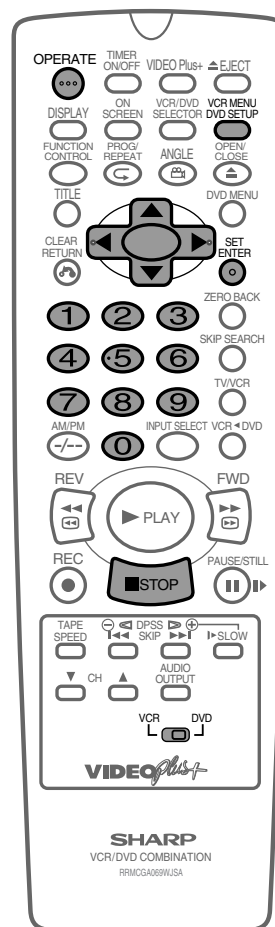
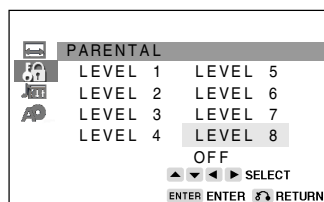
PASSWORD : 1 2 3 4 ——— Displayed when “1234” is being entered as the password

NOTE

- Enter the numbers slowly as each number is stored separately.
- If you enter the wrong number three times in succession, the normal screen reappears.

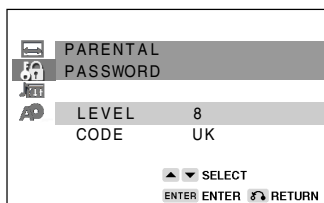
If you forget your password, you can erase your current password by press **■STOP** four times.

- 4 The cursor is moved to “LEVEL” and then press **ENTER**.



DVD Setup

- 5 Press ▲, ▼, ◀ or ▶ to select the desired parental level and then press **ENTER**.



- Level 1: for most restrictive viewing → Level 8: for adult viewing (The smaller the number, the greater the level of restriction.)
- When the parental level is set to "OFF", DVDs can be played back regardless of the parental level.

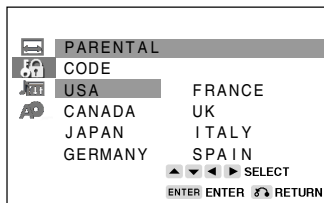
The parental level for the UK is as follows:

Level 8: Adult

Level 1: Child

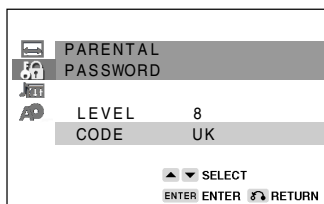
As for the set up of an appropriate level, please check the level when you purchase your DVD disc equipped with the parental feature.

- 6 Press ▼ to select "CODE" and then press **ENTER**.



- 7 Press ▲, ▼, ◀ or ▶ to select the desired country code and then press **ENTER**.

- If you want to go to the next page, select the country code displayed at the bottom, then press ▼.



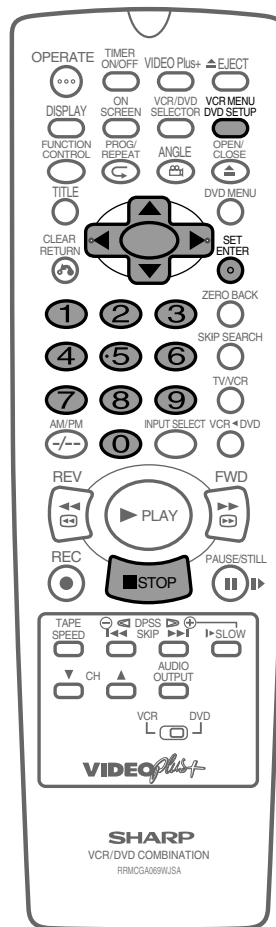
- 8 Press **RETURN** to return to the SETUP screen.
- If you want to go on and specify other settings, use ▲ or ▼ to display other SETUP screens. However, press **RETURN** if you want to exit the SETUP screen.

! Important!

- Be sure to try playing back the disc to confirm that the parental level setting is working correctly. If it is not working correctly, try changing the country code.

NOTE

- You can use the parental lock function only with DVD discs that are equipped with the parental lock feature.
- On some DVD discs, the parental level setting is fixed and cannot be modified.
- The parental level depends on countries. If you do not set the country code correctly, it fails to work correctly.
- Some DVD discs allow the viewer to temporarily change the parental level setting to view the original scenes. When this prompt appears, input the password to view the original scenes.



Country Code List

USA	FINLAND
CANADA	BELGIUM
JAPAN	HONG KONG
GERMANY	SINGAPORE
FRANCE	THAILAND
UK	MALAYSIA
ITALY	INDONESIA
SPAIN	TAIWAN
SWISS	PHILIPPINE
SWEDEN	AUSTRALIA
HOLLAND	RUSSIA
NORWAY	CHINA
DENMARK	









DVD Setup

AUDIO Setting

- COMPRESSION Use this setting for increasing the average volume of Dolby Digital audio when playing a DVD.
- DD** DIGITAL/MPEG Use these settings for specifying the type of digital output when playing a disc recorded using Dolby Digital/MPEG AUDIO.
- CINEMA VOICE Use the setting for raising the sound of the centre speaker to make the voices in a movie easier to hear.

Setting the COMPRESSION (Dolby Digital output level)

When Dolby Digital is used to record the audio on a DVD disc, the average overall volume level of the audio is relatively lower than that produced by an Audio CD. This is to provide the widest possible dynamic range. To counteract this, this Unit automatically raises the overall average volume level of a disc recorded using Dolby Digital to a level that is similar to that of an Audio CD.

	COMPRESSION: OFF	COMPRESSION: ON
 DVD Dolby Digital Audio	 • Low audio level	 • Audio level the same as audio CD, etc.
 Audio CD's		

- **OFF** Audio level recorded on disc is played back without modification.
- **ON** Dolby Digital average audio level is increased so it sounds similar to that of Audio CD.

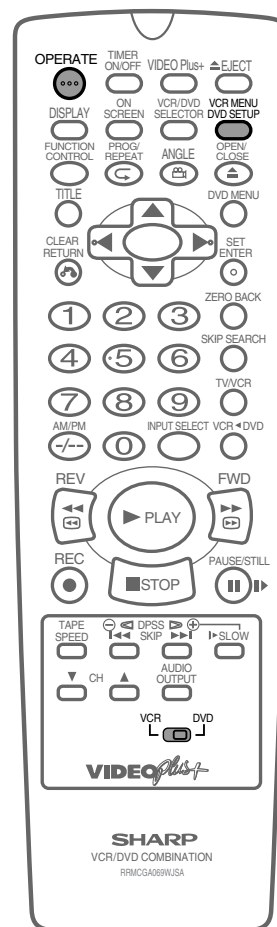


- Use of the "OFF" setting is recommended when the Unit is connected to audio equipment or, depending on the disc, the sound is abnormal.
- Advanced Surround is disabled when "COMPRESSION" is set to "ON".

Preparation

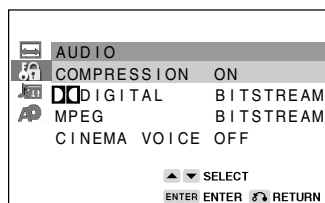
- Press **OPERATE**. Then move the **VCR/DVD CHANGE Switch** to **DVD**.

- 1 Press **DVD SETUP** to display the SETUP screen.

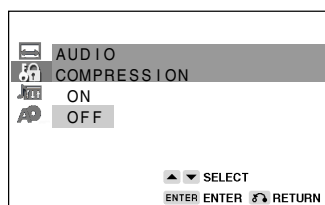


DVD Setup

- 2 Use ▲ or ▼ to select the "AUDIO SETUP".
- 3 Press **ENTER** and then use ▲ or ▼ to select "COMPRESSION".



- 4 Press **ENTER** to display the settings you can select.



- 5 Use ▲ or ▼ to select "ON" or "OFF".
 - Use of the "OFF" setting is recommended when the Unit is connected to audio equipment.
- 6 Press **ENTER** to confirm the setting.
 - When you have completed the above setting, press **RETURN** to exit the SETUP screen. However, if you want to specify the "DIGITAL" setting in succession, proceed to step 1 below.

NOTE

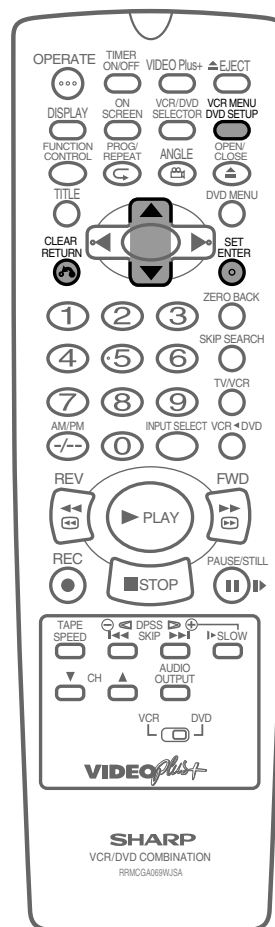
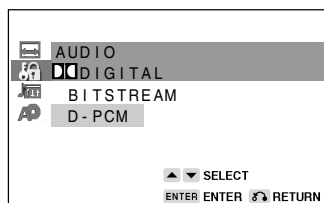
- Whenever the "COMPRESSION" setting is "ON", Advanced Surround setting is automatically changed to "OFF".

Setting the DOLBY DIGITAL

When playing a disc recorded using Dolby Digital (5.1ch), you can specify either "BITSTREAM" or "D-PCM" as the digital type output.

- Before setting the "DIGITAL", perform the step 1 to 2 on pages 45 and 46.

- 1 Press **ENTER** and then use ▲ or ▼ to select "DIGITAL".
- 2 Press **ENTER** to display the settings you can select.





DVD Setup

- 3 Use **▲** or **▼** to select "BITSTREAM" or "D-PCM".

BITSTREAM: Use this setting for a digital connection of a receiver (amplifier) equipped with a Dolby Digital decoder.

D-PCM: Use this setting for a digital connection to the PCM digital input jack of a DAT or MD, or for a digital connection to a receiver (amplifier) that does not have a Dolby Digital decoder.

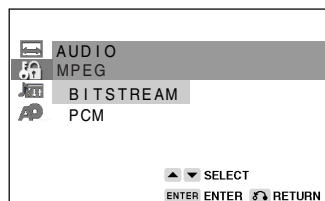
- 4 Press **ENTER** to confirm the setting.

- 5 Press **RETURN** to exit the SETUP screen and return to normal screen.
 - When you have completed the above setting, press **RETURN** to exit the SETUP screen. However, if you want to specify the "MPEG" setting in succession, proceed to step 1 below.

Setting the MPEG

Selected the same as "COMPRESSION" on page 45 for MPEG signals.

- 1 Press **ENTER** and then use **▲** or **▼** to select "MPEG".
- 2 Press **ENTER** to display the settings you can select.



- 3 Use **▲** or **▼** to select "BITSTREAM" or "PCM".

BITSTREAM: Use this setting for a digital connection of a receiver (amplifier) equipped with an MPEG Audio decoder.

PCM: Use this setting for a digital connection to the PCM digital input jack of a DAT or MD, or for a digital connection to a receiver (amplifier) that does not have an MPEG Audio decoder.

- 4 Press **ENTER** to confirm the setting.

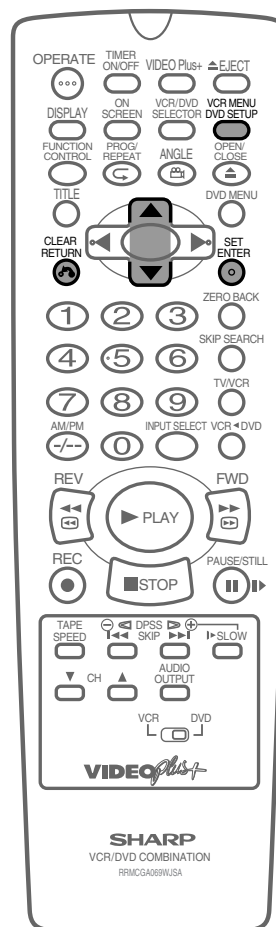
- 5 Press **RETURN** to exit the SETUP screen and return to normal screen.
 - If you want to go on and specify other settings, use **▲** or **▼** to display the other SETUP screen without pressing **RETURN**.



When playing a disc recorded using DTS, the bitstream type signal is output regardless of the setting of "Digital" and "MPEG".

NOTE

- When audio CD's that support MPEG are played back, BITSTREAM signals will be output, even if "MPEG" has been set to "PCM".
- Make sure to set "DIGITAL" or "MPEG" to "PCM" when making a digital connection to 2 channel audio equipment or MD. Leaving on "BITSTREAM" may cause static noise and damage the speakers as well as incorrect recording on MD's.

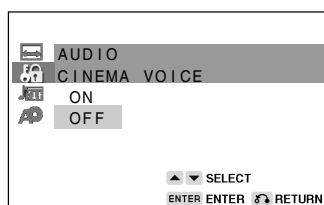


Setting the CINEMA VOICE

This function raises the sound of the centre speaker to make the voices in a movie easier to hear.

- Before setting the “CINEMA VOICE”, perform steps 1 and 2 from pages 45 to 46.

- 1 Press **ENTER** and then use **▲** or **▼** to select “CINEMA VOICE”.
- 2 Press **ENTER** to display the settings you can select.



- 3 Use **▲** or **▼** to select “ON” or “OFF”.

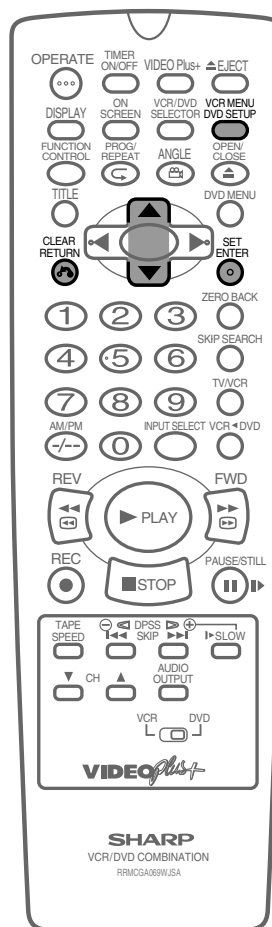
ON: Set to “ON” when you want to raise the sound of the voice.

OFF: Set to “OFF” when you do want to use this function.

- 4 Press **ENTER** to confirm the setting.
- 5 When you have completed the setting above, press **RETURN** to return to the SETUP screen. However, if you want to go on and specify other settings, use **▲** or **▼** to display other setting screens.

NOTE

- The CINEMA VOICE setting raises the sound of the centre channel. It does not affect the voices in other channels.
- Even if this function is set to “ON”, the results may or may not be effective, depending on the disc.





DISC LANGUAGE Setting

Use this setting for selecting the language for subtitles, audio tracks and disc menu.



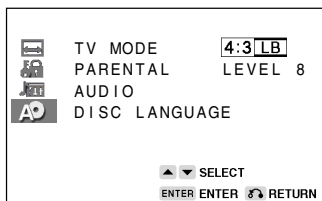
- Note that the language you select is not displayed or does not sound if it is not recorded on the disc you are playing.
- With some discs, it is intentionally disabled by the disc manufacturer to change the language of the subtitle, audio track and disc menu through this SETUP screen. When playing such discs, try using **FUNCTION CONTROL** (pages 81 and 85) or, if applicable, use the menu that appears on the DVD.

Setting SUB TITLE, AUDIO and MENU languages.

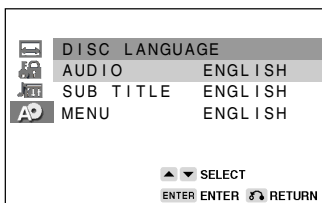
Preparation

- Press **OPERATE**. Then move the **VCR/DVD CHANGE Switch** to **DVD**.

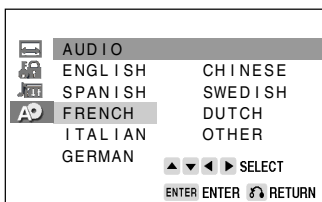
- Press **DVD SETUP** to display the SETUP screen.
- Use **▲** or **▼** to select the **DISC LANGUAGE**.



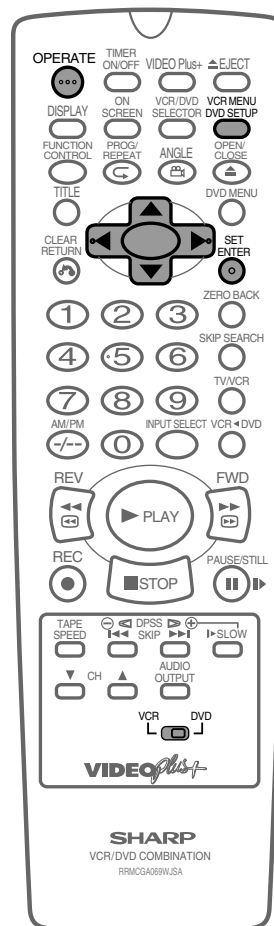
- Press **ENTER** and then use **▲** or **▼** to select "AUDIO", "SUB TITLE" or "MENU".
 - You can set "AUDIO", "SUB TITLE" or "MENU" individually.(Example) Selecting "AUDIO"



- After selecting the item, press **ENTER**.
- Select the language you want to use with **▲**, **▼**, **◀** and **▶**.
(Example) Selecting "FRENCH"



- If you want to use any languages which are not on the OSD, proceed to step 1 under "Selecting languages from OTHER" on next page.



