

SHARP®

MODEL

DV-720S

OPERATION MANUAL
 BEDIENUNGSANLEITUNG
 MODE D'EMPLOI
 MANUAL DE MANEJO
 MANUALE DI ISTRUZIONI
 GEBRUIKSAANWIJZING
 BRUKSANVISNING

DVD Video Player
 DVD-Video-Player
 Lecteur Vidéo DVD
 Reproductor de vídeo DVD
 Videolettore DVD
 DVD-videospeler
 Digital Video Disc-spelare

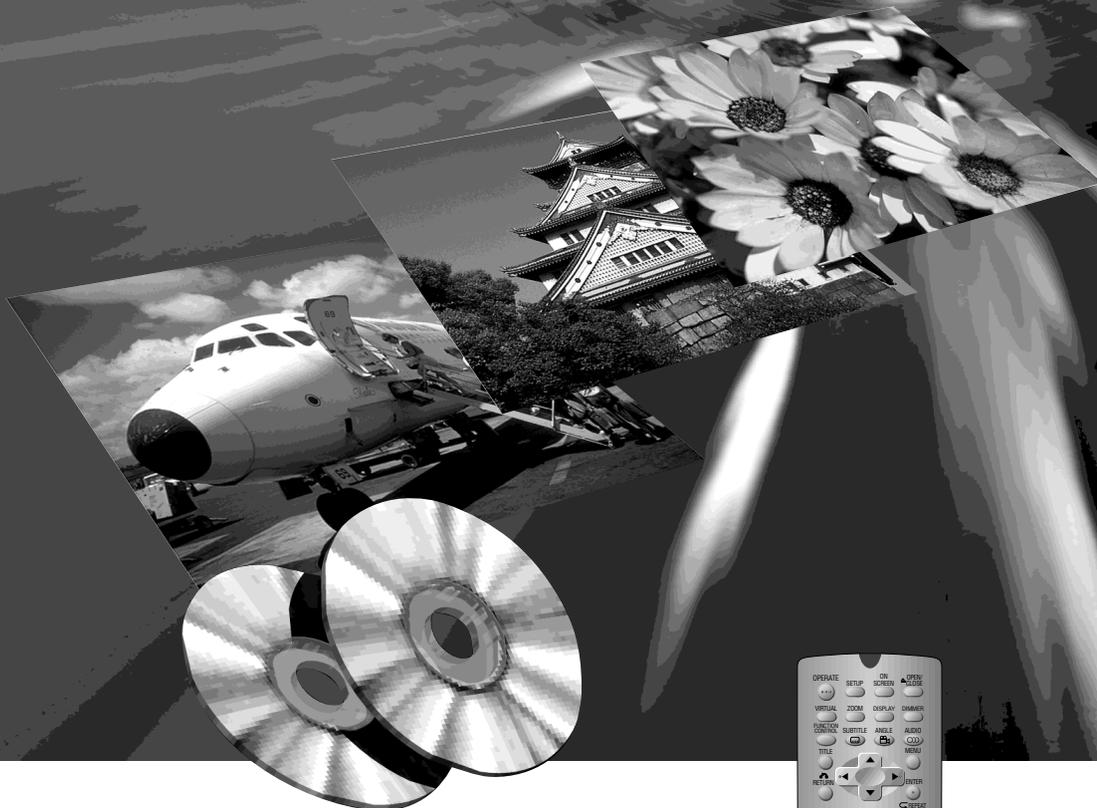
GENERAL INFORMATION

SETTING UP

BASIC OPERATIONS

SPECIAL FUNCTIONS

OTHER INFORMATION



The region number for this DVD player is 2.



ENGLISH **GB** 1- **GB** 70
 DEUTSCH **D** 1- **D** 70
 FRANÇAIS **F** 1- **F** 70
 ESPAÑOL **E** 1- **E** 70
 ITALIANO **I** 1- **I** 70
 NEDERLANDS .. **NL** 1- **NL** 70
 SVENSKA **S** 1- **S** 70



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

Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EWG und 73/23/EWG mit Änderung 93/68/EWG.

Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.

Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.

Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillæg nr. 93/68/EEC.

Quest' apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC, come emendata dalla direttiva 93/68/EEC.

Η εγκατάσταση αυτή ανταποκρίνεται στις απαιτήσεις των οδηγιών της Ευρωπαϊκής Ένωσης 89/336/ΕΟΚ και 73/23/ΕΟΚ, όπως οι κανονισμοί αυτοί συμπληρώθηκαν από την οδηγία 93/68/ΕΟΚ.

Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versão corrigida pela directiva 93/68/CEE.

Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.

Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som kompletteras av 93/68/EEC.

Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC.

Tämä laite täyttää direktiivien 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktiivillä 93/68/EEC.

ENGLISH



OPERATION MANUAL

About This Manual

- All mentions of “the Player” refer to the DV-720S DVD Player.
- All mentions of “the Remote” refer to the remote control unit.
- The following table describes the icons used in this Operation Manual.

Icon	Meaning
	Remote operation
	Tip and Hint for easier operation
	Functions for DVD
	Functions for VIDEO CD
	Functions for Audio CD
	Quick Start Guide (the separate volume)
	GENERAL INFORMATION
	SETTING UP procedure
	BASIC OPERATIONS
	SPECIAL FUNCTIONS
	OTHER INFORMATION

Important!

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



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BASIC OPERATIONS

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SAFETY INFORMATION

Note:

This unit can be used only where the power supply is AC 220V-240V, 50/60Hz. 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 PLAYER 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 Cord Protection

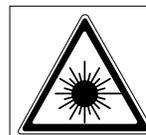
To avoid any malfunctions of the unit, and to protect against electric shock, fire or personal injury, please observe the following.

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

- This Player 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.



(Back of product)



CAUTION-WHEN OPEN, DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

VARNING-NÄR DENNA DEL ÄR ÖPPNAD, STIRRA EJ IN I STRÅLEN OCH BETRÄKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

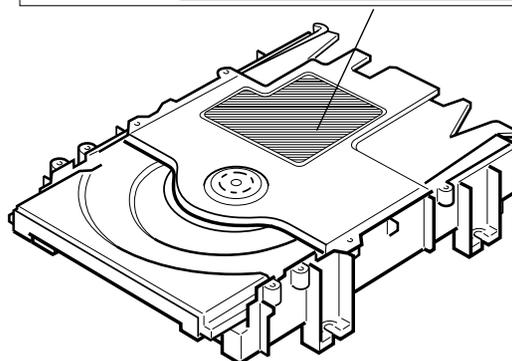
ADVARSEL-VED ÅBNING, SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.

VARO! AVATTAESSA OLET ALLTTIINA. ÄLÄ TUJUJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.

VARNING-NÄR DENNA DEL ÄR ÖPPNAD, STIRRA EJ IN I STRÅLEN OCH BETRÄKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

ADVARSEL-NÄR DEKSEL ÅPNES, STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.

ここを開くとレーザー光が出ます。
レーザー光をのぞきまなしないでください。
光学機器で直接ビームを見ないでください。



SAFETY INFORMATION

Location and Handling

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

Nonuse Periods

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 outlet.

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 Player 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 Player.

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 Player yourself. Please refer any service to the nearest service centre approved by SHARP.

Copyright

Audio-visual material may consist of copyrighted works which must not be recorded without the authority of the owner of the copyright. Please refer to relevant laws in your country.

Copy Protection

This Player 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. At the worst, neither video nor audio will be played back. To obtain optimum picture quality, the Player 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 Player is used. Contact your authorized Sharp supplier for details.

Do not attempt to clean the pickup lens yourself.



Types of Discs that Can Be Played on Your Player

The Player can play back discs bearing any of the following marks:

	DVDs [8cm(3") disc/12cm(5") disc]	See NOTE 1 See NOTE 2 on the next page
 	VIDEO CDs [8cm(3") disc/12cm(5") disc]	• Supports until version 2.0.
	Audio CDs [8cm(3") disc/12cm(5") disc]	See NOTE 3 on the next page

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 your Player, you will not be able to play the disc.

The region number for this Player 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 66.

Discs that Cannot be Played

The following types of discs cannot be played back on this Player. In many cases, attempting to play back such discs may result in malfunction and/or damage to this Player.

- Illegally produced, or "pirated", discs
- Photo CD, DVD-Audio, DVD-ROM, CD-ROM, CD-R, CD-RW, DVD-R, DVD-RW, S-VCD/CVD, or any other disc with marks other than those displayed above
- Discs with unusual shapes (for example, heart-shaped or hexagonal)
- DVDs with region codes other than region number 2, such as discs intended for use in the U.S.A. (region 1) or China (region 6)

In addition to the above, when a disc is scratched, soiled, or marked with fingerprints, this Player may determine that the disc cannot be played, and eject the disc tray. When this occurs, clean the disc referring to the guidelines on page 70, and then try to load the disc again.

While a disc is playing, minor soiling or scratches on the disc may disrupt the image (appearing as blocks on the screen). When the image is disrupted, the Player automatically restores the correct image after 2 or 3 seconds. However, if the normal screen does not reappear, press **RESUME** to bring up the normal screen again.



Disc Function or Operation that is Not Available

In the cases listed below, the  or  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 and VIDEO CDs are determined by the disc manufacturer. As this Player 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 Player supports 2-channel (L/R) audio and 5.1ch (Multi-channel) MPEG Audio 1/2 (only when the DIGITAL OUT coaxial jack or OPTICAL DIGITAL OUT jack is used for connection). It does not support 7.1 channel MPEG Audio Version 2.0.

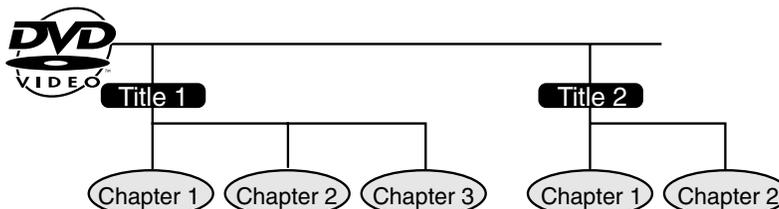
NOTE 3

- 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



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

Example: VIDEO CD or 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.

Features

GENERAL INFORMATION

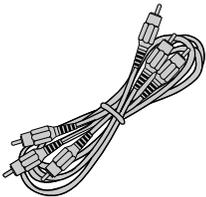
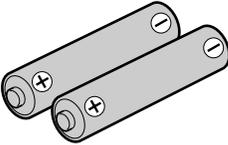
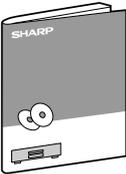
- Playback of DVD, VIDEO CD, and Audio CD
- Virtual Dolby Surround (QSURROUND*¹) for high-quality surround sound using analogue output
- Dolby Digital*², DTS*³, MPEG Audio digital out

*1 QSURROUND™ is a trademark of QSound Labs, Inc.

*2 Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol () are trademarks of Dolby Laboratories. Confidential Unpublished Works. ©1992-1997 Dolby Laboratories, Inc. All rights reserved.

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

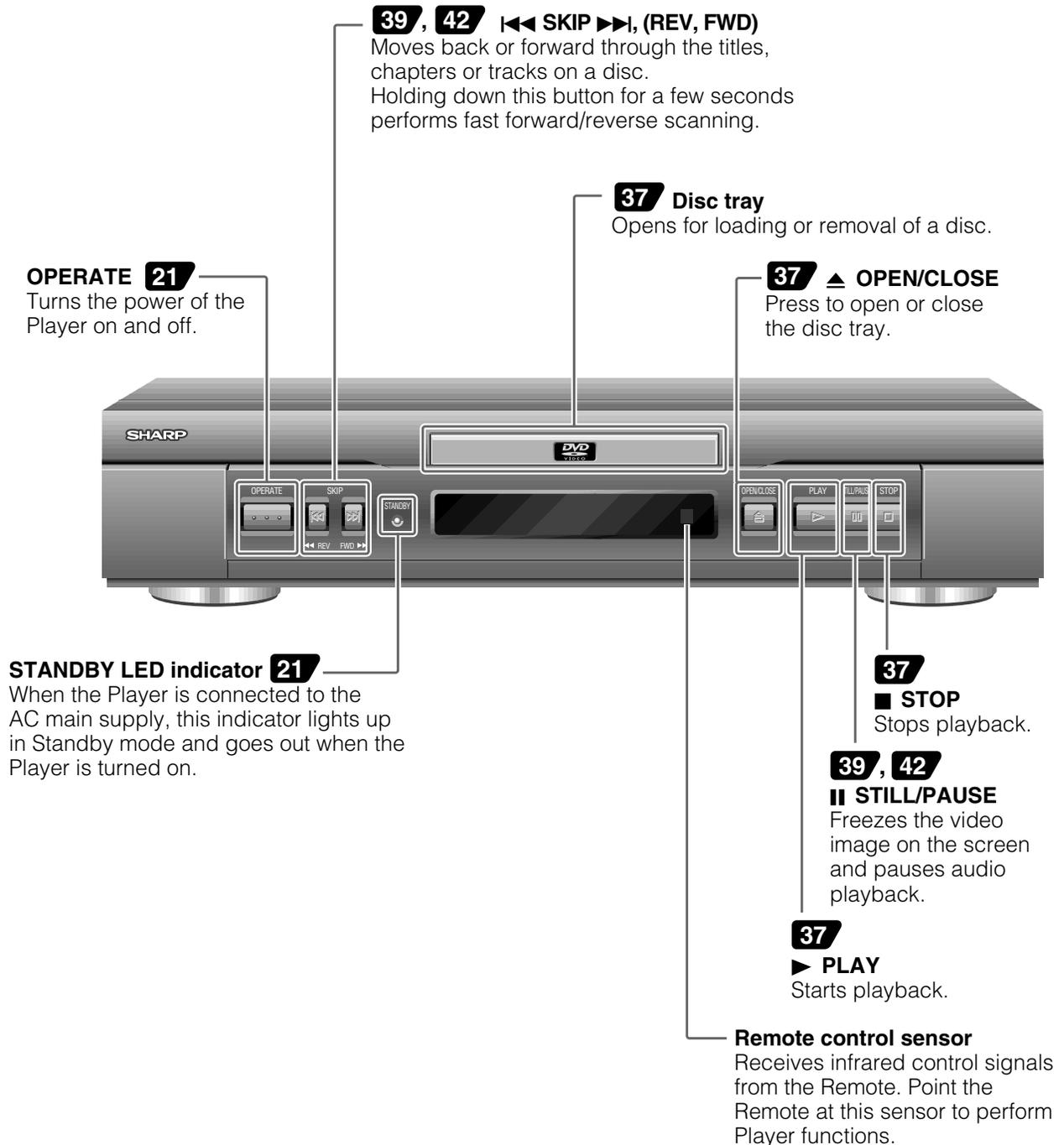
Accessories

 <p>Remote control unit</p>	 <p>SCART cable (Supplied for Europe only)</p>  <p>VIDEO/AUDIO cable (Supplied for Middle East only)</p>		
	 <p>Two batteries (AA, R6 or UM/SUM-3) for the Remote control unit</p>	 <p>Operation Manual</p>	 <p>Quick Start Guide</p>

Major Components

Main Unit (Front)

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





Front panel Display in Main Unit

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



TITLE indicator 

When a DVD is loaded in the Player, this indicator appears along with the title number.

TRACK indicator 

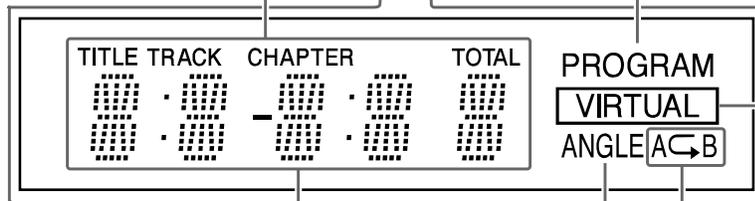
When a VIDEO CD or Audio CD is loaded in the Player, this indicator appears along with the track number.

CHAPTER indicator 

When a DVD is loaded in the Player, this indicator appears along with the chapter number.

PROGRAM indicator 

Displayed during programmed playback.



Operation status 

Indicates the operation status of the disc and the Player.

Time indicator 

Indicates the elapsed playback time of the disc. With some discs, this area also shows the total play time of the disc when playback is stopped.

VIRTUAL surround indicator 

Displayed while virtual surround processing is being performed.

REPEAT indicator 

Displayed during repeat playback.

ANGLE indicator 

Appears to indicate that multiple camera angles are recorded in the section of the DVD that is currently playing.

Each time **DISPLAY** on the Remote is pressed, the Player's front panel display changes. Refer to "Display Information" on page 36.



Main Unit (Rear)

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

DIGITAL OUT (coaxial) jack **19**, **20**

Connect a coaxial cable here when connecting to a device with a coaxial digital audio input jack.

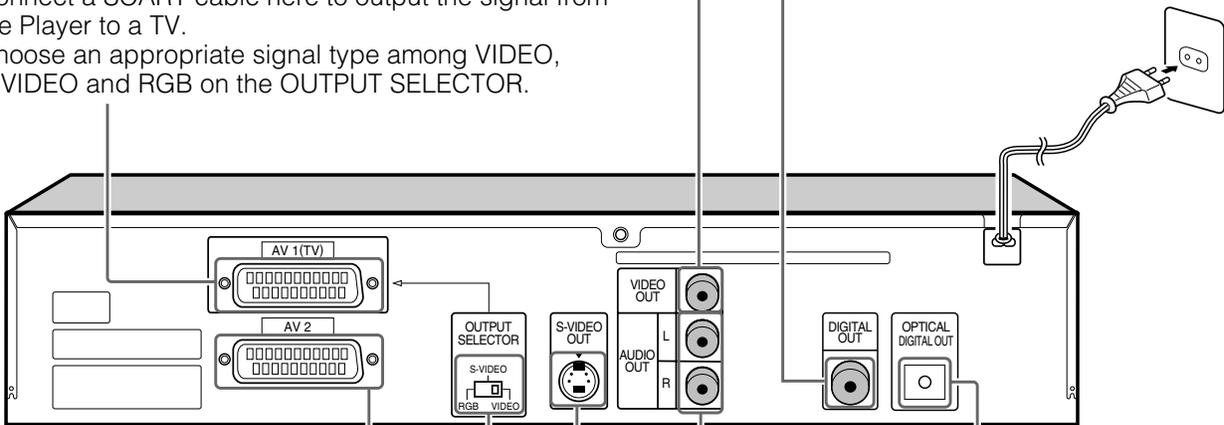
VIDEO OUT jack **17**

Connect a standard video cable here when connecting to a TV with a video input jack.