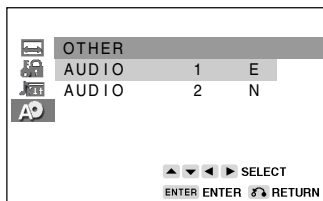
DVD Setup

- 6 Press **ENTER** to confirm the setting.
- 7 Repeat steps 4 to 7 above to go on with other "DISC LANGUAGE" settings in succession.
- 8 If you want to exit the SETUP screen and return to the normal screen, press **RETURN**.
 - If you want to go on and specify other settings, press **▲** or **▼** to display other SETUP screen without pressing **RETURN**.

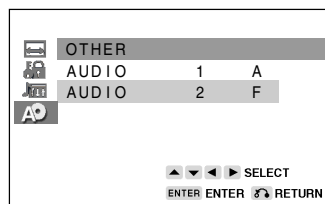
Selecting languages from OTHER

- 1 Select "OTHER" with **▲**, **▼**, **◀** and **▶**, then press **ENTER** to set the "OTHER" input item (two letters).
 - See Language **Code List for Disc Language** on page 52 when selecting the code.

(Example) Selecting "OTHER" in "AUDIO"



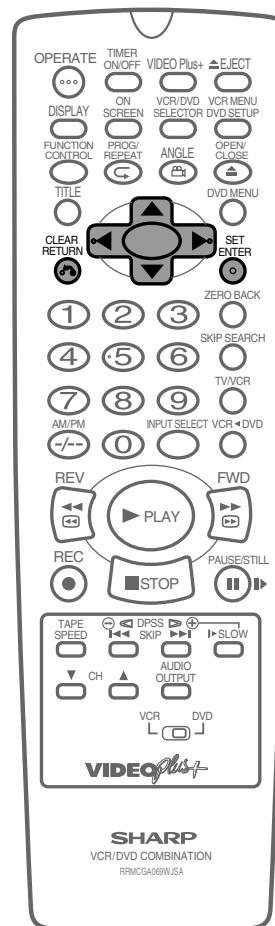
- The "SUB TITLE" and "MENU" screens are displayed respectively when being set.
- 2 Press **◀** or **▶** to select the alphabet as the first letter on "AUDIO 1" (upper side).
 - 3 Press **▼** to move the cursor to "AUDIO 2" (lower side).



- 4 Press **◀** or **▶** to select the alphabet as the second letter.
- 5 Press **ENTER** to confirm the setting.

NOTE

- Press **RETURN** to return to the previous screen.





DVD Display Information

Operation Mode Indicators

Each time **ON SCREEN** on the Remote is pressed, the display on the TV screen changes the mode in the following sequence:

→ **AUTO mode** → **ON mode** → **OFF mode** →

- **AUTO mode** Displays indicators for 3 seconds when operation begins.
- **ON mode** Displays indicators continually until the operation mode is changed.
- **OFF mode** Does not display indicators.

Each time **DISPLAY** on the Remote is pressed, the DVD Front Panel Display changes the mode in the following sequence:

→ **Time mode** → **Operation Status mode** → **Title mode** →

- **Time mode** Displays the playing time*.
 - **Operation Status mode** Displays the operation you perform such as "PLAY", "REV".
 - **Title mode** Displays the total number of titles, chapters, or tracks.
- * When the disc you attempt to play has no information on time, the operation status is displayed.

This Unit displays the information shown below on the TV screen and on the DVD Front Panel Display depending on the operation status.

Display Examples

	TV Screen	DVD Front Panel Display	Remarks
If no disc is loaded or an unplayable disc is loaded when this Unit is switched on.			"-----" appears when the tray is closed and: 1) There is no disc in the tray. 2) The disc type is not DVD or Audio CD. 3) The disc is not loaded correctly (upside-down, etc.)
Tray open			
Tray closed			
Loading			
Stopped			The indicator changes to show other indicators (total time, etc.)
Playing			
Still/Paused			When a DVD is played back.
			When an Audio CD is played back.
Fast Forward			
Fast Reverse			
Slow			Does not function for Audio CD's.

Region (Local) Number Error Indicator

If the region (local) number of the disc that you attempt to play differs from the region number of this Unit (see page 99), "REGION CODE ERROR" appears on the TV screen and the disc tray slides out. (The disc cannot be played.)

Language Code List for Disc Language

Code	Language Name	Code	Language Name	Code	Language Name	Code	Language Name
AA	Afar	FY	Frisian	MG	Malagasy	SL	Slovenian
AB	Abkhazian	GA	Irish	MI	Maori	SM	Samoan
AF	Afrikaans	GD	Scots Gaelic	MK	Macedonian	SN	Shona
AM	Ameharic	GL	Galician	ML	Malayalam	SO	Somali
AR	Arabic	GN	Guarani	MN	Mongolian	SQ	Albanian
AS	Assamese	GU	Gujarati	MO	Moldavian	SR	Serbian
AY	Aymara	HA	Hausa	MR	Marathi	SS	Siswat
AZ	Azerbaijani	HI	Hindi	MS	Malay	ST	Sesotho
BA	Bashkir	HR	Croatian	MT	Maltese	SU	Sundanese
BE	Byelorussian	HU	Hungarian	MY	Burmese	SV	Swedish
BG	Bulgarian	HY	Armenian	NA	Nauru	SW	Swahili
BH	Bihari	IA	Interlingua	NE	Nepali	TA	Tamil
BI	Bislama	IE	Interlingue	NL	Dutch	TE	Telugu
BN	Bengali; Bangla	IK	Inupiak	NO	Norwegian	TG	Tajik
BO	Tibetan	IN	Indonesian	OC	Occitan	TH	Thai
BR	Breton	IS	Icelandic	OM	(Afan) Oromo	TI	Tigrinya
CA	Catalan	IT	Italian	OR	Oriya	TK	Turkmen
CO	Corsican	IW	Hebrew	PA	Panjabi	TL	Tagalog
CS	Czech	JA	Japanese	PL	Polish	TN	Setswana
CY	Welsh	JI	Yiddish	PS	Pashto, Pushto	TO	Tonga
DA	Danish	JW	Javanese	PT	Portuguese	TR	Turkish
DE	German	KA	Georgian	QU	Quechua	TS	Tsonga
DZ	Bhutani	KK	Kazakh	RM	Rhaeto- Romance	TT	Tatar
EL	Greek	KL	Greenlandic	RN	Kirundi	TW	Twi
EN	English	KM	Cambodian	RO	Romanian	UK	Ukrainian
EO	Esperanto	KN	Kannada	RU	Russian	UR	Urdu
ES	Spanish	KO	Korean	RW	Kinyarwanda	UZ	Uzbek
ET	Estonian	KS	Kashmiri	SA	Sanskrit	VI	Vietnamese
EU	Basque	KU	Kurdish	SD	Sindhi	VO	Volapük
FA	Persian	KY	Kirghiz	SG	Sangho	WO	Wolof
FI	Finnish	LA	Latin	SH	Serbo- Croatian	XH	Xhosa
FJ	Fiji	LN	Lingala	SI	Singhalese	YO	Yoruba
FO	Faroese	LO	Laothian	SK	Slovak	ZH	Chinese
FR	French	LT	Lithuanian			ZU	Zulu
		LV	Latvian, Lettish				

Watching the VCR

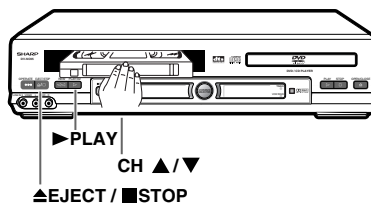
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Playback

! Caution:

BEFORE YOU PLAYBACK A VIDEO TAPE:

Condensation forms in the Unit when it is moved out of or into a warm place. If you try to playback or record, the video tape and Unit may be damaged. Turn the Unit on and wait for about two hours until the Unit reaches room temperature before operating.



Playback

- 1 Switch on your TV and select the video channel.
- 2 Carefully push a pre-recorded video tape into the tape compartment. This will switch the Unit on.
 - If the record-protection tab has been removed, the VCR will start playback as soon as the video tape has been loaded.
- 3 Press ►PLAY to start playback.
 - For double speed playback (without sound), press ►PLAY again.
 - To revert to normal playback, press ►PLAY again.
 - To stop the video tape, press ■STOP.
 - To eject the tape, press EJECT.

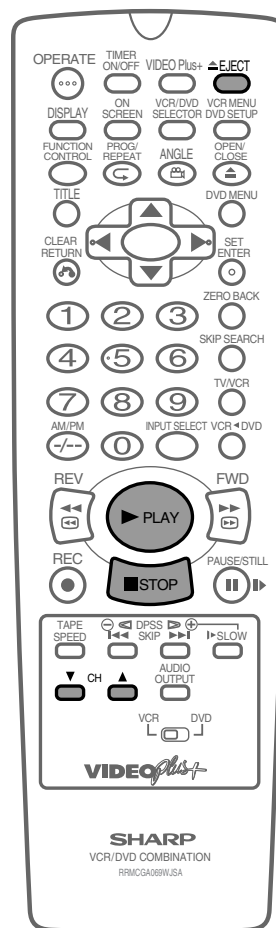
SHARP SUPER PICTURE should enhance the picture quality during playback. It is normally set to "ON". (See page 60.)

Picture Disturbance During Playback

This Unit has an automatic tracking system which reduces picture disturbance when you start to playback a video tape. When auto-tracking is in operation ✱ flashes on the on-screen display. If the picture still has disturbance you may need to manually track the video tape:

During PLAYBACK of a video tape.

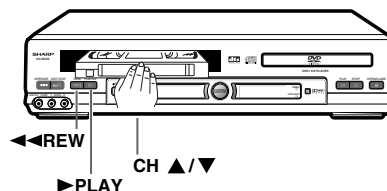
- Press CH ▲ / ▼ to position picture interference off the TV screen.
- Press CH ▲ / ▼ together to start Auto Tracking.





Pausing and Slow Motion

- 1 Press **▶PLAY** to start the video tape playback.
- 2 Press **⏸PAUSE/STILL** to pause the video tape.
 - Press **CH ▲ / ▼** to minimise jitter whilst in pause mode.
 - Press **▶PLAY** to resume playback.
- 3 Press **▶SLOW** to playback in slow motion (without sound). Slow motion speed can be adjusted using **SLOW ⊖/⊕** next to **▶SLOW**. Picture disturbance can be improved by pressing **CH ▲ / ▼** during slow motion playback.
 - Press **▶PLAY** to resume playback.



NOTE

- When using SLOW MOTION function some mechanical noise may be heard.
- There will be picture interference and possibly a change to black and white picture using the Pause and Slow functions.
- PAUSE mode, Slow Motion will automatically disengage after about 5 minutes.

Fast Forwarding/Rewinding a Video Tape

- 1 Press **■STOP** to stop the video tape.
- 2 Press **FF▶▶** or **◀◀REW**.
- 3 Press **■STOP** to stop fast forward/rewind.

NOTE

- If you use other than E-90/E-180 cassettes, fast forward and rewind may take somewhat longer

Forward/Reverse Visual Search

- 1 Press **FF▶▶** or **◀◀REW** during playback to select search mode.
- 2 Press **▶PLAY** to resume playback.
- OR
- 3 Press **FF▶▶** or **◀◀REW** to decrease the speed during visual search mode. There are 2 search speeds in each direction. The unit switches between them each time the button is pressed.
- 4 Press **▶PLAY**.

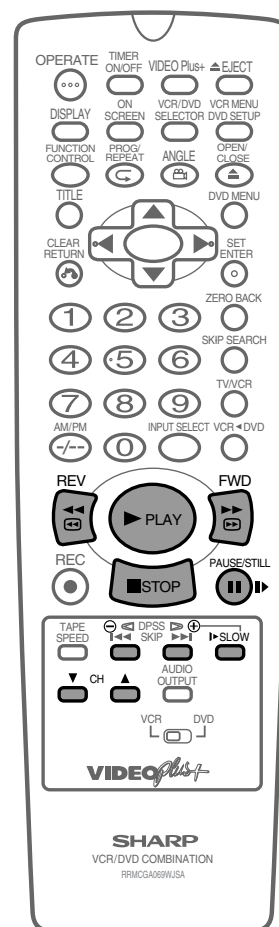
NOTE

- There will be picture interference and possibly a change to black and white picture using Visual Fast Forward/Rewind functions.

Automatic Head Cleaning System

When the tape is inserted, or ejected, this system automatically cleans the drum and heads with a special roller before recording or playback begins, protecting the heads and drum from dirt and preserving beautiful sound and picture quality.

www.sharp.co.uk/support





Playback

Playing Back an S-VHS Cassette

S-VHS (super -VHS) pre-recorded cassettes give you a better quality playback picture with increased detail and depth.

Your Unit will automatically recognise which type of cassette is being used, VHS or S-VHS and playback the appropriate standard accordingly.

NOTE

- All of the VCR's playback functions can be used during S-VHS playback, SLOW, PLAY/X2, VISUAL SEARCH, etc.
- Your Unit is S-VHS playback only, it will not record S-VHS.
- Some picture noise may be observed on the screen in Long Play (LP) mode trick playback (Slow Motion, Frame Advance playback).

Playing Back an NTSC Cassette

NTSC (National Television Standards Committee) is a different TV standard to PAL and is used in some Non-European Countries. Your Unit can playback pre-recorded NTSC cassette onto a PAL system TV, but cannot record an NTSC signal onto a video cassette.

NOTE

- You cannot record NTSC signals or dub NTSC cassettes onto other VCR's from this Unit.
- You cannot use Slow speed, Still frame, Double Speed, Frame Advance or Tape Remaining with a pre-recorded NTSC cassette.
- Some picture noise may be observed on the screen in Long Play (LP) mode trick playback (Slow Motion, Frame Advance playback).
- On some TVs, the picture may appear in black and white or there may be no picture. This does not indicate a fault with your VCR.
- On some TVs, the picture may shrink vertically causing black bands to appear at the top and bottom of your screen.
- On some TVs, the played-back picture may roll vertically. This does not indicate a fault with your VCR.



BLUE MUTE

The TV screen will be blue if a TV channel with no signal is selected, an unrecorded section of tape is played or the quality of the recording on the tape is poor. Select OFF in the mode menu to disable this feature.

- 1 Press **VCR MENU** to display the main menu on the screen.
- 2 Press **▲ / ▼** to select "MODE".
- 3 Press **SET**.
- 4 Press **▲ / ▼** to select "BLUE MUTE".

NICAM	AUTO	OFF
COLOUR	AUTO	PAL
→BLUE MUTE	AUTO	OFF
REPEAT	ON	OFF
16:9	AUTO	OFF
SUPER. P	ON	OFF
▲ ▼ : SELECT ◀ ▶ : CHANGE		
SET : ENTER MENU : EXIT		

- 5 Press **◀ / ▶** to select "AUTO" or "OFF".
- 6 Press **SET** to confirm and then **VCR MENU** to return to the normal screen

COLOUR

If the VCR is playing poor quality recording, the picture may turn black and white. Selecting PAL may improve this (depending on the recording), although coloured speckles may appear on black and white recordings.

- 1 Follow steps 1 to 3 from **BLUE MUTE** above.
- 2 Press **▲ / ▼** to select "COLOUR".

NICAM	AUTO	OFF
→COLOUR	AUTO	PAL
BLUE MUTE	AUTO	OFF
REPEAT	ON	OFF
16:9	AUTO	OFF
SUPER. P	ON	OFF
▲ ▼ : SELECT ◀ ▶ : CHANGE		
SET : ENTER MENU : EXIT		

- 3 Press **◀ / ▶** to select "AUTO" or "PAL".
- 4 Press **SET** to confirm and then **VCR MENU** to return to the normal screen.





Playback

16:9 Playback and Recording

This feature allows the playback and recording of wide screen format signals (16:9), which should automatically change the picture size setting on a wide screen TV. To allow the operation of this feature, ensure 16:9 mode is set to AUTO in the MODE menu. A scart connection must be used between the VCR (SOCKET L1) and the TV.

During Playback of a 16:9 encoded tape the TV should switch to (Widescreen) 16:9 mode.

1 Follow steps 1 to 3 from **BLUE MUTE** on page 57.

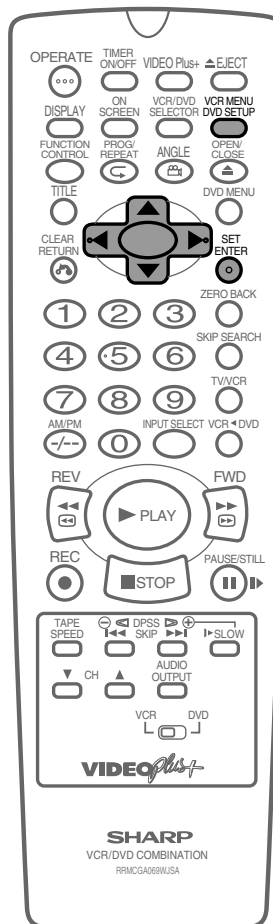
2 Press **▲ / ▼** to select "16:9".

N I C A M	AUTO	OFF
C O L O U R	AUTO	P A L
B L U E M U T E	AUTO	OFF
R E P E A T	ON	OFF
→ 16 : 9	AUTO	OFF
S U P E R . P	ON	OFF

▲ ▼ : SELECT ◀ ▶ : CHANGE
SET : ENTER MENU : EXIT

3 Press **◀ / ▶** to select "AUTO" or "OFF".

4 Press **SET** to confirm and then **VCR MENU** to return to the normal screen.



Audio Output Mode

Hi-Fi STEREO SOUND

Stereo sound is possible from this Unit if you have a stereo TV connected to the Unit with a scart lead, or audio equipment connected with audio phono leads. The Unit is normally set so that stereo sound is possible. The sound output from the Unit is controlled by **AUDIO OUTPUT**. If you wish to change the sound output you can use **AUDIO OUTPUT** as follows:

- Press **AUDIO OUTPUT** once. The LEFT audio channel will be sent to BOTH speakers. **L** will appear on the VCR Front Panel display.
- Press **AUDIO OUTPUT** again. The RIGHT audio channel will be sent to BOTH speakers. **R** will appear on the VCR Front Panel display.
- Press **AUDIO OUTPUT** a third time and the MONO track will be sent to BOTH speakers. **L** and **R** will not appear on the VCR Front Panel display.
- Pressing **AUDIO OUTPUT** a fourth time, normal Hi-Fi stereo sound will be heard. **L** and **R** will appear on the VCR Front Panel display.

NICAM Hi-Fi STEREO SOUND

Your Unit can receive and record NICAM sound. The Unit is normally set so that NICAM sound is possible if it is present on the receiving signal, otherwise the Unit will automatically switch to receive the mono signal. NICAM sound can be turned off. If you wish to do this follow the procedure below:

- 1 Press **VCR MENU** to display the menu screen.
- 2 Press **▲ / ▼** to select "MODE" then press **SET** to confirm.
 - The MODE menu will be displayed with NICAM selected.

→NICAM	AUTO	OFF
COLOUR	AUTO	PAL
BLUE MUTE	AUTO	OFF
REPEAT	ON	OFF
16 : 9	AUTO	OFF
SUPER. P	ON	OFF
▲ ▼ : SELECT		
SET : ENTER		
◀ ▶ : CHANGE		
MENU : EXIT		

- 3 Press **◀ / ▶** to select "OFF".
- 4 Press **SET** to confirm and return to the menu screen.
- 5 Press **VCR MENU** to exit to normal screen.

NOTE

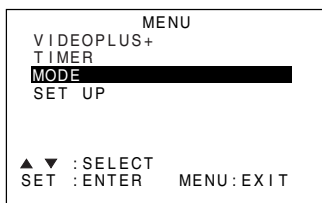
- If the tape being played back does not carry sound recorded on Hi-Fi tracks, L and R will not appear on the display.
- If the sound contains 'crackling' or 'popping' noises the sound quality may be improved by adjusting the tracking using **CH ▲ / ▼**.
- If the poor quality is for a long period the Unit will automatically select the mono track and the sound will be in mono.
- NICAM sound may not be stereo.



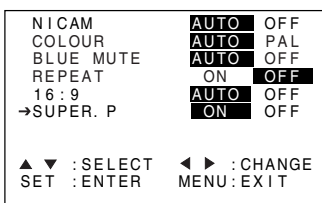
Sharp Super Picture

This function creates clearer picture quality only during playback.

- 1 Press **VCR MENU** to display the menu screen.
- 2 Select "MODE" with **▲ / ▼** and then press **SET**.



- 3 Select "SUPER. P" with **▲ / ▼**. Then set it to "ON" or "OFF" with **◀ / ▶**.



ON:

Normally leave the mode set to ON. This high picture quality function will create a clearer image during playback.

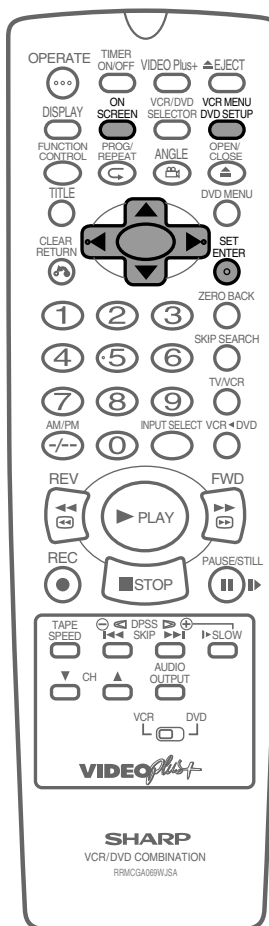
OFF:

Set to OFF when playing back a tape on the VCR while editing or when strong noise appears on the screen.

- 4 Press **SET** to confirm and return to the menu screen.
- 5 Press **VCR MENU** to exit to normal screen.

NOTE

- This function only operates during playback. It will not operate when recording or watching a TV program with the VCR tuner.
- When playing S-VHS tape
 1. Sharp Super Picture is set to off automatically. When finished playback, the setting will return to the previous setting.
 2. You cannot change ON/OFF setting manually.
- The ON/OFF status of the Sharp Super Picture can be checked when **ON SCREEN** is pressed to display OSD.
- When the Unit power is turned off, the Sharp Super Picture setting is retained in memory.
- If power is interrupted for more than 60 seconds (power failure, etc.), the setting will return to ON.

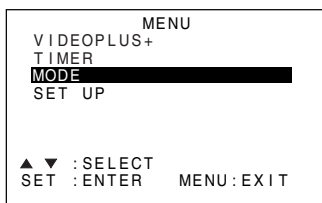


Auto Repeat/Auto Zero Back

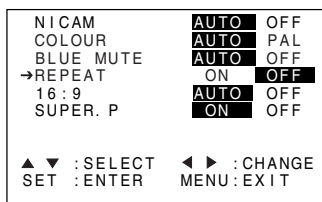
Auto Repeat

This function replays the specified part.

- 1 Press **VCR MENU** to display the menu screen.
- 2 Select "MODE" with **▲ / ▼** and then press **SET**.



- 3 Select "REPEAT" mode with **▲ / ▼**. Then set the mode to "ON" or "OFF" with **◀ / ▶**.



- 4 Press **SET** to confirm and return to the menu screen.
- 5 Press **VCR MENU** to return to normal screen.

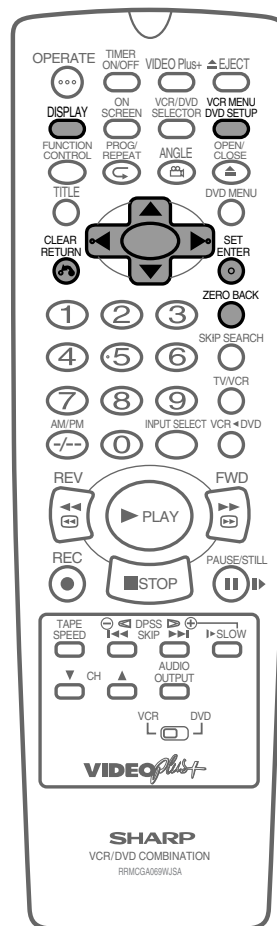
Auto Zero Back

ZERO BACK uses the tape counter to determine a specific point on a cassette you may wish to return to.

- 1 Press **DISPLAY** until tape counter appears.
- 2 Press **CLEAR** to identify the current position on a video cassette and the tape counter will appear.
- 3 Press **ZERO BACK** when you wish to return to this position on the video cassette. The cassette will rewind/advance to this point.

NOTE

- The tape counter will only operate on recorded sections of cassette.



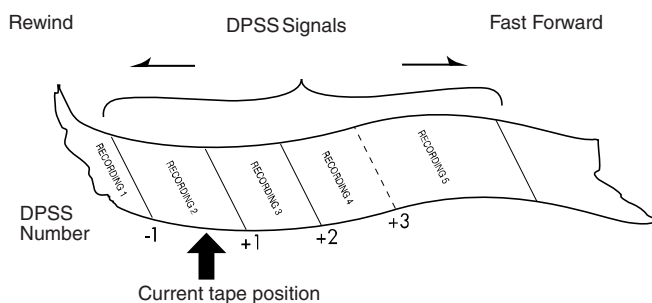
DPSS (Digital Program Search System) / Skip Search

DPSS

Your Unit records a marker signal on the tape at the start of each recording. These signals can be used later to locate the starting point of a recording.

Press **DPSS** \ominus/\oplus to locate a previous programme or the next programme.

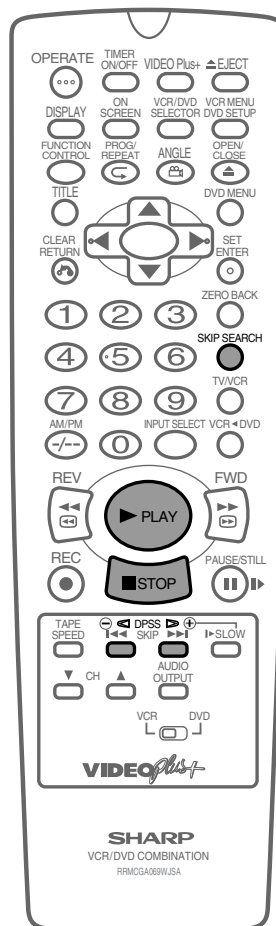
- 1 Load the video cassette into the Unit.
- 2 Press **DPSS** \oplus three times. DPSS 3 will appear on the on-screen display, and the Unit will fast forward to locate the third recording after the current one.
- 3 Press **DPSS** \ominus once. DPSS -1 will appear on the on-screen display and the Unit will rewind to locate the beginning of the current recording.



- 4 To cancel the search before it has finished, press **STOP** or **PLAY**.

NOTE

- Recordings must be longer than 3 minutes.
- The starting point of playback may vary.
- This feature will only work with video tapes recorded on a VCR with the DPSS feature.



Skip Search

With this feature, you can set a forward video search time to approx. 30, 60, 90 or 120 seconds of recorded material. After searching, normal playback will resume automatically.

- 1 Press **PLAY** to start playback.
- 2 Press **SKIP SEARCH**.
The number of times you press **SKIP SEARCH** determines the forward search time.

Number of Times Pressed	1 Time	2 Times	3 Times	4 Times
Video Search Time	Approx. 30 sec.	Approx. 60 sec.	Approx. 90 sec.	Approx. 120 sec.

TV Program Recording

Immediate Recording

Selection of a Channel

Select the channel you wish to record by using the number buttons, or select the next/previous channel by pressing **CH ▲ / ▼**. To change between single digit and 2-digit channel numbers, press **- / --**. For example, for channel 24, press **- / --** then press 2 and 4.

Tape Speed Selection

Your Unit has three tape speeds: SP (Standard Play), LP (Long Play) and EP (Extended Play). Press **TAPE SPEED** to select the desired setting.

It is recommended that EP recordings are only played back on the Unit on which they were originally recorded. You can record the channel you are watching or a different channel.

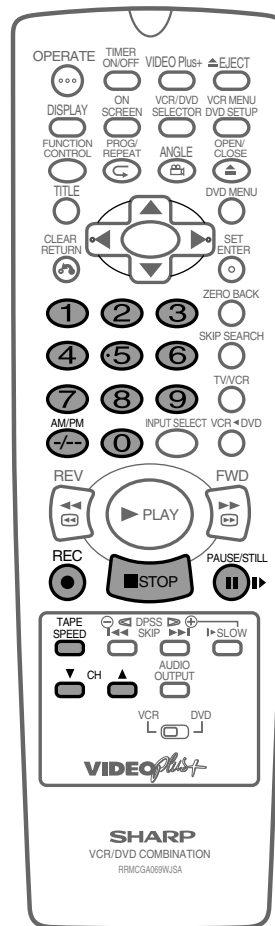
MODE	SP (Standard Play)	LP (Long Play)	EP (Extended Play)
CASSETTE			
E-240	240 min.	480 min.	720 min.

Immediate Recording

- 1 Insert a video tape into your Unit.
- 2 Select the channel you wish to record on the Unit as above.
- 3 Press **●REC** to start recording.
- 4 Press **⏸PAUSE/STILL** to pause during recording.
- 5 Press **●REC** to continue recording.
- 6 Press **■STOP** once to stop recording.

Simple Timed Recording

- 1 Press **●REC**.
- 2 To specify a stop time, each additional press of **●REC** will delay the stop time by 10 minutes.
- 3 Press **■STOP** once to stop recording at any time.



NOTE



- If the tape ends before the recording is complete the Unit will stop recording, rewind, eject the tape and place the Unit into STANDBY mode.
- If the Unit ejects the video tape when you press **●REC** the tape is record protected. i.e. record protection tab has been removed.

Timer Recording

How to Use the VIDEO Plus+® System to Make a Recording

The VIDEO Plus+ system allows you to program the Unit to record up to eight programmes using the PlusCode numbers published in TV listings (refer to your daily newspaper or TV magazine).

Preparations

- Check that the clock is displaying the correct time.
- If the Timer Standby symbol  appears on the VCR display, press the **TIMER ON/OFF** to remove the  symbol.

- 1 Press the **VIDEO Plus+** button.
- 2 Enter the PlusCode number from the TV listing using the number buttons.

➔ PLUSCODE NO.

ONCE

WEEKLY

DAILY

▲ ▼ : SELECT

SET : ENTER

0 ~ 9 : DATA

MENU : EXIT

NOTE

- An ERROR message will appear if you have entered a number that is not a current PlusCode number. If this happens press **CLEAR** to delete the numbers as required and enter the correct PlusCode number.

- 3 Press **▲ / ▼** to select **ONCE, WEEKLY, DAILY**.
 - If you want to make additional recordings at the same time each day or week, then use **◀ / ▶** to select the **WEEKLY**, or **DAILY** option as appropriate.
- 4 Press **SET** to confirm.

NOTE

- Check that the menu list agrees with the times shown in the TV listing. If it does not, press **CLEAR** to return to the VIDEO Plus+ system menu, and re-enter the correct PlusCode number.

The first time that you use the VIDEO Plus+ system to make a recording on each channel Preset, (PR) may be highlighted on the On-Screen Display.

- 5 Enter the channel number you wish to record using the number buttons.

(Example) Channel 2

DATE PR START STOP 1 / 2

21 / 06 02 12 : 00 AM 13 : 00 PM SP -

-- / -- -- : : -- : --

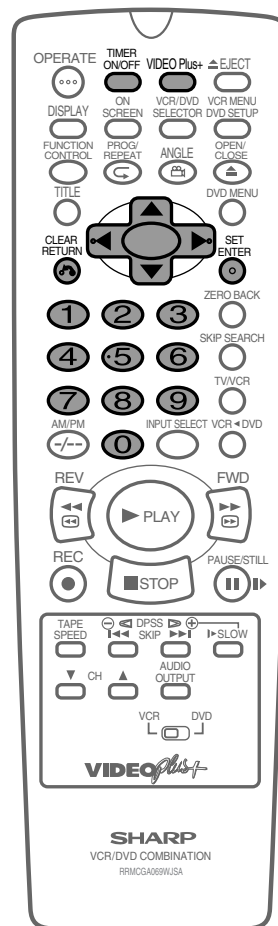
-- / -- -- : : -- : --

-- / -- -- : : -- : --

PR : CH02

◀ ▶ : SELECT ▲ ▼ : CHANGE

SET : ENTER MENU : EXIT





Timer Recording

- 6 If you wish to change the recording speed, use ◀/▶ to highlight SP. Press ▲/▼ to select standard play (SP), long play (LP) or extended play (EP) as required.

DATE	PR	START	STOP	1/2
21/06	02	12:00AM	13:00PM	SP
--/--	--	--:--	--:--	--
--/--	--	--:--	--:--	--
--/--	--	--:--	--:--	--

SP/LP/EP:TAPE	SPEED
◀▶ :SELECT	▲▼ :CHANGE
SET :ENTER	MENU:EXIT

- 7 For VPS/PDC setting use ◀/▶ to highlight the final column (See NOTE below). Using ▲/▼ will select VPS/PDC "ON" or "OFF". (* = ON - = OFF).