SCART AV 1 (TV) socket **15**, **16**

Connect a SCART cable here to output the signal from the Player to a TV.

Choose an appropriate signal type among VIDEO, S-VIDEO and RGB on the OUTPUT SELECTOR.



SCART AV 2 socket **15**

Connect a SCART cable here to input the signal from a VCR to the Player.

OUTPUT SELECTOR **15**

Change the position to the signal type (VIDEO/S-VIDEO/RGB) that is output to a TV.

S-VIDEO OUT jack **17**

Connect an S-VIDEO cable here when connecting to a TV with an S-VIDEO input jack. This type of connection provides superior picture quality.

AUDIO OUT jacks **17**, **18**

Connect a standard audio cable here when connecting to a TV or audio equipment.

19, **20**

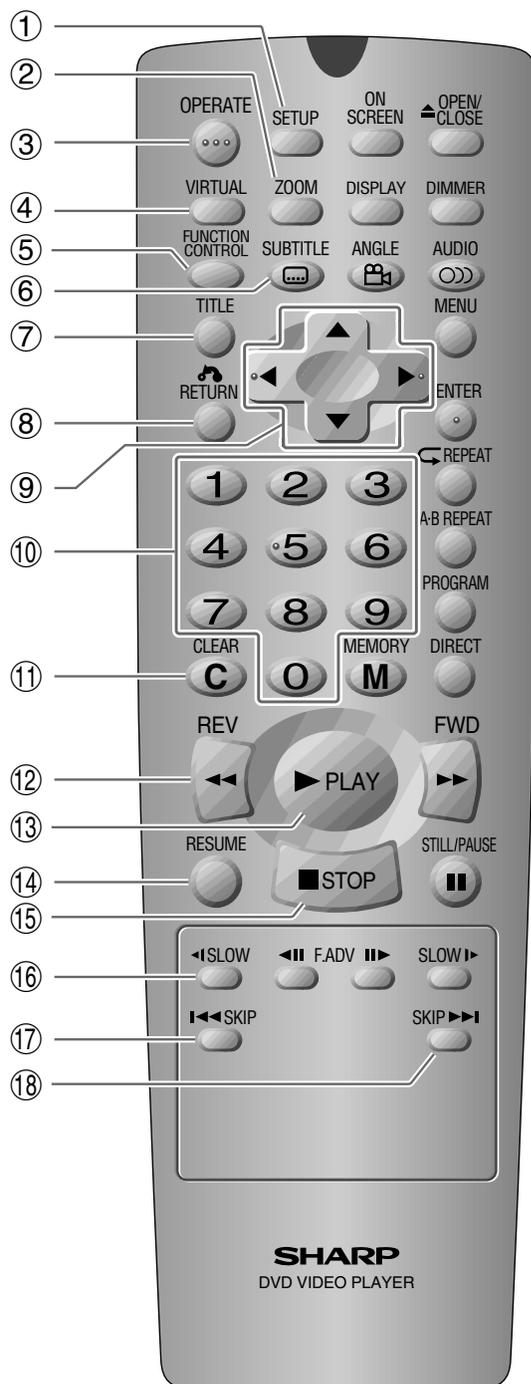
OPTICAL DIGITAL OUT jack

Connect an optical digital audio cable here when connecting to a device with an optical digital audio input jack.

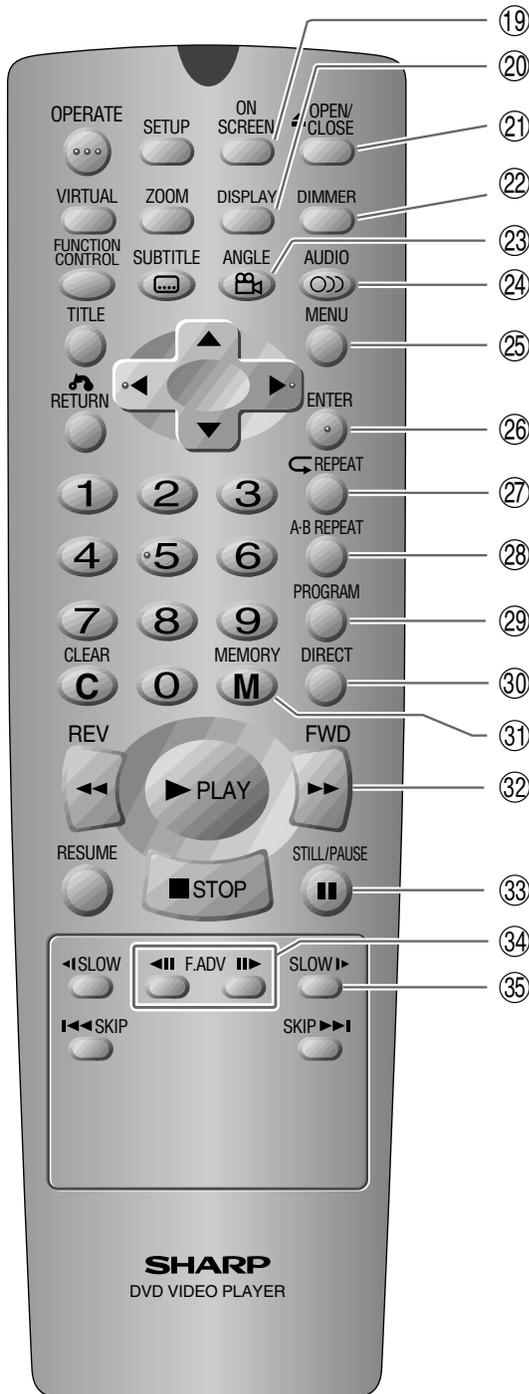
Remove the protective cap before connecting the cable.

Remote Control Unit

Remote Control Unit



- ① **SETUP**
Opens the Player's SETUP menu screen. (See page 23.)
- ② **ZOOM**
Zooms an image 1.2x, 1.5x or 2.0x. (See page 40.)
- ③ **OPERATE**
Turns the Player power on and off. (See page 21.)
- ④ **VIRTUAL**
Creates a "virtual" surround sound effect from your stereo TV or audio system. (See page 58.)
- ⑤ **FUNCTION CONTROL**
Displays the FUNCTION CONTROL screen where you can check or change various settings. (See page 43.)
- ⑥ **SUBTITLE** 
Selects one of the subtitle languages programmed on a DVD. (See page 56.)
- ⑦ **TITLE**
Selects one of the titles on a DVD. (See page 47.)
- ⑧ **RETURN** 
Returns to a previous menu screen on a DVD or returns to DVD playback from the DVD menu screen. (See page 25.)
- ⑨ **Cursor buttons** , , , 
Use to highlight selections on a menu screen and make adjustments of the Player settings. (See page 23.)
- ⑩ **Number buttons**
Use when creating programs, and entering a parental level password. (See page 26.)
- ⑪ **(C) CLEAR**
Clears input selections and cancels certain playback functions. (See page 50.)
- ⑫ **◀◀ REV**
Performs reverse fast audio or visual scanning. (See pages 38 and 41.)
- ⑬ **▶▶ PLAY**
Starts playback. (See page 37.)
- ⑭ **RESUME**
Restarts playback from the place where playback was stopped. (See page 54.)
- ⑮ **■ STOP**
Stops playback. (See page 37.)
- ⑯ **◀ SLOW**
Performs slow reverse playback of DVDs. (See page 38.)
- ⑰ **◀◀ SKIP**
Moves reverse through disc titles, chapters or tracks on a disc. (See pages 39 and 42.)
- ⑱ **SKIP ▶▶**
Moves forward through disc titles, chapter or tracks on a disc. (See pages 39 and 42.)

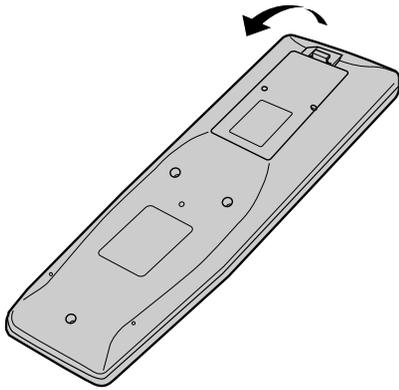


- ①⑨ **ON SCREEN**
Toggles display of on-screen indicators on and off. (See page 36.)
- ②⑩ **DISPLAY**
Changes the mode of the front panel display. (See page 36.)
- ②① **▲ OPEN/CLOSE**
Opens and Closes the disc tray. (See page 37.)
- ②② **DIMMER**
Adjusts the brightness of the front panel display to the level you prefer.
- ②③ **ANGLE**
Switches the camera angle of the video presentation when scenes with multiple camera angles are recorded on a DVD. (See page 55.)
- ②④ **AUDIO**
Selects one of the audio soundtracks programmed on a DVD or selects the audio output mode on a VIDEO CD or Audio CD. (See pages 57 and 63.)
- ②⑤ **MENU**
Opens and closes DVD's menu. (See page 47.)
- ②⑥ **ENTER**
Confirms selections on a menu screen. (See page 24.)
- ②⑦ **↶ REPEAT**
Performs repeat playback. (See pages 52 and 62.)
- ②⑧ **A-B REPEAT**
Performs point-to-point repeat playback. (See pages 53 and 61.)
- ②⑨ **PROGRAM**
Enters the programmed playback mode. (See pages 50 and 60.)
- ③⑩ **DIRECT**
Performs direct chapter selection or direct track selection. (See pages 48 and 49.)
- ③① **(M) MEMORY**
Enters the number of a selected chapter or track. (See pages 50 and 60.)
- ③② **FWD**
Performs fast forward audio or visual scanning. (See pages 38 and 41.)
- ③③ **|| STILL/PAUSE**
Freezes the video image on the screen or pauses audio playback. (See pages 39 and 42.)
- ③④ **◀|| F.ADV ||▶**
Performs reverse or forward frame by frame playback. (See pages 39 and 42.)
- ③⑤ **▶ SLOW**
Performs slow forward playback of a DVD and VIDEO CD. (See pages 38 and 41.)

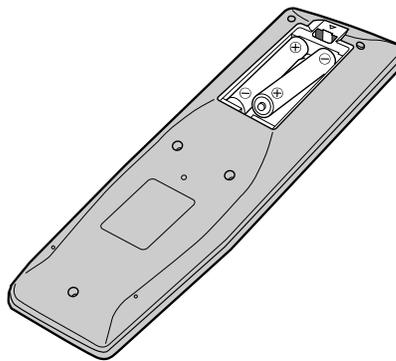


Loading the Batteries

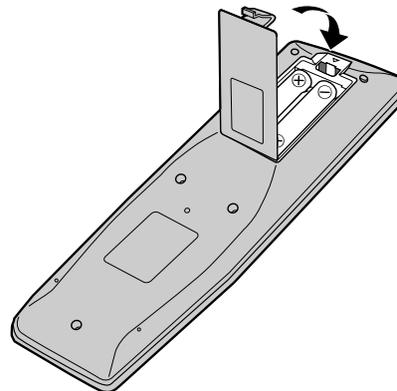
- 1 Open the battery cover.
Open the lid in the direction of the arrow.



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



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



NOTE

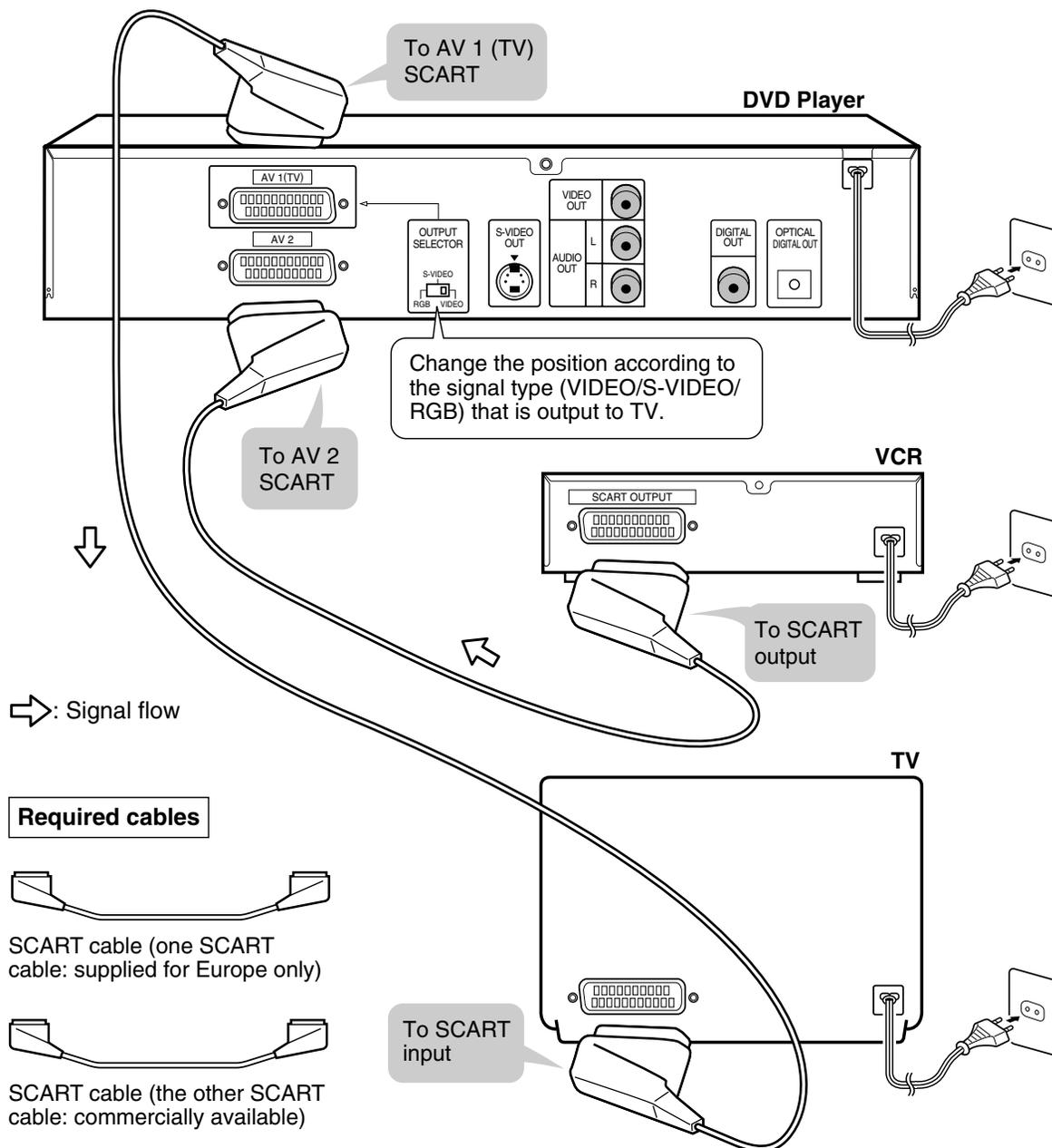
- Do not subject the Remote to shock, water or excessive humidity.
- The Remote may not function if the Player sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old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

! Caution:

- Be sure to turn off the Player 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 cable (supplied for Middle East only).
- Be sure to keep the Player connection cables separate from the TV antenna cable when you install the Player, because it may cause electrical interference when you are watching television programs.

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

Use the SCART cables (one SCART cable: supplied for Europe only) to connect the Player to your TV and VCR.



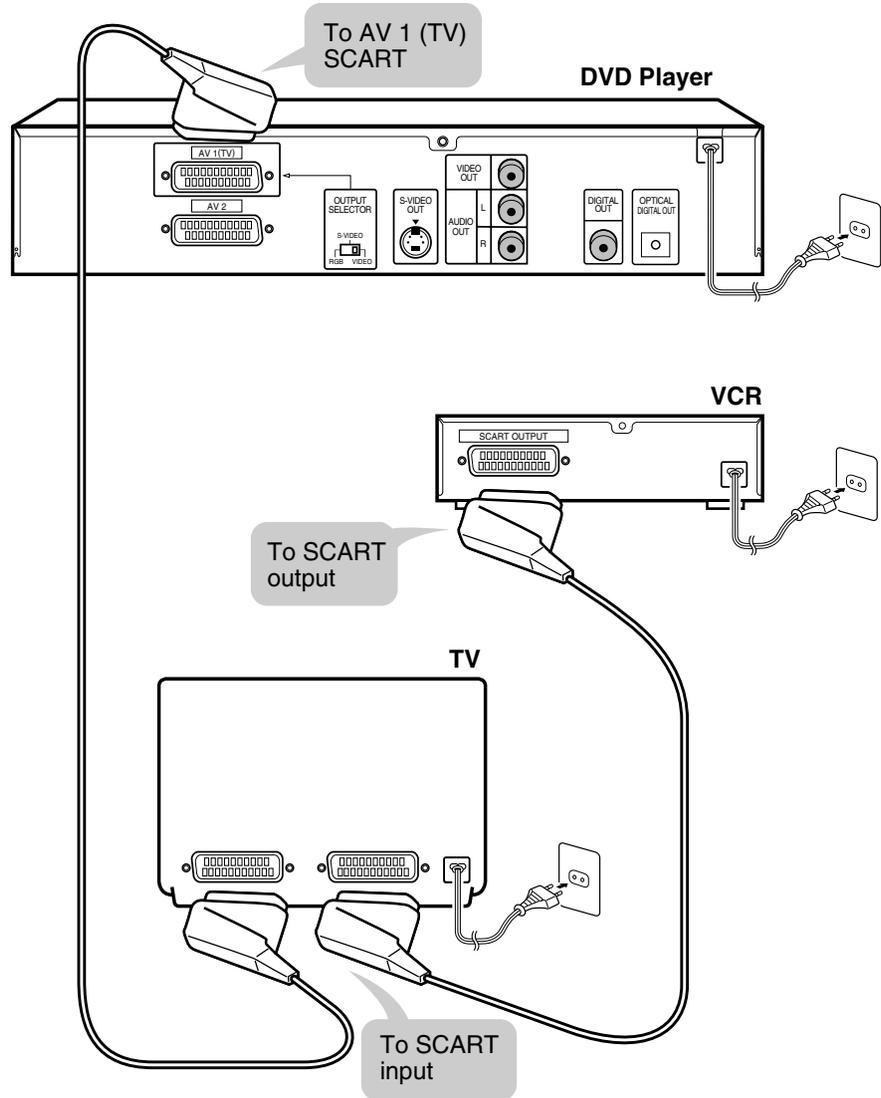
SETTING UP

💡 Position the OUTPUT SELECTOR to "VIDEO" when connecting the Player to a TV which does not support S-VIDEO and/or RGB signal. The factory default setting is "VIDEO".



If your TV has two SCART sockets

SETTING UP



Required cables



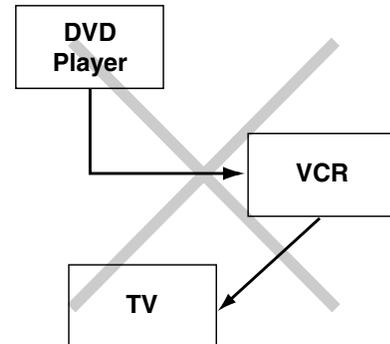
SCART cable (one SCART cable: supplied for Europe only)



SCART cable (the other SCART cable: commercially available)

! Caution:

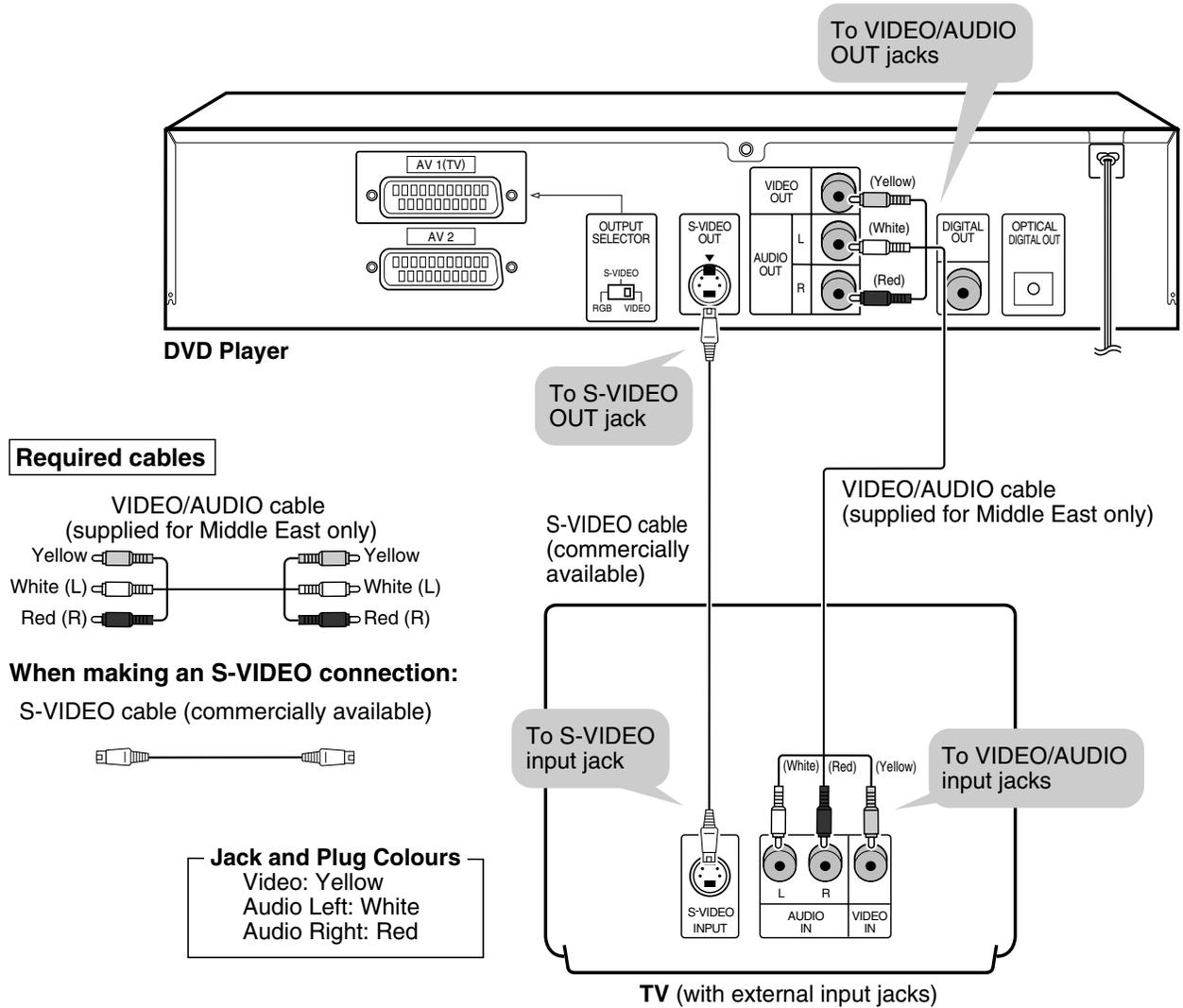
- Do not connect the Player to a VCR. If you view the Picture on your TV after making the connections shown on the right, a picture noise may appear. Connect the Player to your TV directly.





Connecting a TV Equipped with S-VIDEO Input or VIDEO/AUDIO Input Jacks

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



- When the Player is connected to a TV using both a VIDEO cable and an S-VIDEO cable, only the S-VIDEO connection is enabled (the VIDEO connection is disabled).
- You will not be able to hear all of the sound being output by the Player if you use the VIDEO/AUDIO cable (supplied for Middle East only) 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 cable.
- Connect the Player 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 the S-VIDEO or VIDEO cable to the TV.

SETTING UP



Connecting to Audio Equipment

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

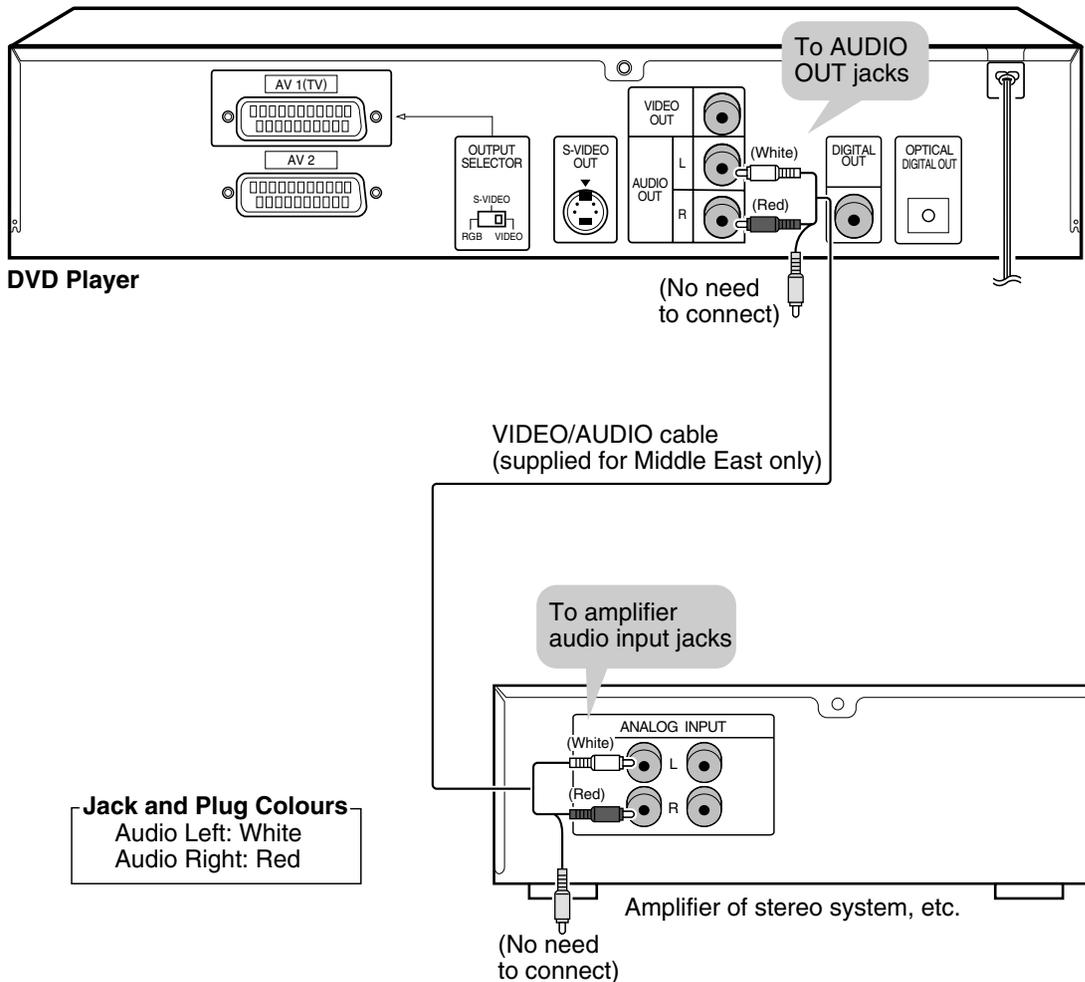
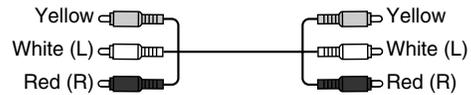
Playing 2 channel audio

■ Analogue Connection

SETTING UP

Required cable

VIDEO/AUDIO cable (supplied for Middle East only)



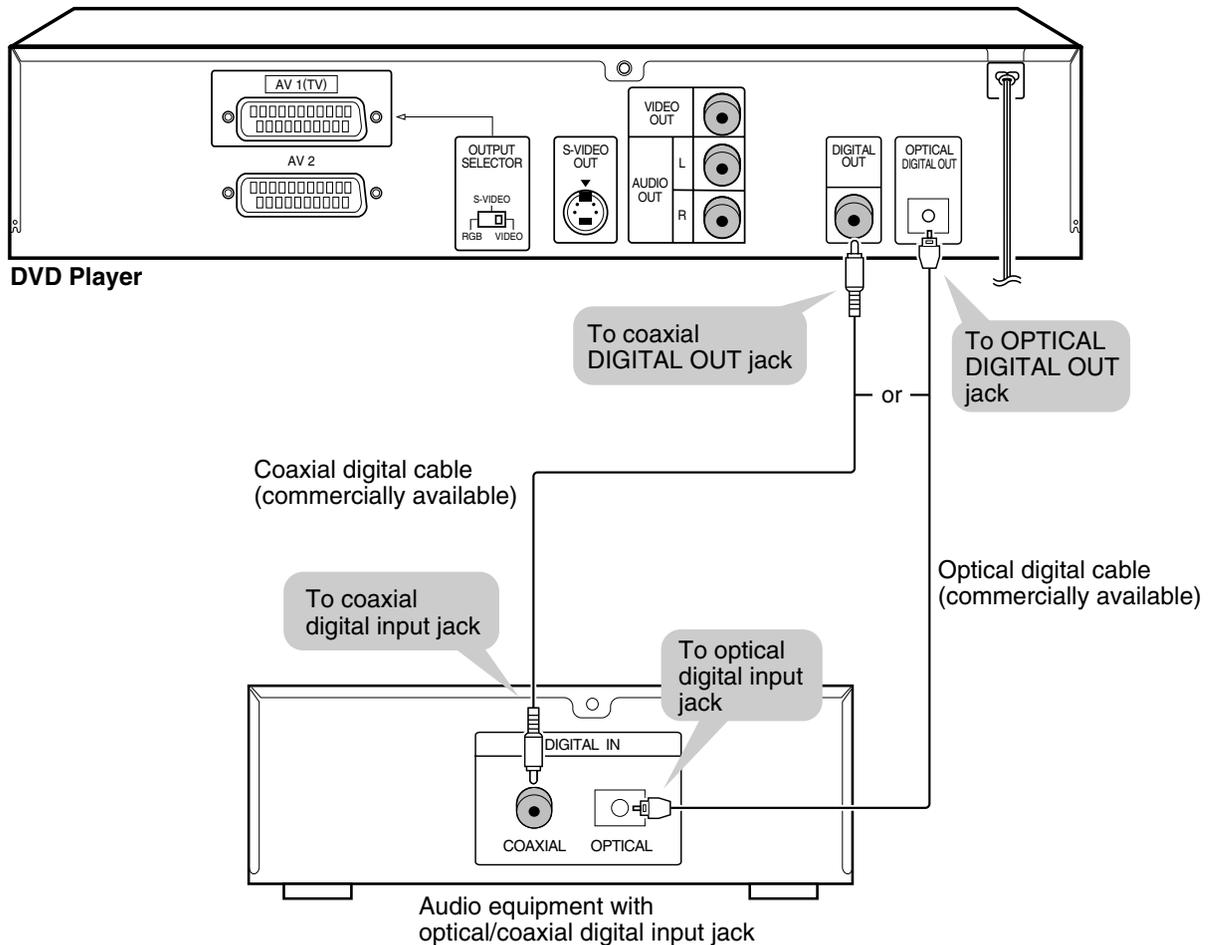
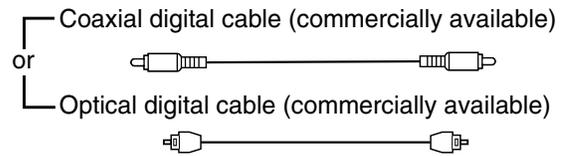
Jack and Plug Colours
Audio Left: White
Audio Right: Red



Digital Connection

You can make this connection using either a coaxial digital cable or an optical digital cable.

Required cable



SETTING UP

Digital Connection to an MD to Record a CD

Some Audio CDs and VIDEO CDs have a short silent section between musical tracks. When sound from discs such as these is digitally recorded by connecting the Player 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 or VIDEO CD
Play the disc as you normally would, with the audio mode set to "L+R" (see page 63). 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.



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

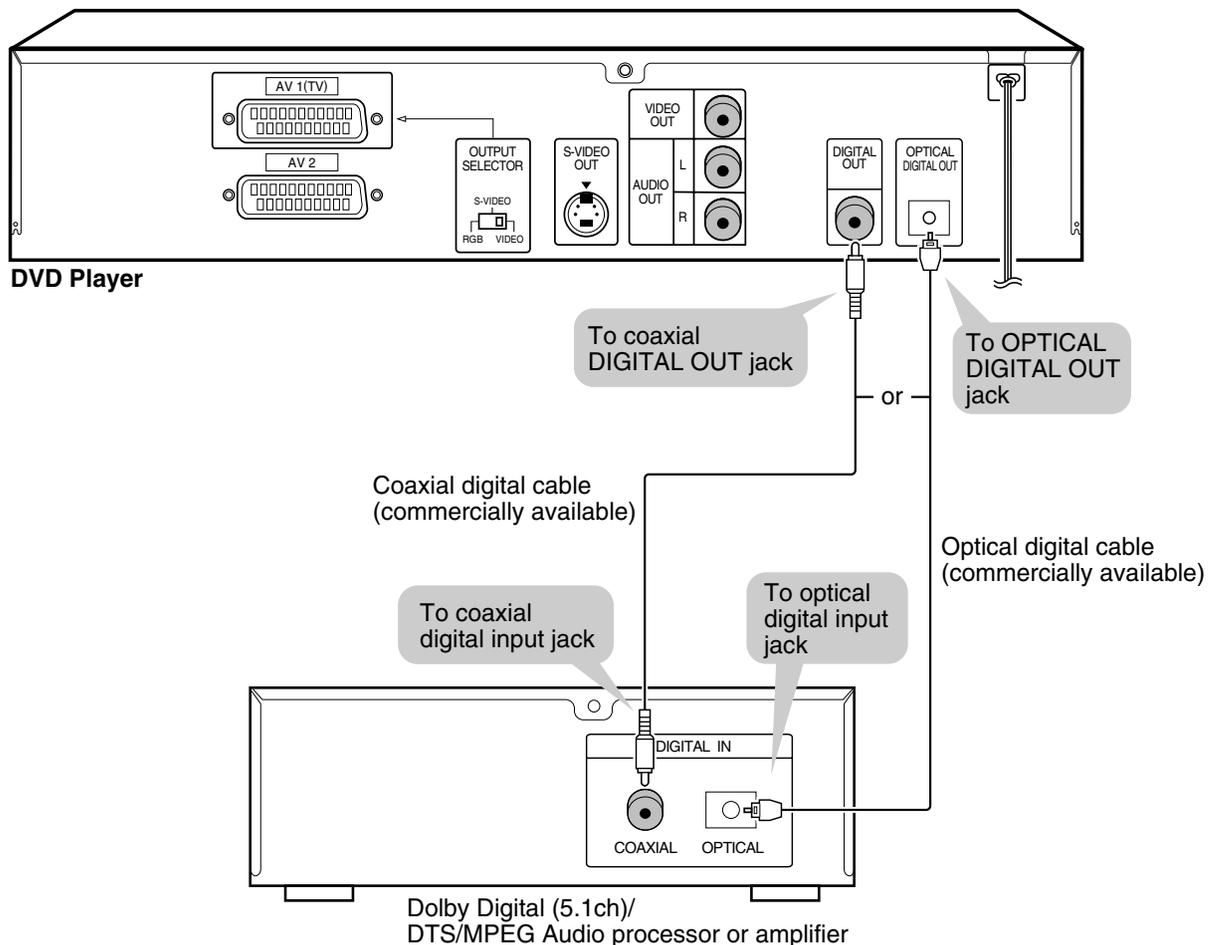
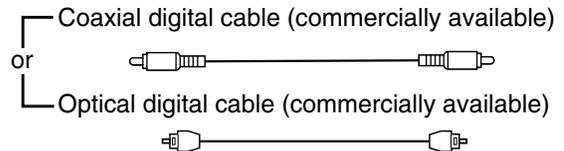
Connecting an amplifier with a Dolby Digital/DTS/MPEG Audio digital surround processor or a Dolby Digital/DTS/MPEG Audio surround processor to your Player's optical/coaxial digital jack provides richer and more powerful audio play.