DATE	PR	START	STOP	1/2
21/06	02	12:00AM	13:00PM	SP
--/--	--	--:--	--:--	--
--/--	--	--:--	--:--	--
--/--	--	--:--	--:--	--

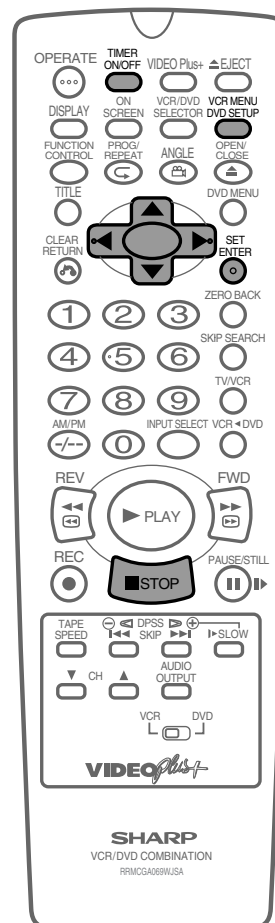
VPS/PDC	*:ON	-:OFF
◀▶ :SELECT		▲▼ :CHANGE
SET :ENTER		MENU:EXIT

- 8 Press **SET** to confirm the programme. The VIDEO Plus+ system menu will reappear. If you wish to enter further VIDEO Plus+ system recordings repeat this procedure.

PLUSCODE NO.
ONCE WEEKLY DAILY

▲▼ :SELECT	0~9 :DATA
SET :ENTER	MENU:EXIT

- 9 When you have completed entering the timer settings, press **VCR MENU** to remove the menu from the TV screen.
- 10 Ensure that the tape on which you wish to record is inserted into the Unit, then press **TIMER ON/OFF** once to place the Unit in **TIMER STANDBY** mode. [] will be shown on the VCR Front Panel Display and the timer standby indicator will be illuminated.



NOTE

- You may also access the VIDEO Plus+ system menu by the following procedure:
 - Press **VCR MENU**.
 - The VIDEO Plus+ system option will be highlighted. Press **SET** to confirm. Continue from step 2 of this procedure.
- VPS/PDC is a signal broadcast by some TV stations which adjusts the start and stop time of your Unit recording. This ensures that if there is a change in broadcast time for your programme the Unit will still record the whole programme. It is essential that the start time as it appears in the TV listing is used to program the Unit, as this information is used to identify the VPS/PDC signal corresponding to your programme.
- If the [] symbol and the red indicator light flashes a video tape has not been inserted into the Unit.
- If the video cassette is ejected when the Unit tries to record the record protection tab has been removed.
- During recording, press **STOP** to cancel the recording. If there are further recordings to be made, the Unit will return to Timer Standby.



Timer Recording

How to Set a Delayed Recording

You can make a maximum of eight delayed recordings up to a year in advance. The example shown is for 24-hour clock operation. To change to 12-hour clock operation refer to the **Manual Clock Setting** section of this manual. 12-hour clock am/pm can be selected using **AM/PM**.

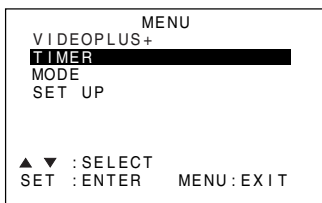
Preparations

- If the Timer Standby symbol appears on the VCR Front Panel Display, press the **TIMER ON/OFF** to remove the symbol.
- Check that the VCR clock is displaying the correct time.

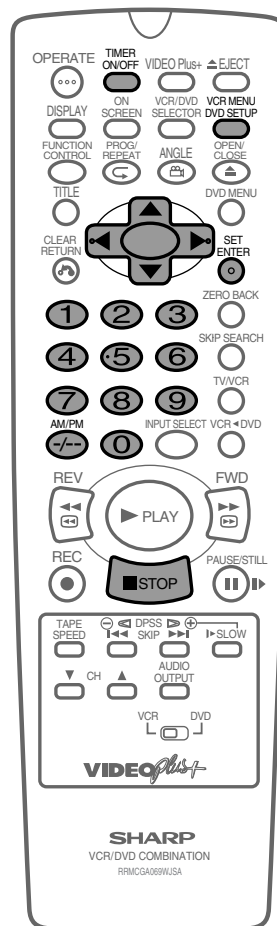
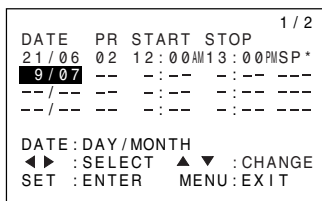
Setting a Recording

For example: Recording a programme on channel 3 from 21:05 to 22:30 on July 9th.

- 1 Press **STOP** to ensure that the Unit is switched on.
- 2 Press **VCR MENU**.
- 3 Press **▲ / ▼** to select "TIMER". Then press **SET** to confirm.



- 4 Press **SET** again, the on-screen display will now show today's date. If you wish to change the date use **▲ / ▼** or number buttons. If you use the number buttons, enter two digits for the day, then two for the month. For example for July 9th, press 0 9 (9th), then 0 7 (July). When the correct date for your recording is shown, press **▶** to move to the next setting.





Timer Recording

- 5 If you want to make additional recordings at the same time each day or week, use ▲ / ▼ to select D (daily) or W (weekly). Then press ► to move to the next setting.

DATE	PR	START	STOP	1 / 2
21 / 06	02	12 : 00 AM	13 : 00 PM	SP*
9 / 07	D	-- : --	-- : --	--
-- / --	--	-- : --	-- : --	--
-- / --	--	-- : --	-- : --	--
ONCE				
W : WEEKLY D : DAILY				
► : SELECT ▲ ▼ : CHANGE				
SET : ENTER MENU : EXIT				

- 6 Enter the channel number using ▲ / ▼ or the number buttons. For example to record a programme on channel 3, press 0 3. Then press ► to move to the next setting.
- 7 Enter the start time using ▲ / ▼ or the number buttons, hours first then minutes (when entering less than 10 hours or minutes add a '0' before the number), for example for 21:05 start, press 2 1 0 5. Then press ► to move to the next setting.

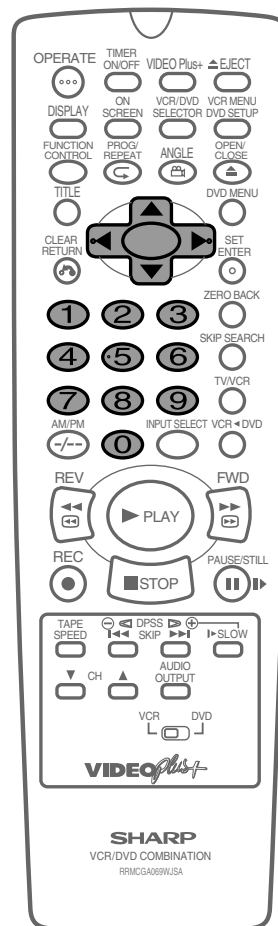
DATE	PR	START	STOP	1 / 2
21 / 06	02	12 : 00 AM	13 : 00 PM	SP*
9 / 07	D 03	21 : 05 PM	-- : --	--
-- / --	--	-- : --	-- : --	--
-- / --	--	-- : --	-- : --	--
► : SELECT ▲ ▼ : CHANGE				
SET : ENTER MENU : EXIT				

- 8 Enter the stop time, for example for 22:30 stop, press 2 2 3 0.
- 9 If you wish to change the "RECORDING SPEED", use ◀ / ▶ to highlight SP. Press ▲ / ▼ to select standard play (SP), long play (LP) or extended play (EP) as required.

DATE	PR	START	STOP	1 / 2
21 / 06	02	12 : 00 AM	13 : 00 PM	SP*
9 / 07	D 03	21 : 05 PM	22 : 30 PM	SP
-- / --	--	-- : --	-- : --	--
-- / --	--	-- : --	-- : --	--
SP / LP / EP : TAPE SPEED				
► : SELECT ▲ ▼ : CHANGE				
SET : ENTER MENU : EXIT				

- 10 For VPS/PDC setting use ◀ / ▶ to highlight the final column (See note on next page). Using ▲ / ▼ will select VPS/PDC "ON" or "OFF" (* = ON - = OFF).

DATE	PR	START	STOP	1 / 2
21 / 06	02	12 : 00 AM	13 : 00 PM	SP*
9 / 07	D 03	21 : 05 PM	22 : 30 PM	SP
-- / --	--	-- : --	-- : --	--
-- / --	--	-- : --	-- : --	--
VPS / PDC * : ON - : OFF				
► : SELECT ▲ ▼ : CHANGE				
SET : ENTER MENU : EXIT				





Timer Recording

- 11** Press **SET** to confirm.
 - The MENU now shows all the timer settings you have entered. If you wish to make additional timer recordings, repeat this procedure.
- 12** When you have completed entering timer settings, press **VCR MENU** to remove the menu from the TV screen.
- 13** Ensure that the tape on which you wish to record is inserted into the Unit, then press **TIMER ON/OFF** once to place the Unit in **TIMER STANDBY** mode. will be shown on the VCR Front Panel display and the timer standby indicator will be illuminated.

NOTE

- If problems persist contact the SHARP Helpline on tel: 08705-274277 (office hours)
- VPS/PDC is a signal broadcast by some TV stations which adjusts the start and stop time of your VCR recording. This ensures that if there is a change in broadcast time for your programme the Unit will still record the whole programme. It is essential that the start time as it appears in the TV listing is used to program the Unit, as this information is used to identify the VPS/PDC signal corresponding to your programme.
- If the symbol and the red indicator light flashes a video tape has not been inserted into the Unit.
- If the video tape is ejected when the Unit tries to record the record protection tab has been removed.
- During recording, press **■STOP** to cancel the recording. If there are further recordings to be made, the Unit will return to Timer Standby.

How to Check, Change, and Cancel a Delayed Recording

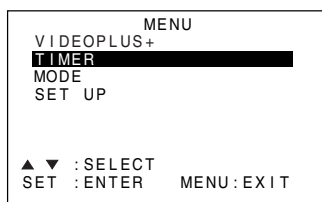
Checking a Recording

You can see on the Timer setting screen a list of all timer programmes that are already set.

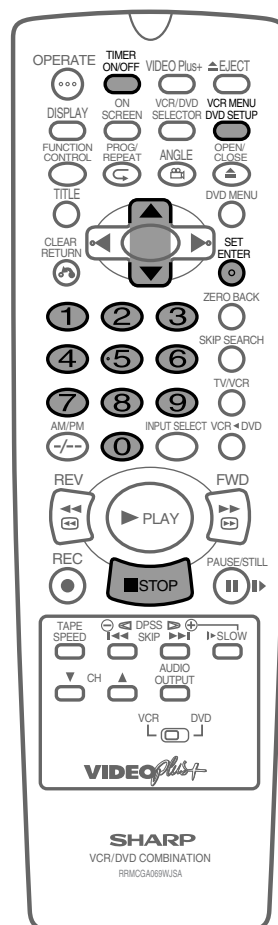
Preparations

- If the Timer Standby symbol appears on the VCR Front Panel Display, press the **TIMER ON/OFF** to remove the symbol.

- 1** Press **■STOP** to switch on the VCR.
- 2** Press **VCR MENU**.
- 3** Press **▲ / ▼** to select "TIMER". Press **SET** to confirm.
 - All the delayed recordings in the VCR's memory will be shown.



- 4** If the settings are correct press **VCR MENU** to exit.

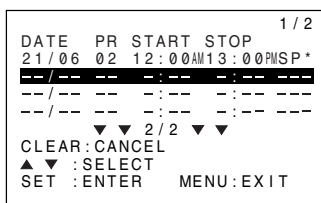




Timer Recording

Changing a Recording

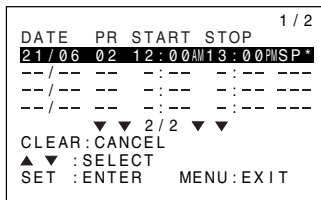
- 1 Follow steps 1 to 3 of **Checking a Recording** on page 68.
- 2 To change a delayed recording, press **▲** / **▼** to highlight the recording, then press **SET** to select.
- 3 Press **◀** / **▶** to highlight the setting to be changed and correct it by using **▲** / **▼** or the number buttons.



- 4 When all corrections are complete press **SET** to confirm, then press **VCR MENU** to exit.

Cancelling a Recording

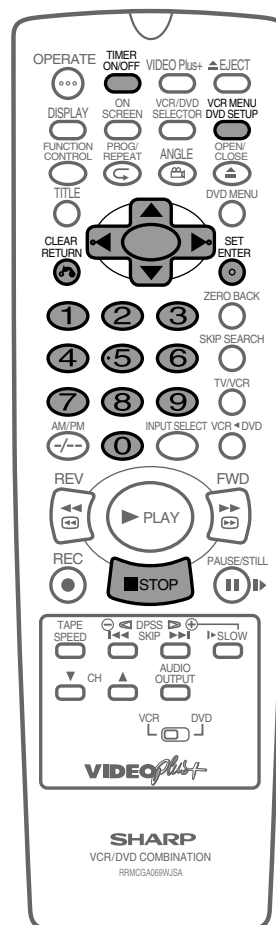
- 1 Follow steps 1 to 3 of **Checking a Recording** on page 68.
- 2 To cancel a delayed recording, press **▲** / **▼** to highlight the recording to be cancelled, then press **CLEAR**.



- 3 Press **VCR MENU** to exit.

NOTE

- If there are some programmes to be recorded, do not forget to press **TIMER ON/OFF** to return the Unit to Timer Standby mode.

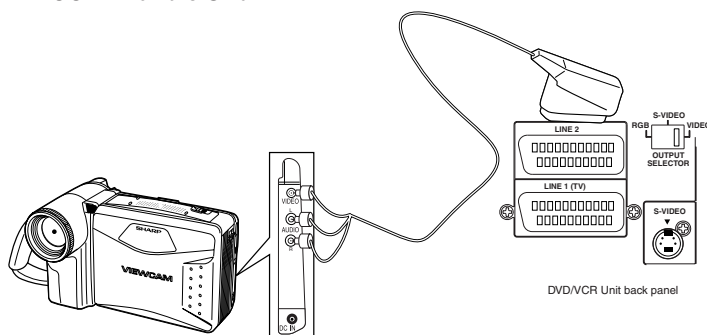


Recording From Other Equipment

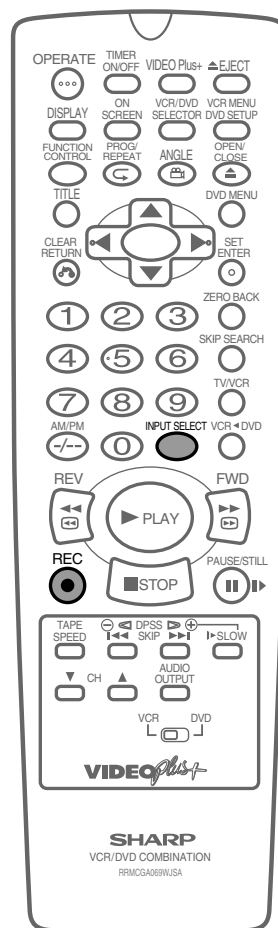
Recording from Other Equipment

You can record video and audio signals from various external sources, such as a camcorder, onto a video tape using this Unit.

For example, recording from a camcorder connected to LINE 2 IN/DECODER on the Unit:

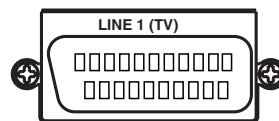
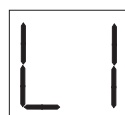


- 1 Connect your signal source (e.g. Camcorder, Digital Camera etc.) to the desired scart socket on the back of the Unit using the manufacturers' recommended cable (not supplied).
- 2 Ensure that the tape on which you wish to record is inserted into the Unit.
- 3 Press the **INPUT SELECT** button on the remote control until the VCR display shows **L2**.
- 4 Press the **RECORD** button on the remote to start recording.



OTHER POSSIBLE CONNECTIONS

- If you wish to record from a source connected to LINE 1 IN/OUT, select **L1**. Press the **RECORD** button on the remote to start recording.
- If you wish to record from a source connected with audio phone leads to the sockets on the front of the Unit, select **L3**. Press the **RECORD** button on the remote to start recording.



NOTE

- There are many different ways of connecting external equipment to the Unit. Please refer to your equipment operation manuals for further information.

Tape Remaining

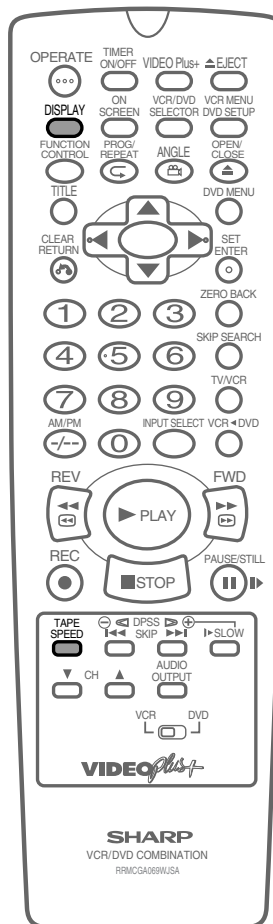
When you load a video cassette into the Unit, the Unit can calculate approximately the amount of video tape remaining in hours and minutes. This is useful in determining whether or not there is sufficient tape left to make a recording.