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

SETTING UP

💡 You can make this connection using either a coaxial digital cable or an optical digital cable.

Required cable



NOTE

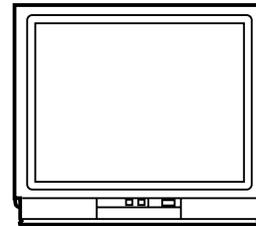
- This connection is not possible if the processor or amplifier to which you want to connect does not have an optical/coaxial digital input jack.

Switching the TV and the Player On

- 1 Turn on the TV and select the "VIDEO" or "AV" mode.
- 2 Switch the Player on by pressing **OPERATE**. When the startup screen shown below appears on the TV screen, the preparations are complete.



Startup Screen



TV



TV's remote

Power Control Operation

Standby mode and Active mode

This Player has these two working modes. When turning off the Player, it goes in the Standby mode. When turning it on, it goes in the Active mode.

These two modes work as shown on the following table.

	Front Panel Display	STANDBY LED indicator	VIDEO Output signal	Pick up activity
Active mode	On	Off	On	On
Standby mode	Off	On	Off	Off

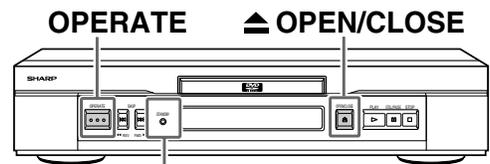
- In the Active mode, all functions are available.
- In the Standby mode, you can change to the Active mode by pressing **OPERATE** or **▲ OPEN/CLOSE**.

How to turn off the power

Press **OPERATE** to turn off the Player which is in the Active mode. At this time, the STANDBY LED indicator on the Player lights and the Player goes in the Standby mode.

Auto power-off function

- If the Player is stopped and not used in any way for 5 minutes, "**SHARP DVD VIDEO PLAYER**" appears on the Player's front panel display.
- After another 25 minutes of non-operation, the STANDBY LED indicator lights and the Player enters the Standby mode automatically.
- In the Standby mode, all buttons are disabled, except for **▲ OPEN/CLOSE** and **OPERATE**.



STANDBY LED indicator



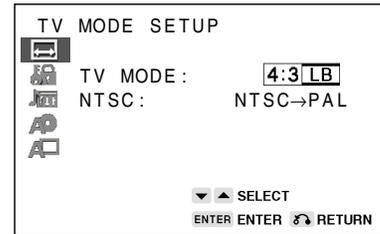


About the SETUP Screen

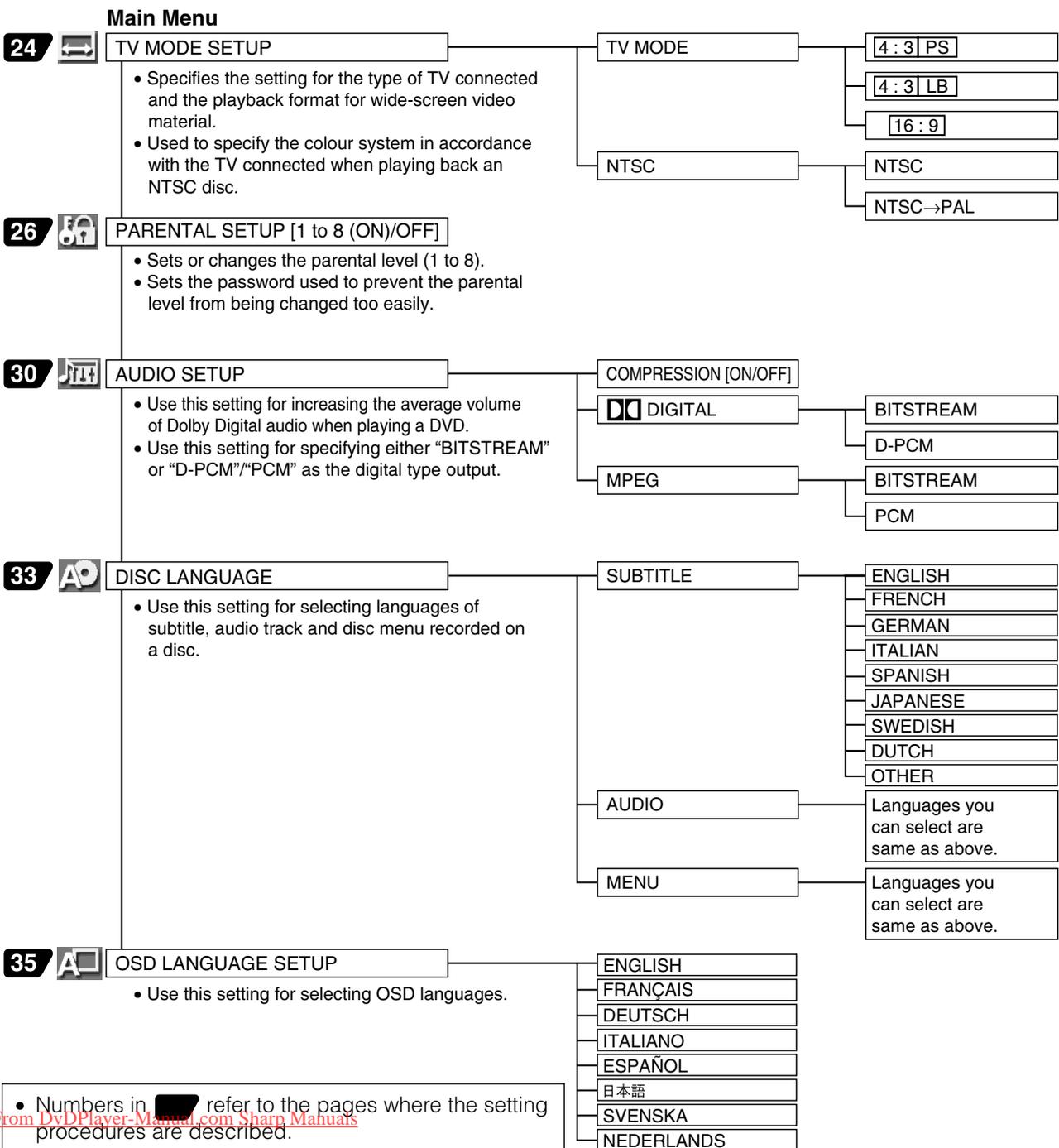
This section describes how to specify various basic settings using the SETUP screen. The list below shows all the items you can set and adjust. See the following pages for details on each setup procedure.

- 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 screens may differ slightly from what is shown here.

(Example) TV MODE SETUP



Setup item list





Initial Setup (OSD LANGUAGE SETUP)

When you use the Player for the first time, you should set the language to be used for the OSD (On Screen Display).

- 1 Turn on your TV and select the "AV" channel. Then press **OPERATE** to turn on the Player.
- 2 Press **SETUP** on the Remote while the Player is stopped.
 - "A" OSD LANGUAGE SETUP" screen appears.



- 3 Use **▲**, **▼**, **◀** or **▶** to select the language you want to use.
 - The background colour for the selected item changes to orange.



To use French as the OSD language, select "FRANÇAIS".

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

NOTE

- After the second time when you press **SETUP**, the screen in the language that you selected in step 3 above appears immediately.
- You can change OSD LANGUAGE whenever you want. For details, please refer to "OSD LANGUAGE SETUP Setting" on page 35.



SETTING UP



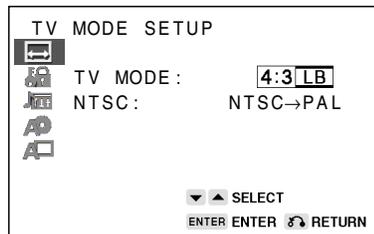
TV MODE SETUP Setting

Setting the TV MODE

1 While the Player is stopped, press **SETUP** to view the SETUP screen.

When you use the Player for the first time, press **SETUP**. "OSD LANGUAGE SETUP" screen appears. You should set the language to be used for the OSD (On Screen Display). See "OSD LANGUAGE SETUP Setting" on page 35.

2 Use **▲** or **▼** to select the "TV MODE SETUP".

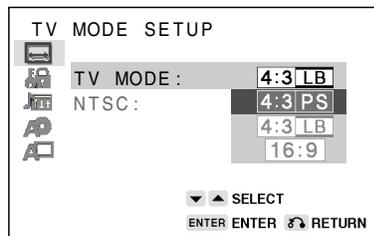


3 Press **ENTER** and then use **▲** or **▼** to select "TV MODE".
• The background colour for the selected item changes to orange.

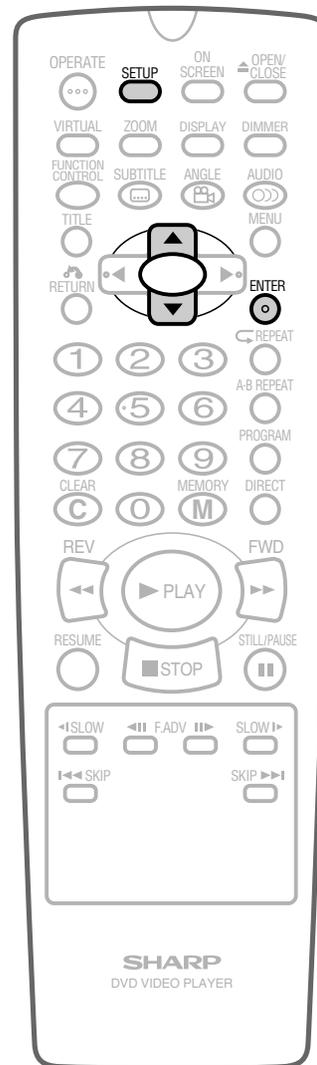
4 Press **ENTER** to display the items you can select.

5 Use **▲** or **▼** to select "4:3 LB", "4:3 PS" or "16:9".
• The background colour for the selected item changes to orange.

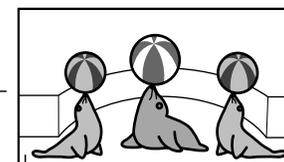
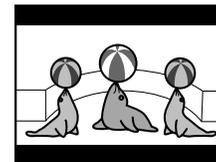
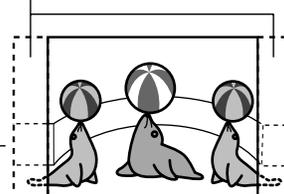
(Example) Selecting "4:3 PS".



- **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).
- **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".



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



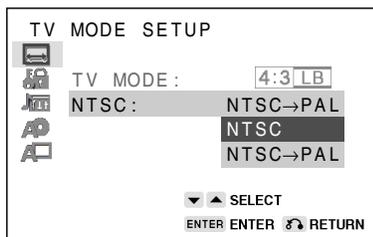
The actual appearance of the image depends on the screen mode setting of your wide-screen TV.



- 6 Press **ENTER** to confirm the “TV MODE” setting.
 - When you have completed the setting above, press **RETURN** to exit the SETUP screen. However, if you want to specify the “NTSC” setting in succession, proceed to step 1 below.

Setting Up for Playback of an NTSC Disc

- Before setting the “NTSC” (video signal system), perform the step 1 to 2 on the previous page.
- 1 Press **ENTER** and then use ▲ or ▼ to select “NTSC”.
 - The background colour for the selected item changes to orange.
- 2 Press **ENTER** to display the items you can select.
- 3 Use ▲ or ▼ to select “NTSC” or “NTSC→PAL”.
(Example) Selecting “NTSC”



- About the NTSC settings:
 - NTSC:** Select this setting when you have an NTSC TV or an NTSC-compatible Multi-System TV connected to the Player.
 - NTSC→PAL:** Select this setting when you have a PAL TV connected to the Player. This setting converts the NTSC signal to a modified PAL signal.

NOTE

- When you play back the PAL discs, either setting of “NTSC→PAL” or “NTSC” can be used on a PAL TV or a Multi System TV.

- 4 Press **ENTER** to confirm the setting.
- 5 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 (PARENTAL SETUP, AUDIO SETUP, DISC LANGUAGE or OSD LANGUAGE SETUP), press ▲ or ▼ to display other SETUP screen without pressing **RETURN**.



SETTING UP



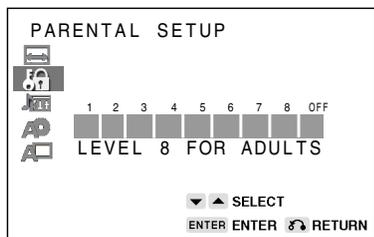
PARENTAL SETUP Setting

DVDs 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 may vary from disc to disc. Some discs, for example, may let you edit out violent scenes and replace them with scenes more suitable for viewing by children. You can also use the parental lock to disable playback of the DVD entirely.

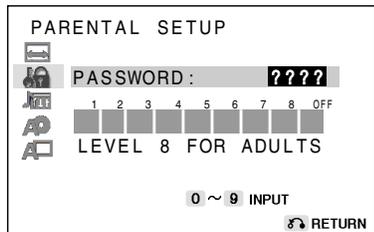
SETTING UP

Setting the parental level for the first time

- 1 Press **SETUP** to display the SETUP screen.
- 2 Use **▲** or **▼** to select the “**🔒** PARENTAL SETUP”.



- 3 Press **ENTER** to display the password specification screen.



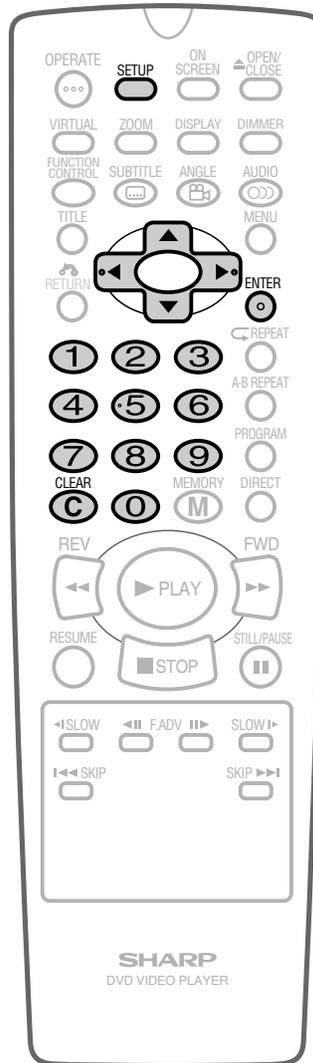
- 4 Use the number buttons (**0** to **9**) to enter a 4-digit password.

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

- When you have finished entering your 4-digit number, (password verification display) appears.

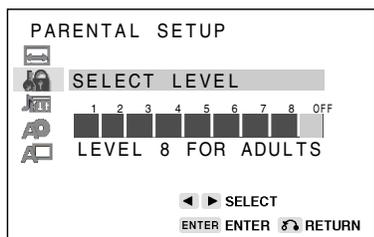
NOTE

- Enter the numbers slowly as each number is stored separately.
- Press **C** (CLEAR) to return to the previous digit.





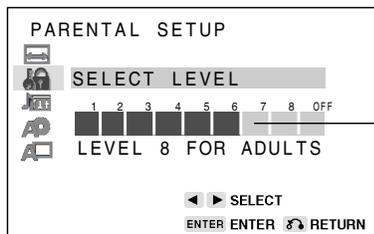
- To confirm your password, re-enter the numbers you entered in step 4 (using the number buttons).
 - When the correct password is entered, the screen below appears.



- 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 pressing **■ STOP** four times.

- Press **◀** or **▶** to change the parental level.
 - Factory setting keeps parental level 8.



Can be changed to any number between 1 and 8 or OFF.

- 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.

- Once you have changed the parental level in step 6 above, press **ENTER** to confirm the setting.

- 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**.

NOTE

- You can use the parental lock function only with DVDs that are equipped with the parental lock feature.
- On some DVDs, the parental level setting is fixed and cannot be modified.
- Some DVDs 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.

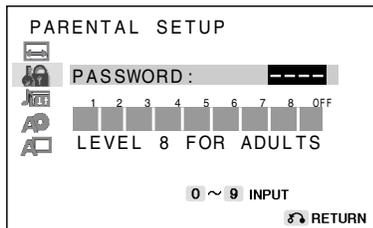




Changing the parental level

- Before changing the parental level, perform the step 1 to 2 on page 26.

1 Press **ENTER** to display the password verification screen.



2 Use the number buttons (**0** to **9**) to enter the 4-digit password that was set previously.



- When you have finished entering your 4-digit number, □□□□ changes to * * * *.

3 Press **◀** or **▶** to change the parental level.

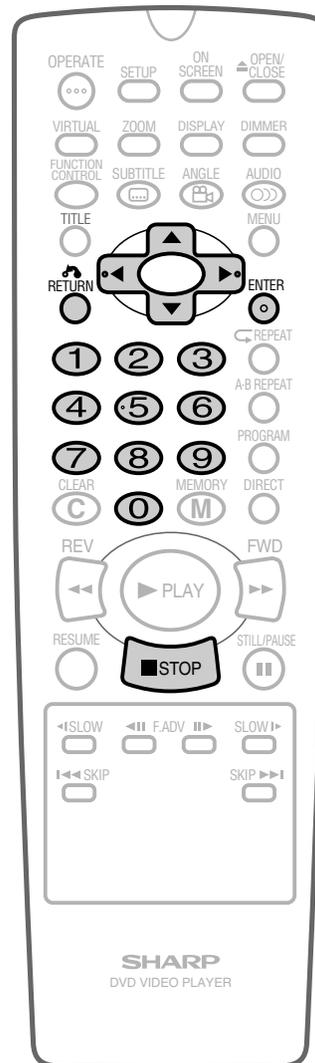
- The same screen as step 6 on the previous page appears.
- If you enter the wrong number three times in succession, the normal screen reappears.

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

4 Once you have changed the parental level in step 3 above, press **ENTER** to confirm the setting.

5 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**.





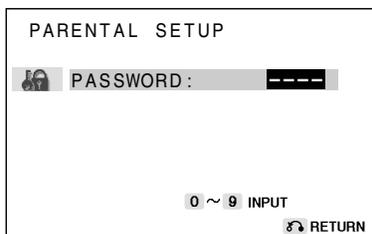
Temporary parental level setting

In addition to “PARENTAL SETUP Setting” on page 26, some DVDs will prompt the viewer to temporarily change the parental level. In this event, the following screen appears.



When this screen appears, use the procedure described below to temporarily change the level.

- Use ▲ or ▼ to select “YES” or “NO”.
 - YES:** Temporarily changes the parental level (sets the level to a value other than the current setting (page 26)).
 - NO:** Does not change the parental level (maintains the current level (page 26)).
- Press **ENTER**.
 - If “NO” was selected in step 1, the normal screen reappears.
 - If “YES” was selected in step 1, the following screen appears.



- To temporarily change the parental level, enter your password (page 28) and confirm the password. The setting automatically changes temporarily to the disc-specific parental level.
- When you have completed the temporary change procedure, press **ENTER**. (The normal screen reappears.)

NOTE

- This change only applies while the current disc is being played.



SETTING UP



AUDIO SETUP Setting

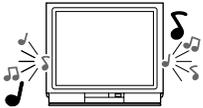
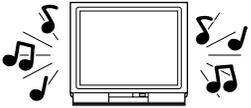
COMPRESSION Use this setting for increasing the average volume of Dolby Digital audio when playing a DVD.

DD DIGITAL/MPEG Use these settings for specifying the type of digital output when playing a disc recorded using Dolby Digital/MPEG Audio.

SETTING UP

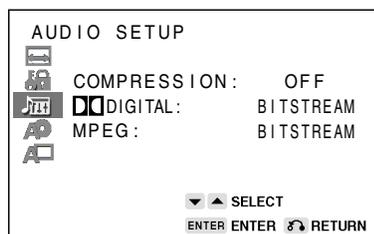
Setting the COMPRESSION (Dolby Digital output level)

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

	COMPRESSION: OFF	COMPRESSION: ON
 DVDs Dolby Digital audio	 • Low audio level	 • Audio level the same as Audio CD, etc.
 VIDEO CDs Audio CDs		

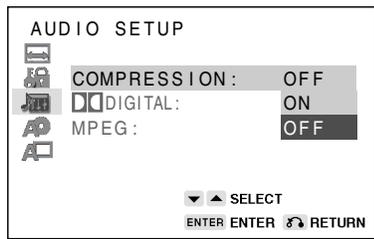
- **OFF** Audio level recorded on disc is played back without modification.
- **ON** Dolby Digital average audio level is increased so it sounds similar to that of a VIDEO CD/Audio CD.

- 1 Press **SETUP** to display the SETUP screen.
- 2 Use **▲** or **▼** to select the “**DD** AUDIO SETUP”.





- 3 Press **ENTER** and then use **▲** or **▼** to select “COMPRESSION”.
 - The background colour for the selected item changes to orange.
- 4 Press **ENTER** to display the settings you can select.



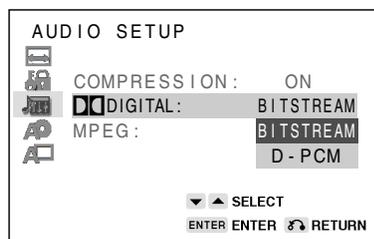
- 5 Use **▲** or **▼** to select “ON” or “OFF”.
 - Use of the “OFF” setting is recommended when the Player is connected to audio equipment.
- 6 Press **ENTER** to confirm the setting.
 - When you have completed the setting above, press **RETURN** to exit the SETUP screen. However, if you want to specify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

Setting the DIGITAL OUT

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

Setting the DOLBY DIGITAL

- Before setting the “**DIGITAL**”, perform the step 1 to 2 on the previous page.
- 1 Press **ENTER** and then use **▲** or **▼** to select “**DIGITAL**”.
 - The background colour for the selected item changes to orange.
 - 2 Press **ENTER** to display the settings you can select.



- 3 Use **▲** or **▼** to select “BITSTREAM” or “D-PCM”.
 - The factory default setting is “BITSTREAM”.

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 setting above, press **RETURN** to exit the SETUP screen. However, if you want to specify the “MPEG” setting in succession, proceed to step 1 below.



NOTE

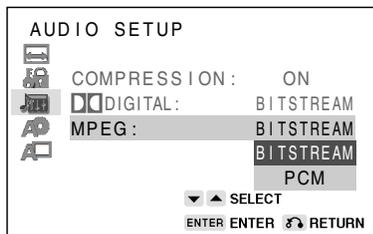
- Whenever the “COMPRESSION” setting is “ON”, VIRTUAL DOLBY setting is changed to “OFF” automatically.



Setting the MPEG

- Before setting the “MPEG”, perform the step 1 to 2 on page 30.

- 1 Press **ENTER** and then use **▲** or **▼** to select “MPEG”.
 - The background colour for the selected item changes to orange.
- 2 Press **ENTER** to display the settings you can select.



SETTING UP

- 3 Use **▲** or **▼** to select “BITSTREAM” or “PCM”.
 - The factory default setting is “BITSTREAM”.

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”.



DISC LANGUAGE Setting

Use this setting for selecting languages of subtitle, audio track 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** (page 45), **SUBTITLE** (page 56), **AUDIO** (page 57), or **MENU** (page 47).

Setting SUBTITLE, AUDIO and MENU languages from 8 languages

- 1 Press **SETUP** to display the SETUP screen.
- 2 Use **▲** or **▼** to select the “**DISC LANGUAGE**”.



- 3 Press **ENTER** and then use **▲** or **▼** to select “SUBTITLE”, “AUDIO” or “MENU”.
 - The background colour for the selected item changes to orange.
 - You can set “SUBTITLE”, “AUDIO” or “MENU” individually.

(Example) Selecting “SUBTITLE”



- 4 After selecting the item, press **ENTER**.
- 5 Select the language you want to use with **▲**, **▼**, **◀** or **▶**.

(Example) Selecting “FRENCH”



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

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



SETTING UP



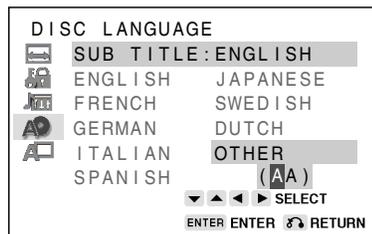
Setup

- Repeat steps 3 to 6 above to go on with other “DISC LANGUAGE” settings in succession.
- 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 a language from OTHER

SETTING UP

- In step 5 on the previous page, select “OTHER” with ▲, ▼, ◀ and ▶, then press **ENTER** to set the “OTHER” input item (two letters).



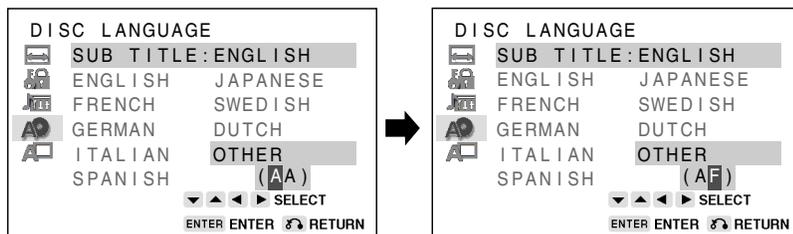
- Example: To select “AF” (Afrikaans)**
Use ▲ or ▼ to select “A” as the first letter, use ◀ or ▶ to move to the second place, then use ▲ or ▼ to select “F”.

NOTE

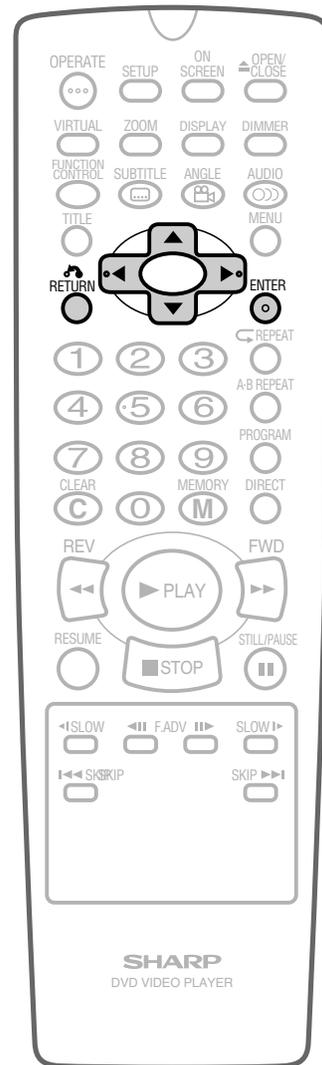
- When “A” is selected for the first letter, only letters to the right of codes beginning with “A” can be selected as the second letter. Refer to the codes beginning with “A” on “**Language Code List for Disc Language**” (see page 64).

Example: First letter-A

Second letter-A, B, F, M, R, S, Y or Z



- Press **ENTER** to confirm the setting.
- If you want to exit the SETUP screen and return to the normal screen, press **RETURN**.
 - However, if you want to specify other “DISC LANGUAGE” setting in succession, press **ENTER** and then select the setting item with ▲ and ▼.





OSD LANGUAGE SETUP Setting

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

! Caution:

When you use the Player for the first time, press **SETUP**. "OSD LANGUAGE SETUP" (English) screen appears. You should set the language to be used for the OSD.

- 2 Use **▲** or **▼** to select the "A OSD LANGUAGE SETUP".



- 3 Press **ENTER** to display the languages you can select.



- 4 Use **▲**, **▼**, **◀** or **▶** to select the language you want to use.
For example: "FRANÇAIS"
 - The background colour for the selected item changes to orange.



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

- 6 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 the other SETUP screen without pressing **RETURN**.



SETTING UP



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 Player's 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 title, chapter, or tracks.

* When the disc you attempt to play has no information on time, operation status is displayed.

The Player displays the information shown below on the TV screen and on the Player's front panel display depending on the operation status.

Display Examples

	TV Screen	Front Panel Display	Remarks
If no disc is loaded or an unplayable disc is loaded when the Player 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, VIDEO CD 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 or VIDEO CD is played back.
			When an Audio CD is played back.
Fast forward			
Fast reverse			
Slow			Does not function for VIDEO CDs or Audio CDs.
Playback control			

Region (Locale) Number Error Indicator

If the region (locale) number of the disc that you attempt to play differs from the region number of the Player (see page 6), "REGION CODE ERROR" appears on the TV screen and the disc tray slides out. (The disc cannot be played.)



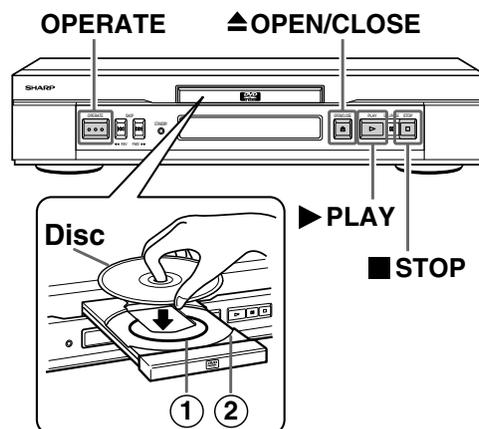
Preparations

- Switch on the TV set's power, and select the AV channel you are to watch the DVD on. Refer to the operation manual for your TV for details.
- Switch on the stereo system's power if the Player has been connected to a stereo system.

DVD**VIDEO
C D****C D**

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. (No image is 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**.

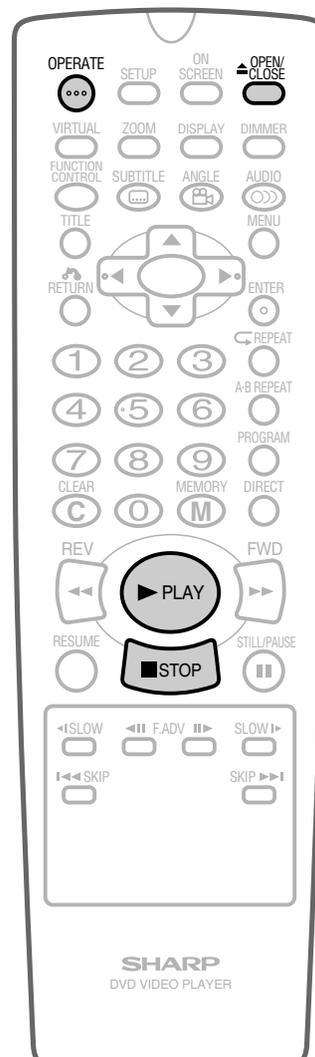


Playing VIDEO CDs with Playback Control (PBC)

- Pressing **▶ PLAY** begins PBC playback. Time display is not shown for some discs.
- If you specify the track number to be played (with playback stopped) and press **▶ PLAY**, normal playback (not PBC playback) begins.

NOTE

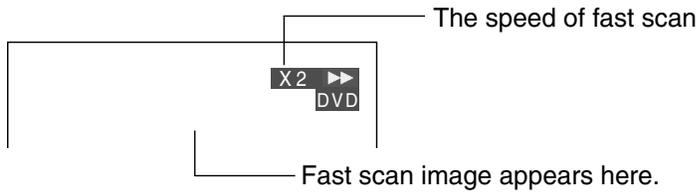
- If the disc is loaded upside down or is damaged, "-----" appears on the Player's front panel display and the disc tray slides out.
- If you attempt to play a DVD with the wrong region code, "REGION CODE ERROR" appears on the TV screen and the disc tray slides out.
- If the Player is stopped and not used in any way for 5 minutes, "SHARP DVD VIDEO PLAYER" appears on the Player's front panel display.



DVD

Fast Forward/Fast Reverse

- 1 Press **FWD** or **REV** when a disc is playing.
 - The disc begins fast scan at $\times 2$ speed.



- Three speeds are available. Each time **FWD** or **REV** is pressed, the speed of fast scan changes in the following sequence:
 $\rightarrow \times 2 \rightarrow \times 8 \rightarrow \times 32$
- You can also operate this function by holding down **SKIP** (**FWD**) or **SKIP** (**REV**) on the Player for two or more seconds.

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

DVD

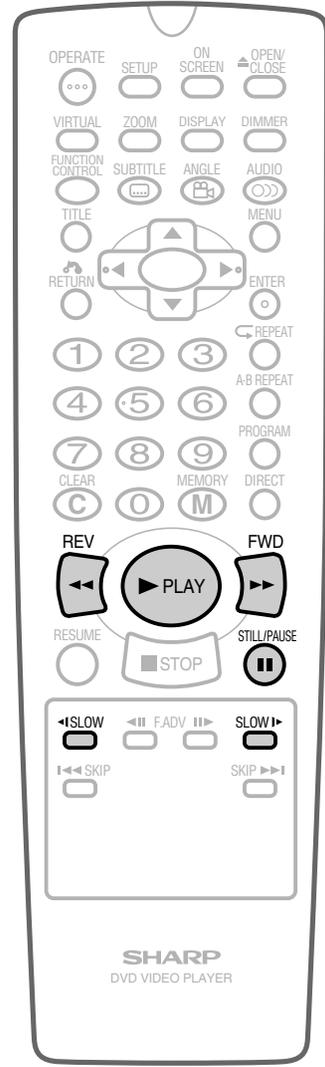
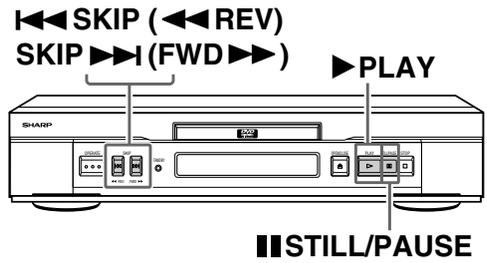
Slow-Motion Play

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

- Three speeds are available. Each time **SLOW** or **SLOW** is pressed, the speed of slow-motion playback changes in the following sequence:
 $\rightarrow \times 1/2 \rightarrow \times 1/8 \rightarrow \times 1/16^*$
- * The reverse slow-motion playback (**SLOW**) at $\times 1/16$ speed is disabled.

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

- NOTE**
- On some discs, the fast scan function is disabled.
 - Audio and subtitles are not played back during the fast scan playback.
 - On some discs, the slow-motion playback functions are disabled.
 - Using reverse slow-motion playback with a DVD causes frame-by-frame reverse playback.



BASIC OPERATIONS

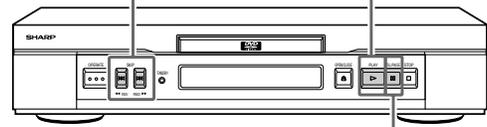


DVD

Still/Pause

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

◀◀ SKIP (◀◀ REV)
SKIP ▶▶▶ (FWD ▶▶▶) **▶ PLAY**



|| STILL/PAUSE

DVD



Frame Advance

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

DVD

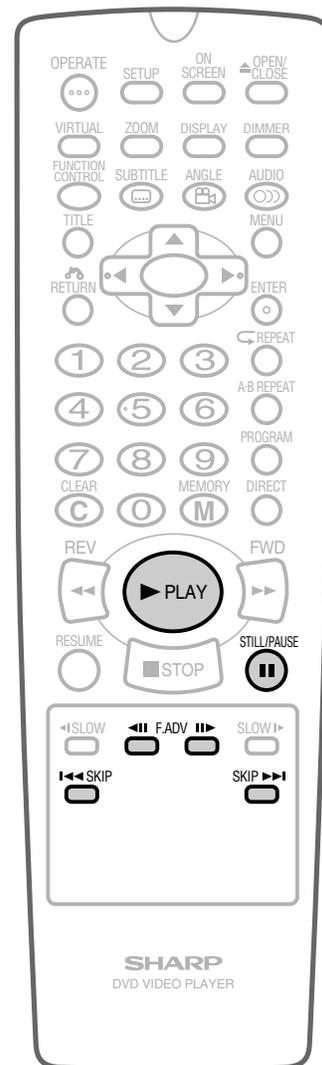
Skip (Forward/Reverse)

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

- 1 While a disc is playing, press **SKIP ▶▶▶** or **◀◀ SKIP**.
 - Playback skips forwards one chapter for each time **SKIP ▶▶▶** is pressed. When the last chapter is reached, playback returns to the start of the disc.
 - 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.