When a video tape is playing, the amount of tape remaining is calculated automatically. To display the amount of video tape remaining:

- 1 Load the video cassette into the Unit.
- 2 Press **DISPLAY** as many times as necessary until "R" appears on the VCR Front Panel display. The tape will wind forward for a few seconds and then return to its original position. The tape remaining will be shown on the VCR Front Panel display in hours and minutes. By pressing **TAPE SPEED** on the Remote the remaining time will change between standard play, long play and extended play.

NOTE

- If the TAPE REMAINING function is interrupted, the remaining time will not be displayed.
- If less than 5 minutes of tape remains the display will flash.
- When you start recording or playback, the VCR will begin the computation. However, this may take some time. When the computation is completed, the tape remaining will be shown on the OSD and VCR display for 5 seconds.
- If the "REM" mode is selected with MODE OSD or DISPLAY and the VCR is in Stop mode, the tape will automatically fast forward or rewind for a few seconds and then the VCR will begin computing the amount of tape remaining.
- During computation, REC will not function and pressing STOP, PLAY/X2 or other buttons will interrupt the computation.
- Setting the DPSS or ZERO BACK function during computation may cancel it.
- The indicated length of tape remaining is only an approximate guide.
- This function may not work properly for video tapes other than E-60, E-90, E-180 and E-240.
- The length of tape remaining during fast forward or rewind may be indicated as greater than it actually is.
- When **VHS-C** and **SVHS-C** tapes are used with a cassette adapter, the indication may not be correct.



Watching the DVD

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Preparing to Use The DVD

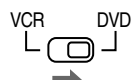
The following steps are necessary to display the DVD screen on the TV.

When connecting a TV with the DVD output jacks

- 1 Turn on the TV and switch the TV channel to the external input "VIDEO" or "AV" channel connected to the DVD output jack.
- 2 Press **OPERATE**.
 - The start up screen is displayed on the TV screen.



- 3 Move the **VCR/DVD CHANGE Switch** on the remote control to **DVD**.

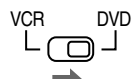


NOTE

- When the TV is connected to the DVD output jack, the image will be displayed regardless of the VCR/DVD mode selected. Therefore, it is not necessary to adjust the mode selected.

When connecting a TV with the DVD/VCR shared output jacks

- 1 Turn on the TV and switch the TV channel to the external input "VIDEO" or "AV" channel connected to the DVD/VCR shared output jack.
- 2 Press **OPERATE**.
- 3 Move **VCR/DVD CHANGE Switch** on the remote control to **DVD**.

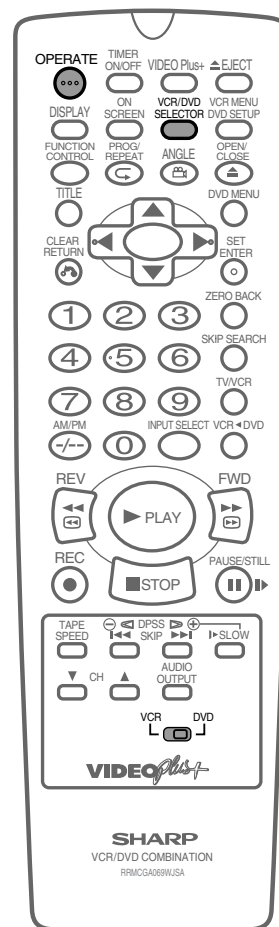
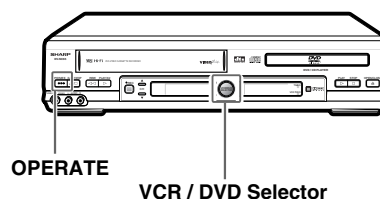


- 4 Press **VCR/DVD SELECTOR** to enter the **DVD** mode.
 - The VCR/DVD SELECTOR on the product lights up in green.



Lights up in green

- Each time VCR/DVD SELECTOR is pressed, the mode changes between "VCR" mode and "DVD" mode.



Playback DVD C D CD-R/RW

Preparation

- See **Preparing to Use DVD** on page 24.



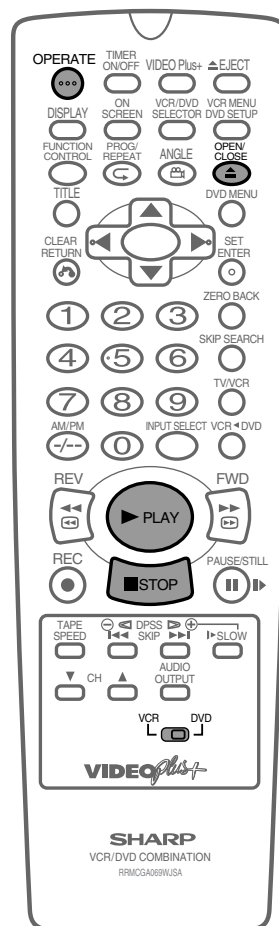
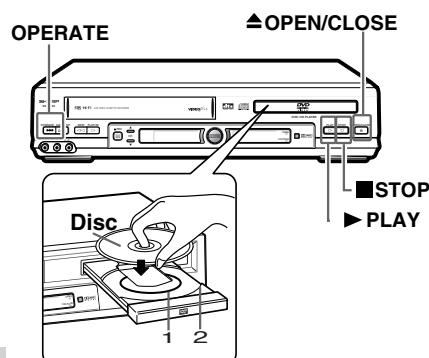
- The icons below are used in this Operation Manual:
 - DVD Indicates the functions that can be performed for DVDs.
 - C D Indicates the functions that can be performed for AUDIO CDs.
 - CD-R/RW ... Indicates the functions that can be performed for CD-R/RW.

Basic Play

- 1 Press **OPERATE**.
- 2 Press **▲OPEN/CLOSE** to open the disc tray.
- 3 Place a disc onto the tray.
 - Hold the disc without touching either of its surfaces, position it with the printed title side facing up, align it with the guides, and place it in its proper position.
 - ① 8 cm (3") disc
 - ② 12 cm (5") disc
 - **Do not stack discs in the tray. This can damage the player and the discs.**
- 4 Press **▲OPEN/CLOSE** to close the disc tray.
- 5 Press **▶PLAY**.
 - Playback image appears on the screen. (The "Start Up screen" will be shown for audio CDs.)
 - Some discs are played back automatically without pressing **▶PLAY**.
 - Some discs prompt you to select a title. In this case, select a title you want to view.
- 6 Press **■STOP** to stop playback.

NOTE

- If the disc is loaded upside down or is damaged, "-----" appears on the DVD Front Panel display and the disc tray slides out.
- If you attempt to play a DVD disc with the wrong region code, "REGION CODE ERROR" appears on the TV screen and the disc tray slides out.





Playback

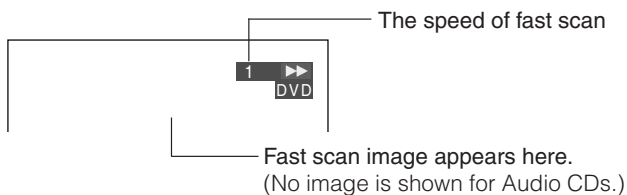
DVD

C D

CD-R/RW

Fast Forward/Fast Reverse

- 1 Press **FWD** or **REV** during playback.
 - The disc begins fast scan at x2 speed (1).



- Three speeds are available for DVD and for Audio CDs. Each time **FWD** or **REV** is pressed, the speed of fast scan changes in the following sequence:

Number of Presses

→ 1 (approx. x2) → 2 (approx. x8) → 3 (approx. x32) →

- 2 Press **PLAY** when you reach the desired point.

NOTE

- On some discs, the fast scan function is disabled.
- On DVD discs, audio and subtitles are not played back during the fast scan playback. Audio is played back only when the search speed of the fast forward is 1 (about x2).
- With a DVD disc, you cannot search past a title. Playback starts from the beginning of the title.
- Depending on the audio equipment, the sound may not come out when the fast forward is 1 (about x2).

DVD

Slow-Motion Play

- 1 Press **SLOW** in the play mode or still mode.

- Three speeds are available. Each time **SLOW** is pressed, the speed of slow-motion playback changes in the following sequence:

(DVD)

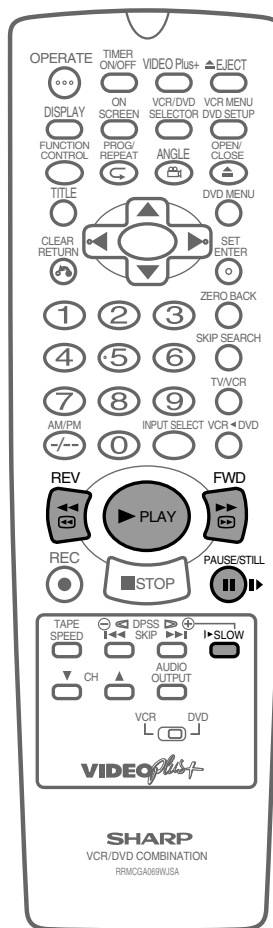
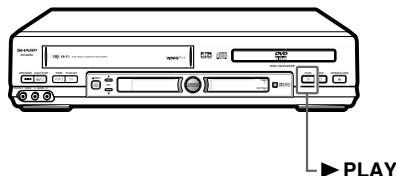
Number of Presses

→ 1 (approx. x1/2) → 2 (approx. x1/8) → 3 (approx. x1/16) →

- 2 Press **PLAY** to return to the normal playback or press **PAUSE/STILL** to return to the still picture mode.

NOTE

- On some discs, the slow-motion playback functions are disabled.
- Slow-motion playback is disabled on Audio CDs and MP3 discs.





Playback

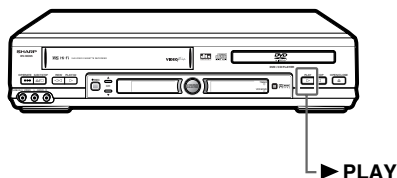
DVD

C D

CD-R/RW

Still/Pause

- 1 Press **||PAUSE/STILL** during playback.
- 2 If you press **▶PLAY** while paused (STILL/PAUSE), normal playback resumes.



DVD

Frame Advance

- 1 Press **||PAUSE/STILL** during playback.
 - The playback is paused (STILL/PAUSE).
 - The disc goes forward by one frame each time **||PAUSE/STILL** is pressed.
- 2 Press **▶PLAY** to return to the normal playback.

DVD

C D

CD-R/RW

Skip (Forward/Reverse)

While you are playing a disc, this function jumps to the beginning of the next chapter/track (Forward) or the current chapter/track (Reverse) and automatically starts playing that chapter/track.

- 1 While a disc is playing, press **SKIP▶▶▶** or **◀◀◀SKIP**.
 - Playback skips forwards one chapter/track for each time **SKIP▶▶▶** is pressed.
 - If you press **◀◀◀SKIP** and playback begins, and you then press **◀◀◀SKIP** again within 3 seconds, playback returns to the beginning of the previous chapter/track.

NOTE

- The frame advance playback functions are disabled for Audio CDs and CD-R/RW.
- On some discs, the skip functions are disabled.
- The playback image is not displayed during the skip. It resumes during playback following the skip.



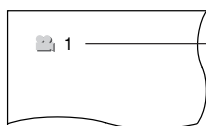


DVD

Angle Selection

Some DVD discs contain scenes which have been shot simultaneously from a number of different angles. For these discs, the same scene can be viewed from each of these different angles. (The recorded angles differ depending on the disc used.)

- 1 While you are playing a DVD disc with different angles recorded, press **ANGLE** to view the number of the current angle.



Number changes to show the number of the current angle. (The maximum number stipulated by the manufacturers is 9.)

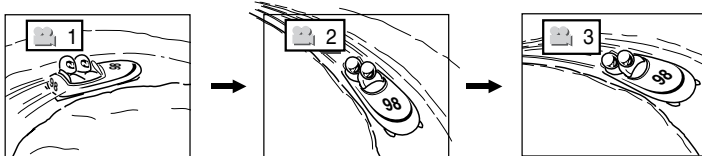


Lights when different angles are recorded for the title currently playing.

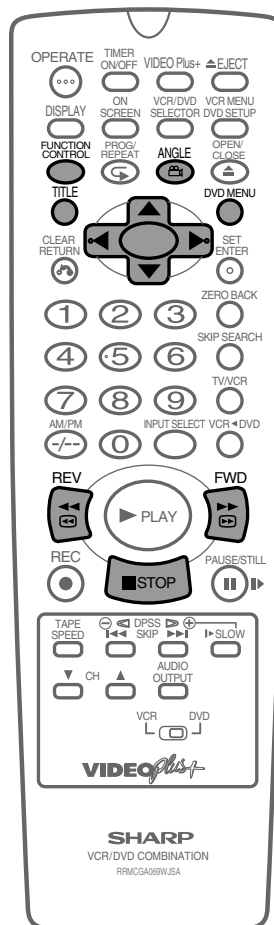
- 2 Use **▲** or **▼** (or **ANGLE**) to change the scene to the next angle in those recorded.

- About two seconds later, playback continues from the new angle you selected.
- If no button is pressed within 10 seconds, playback continues without changing the current angle.

Sequence of angle shots (Example)

**NOTE**

- This function can only be used for discs on which scenes shot from multiple angles have been recorded.
- If no angles are recorded, **xx** is displayed.





Playing MP3 Discs

This Unit is able to play CD-R or CD-RW discs recorded in MP3 format.

Regarding MP3 discs

- MP3 files are audio data compressed in MPEG1 Audio layer 3 file format. "MP3 files" have ".mp3" as extensions.
- Some files that have ".mp3" extensions or files that have not been recorded in MP3 format will produce noise or cannot be played.
- Some discs cannot be played depending on the actual CD-R/CD-RW disc condition, the recording equipment and the disc's recording.
- Data on the CD-R or CD-RW disc, which has not been recorded in MP3 format, audio tracks or has been recorded in other file formats except MP3, cannot be played.

Playing MP3 discs

- Discs that have more than 1000 folders and files in total cannot be played.
- Some MP3 files are not played in the order they were recorded.
- The number of layers, which can be recognized, including files and folders, is maximum 8.
- Only the first session of a multi-session disc can be played.
- When both audio tracks and MP3 files are recorded on a disc, audio tracks will be played.
- Depending on the folder tree, reading MP3 files can take time.
(The more files there are, the longer the reading time. Therefore it is recommended to lower the number of folders before recording.)
- Folder or track (file) names are limited to 8 characters. The folder / file names are displayed in half-size, capital letters or half-size numbers. Folder or track (file) names that go over 8 characters will be abbreviated.
- Certain letters or symbols in folder names or file names may not be displayed. In this case, "?" will be displayed.
- The playing time may not be correctly displayed during MP3 file playback.
- It is recommended to record data at a lower speed as data recorded at fast speed can produce noise and may not be able to be played.

CAUTION

- It is impossible to make a digital copy by using a digital audio recording device which outputs sound from discs in MP3 format through the coaxial digital output jack of this Unit.

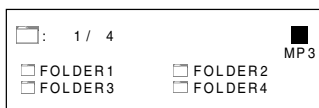


Playing MP3 Discs

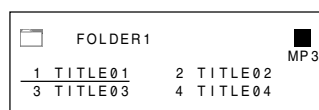
CD-R/RW

To play MP3 discs

- 1 Load the MP3 recorded CD-R or the CD-RW.
 - The folder selection screen will be displayed after the date is read.

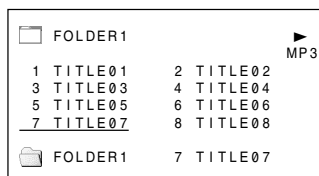


- 2 Select the folder you want to play by using ▲, ▼, ◀ or ▶ and then press **ENTER**.
 - The file (music title) in the folder is displayed on the file selection screen.



- Press **RETURN** to return to the folder selection screen.
- When pressing **▶PLAY** after selecting the folder, the playback screen is displayed and the files in that folder can be played from the beginning.

- 3 Select the file (music title) you want to play by using ▲, ▼, ◀ or ▶ and then press **ENTER**.
 - The chosen file (music title) will be played in sequence.



- 4 Press **■STOP** to stop playback.

To play another file (music title) while playing

- 1 Press ▲, ▼, ◀ or ▶ to select the file (music title) you want to play and then press **ENTER**.
 - The chosen file (music title) will be played.

NOTE

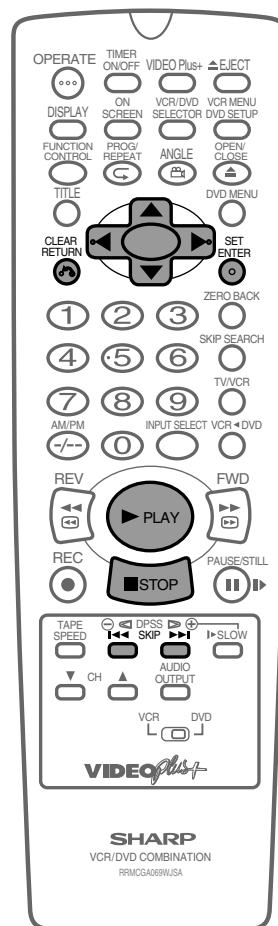
- If the cursor is moved to highlight a file which is not being played, that file will be automatically played after 10 seconds.
- Press **RETURN** to return to the folder selection screen.