NOTE

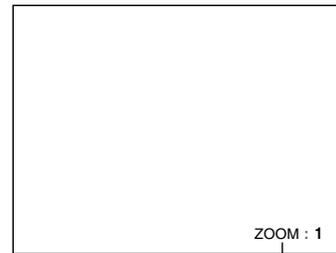
- On discs or titles that do not have chapter settings, playback skips forward to the next title or back to the beginning of the current title or disc.
- On some discs, the skip functions are disabled.
- The playback image is not displayed during the skip. It resumes during playback following the skip.





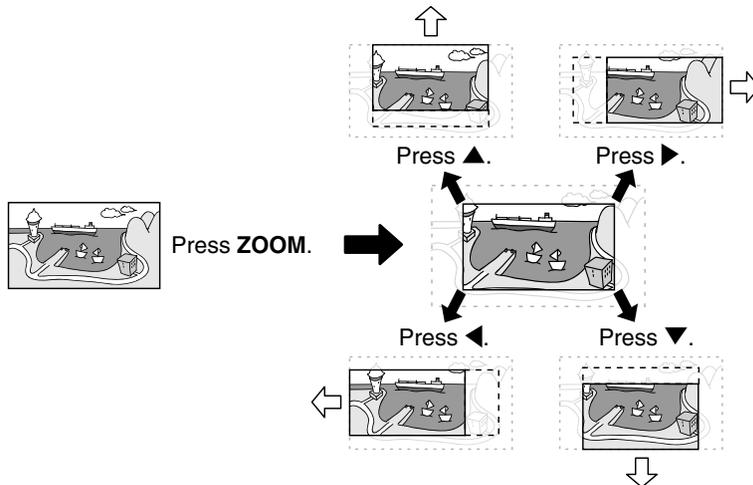
Zooming an Image

- While a disc is playing, press **ZOOM**.
 - Each press of **ZOOM** cycles through the zoom settings in the following sequence:
ZOOM 1 (1.2x) → ZOOM 2 (1.5x) → ZOOM 3 (2.0x) → Off.
 - When playing a Pan Scan disc while [4:3 P S] is selected as the "TV MODE" setting on the "TV MODE SETUP" screen, each press of **ZOOM** cycles through zoom settings in the following sequence:
ZOOM 1 (1.2x) → ZOOM 2 (1.5x) → Off.
 - Note that all of the above zoom factors are approximate only.
 - While an image is zoomed, you can use ▲, ▼, ◀ and ▶ to shift the view and display the part you want.



ZOOM indicator

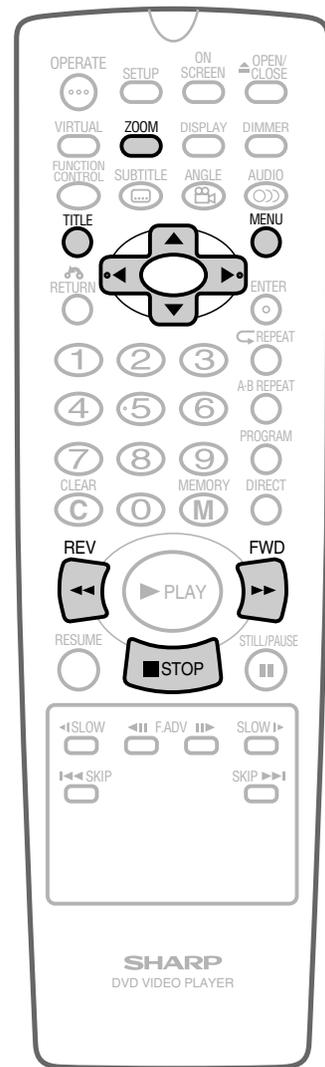
BASIC OPERATIONS



- The zoom indicator changes from white to red to let you know when you are trying to perform an illegal shift of view. If you are already at the far left side of the image, for example, the zoom indicator will become red when you press ◀.

NOTE

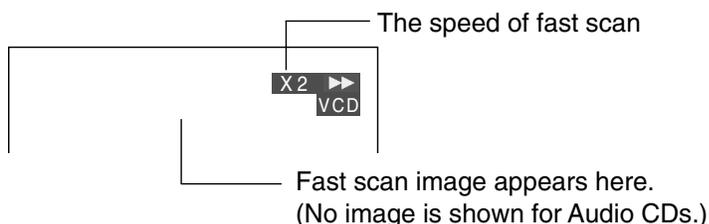
- An image may become distorted when zoomed.
- You can cancel the zoom operation by pressing **STOP**, **MENU**, **TITLE**, **FWD▶▶**, or **◀◀REV**.
- The setting screen is cleared automatically whenever you display a DVD screen that enables you to change the scene by pressing ▲, ▼, ◀ or ▶.
- 1.2x, 1.5x, and 2.0x zoom are approximate magnification values only. The actual image may be somewhat larger or smaller depending on the recording system (NTSC or PAL) that was used to record the disc.





Fast Forward/Fast Reverse

- 1 Press **FWD** or **REV** when a disc is playing.
 - The disc begins fast scan at $\times 2$ speed.



- Two speeds are available. Each time **FWD** or **REV** is pressed, the speed of fast scan changes in the following sequence:

$\times 2 \leftrightarrow \times 8$

- You can also operate this function by holding down **SKIP** (**FWD**) or **SKIP** (**REV**) on the Player for two or more seconds.

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

Slow-Motion Play

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

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

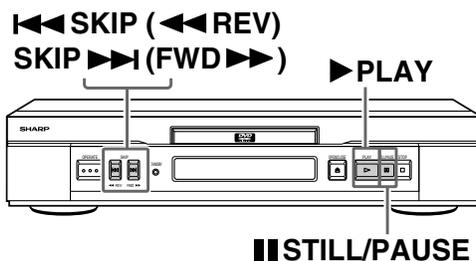
$\rightarrow \times 1/2 \rightarrow \times 1/8 \rightarrow \times 1/16$

- * On VIDEO CDs, the reverse slow-motion playback (**REV SLOW**) is disabled.

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

NOTE

- On some discs, the fast scan function is disabled.
- Audio is not played back during fast scan (Audio CDs).
- The current track number and playback time are not shown on the screen for VIDEO CDs with PBC recorded (most version 2.0 discs).
- On some discs, the slow-motion playback functions are disabled.
- The slow-motion playback is disabled for Audio CDs.



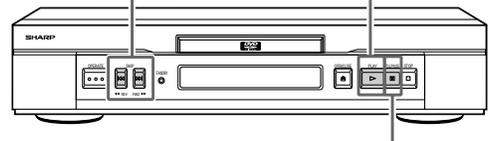
BASIC OPERATIONS



Still/Pause

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

◀◀ SKIP (◀◀ REV)
SKIP ▶▶▶ (FWD ▶▶▶) **▶ PLAY**



|| STILL/PAUSE

Frame Advance

- 1 Press **F.ADV ||▶** during playback.
 - The playback is paused (STILL/PAUSE).
 - The disc goes forward by one frame each time **F.ADV ||▶** is pressed.
 - The reverse frame advance playback (**◀|| F.ADV**) is disabled on VIDEO CDs.
- 2 Press **▶ PLAY** to return to the normal playback.



BASIC OPERATIONS

Skip (Forward/Reverse)

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

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

NOTE

- The frame advance playback functions are disabled for Audio CDs.
- On some discs, the skip functions are disabled.
- The playback image is not displayed during the skip. It resumes during playback following the skip.
- The current track number and playback time are not shown on the screen for VIDEO CDs with PBC recorded (most version 2.0 discs).

When VIDEO CDs are played in PBC mode:

- Pressing **SKIP ▶▶▶** causes the disc to move to the NEXT position.
- Pressing **◀◀ SKIP** causes the disc to move to the PREVIOUS position.

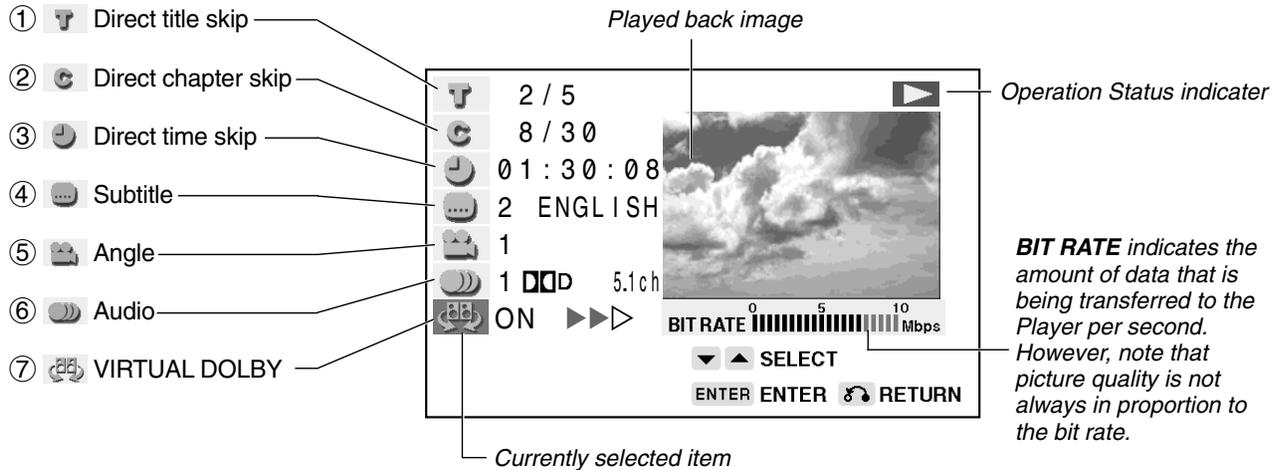


About the FUNCTION CONTROL Screen

Using FUNCTION CONTROL, you can check at a glance and change the current settings of the following items: SUBTITLE, ANGLE, AUDIO and VIRTUAL DOLBY.

FUNCTION CONTROL also allows you three ways of direct skips (title, chapter and time).

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



① **T** Direct title skip **44**

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

② **C** Direct chapter skip **44**

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

③ **⏪** Direct time skip **44**

- 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 **45**

- 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 **45**

- 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 **45**

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

⑦ **🔊** VIRTUAL DOLBY setting **46**

- 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 VIRTUAL DOLBY function, set the "COMPRESSION" to "OFF" (see page 30).

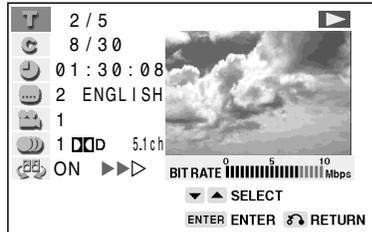
NOTE

- 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**, **MENU**, **TITLE**, **FWD**, **REV**, **VIRTUAL**, **ZOOM**, **SUBTITLE**, **ANGLE**, **AUDIO** or **DIRECT**.
- The setting screen is cleared automatically when appears a DVD screen that prompts you to change the scene by pressing **▲**, **▼**, **◀**, or **▶**.

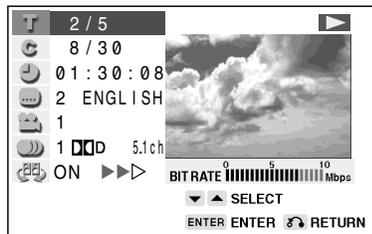
**Direct skip (title/chapter/time)**

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

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

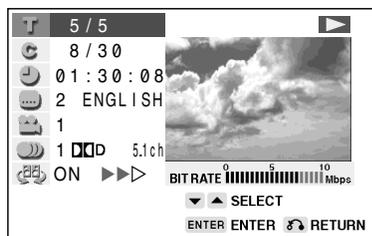


- 2 Use **▲** or **▼** to select **T** and then press **ENTER**.
(Example) Direct title skip



- 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.

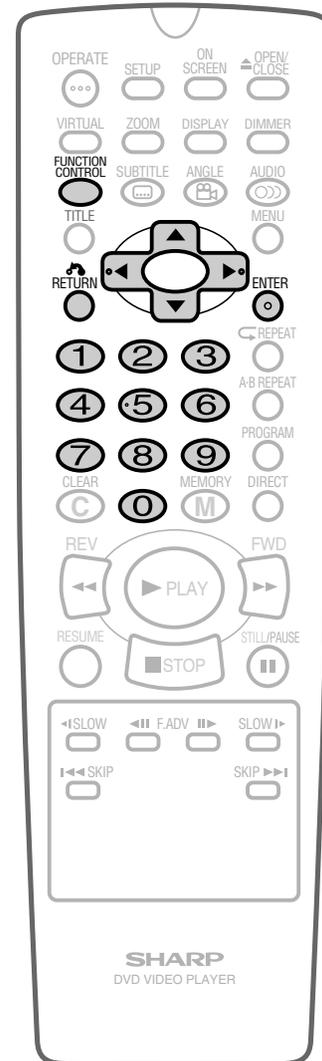
(Example) Entering title 5



- 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**.

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.
- See page 48 for information about the direct skip functions using the **DIRECT** button.

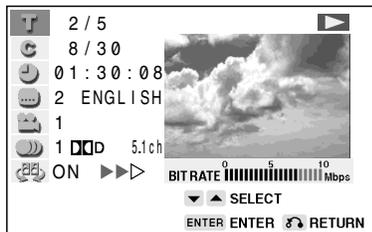




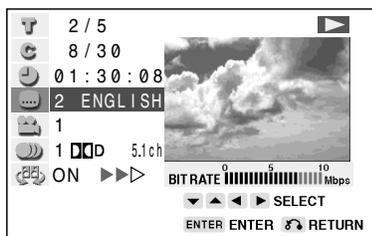
Subtitle/angle/audio setting

Use the following procedure to perform the Subtitle, Angle, or Audio setting.

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

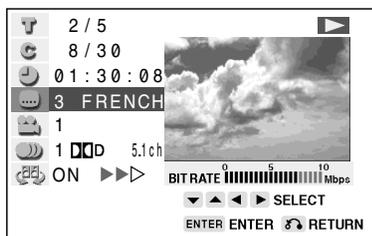


- 2 Use **▲** or **▼** to select **...** and then press **ENTER**.
(Example) Subtitle setting



- 3 Press **▲** or **▼** to select the subtitle 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 FRENCH"



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

NOTE

- See page 56 about how to change the settings using the **SUBTITLE** button, page 55 for the **ANGLE** button, and page 57 for the **AUDIO** button.

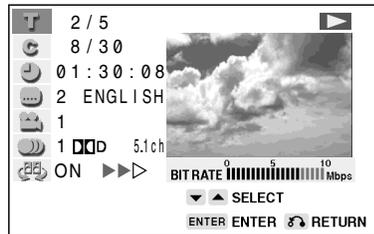




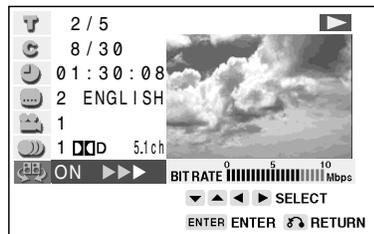
VIRTUAL DOLBY setting

Use the following procedure to change the setting between “ON” and “OFF”, and the level for the VIRTUAL DOLBY setting.

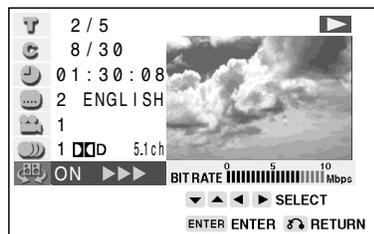
- 1 Press **FUNCTION CONTROL** during playback.
 - The FUNCTION CONTROL screen appears.



- 2 Use **▲** or **▼** to select and then press **ENTER**.
(Example) VIRTUAL DOLBY setting



- 3 Press **▲** or **▼** to toggle VIRTUAL DOLBY between “ON” and “OFF”.
- 4 While “ON” is selected, use **◀** or **▶** to change the level setting.



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

NOTE

- See page 58 about how to change the setting using the **VIRTUAL** button.





DVD

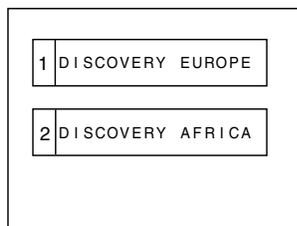


Direct Selection of Scenes

Selecting Scenes by Title Number

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

(Example)

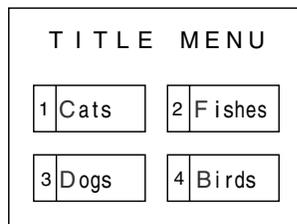


- 2 Use the number buttons (0 to 9) to enter the desired title, or ▲, ▼, ◀ or ▶ to highlight the desired title.
- 3 When you press **M** (MEMORY), **ENTER** or ▶ **PLAY**, the title specified in step 2 starts playing.

Selecting Scenes from the Menu Screen

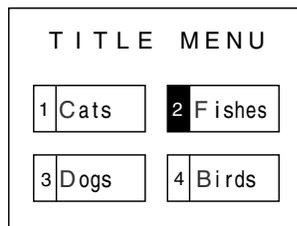
- 1 Press **MENU** to show the menu screen.

(Example)



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

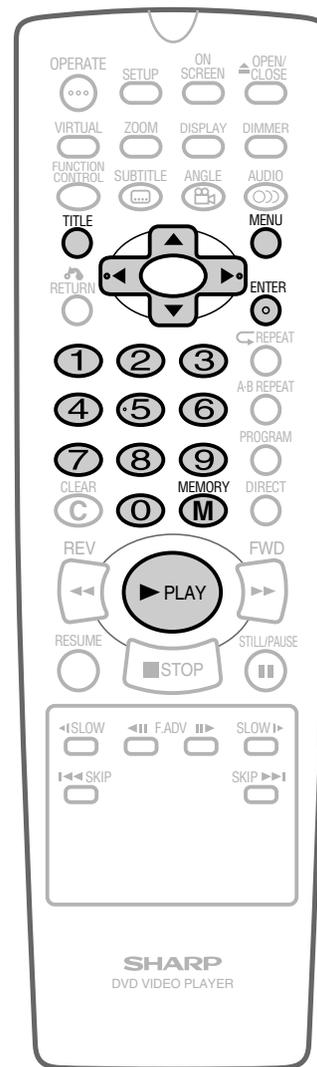
(Example) Title 2 selected.



- 3 When you press **M** (MEMORY), **ENTER** or ▶ **PLAY**, title 2 starts playing.

NOTE

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





Direct Skip Function

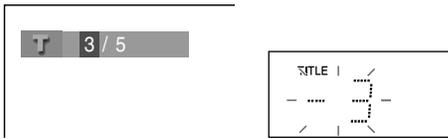
This function allows you to skip directly to the beginning of any title or chapter.

• Direct Title Skip

- 1 While a disc is playing or is stopped, press **DIRECT**.
 - The following screen appears when pressing **DIRECT** in stop mode.



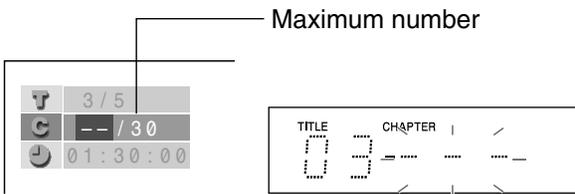
- 2 Using the number buttons (0 to 9) or ▲, ▼, enter a title number. (If you enter two or more digits, the last two digits are displayed.) (Example) Entering title 3



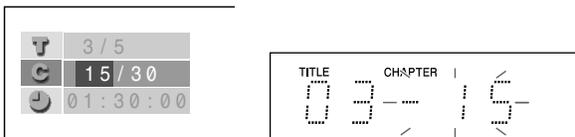
- 3 Press **ENTER** to skip to the title you specified.
 - If no button is pressed within 10 seconds, the specification display disappears.

• Direct Chapter Skip

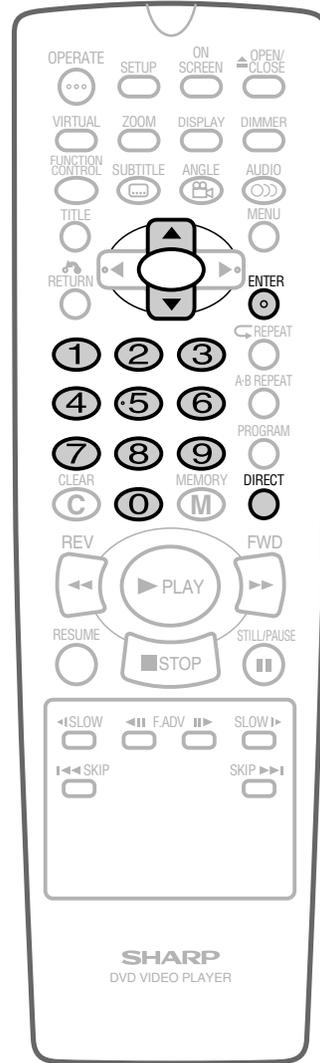
- 1 While a disc is playing, press **DIRECT** twice. (Press once for a title and twice for a chapter.)
 - This function is disabled in stop mode.



- 2 Using the number buttons (0 to 9) or ▲, ▼, enter the desired chapter number. (If you enter three or more digits, the last three digits are displayed.) (Example) Entering chapter 15



- 3 Press **ENTER** to skip to the chapter you specified.
 - If no button is pressed within 10 seconds, the specification display disappears.



NOTE

- The Direct Title Skip function does not operate on discs on which no titles are recorded.
- The Direct Chapter Skip function cannot be used while a disc is stopped.

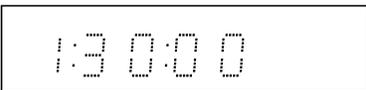
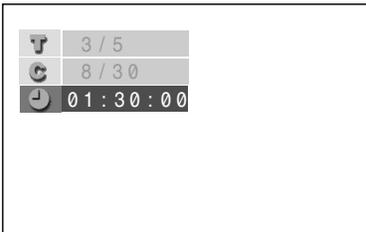
SPECIAL FUNCTIONS



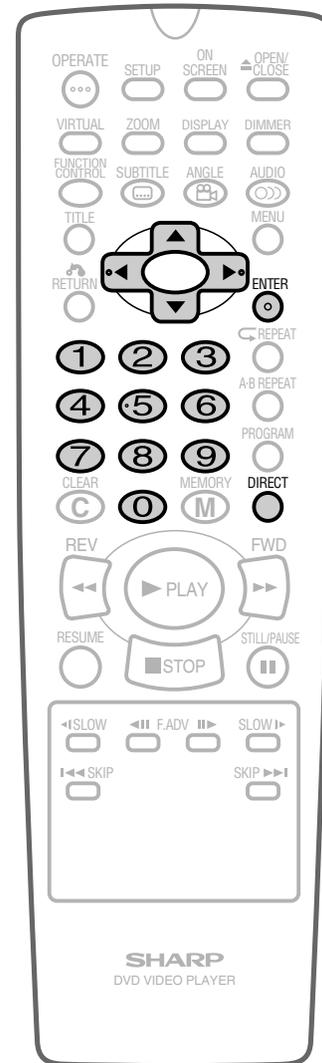
• Direct Time Skip

Direct time skip lets you skip directly to a specific location on a disc. When a disc is playing, make notes of the elapsed time at the locations to which you later want to skip. Later you can skip directly to a location by specifying its time.

- 1 While a disc is playing, press **DIRECT** three times. (Once for a title, twice for a chapter and three times for a time.)
 - This function is disabled in stop mode.
- 2 Using the number buttons (0 to 9) or ▲, ▼, enter the time.
 - Use ◀ or ▶ to move the highlighting to the next or previous digit.



- 3 Press **ENTER** to skip to the point you specified.
 - If no button is pressed within 10 seconds, the specification display disappears.



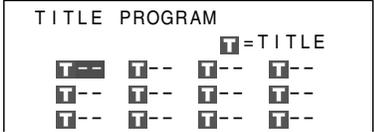


Programmed Playback

The two types of programmed playback provided by this Player are title programmed playback, chapter programmed playback.

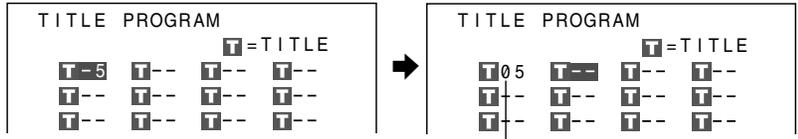
Title Programmed Playback

- 1 Press **PROGRAM** while the disc is stopped.
 - The "TITLE PROGRAM" screen appears.



- 2 Use the number buttons (0 to 9) to enter the title numbers in -- and then press **M** (MEMORY). (The highlight moves to the right (next field).)
 - If the entered title number does not exist on the disc, the number is ignored when **M** (MEMORY) is pressed. Press **C** (CLEAR) to clear.

(Example) Title 5 entered.



A zero (0) is automatically inserted before the first digit.

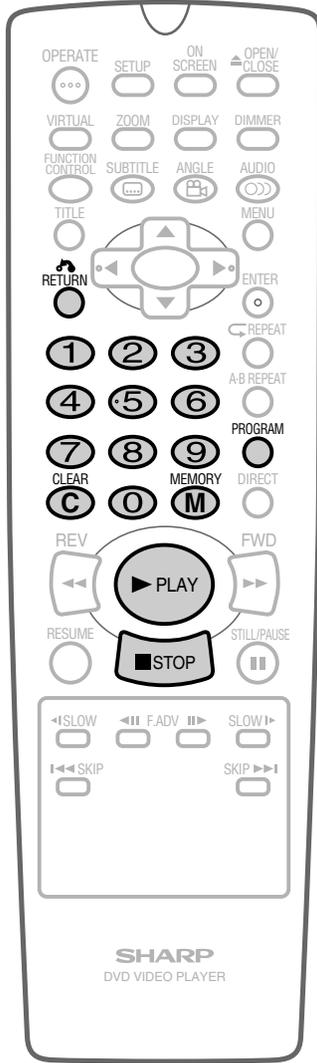
- 3 Repeat step 2 for each of the titles that you want to play as part of the program.
 - If you enter two or more digits, only the last two digits are displayed.
 - **If you hold down C (CLEAR) for 2 seconds or longer while you are entering numbers, all the entered numbers are erased and the highlight returns to the initial (top left) position.**
 - If you press **C** (CLEAR) while you are entering a title number, the number entered reverts to --.
 - If you press **C** (CLEAR) when the Player is awaiting input (cursor in --), the cursor highlight returns to the previous location.
- 4 Press **▶PLAY** to begin playing the programmed titles. (Press this button while the "TITLE PROGRAM" screen is displayed.)
 - PROGRAM indicator lights on the front panel display.



- 5 Press **■STOP** to stop programmed playback.

NOTE

- On some discs, the programmed playback is disabled.
- Up to 20 titles can be programmed.
- To exit the "TITLE PROGRAM" screen, press **RETURN** or **■STOP**.



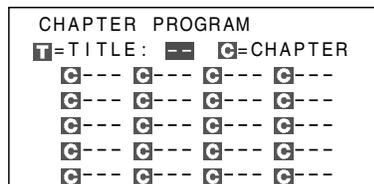
SPECIAL FUNCTIONS



DVD

Chapter Programmed Playback

- Press **PROGRAM** twice while the disc is stopped. (Press once for a title and twice for a chapter.)
 - The "CHAPTER PROGRAM" screen appears.



- First, use the number buttons (0 to 9) to specify the desired title number and then press **M** (MEMORY).
- Use the number buttons (0 to 9) to enter the chapter number in --- and then press **M** (MEMORY). (The highlight moves to the right (next field).)
 - If the entered chapter number does not exist on the disc, the number is ignored when **M** (MEMORY) is pressed. Press **C** (CLEAR) to clear.

(Example) Chapter 35 entered.

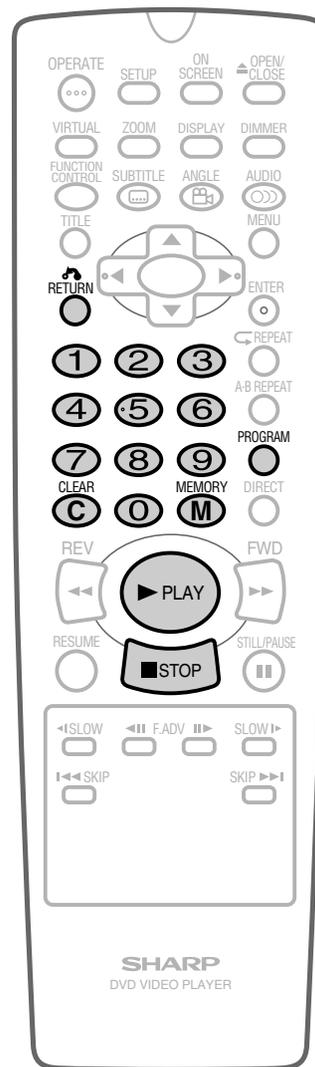
(0 35 0) → (0⁰35 0---) A zero (0) or double-zero (00) is automatically inserted before the first or second digit.

- Repeat step 3 for each of the chapters that you want to play as part of the program.
 - If you enter three or more digits, only the last three digits are displayed.
 - If you hold down C (CLEAR) for 2 seconds or longer while you are entering numbers, all the entered numbers are erased and the highlight returns to the initial (top left) position.**
 - If you press **C** (CLEAR) while you are entering a chapter number, the number entered reverts to ---.
 - If you press **C** (CLEAR) when the Player is awaiting input (cursor in ---), the cursor highlight returns to the previous location.
- Press **▶PLAY** to begin playing the programmed chapters. (Press this button while the "CHAPTER PROGRAM" screen is displayed.)
 - PROGRAM indicator lights on the front panel display.

- Press **■STOP** to stop programmed playback.

NOTE

- Up to 20 chapters can be programmed.
- To exit the "CHAPTER PROGRAM" screen, press **RETURN** or **■STOP**.



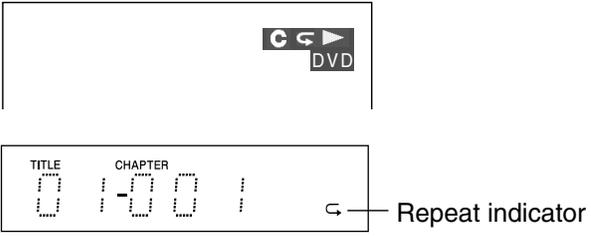


DVD

Repeat Playback

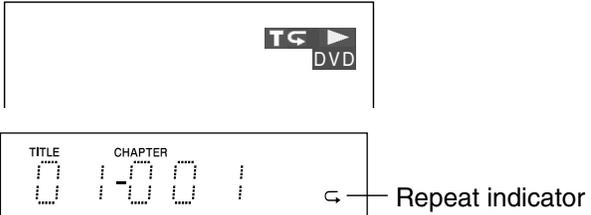
Chapter Repeat

1 If you press **REPEAT** while a disc is playing, the current chapter is played repeatedly.



Title Repeat

2 If you press **REPEAT** during chapter repeat playback, the current title is played repeatedly.

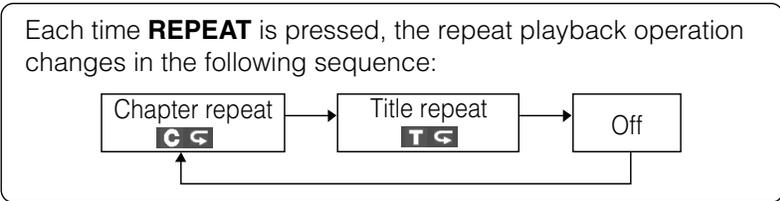


- The front panel displays are the same as for chapter repeat playback.

Repeat Off

3 Press **REPEAT** during title repeat playback to quit the repeat playback operation and resume normal playback.

- The TV screen and front panel displays are the same as for normal playback.



NOTE

- Repeat playback is disabled on some discs.
- On discs without chapters, the Player repeats the current title.



SPECIAL FUNCTIONS

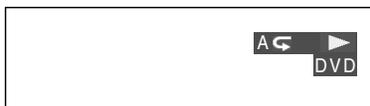


DVD

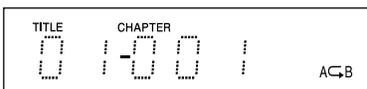
A-B Repeat

A-B repeat allows you to repeat specified section (from A to B) on a disc.

- 1 While you are playing a disc, press **A-B REPEAT** when you reach the start of the section to be repeated.



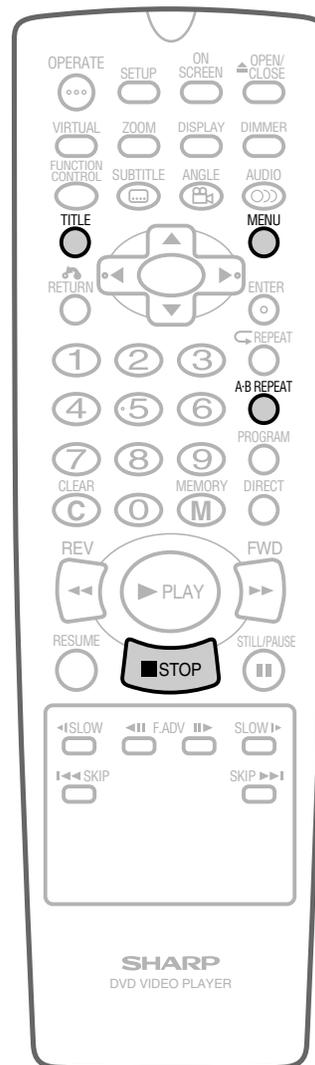
- 2 While the disc is playing the same title (same chapter), press **A-B REPEAT** again when you reach the end of the section to be repeated.



- The A-B repeat begins from the point where you specified in step 1.
- To cancel A-B repeat, press **A-B REPEAT** again during A-B repeat playback or press **STOP**, **TITLE** or **MENU**.

NOTE

- A-B repeat can only be used within the same title. (On some DVDs, A-B repeat is restricted to the same chapter.) If the start and end of the section to be repeated are in different titles/chapters, A-B repeat is cancelled.
- If the 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.





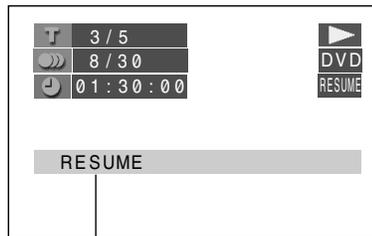
DVD



Resume Function

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

- 1 Press **RESUME** at the desired point during playback.
 - “RESUME” appears followed by “RESUME” on the screen.
 - The Player stores the location at which **RESUME** is pressed.
 - Each press of **RESUME** replaces the location stored with the last press of **RESUME** with the new location.



Displayed for a few seconds after you press **RESUME**.

- 2 Press **STOP**.
- 3 Press **RESUME**.
 - Playback resumes from the location which you stored in step 1.
 - The location stored in step 1 is cleared after this step is performed.

NOTE

- The continued playback described here may not be possible on some discs (such as discs that automatically start playing when the disc tray closes).



When you turn off the Player's power after pressing **STOP** in step 2 and then you turn it on again and press **RESUME**, playback resumes from the location which you stored in step 1. This function is disabled on some discs.





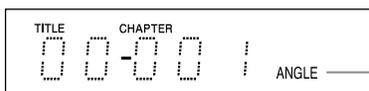
Angle Selection

Some DVDs contain scenes which have been shot 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.)

- While you are playing a DVD with different angles recorded, press **ANGLE** to view the number of the current angle.
 - If only one angle is recorded, XX is displayed.