To skip the file while playing

- 1 Press **SKIP▶▶** or **◀◀SKIP** during playback.
 - **SKIP▶▶** will skip forward, and **◀◀SKIP** will rewind.
 - When playing files (tracks) from other folders, press **RETURN** and then select the files from the folder selection screen.

While the MP3 disc is playing

- Time Search is disabled.
- It is possible to repeat one track or the entire folder.





About the Function Control Screen

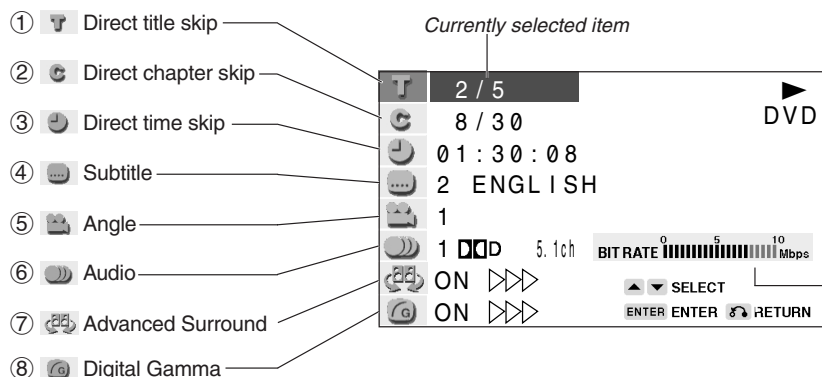
DVD

CD

Using Function control, you can check at a glance and change the current settings of the following items: SUBTITLE, ANGLE, AUDIO, ADVANCED SURROUND and DIGITAL GAMMA.

Function control also allows you three ways of direct skips (title [track], chapter and time).

- While the disc is playing, press **FUNCTION CONTROL** to display the screen shown below.
- Pressing **▲** or **▼** changes the currently selected item.
- Numbers in **82** refer to the pages where the setting procedures are described.



BIT RATE indicates the amount of data that is being transferred to the Unit per second. However, note that picture quality is not always in proportion to the bit rate.

① Direct title skip **82**

- The number of the title currently played back is displayed.
- You can skip directly to the desired title.

② Direct chapter skip **82**

- The number of the chapter currently played back is displayed.
- You can skip directly to the desired chapter.

③ Direct time skip **82**

- Elapsed time from the beginning of the disc is displayed.
- You can skip directly to the point from which you want to start playback.

④ Subtitle setting **83**

- The subtitle number and language currently selected are displayed. (When a disc with only one subtitle is played back, xx is displayed.)
- You can select the desired subtitle language.

⑤ Angle setting **84**

- The current angle is displayed. (When a disc with only one angle is played back, xx is displayed.)
- You can select the desired angle.

⑥ Audio setting **85**

- The type of audio currently selected is displayed.
- You can select the desired type of audio.

⑦ Advanced Surround setting **86**

- This function provides rich surround sound by downmixing Dolby Digital 5.1 channel and Dolby Surround (Pro Logic) to 2-channel audio or TV.
- You can toggle the setting between "ON" and "OFF", and change the level.
- When "COMPRESSION" is "ON", this function is disabled, which is indicated by xx. To use the Advanced Surround function, set the "COMPRESSION" to "OFF" (see page 45).

⑧ Digital Gamma setting **87**

- You can make the entire image easier to see by brightening the darker and obscure portions.
- You can toggle the setting between "ON" and "OFF", and change the level.

NOTE

- In Function Control mode, you can return to the previous setting screen by pressing **RETURN** or **FUNCTION CONTROL**.
- You can cancel the Function Control mode by pressing **■STOP**, **DVD MENU**, or **TITLE**.
- The setting screen is cleared automatically whenever you display a DVD screen that prompts you to change the scene by pressing **▲**, **▼**, **◀**, or **▶**.
- When playing back Audio CDs only the Track Number and Time is displayed.



About the Function Control Screen

DVD

C D

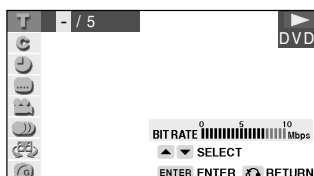
Direct skip (title/chapter/time)

Use the following procedure to perform Direct title skip, Direct chapter skip, or Direct time skip.

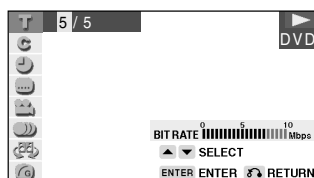
- 1 Press **FUNCTION CONTROL** during playback.
 - The Function control screen appears.



- 2 Use **▲** or **▼** to select **T** and then press **ENTER**.
(Example) Direct title skip



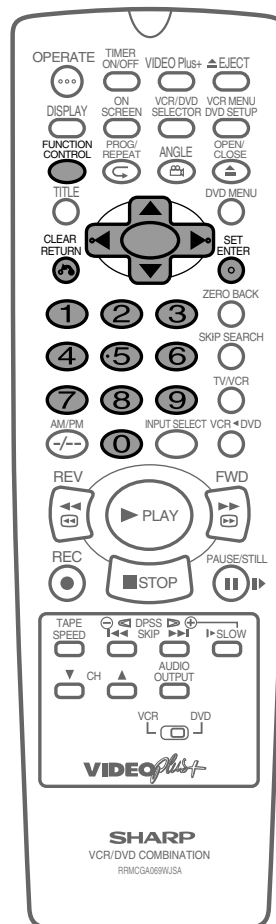
- 3 Use number buttons (0 to 9) to input the title number to which you want to skip.
 - You can also use **▲** or **▼** to input the title number.
 - When you specify the time for the direct time skip, use **◀** or **▶** to move the highlighting to the next or previous digit.
(Example) Entering title 5



- 4 Press **ENTER**.
 - The played back image changes to the beginning of the specified title.
 - You can exit the Function control screen by pressing **RETURN** or **FUNCTION CONTROL**.

NOTE

- The number of titles, chapters or times you can input depends on that of the titles, chapters or times recorded on a disc you play.





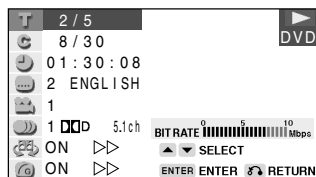
About the Function Control Screen

DVD

Subtitle language setting

Use the following procedure to perform the Subtitle language setting.

- 1 Press **FUNCTION CONTROL** during playback.
 - The Function control screen appears.



- 2 Use **▲** or **▼** to select **2 ENGLISH** and then press **ENTER**.



- 3 Press **▲** or **▼** to select the subtitle language you want to use.
 - You can set the subtitle setting to "OFF".
 - You can also toggle the setting between "ON" and "OFF" by pressing **◀** or **▶**.

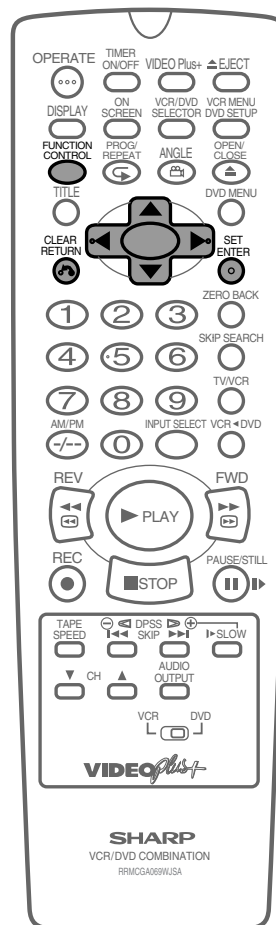
(Example) Selecting "3 SPANISH"



- 4 Press **ENTER** to confirm the setting.
 - You can exit the Function control screen by pressing **RETURN** or **FUNCTION CONTROL**.

NOTE

- This function can only be used for discs on which subtitles have been recorded in multiple languages.
- Some DVD discs are marked "Forced Display", indicating that the subtitling cannot be suppressed. With such discs, the subtitles will be displayed even when you select "OFF" display. This does not indicate a fault with this Unit.
- If no subtitles are recorded on the disc, **xx** is displayed.





About the Function Control Screen

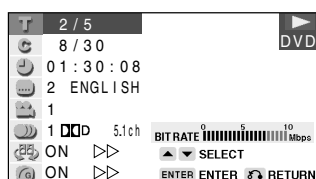
DVD

Angle setting

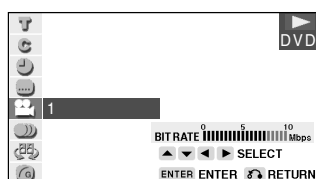
You can change the angle of view when playing a DVD video disc that contains scenes recorded from multiple angles.

Use the following procedure to perform the Angle setting.

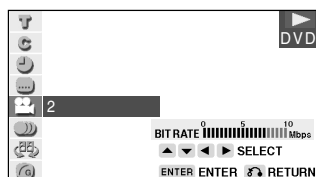
- 1 Press **FUNCTION CONTROL** during playback.
 - The Function control screen appears.



- 2 Use **▲** or **▼** to select and then press **ENTER**.



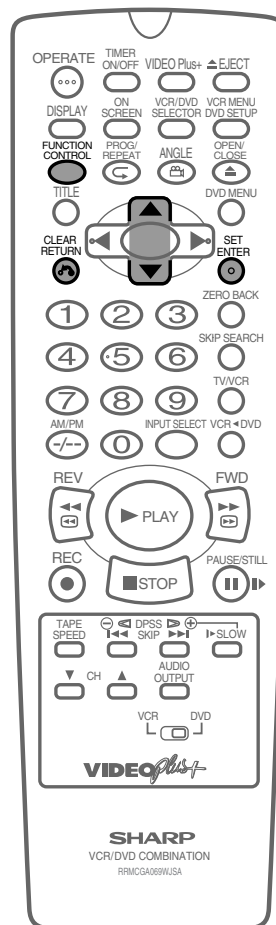
- 3 Press **▲** or **▼** to select the angle number you want.
 - The number of recorded angles differs depending on the disc used.



- 4 Press **ENTER** to confirm the setting.
 - You can exit the Function control screen by pressing **RETURN** or **FUNCTION CONTROL**.

NOTE

- This function can only be used for discs on which scenes shot from multiple angles have been recorded.
- If no angles are recorded on the disc, xx is displayed.





About the Function Control Screen

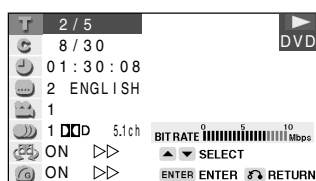
DVD

Audio setting

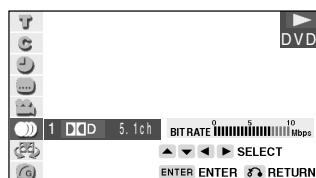
A number of different methods are used to record audio onto a DVD video disc, including multi-channels (used for voiceovers in other languages), Dolby Digital (5.1ch), DTS, and Linear PCM. This Unit provides a number of different audio modes from which you can choose to suit the type of disc you are playing.

Use the following procedure to perform the Audio setting.

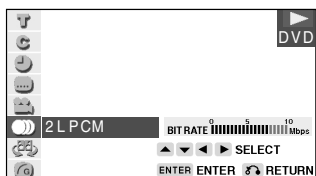
- 1 Press **FUNCTION CONTROL** during playback.
 - The Function control screen appears.



- 2 Use **▲** or **▼** to select  and then press **ENTER**.



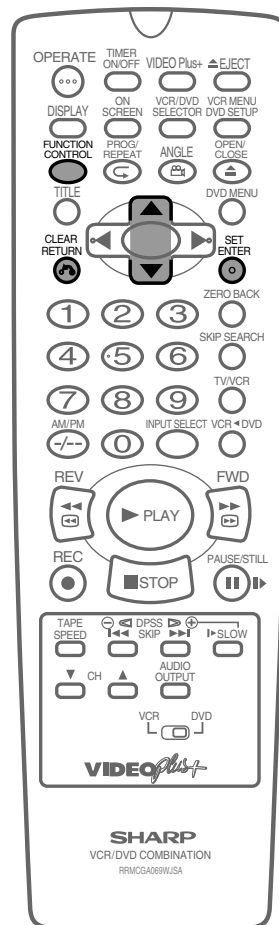
- 3 Press **▲** or **▼** to select the audio format you want to use.
 - See page 45 for details about the types of audio format.



- 4 Press **ENTER** to confirm the setting.
 - You can exit the Function control screen by pressing **RETURN** or **FUNCTION CONTROL**.

NOTE

- This function can only be used for discs on which the sound has been recorded in multiple formats.
- With certain types of discs, you can change the audio using the disc menu.
- A DTS digital surround decoder is required to listen to DTS audio.





About the Function Control Screen

DVD

Advanced Surround setting

This function allows you to enjoy a “surround sound” effect when you are using an analog connection (using LINE 1 OUT on this Unit) to 2-channel audio equipment (TV, etc.).

Preparation

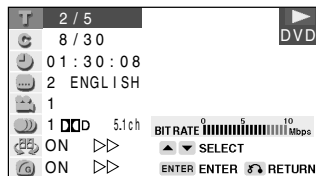
To use the Advanced Surround function

- Set the “COMPRESSION” setting in “AUDIO” to “OFF” (see page 45).

Refer to the table below about the types of audio format with which Advanced Surround works.

Types of audio recorded on the disc			
Dolby Digital	Dolby Pro Logic	Dolby Digital 2ch/Linear PCM	MPEG Audio Ver. 2.0/ DTS
×	×	-	-

- Press **FUNCTION CONTROL** during playback.
 - The Function control screen appears.



- Use ▲ or ▼ to select and then press **ENTER**.

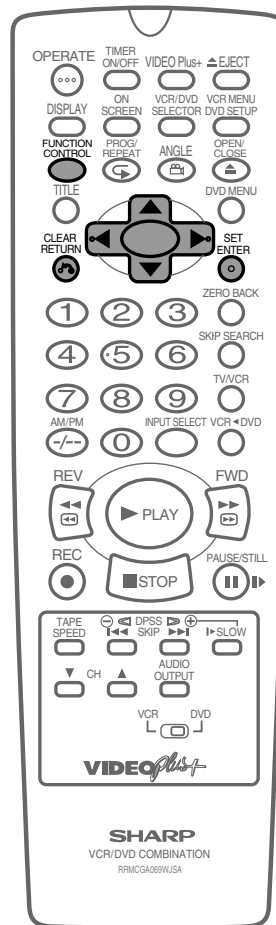


- Press ▲ or ▼ to toggle Advanced Surround between “ON” and “OFF”.

- While “ON” is selected, use ◀ or ▶ to change the level setting.



- Press **ENTER** to confirm the setting.
 - You can exit the Function control screen by pressing **RETURN** or **FUNCTION CONTROL**.



NOTE

- Advanced Surround does not operate on Audio CDs.
- Advanced Surround does not operate when you set the “COMPRESSION” setting in “AUDIO SETUP” to “ON”.
- Advanced Surround does not operate when you are using a Digital connection.
- Advanced Surround does not operate when you play back a disc recorded using Linear PCM or DTS format.



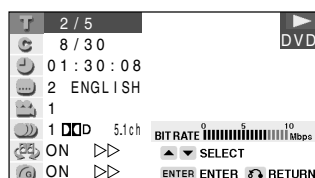
About the Function Control Screen

DVD

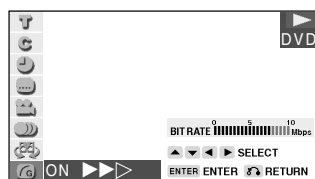
Digital Gamma setting

DIGITAL GAMMA is a digital image quality enhancement function that gives a richer image by brightening the darker and more obscure portions of the image without altering the brightness of the brighter portions, thereby making the entire image easier to see. Three digital gamma settings are available to allow for differences in the images played and in brightness of the room.

- 1 Press **FUNCTION CONTROL** during playback.
 - The Function control screen appears.



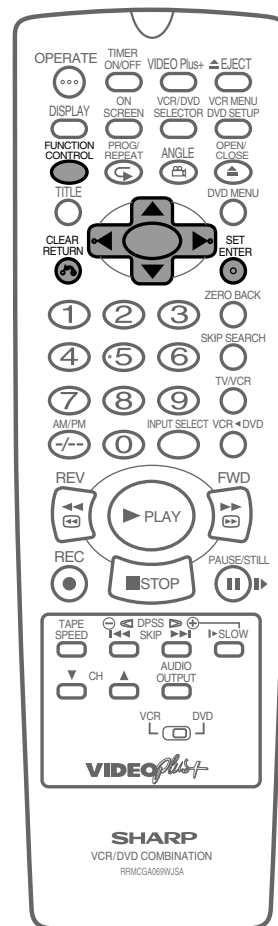
- 2 Use **▲** or **▼** to select **6** and then press **ENTER**.



- 3 Press **▲** or **▼** to toggle DIGITAL GAMMA between “ON” and “OFF”.
- 4 While “**6** ON” is displayed, press **◀** or **▶**.
 - The level selection indicator that shows the current level appears.
 - If no button is pressed within 10 seconds, the level selection indicator goes off.
- 5 Use **◀** or **▶** to change the level.



- 6 Press **ENTER** to confirm the setting.
 - If no change is made for 10 seconds after the level is set, the level indicator goes off.
 - You can exit the Function control screen by pressing **RETURN** or **FUNCTION CONTROL**.



Direct Selection of Scenes

DVD

Selecting Scenes by Title Number

- 1 Press **TITLE** to show the title screen.

(Example)

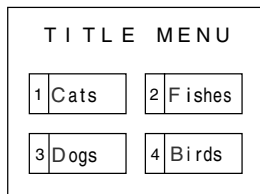


- 2 Use the number buttons (0 to 9) to enter the desired title, or ▲, ▼, ► or ◀ to highlight the desired title.
- 3 When you press **ENTER** or ► **PLAY**, the title specified in step 2 starts playing.

Selecting Scenes from the Menu Screen

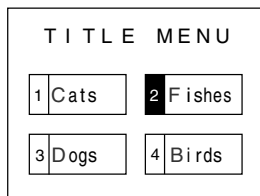
- 1 Press **DVD MENU** to show the menu screen.

(Example)



- 2 Use the number buttons (0 to 9) or ▲, ▼, ► or ◀ to highlight the desired title.

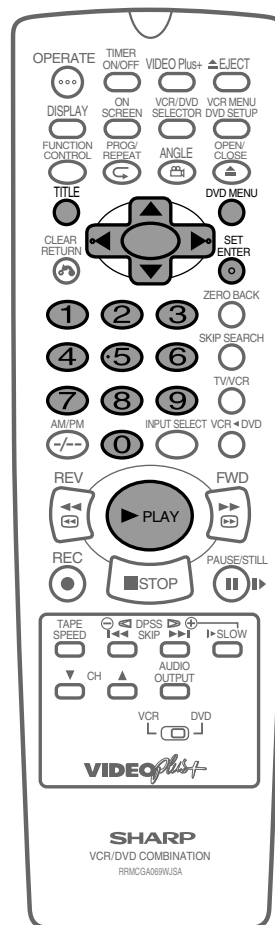
(Example) Title 2 selected.



- 3 When you press **ENTER** or ► **PLAY**, title 2 starts playing.

NOTE

- These functions only operate on DVD discs that have a title or menu screen.
- Languages not provided on the disc are not displayed.



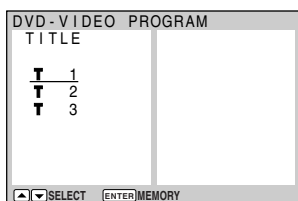
Programmed Playback

The two types of programmed playback provided by this Unit are chapter programmed playback (DVD discs) and track programmed playback (audio CD MP3 recorded on CD-R/RW).

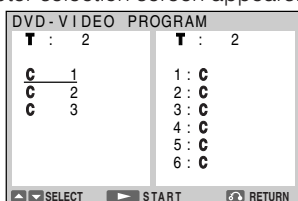
DVD

Chapter Programmed Playback

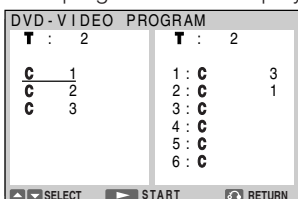
- 1 Press **PROG** twice while the disc is stopped.
 - The "DVD-VIDEO PROGRAM" screen appears.
 - Press **PROG** to return to the normal screen.



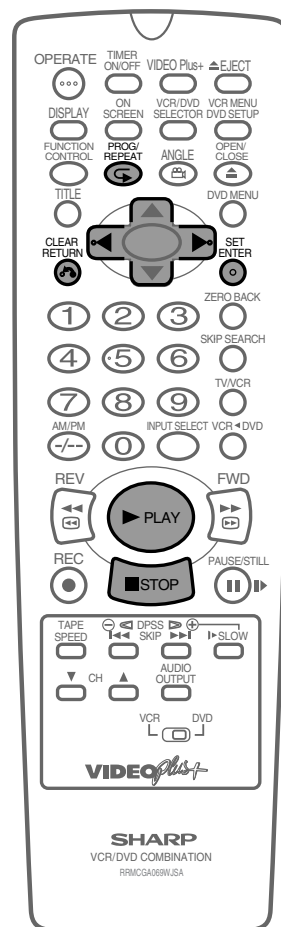
- 2 Press **▲** or **▼** to select the desired title and then press **ENTER**.
 - The chapter selection screen appears.



- 3 Press **▲** or **▼** to select the desired chapter and press **ENTER**.
 - The chapter is programmed in the playlist.



- Repeat the above step for each of the chapters that you want to play as part of the program.
 - To delete the chapter programmed in the playlist, follow the steps below:
 - ① Press **▶** to move the cursor to the playlist.
 - ② Press **▲** or **▼** to select the program (chapter) you want to delete and then press **RETURN**.
 - To delete all programmed chapters, move the cursor to the playlist and then press **RETURN** for more than two seconds.
- 4 Press **▶PLAY** to begin playing the programmed chapters.
 - The chapters will be played in the order they were entered.
 - The PROGRAM indicator lights up on the DVD Front Panel display.
 - 5 Press **■STOP** to stop programmed playback.
 - To start programmed playback again, follow the steps below:
 - ① Press **■STOP** to stop programmed playback.
 - ② Press **PROGRAM**.
 - ③ Select the title you programmed and press **ENTER**. (If other titles are selected, the previously entered program will be cleared.)
 - ④ Press **▶PLAY**.



NOTE

- Up to 24 chapters can be programmed.
- Press **RETURN** to return to the previous screen.
- The program cannot be set during the normal playback.
- This function can only be used for DVD discs on which the chapter has been recorded.
- On some discs in which programmed playback is prohibited, this function is disabled.

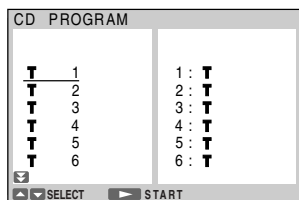


Programmed Playback

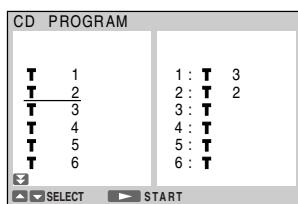
CD

Track Programmed Playback

- 1 Press **PROG** while the disc is stopped.
 - The "CD PROGRAM" screen appears.
 - Press **PROG** to return to the normal screen.



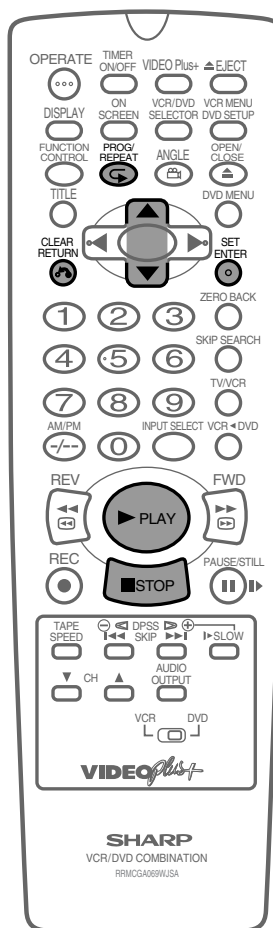
- 2 Press **▲** or **▼** to select the desired track and then press **ENTER**.
 - The track is programmed in the playlist.



- 3 Repeat step 2 for each of the tracks that you want to play as part of the program.
- 4 Press **▶PLAY** to begin playing the programmed tracks.
 - The tracks will be played in the order they were entered.
- 5 Press **■STOP** to stop programmed playback.

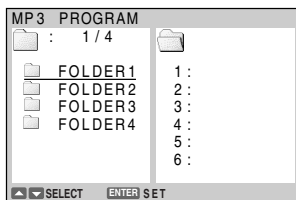
NOTE

- Up to 24 tracks can be programmed.
- The programme cannot be set during the normal playback.
- On some discs in which programmed playback is prohibited, this function is disabled.

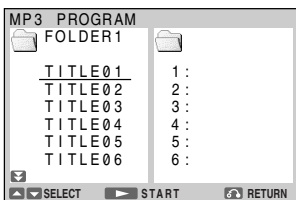


**CD-R/RW****MP3 Files Programmed Playback**

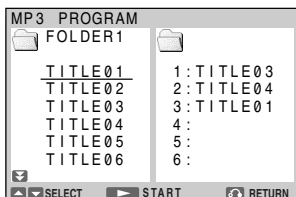
- 1 Press **PROG** while the disc is stopped.
 - The "MP3 PROGRAM" screen appears.
 - Press **PROG** to return to the normal screen.



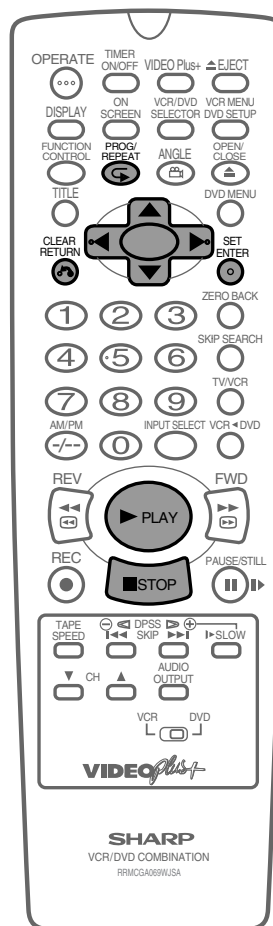
- 2 Press **▲** or **▼** to select the desired folder and then press **ENTER**.



- 3 Press **▲** or **▼** to select the desired folder and then press **ENTER**.
 - The file is programmed in the playlist.
 - Press **RETURN** to return to step 2 and then select the files of the other folder.



- Repeat the above step for each of the files that you want to play as part of the program.
 - To delete the files programmed in the playlist, follow the steps below:
 - ① Press **▶** to move the cursor to the playlist.
 - ② Press **▲** or **▼** to select the program (track/file) you want to delete and then press **RETURN**.
 - To delete all programmed chapter numbers, move the cursor to the playlist and then press **RETURN** for more than two seconds.
- 4 Press **▶PLAY** to begin playing the MP3 files.
 - The file will be played in the order they were entered.
 - 5 Press **■STOP** to stop the programmed playback.
 - To start programmed playback again, follow the steps below:
 - ① Press **■STOP** to stop programmed playback.
 - ② Press **PROG**.
 - ③ Select the file you programmed and press **ENTER**.
 - ④ Press **▶PLAY**.

**NOTE**

- Repeat playback is disabled on some discs.

Repeat Playback

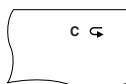
DVD

Repeat playback

- Press **REPEAT** while a disc is playing.
 - The "C" indicator appears on the DVD Front Panel.
 - Each time **REPEAT** is pressed, the repeat function changes as follows.
 - Depending on the disc type, the repeat function will vary.

DVD

Chapter Repeat



Title Repeat

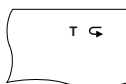


A-B Repeat
(See the next page for details)

OFF

CD

Track Repeat



Repeat all files in the disc

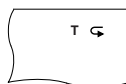


A-B Repeat
(See the next page for details)

OFF

CD-R/RW (Only MP3 File Format)

Repeat one file



Repeat all files in the folder

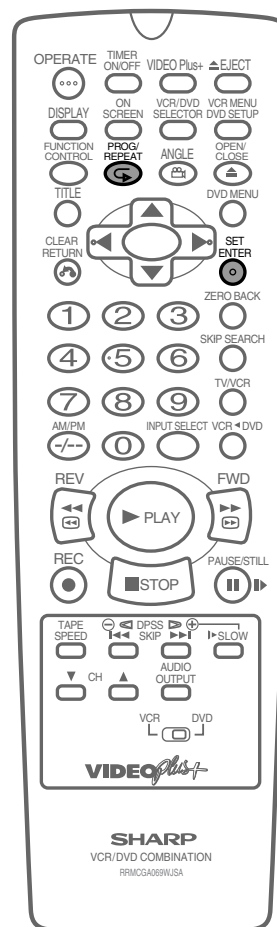


OFF

- Press **ENTER** to start repeat playback.
 - Press **REPEAT** and select OFF when returning to regular playback.

NOTE

- Repeat playback is disabled on some discs.
- Repeat playback cannot be used during programmed playback.





Repeat Playback

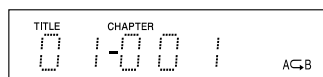
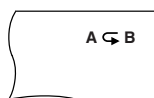
DVD

C D

A-B Repeat

A-B repeat allows you to repeat a specified section on the disc.

- 1 Press **◀ REPEAT** three times while a disc is playing.
- 2 While you are playing a disc, press **ENTER** when you reach the start of the section to be repeated.
- 3 While the disc is playing the same title (same chapter/track), press **ENTER** again when you reach the end of the section to be repeated.



- The A-B repeat begins from the point where you specified in step 1.
- Press **◀ REPEAT** to turn off the "C" indicator when returning to regular playback.

NOTE

- To cancel A-B repeat, press **■ STOP**, **TITLE** or **DVD MENU**.
- A-B repeat can only be used within the same title/track. (On some DVD discs, A-B repeat is restricted to the same chapter.) If the title/track finishes before specifying the ending location (B), the location where the title/track finishes will be set as the ending location (B).
- The A-B repeat function cannot be used during programmed playback.
- If the DVD Front Panel display does not show the elapsed playback time while a disc is playing, A-B repeat playback cannot be used for that disc.
- The A-B repeat function does not operate in scenes where different camera angles are recorded.





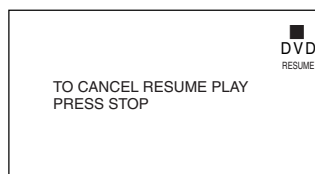
Resume Function

DVD

CD

This function enables you to resume the playback from the location you specify.

- 1 Press **■STOP** at the desired point during playback.
 - "RESUME" appears followed by "RESUME" on the screen.
 - This Unit stores the location where you stopped.



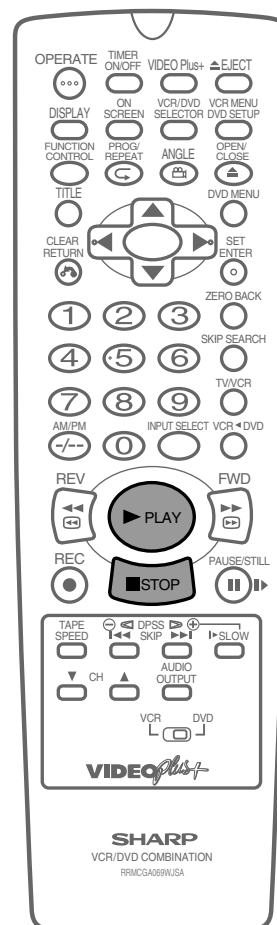
- 2 Press **▶PLAY** to restart play.
 - Play resumes from a point slightly before the point where it was stopped.
 - Press **▶PLAY** to resume disc play, if auto-playback starts from the beginning of the disc when you reload the same disc after removing it.

NOTE

- Resume information will not be cancelled if the power is turned off.
- The continued playback described here may not be possible on some discs (such as discs that automatically start playing when the disc tray closes).

This resume operation does not work in the following cases.

- If you press **■STOP** twice.
- If you press **■STOP** during auto-playback.
- When you open the disc tray.
- After enabling the Resume function.





Other Information

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WATCHING
THE DVD

Troubleshooting

The following conditions do not always denote trouble. Therefore, perform the checks described below before calling for service. If the problem cannot be corrected by the use of this guide, remove the main plugs from the wall socket, and contact the dealer or supplier from whom the unit was purchased in order to obtain service. Where this is not possible please visit our web-site www.sharp.co.uk/support. Customers without Internet access may telephone 08705 274277 during office hours (or (01) 676 0648 if telephoning from Ireland).

Certain replacement parts and accessories may be obtained from our main parts distributor, who can be contacted on the following numbers:

WILLOW VALE ELECTRONICS LTD.:
0121 766 5414

In the unlikely event of this equipment requiring repair during the guarantee period, you will need to provide proof of the date of purchase to the repairing company. Please keep your invoice or receipt, which is supplied at the time of purchase.

The following problems do not always denote a broken unit. Perform the checks listed below before calling service.

■ VCR/DVD

Problem	Suggested Solution
<ul style="list-style-type: none"> No power 	<ul style="list-style-type: none"> Is the power cord connected properly? Is the power cord firmly plugged into the power outlet? One of the safety mechanisms may be operating. In this event, unplug the Unit from the power outlet briefly and then plug it in again.
<ul style="list-style-type: none"> The Remote does not work. 	<ul style="list-style-type: none"> Are the batteries loaded correctly? Are the batteries flat? Is the signal emitter on the Remote pointing at the Unit? Is the Remote too far from the Unit, or is there any obstacle between the Remote and the Unit? Did the VCR/DVD CHANGE Switch change correctly?
<ul style="list-style-type: none"> No picture 	<ul style="list-style-type: none"> Did the VCR/DVD SELECTOR change correctly?
<ul style="list-style-type: none"> Dew 	<ul style="list-style-type: none"> See page 6 for information.

■ VCR

Problem	Possible Cause/Solutions
<ul style="list-style-type: none"> TV will not tune in to the VCR. 	<ul style="list-style-type: none"> Check all the cables are correctly connected. Check your TV manual for correct tuning of your TV.
<ul style="list-style-type: none"> Auto Installation screen does not appear when the VCR is switched on or Auto Installation is not complete. 	<ul style="list-style-type: none"> Reset the VCR and complete AUTO INSTALLATION again. (Refer to VCR Reset on page 38.)
<ul style="list-style-type: none"> Display is not working. 	<ul style="list-style-type: none"> Make sure the power cord is plugged in. Make sure the wall socket has power.
<ul style="list-style-type: none"> No picture appears. 	<ul style="list-style-type: none"> Make sure the TV is set to the video channel. Check all connecting cables.
<ul style="list-style-type: none"> Playback picture is snowy. 	<ul style="list-style-type: none"> Adjust the tracking using CH ▲/▼. Try another tape. The video heads may have been contaminated - refer to a SHARP Service Facility.
<ul style="list-style-type: none"> Playback/Recording does not play back in Stereo. 	<ul style="list-style-type: none"> Ensure the VCR is connected to a stereo TV with a SCART lead. Programme may not carry stereo.



Troubleshooting

Problem	Possible Cause/Solutions
<ul style="list-style-type: none">Tape is automatically ejected when pressing ●REC or TIMER ON/OFF.	<ul style="list-style-type: none">The record-protection tab has been removed from the cassette.
<ul style="list-style-type: none">VIDEO Plus+ does not record desired programme.	<ul style="list-style-type: none">Broadcast does not carry VPS/PDC signal which alters recording time.Check VPS/PDC mode is switched ON.Ensure date and time are correctly set on the Unit.
<ul style="list-style-type: none">Tape can not be loaded.	<ul style="list-style-type: none">Make sure there is no other tape in the VCR.Make sure you are loading the tape correctly.
<ul style="list-style-type: none">Rewind is not possible.	<ul style="list-style-type: none">Make sure the tape is not at the start.
<ul style="list-style-type: none">Desired channel position can not be selected.	<ul style="list-style-type: none">The channel position has been set to be skipped. Cancel the SKIP mode for that channel.
<ul style="list-style-type: none">No colour or poor TV picture on normal viewing.	<ul style="list-style-type: none">Make sure all the cables are connected properly.Make sure the VCR power cord is properly plugged in.
<ul style="list-style-type: none">Desired channel has interference.	<ul style="list-style-type: none">Possible weak signal strength, the same channel with a better signal strength may have been tuned in on another VCR preset channel. Example; VCR preset 1 = BBC1 and VCR preset 14 = BBC1 (Refer to Manually Sorting Channels section to move the channel to your desired position.)TV aerial may need adjusting.

■ DVD

Problem	Suggested Solution
<ul style="list-style-type: none">The DVD player is switched on but does not operate.	<ul style="list-style-type: none">Have you loaded a disc?Is the disc unplayable? (See pages 9 – 11.)Is there dew in the DVD player? (See page 11.)
<ul style="list-style-type: none">The playback image does not appear.No sound is produced.	<ul style="list-style-type: none">Are the video and audio cables connected correctly? (See pages 18 – 23.)Is the disc scratched? (See page 11.)Is the disc dirty? (See page 11.)Is the disc loaded upside down?Is the input selector on the TV set to "VIDEO" or "AV"?Is the audio equipment switched on and are all the components connected properly? (Refer to the operation manuals for your audio equipment.)
<ul style="list-style-type: none">The sound is not Dolby Digital (5ch or 5.1ch).	<ul style="list-style-type: none">Is the disc you are playing recorded in Dolby Digital (5ch or 5.1ch)?Have you set the "DIGITAL" in "AUDIO SETUP" to "BITSTREAM"? (See page 45.)
<ul style="list-style-type: none">The image and sound are garbled.	<ul style="list-style-type: none">Is the disc scratched? (See page 11.)Are vibrations from the speakers affecting the DVD player?
<ul style="list-style-type: none">The sound is not stable during playback.	<ul style="list-style-type: none">Set the "COMPRESSION" in "AUDIO SETUP" to "OFF" (See page 45.)

This unit is equipped with a microprocessor. Its performance could be adversely affected by external electrical noise or interference. If this should happen, unplug the Unit and plug it in again after a few minutes.



Definition of Terms

■ VCR

Full Automatic Playback

This function automatically turns the power on and starts to playback when a tape with the erasure protection tabs removed is inserted.

Sharp Super Picture

Enhanced picture quality during playback.

S-VHS Simple Playback

This function facilitates S-VHS software playback. The original high picture quality of S-VHS (horizontal resolution of 400 lines) cannot be played.

Tracking Control

When noise appears on an image during tape playback, you can adjust the image quality to a suitable level so as to reduce the noise.

■ DVD

Angle

Recorded onto some DVD discs are scenes which have been simultaneously shot from a number of different angles (the same scene is shot from the front, from the left side, from the right side, etc.). With such discs, you can select the angle on Function Control Screen to view the scene from different angles.

Chapter Number

These numbers are recorded on DVD discs. A title is subdivided into many sections, each of which is numbered, and specific parts of video presentations can be searched quickly using these numbers.

Compression (Dolby Digital output level)

Setting that increases the average volume of Dolby Digital audio when playing a DVD.

Digital Gamma

Corrects for gradations in dark areas of images to make images clearer.

Dolby Digital (5.1 channel)

A sound system developed by Dolby Laboratories Inc. that gives movie theater ambience to audio output when the DVD video player is connected to a Dolby Digital 5.1 channel processor or amplifier.

Advanced Surround

Provides rich surround sound by downmixing Dolby Digital 5.1 channel and Dolby Surround (Pro Logic) to 2-channel audio.



Definition of Terms

DVD

This refers to a high-density optical disc on which high-quality pictures and sound have been recorded by means of digital signals. Incorporating a new video compression technology (MPEG II) and high-density recording technology, DVD enables esthetically pleasing full-motion video to be recorded over long periods of time (for instance, a whole movie can be recorded).

DVD has a structure consisting of two 0.6 mm thin discs which are adhered to each other. Since the thinner the disc, the higher the density at which the information can be recorded, a DVD disc has a greater capacity than a single 1.2 mm thick disc. Since the two thin discs are adhered to each other, there is the potential to achieve double-sided play sometime in the future for even longer duration play.

Letter Box

4:3 LB

Screen size that cuts off the top and bottom of the image to allow playing of Wide (16:9) software on a connected 4:3 TV.

Linear PCM Sound

Linear PCM is a signal recording format used for audio CDs.

The sound on audio CDs is recorded at 44.1 kHz with 16 bits. (On DVD discs, sound is recorded at between 48 kHz with 16 bits and 96 kHz with 24 bits.)

Pan Scan

4:3 PS

Screen size that cuts off the sides of the image to allow playing of Wide (16:9) software on a connected 4:3 TV.

Pickup

Laser device that reads the data from a disc for playback.

Region Number

Number identifying a geographic region of compatibility for a DVD.

The list of the region number **2** countries

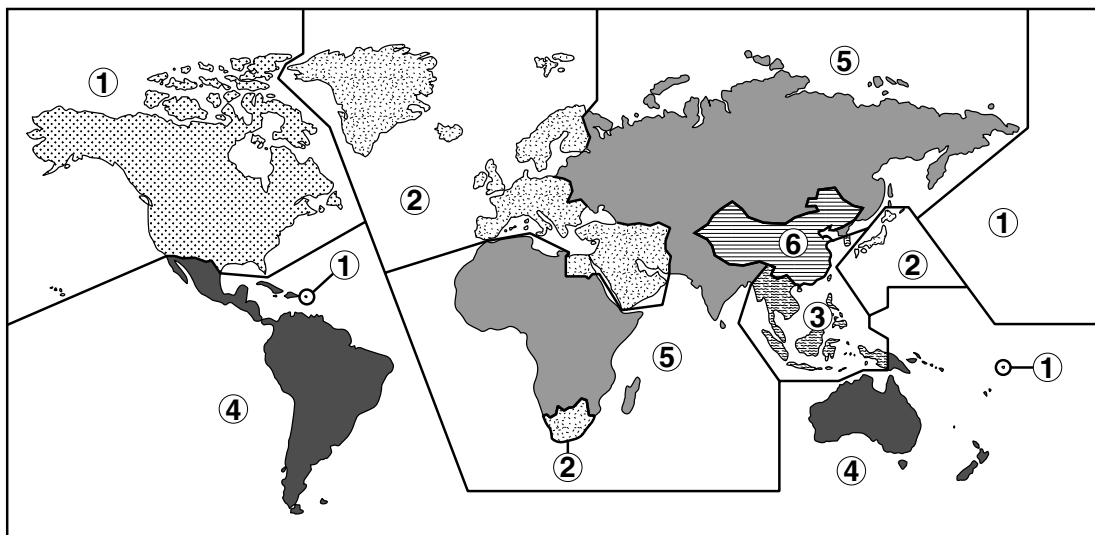
Common Names	Names of Nations and Areas	Common Names	Names of Nations and Areas
Albania	Republic of Albania	Malta	Republic of Malta
Andorra	Principality of Andorra	Monaco	Principality of Monaco
Austria	Republic of Austria	Netherlands	Kingdom of the Netherlands
Bahrain	State of Bahrain	Norway	Kingdom of Norway
Belgium	Kingdom of Belgium	Oman	Sultanate of Oman
Bosnia and Herzegovina	Bosnia and Herzegovina	Poland	Republic of Poland
Bulgaria	Republic of Bulgaria	Portugal	Portuguese Republic
Croatia	Republic of Croatia	Qatar	State of Qatar
Cyprus	Republic of Cyprus	Romania	Romania
Czech	The Czech Republic	San Marino	Republic of San Marino
Denmark	Kingdom of Denmark	Saudi Arabia	Kingdom of Saudi Arabia
Egypt	Arab Republic of Egypt	Slovakia	The Slovak Republic
Finland	Republic of Finland	Slovenia	Republic of Slovenia
France	French Republic	South Africa	Republic of South Africa
Germany	Federal Republic of Germany	Spain	Spain
Greece	Hellenic Republic	Swaziland	Kingdom of Swaziland
Hungary	Republic of Hungary	Sweden	Kingdom of Sweden
Iceland	Republic of Iceland	Switzerland	Swiss Confederation
Iran	Islamic Republic of Iran	Syrian Arab Republic	Syrian Arab Republic
Iraq	Republic of Iraq	Turkey	Republic of Turkey
Ireland	Ireland	United Arab Emirates	United Arab Emirates
Israel	State of Israel	United Kingdom	United Kingdom of Great Britain and Northern Ireland
Italy	Republic of Italy	Vatican City State	State of the City of Vatican
Japan	Japan	Yemen	Republic of Yemen
Jordan	Hashemite Kingdom of Jordan	Yugoslavia	Federal Republic of Yugoslavia
Kuwait	State of Kuwait	Channel Islands*	Channel Islands
Lebanon	Republic of Lebanon	Faeroe Islands*	Faeroe Islands
Lesotho	Kingdom of Lesotho	Gibraltar*	Gibraltar
Liechtenstein	Principality of Liechtenstein	Greenland*	Greenland
Luxembourg	Grand Duchy of Luxembourg	Isle of Man*	Isle of Man
Macedonia	The Former Yugoslav Republic of Macedonia	Svalbard and Jan Mayen Islands*	Svalbard and Jan Mayen Islands

*Represents area name



Definition of Terms

The world map for all region numbers



Subtitles

These are the printed lines appearing at the bottom of the screen which translate or transcribe the dialog. They are recorded on DVD discs.

Time Number

This indicates the play time which has elapsed from the start of a disc or a title. It can be used to find a specific scene quickly. (It may not work with some discs.)

Title Menu

This is a menu displayed by some DVDs for selection of chapters and subtitle set. The title menu is also called a "top menu".

Title Number

These numbers are recorded on DVD discs. When a disc contains two or more movies, these movies are numbered as title 1, title 2, etc.

Track Number

These numbers are assigned to the tracks which are recorded on audio CDs. They enable specific tracks to be located quickly.

Specifications

Signal System		PAL
INPUT/OUTPUT JACKS	DVD/VCR shared output jacks	VIDEO jack: RCA Pin-jack AUDIO jack: RCA Pin-jack
	DVD output jacks	VIDEO jack: S-Video jack AUDIO jack: RCA Pin-jack
	VIDEO input jacks	DIGITAL AUDIO IF: Coaxial digital AUDIO output jack: RCA Pin-jack VIDEO jack: SCART AUDIO jack: SCART
		VIDEO jack : RCA pin-jack AUDIO jack : RCA pin-jack
VCR	Video Recording System	Rotary Two-Head Helical Scanning
	Number of Video Heads	4
	Video Signal Standard	PAL Colour System
	Audio Recording System	1 Stationary Head for Linear Audio 2 Rotary Heads for Hi-Fi stereo
	Tape Width	12.7 mm
	Tape Speed (PAL)	(SP) 23.39 mm/sec (LP) 11.70 mm/sec (EP) 7.80 mm/sec
	(NTSC)	(SP) 33.35 mm/sec (LP) 16.67 mm/sec (EP) 11.12 mm/sec
	Recording/Playback Time	(SP) 240 min (With E-240 Cassette) (LP) 480 min (With E-240 Cassette) (EP) 720 min (With E-240 Cassette)
	Channel Coverage	UHF E21-E69
	Antenna Input	75Ω
	Video Input	Input level: 0.5 to 2.0 Vp-p (75Ω)
	Video Output	Output level: 1.0 Vp-p (75Ω)
	Audio Input (0 dBs = 0.775 Vrms)	Input level: -3.8 dBs (47kΩ)
	Audio Output (0 dBs = 0.775 Vrms)	Output level: -3.8 dBs (1kΩ)
	Hi-Fi Audio	Dynamic Range: 90 dB Frequency Response: 20 Hz-20 kHz
	Memory Backup	10 minutes
DVD	DVD/VCR shared Video output	Output level: 1 Vp-p (75Ω)
	S video output	Y output level: 1 Vp-p (75Ω) C output level: 0.300 Vp-p (75Ω)
	Audio output	Output level: 2 Vrms (1 kHz, 0 dB)
	Video signal horizontal resolution	500 lines (450 lines min.)
	S/N ratio	60 dB (50 dB min.)
	Audio signal frequency characteristics	For DVD linear PCM playback: 4 Hz to 22 kHz (48 kHz sampling) CD playback: 4 Hz to 20 kHz (JEITA)
	S/N ratio	CD: 96 dB, 1 kHz (JEITA)
	Dynamic range	DVD linear PCM: 96 dB (JEITA) CD: 96 dB (JEITA)
	Total harmonic distortion ratio	CD: 0.006% (JEITA)
	Pickup	Wave length: 650 nm (DVD) / 780nm (CD) Laser output: Max. 0.7 mW
Operating temperature		5°C to 35°C (41°F to 95°F)
Storage temperature		-20°C to 55°C (-4°F to 131°F)
Power supply		230V-240V AC, 50 Hz
Power consumption		18W
Dimensions		430 mm × 93.5 mm × 350 mm (W × H × D)
Weight		5.2 kg

Specifications are subject to change without notice.
Weight and dimensions are approximate.

GUARANTEE

SHARP Electronics (UK) Ltd. (hereafter called Sharp) guarantee to provide for the repair or, at its option, the replacement of this product subject to the conditions listed below:

1. This guarantee shall only apply to faults which are due to inferior workmanship or materials. It does not cover faults or damage by accident, misuse, fair wear and tear, neglect, tampering with the product, or repair other than by a Service Facility appointed by SHARP.
2. As this product is intended for private domestic use only, the guarantee will not apply if the product is used in the course of a business, trade or profession.
3. To benefit from this guarantee, any fault which occurs must be notified to SHARP, or its appointed Service Facility within one year from the date this product was purchased. Proof of purchase must be provided.
4. The guarantee does not cover carriage costs, batteries or video tapes.
5. In the unlikely event of this product requiring repair, please contact the supplier from whom it was purchased. Where this is not possible, please contact the SHARP Helpline on the telephone number given below.
6. This guarantee is offered as an additional benefit to your statutory rights and does not affect these rights in any way.
7. No person has any authority to vary the terms or conditions of this guarantee.

If you have any difficulty operating this product, or would like information on other SHARP products, please telephone the SHARP Helpline on the number given below.

**SHARP Helpline: Tel: 08705-247277 (office hours)
or (01) 676 0648 if telephoning from Ireland
Please note that all calls are charged at local rate.**

In the unlikely event of this equipment requiring repair during the guarantee period, you will need to provide proof of the date of purchase to the repairing company. Please keep your invoice or receipt which is supplied at the time of purchase.