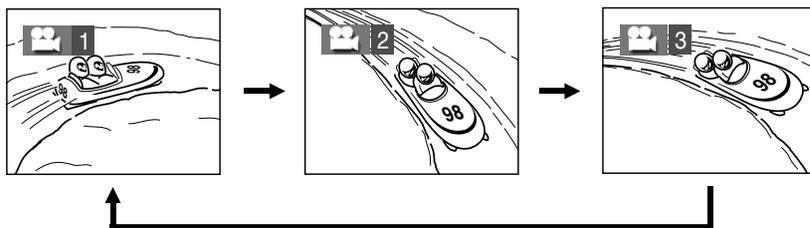
Number changes to show the number of the current angle. (The maximum number stipulated by the manufacturers is 9.)



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

- 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.



SPECIAL FUNCTIONS

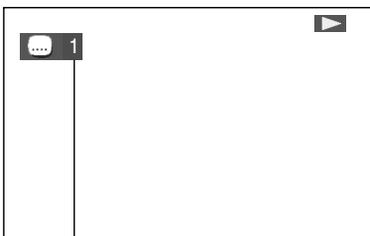


DVD



Subtitle Selection

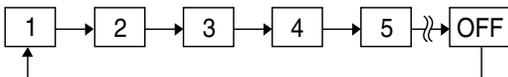
- While a DVD is playing, press **SUBTITLE** to display the current language setting, as shown in the example below.
 - The number of languages recorded differs depending on the disc.
 - If no subtitles are recorded on the disc,  XX is displayed.



Number of the subtitle language currently playing (The maximum number of subtitle languages stipulated by the manufacturers is 32.)

- Press **▲** or **▼** (or **SUBTITLE**) to switch to the next language recorded on the disc.
 - You can toggle the setting between “ON” and “OFF” by pressing **◀** or **▶**.
 - About two seconds later, playback continues with the new subtitle you selected.
 - If no button is pressed within 10 seconds, playback continues without changing the current subtitle.

(Example)



NOTE

- This function can only be used for discs on which subtitles have been recorded in multiple languages.
- Some DVDs 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 your Player.

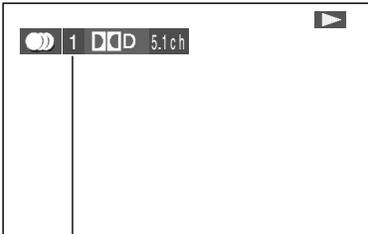




Audio Selection

On some discs, the sound is recorded in two or more formats of Dolby Digital (5ch or 5.1ch), DTS, MPEG Audio, Dolby Pro Logic and Linear PCM. Use the procedure below to select the type of playback.

- 1 While a disc is playing, press **AUDIO** to show the current audio format number.



Recorded audio format number changes sequentially. (The maximum number of audio formats stipulated by the manufacturers is 8.)

- 2 While the audio format number is displayed, press ▲ or ▼ (or **AUDIO**) to switch to the next audio format recorded on the disc.
 - If only one audio format is recorded, the number does not change.
 - About two seconds later, playback continues in the new audio format.
 - If no button is pressed within 10 seconds, playback continues without changing the current audio format.



SPECIAL FUNCTIONS



DVD



VIRTUAL DOLBY (QSURROUND) Selection

This function allows you to enjoy a “surround sound” effect when you are using an analogue connection (using AUDIO OUT on the Player) to 2-channel audio equipment (TV, etc.).

Preparation:

- When you use the VIRTUAL DOLBY (QSURROUND) function, set the “COMPRESSION” setting in “AUDIO SETUP” to “OFF” (see page 30).

Refer to the table below about the types of audio format with which VIRTUAL DOLBY (QSURROUND) works.

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

- While a disc is playing, press **VIRTUAL** to display the current setting.
 - Pressing **VIRTUAL** toggles the setting between “ ON” and “ OFF”.
 - When VIRTUAL is on, **VIRTUAL** lights on the front panel display.
- While the “ 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.
- Use **◀** or **▶** to change the level.

Press **◀** Press **▶**.



- Pressing **ENTER** makes the level indicator go off.
- If no change is made within 10 seconds after the level is set, the level indicator goes off.

NOTE

- VIRTUAL DOLBY (QSURROUND) does not operate when you set the “COMPRESSION” setting in “AUDIO SETUP” to “ON”.
- VIRTUAL DOLBY (QSURROUND) does not operate when you are using a Digital connection.
- QSURROUND™ is a trademark of QSound Labs, Inc.





Direct Selection of Scenes

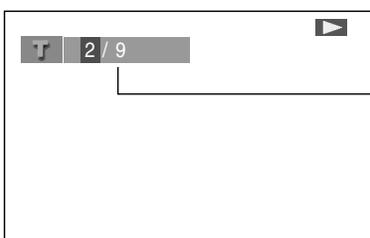
Direct Skip Function

This function allows you to skip directly to the beginning of any track while a disc is playing or stopped.

• Direct Track Skip

- 1 While a disc is playing or is stopped, enter the desired track number using the number buttons (0 to 9). (If you enter two or more digits, the last two digits are displayed.)

(Example) Entering track 2



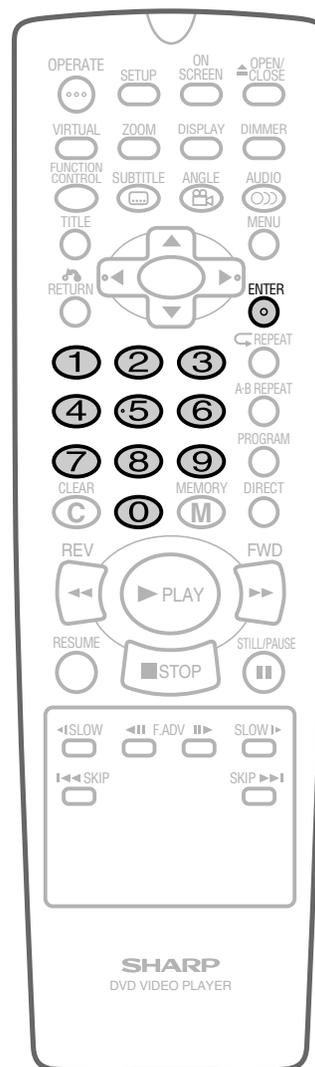
Maximum number



- 2 Press **ENTER** to skip to the point you specified.
 - If no button is pressed within 10 seconds, the specification display disappears.

NOTE

- The direct time skip function does not operate on disc on which no times are recorded.
- The direct track function does not operate during PBC playback of a VIDEO CD. Use the function while disc playback is stopped.



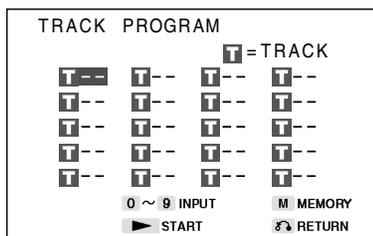


Programmed Playback

This function provides track programmed playback for VIDEO CDs/ Audio CDs.

Track Programmed Playback

- 1 Press **PROGRAM** while the disc is stopped.
 - The "TRACK PROGRAM" screen appears.



- 2 Use the number buttons (0 to 9) to enter the track number in -- and then press **M** (MEMORY). (The highlight moves to the right (next field).)
 - If the entered track number does not exist on the disc, the number is ignored when **M** (MEMORY) is pressed. Press **C** (CLEAR) to clear.

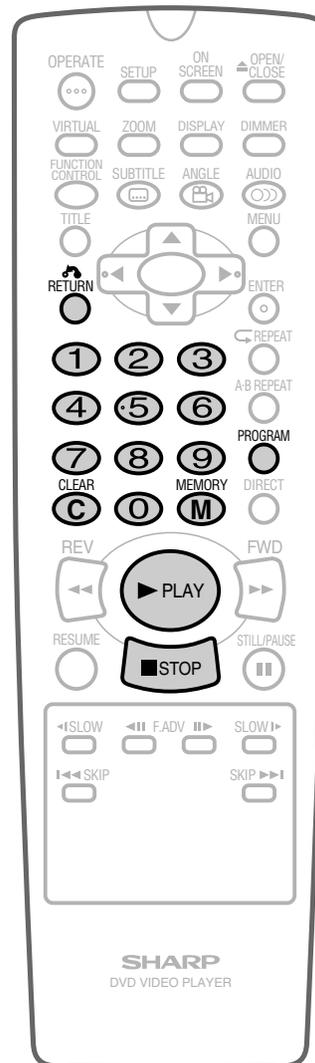
(Example) Track 7 entered.

(**0** **7** **0**) → (**0** **07** **0--**) A zero (0) is automatically inserted before the first digit.

- 3 Repeat step 2 for each of the tracks that you want to play as part of the program.
 - If you enter two or more digits, only the last two digits are displayed.
 - Up to 20 tracks can be programmed.
 - **If you hold down C (CLEAR) for 2 seconds or longer while you are entering numbers, all the entered numbers are erased and the highlight returns to the initial (top left) position.**
 - If you press **C** (CLEAR) while you are entering a track number, the number entered reverts to --.
 - If you press **C** (CLEAR) when the Player is awaiting input (cursor in --), the cursor highlight returns to the previous location.
 - To exit the "TRACK PROGRAM" screen, press **RETURN** or **STOP**.

- 4 Press **▶PLAY** to begin playing the programmed tracks. (Press this button while the "TRACK PROGRAM" screen is displayed.)
 - PROGRAM indicator lights on the front panel display.

- 5 Press **■STOP** to stop programmed playback.





Repeat Playback

A-B Repeat

A-B repeat allows you to repeat specified section (from A to B) on a disc.

- 1 While you are playing a disc, press **A-B REPEAT** when you reach the start of the section to be repeated.



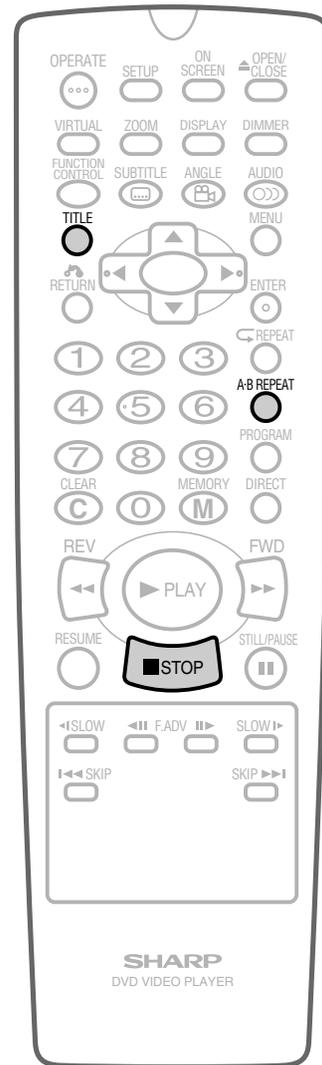
- 2 While the disc is playing the same track, press **A-B REPEAT** again when you reach the end of the section to be repeated.



- The A-B repeat begins from the point where you specified in step 1.
- To cancel A-B repeat, press **A-B REPEAT** again during A-B repeat playback or press **STOP** or **TITLE**.

NOTE

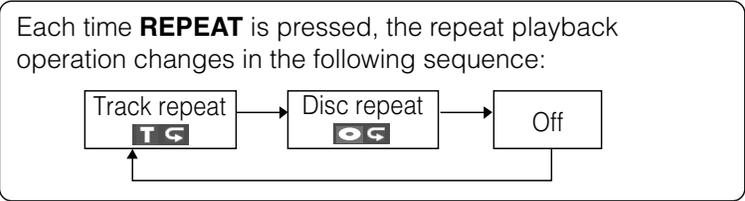
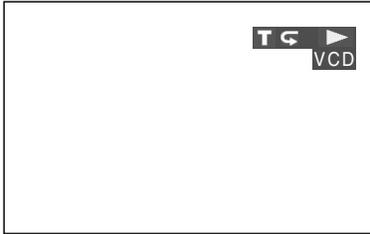
- A-B repeat can only be used within the same track. If the start and end of the section to be repeated are in different tracks, A-B repeat is cancelled.
- If the front panel display does not show the elapsed playback time while a disc is playing, A-B repeat playback cannot be used for that disc.





Disc Repeat / Track Repeat

- While a disc is playing, press **REPEAT**.
 - The disc currently playing is played repeatedly.



NOTE

- The disc repeat function cannot be used on VIDEO CDs with PBC mode playback (most version 2.0 discs).
- Track repeat cannot be used on some VIDEO CDs or Audio CDs. Use the Programmed Playback function instead. (See page 60.)



SPECIAL FUNCTIONS



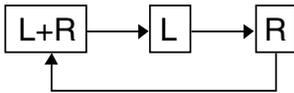
Audio Selection

Some VIDEO CDs and Audio CDs are recorded using two separate channels named “L” (left) and “R” (right). The following are two examples of how two-channel audio is used.

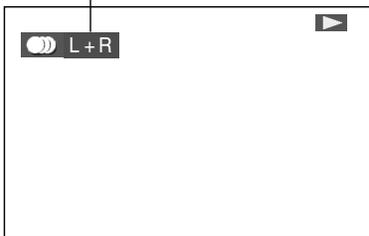
- Example 1: English on the L-channel and French or some other language on the R-channel.
- Example 2: The left side of an orchestra on the L-channel and the right side on the R-channel.

Your Player lets you select one of three audio playback types when playing such a disc: L-channel only, R-channel only, L+R (both) channels.

- 1 While a disc is playing, press **AUDIO** to show the current playback type.
- 2 Press **▲** or **▼** (or **AUDIO**) to change the type of Audio playback.
 - The Audio playback changes as follows:



If no button is pressed within 10 seconds, the indicator goes off.



NOTE

- This function can only be used for discs on which the sound has been recorded in multiple formats.
- To play back VIDEO CDs recorded with DTS format, audio mode should be set to “L+R”. The Digital Out signal cannot be output correctly if audio mode is set to “L” or “R”.





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	GB	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				

OTHER INFORMATION



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.

VIDEO CD (VCD)

This contains recordings of pictures and sound whose quality is on a par with that of videotape. This Player also supports VIDEO CDs with playback control (version 2.0).

Region Number

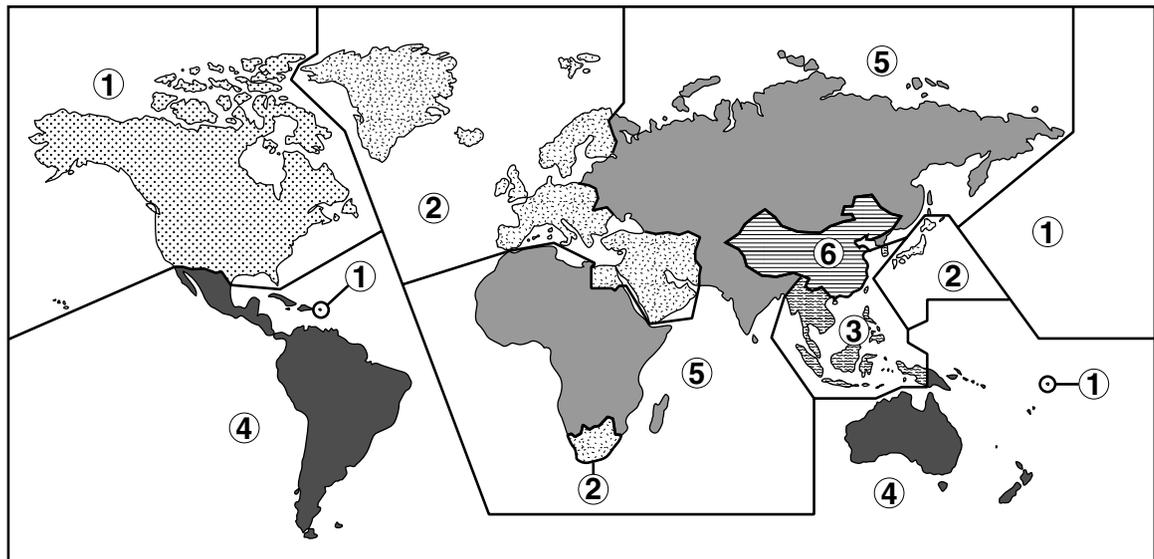
Number identifying a geographic region of compatibility for a DVD.

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

The world map for all region numbers



OTHER INFORMATION



Pickup	Laser device that reads the data from a disc for playback.
Title Number	These numbers are recorded on DVDs. When a disc contains two or more movies, these movies are numbered as title 1, title 2, etc.
Chapter Number	These numbers are recorded on DVDs. 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.
Track Number	These numbers are assigned to the tracks which are recorded on VIDEO CDs and Audio CDs. They enable specific tracks to be located quickly.
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.)
Dolby Digital (5.1 channel)	A sound system developed by Dolby Laboratories Inc. that gives movie theatre ambience to audio output when the Player is connected to a Dolby Digital 5.1 channel processor or amplifier.
DTS	This is a digital sound system developed by Digital Theater Systems for use in cinemas. This system uses 6 audio channels and provides accurate sound field positioning and realistic acoustics. (By connecting a DTS Digital Surround decoder, you can also listen to DTS Digital Surround sound.)
Linear PCM Sound	Linear PCM is a signal recording format used for Audio CDs.
Letter Box 	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.
Pan Scan 	Screen size that cuts off the sides of the image to allow playing of Wide (16:9) software on a connected 4:3 TV.
Compression (Dolby Digital output level)	Setting that increases the average volume of Dolby Digital audio when playing a DVD.
Angle	Recorded onto some DVDs 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, the ANGLE button can be used to view the scene from different angles.



- Subtitles** These are the printed lines appearing at the bottom of the screen which translate or transcribe the dialog. They are recorded on DVDs.
- Virtual Dolby (QSURROUND)** Provides rich surround sound by downmixing Dolby Digital 5.1 channel and Dolby Surround (Pro Logic) to 2-channel audio.
- 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”.
- Playback Control (PBC)** This is recorded on a VIDEO CD (version 2.0). The scenes or information to be viewed (or listened to) can be selected interactively with the TV monitor by looking at the menu shown on the TV monitor.



Troubleshooting

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

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 Player from the power outlet briefly and then plug it in again.
<ul style="list-style-type: none"> The 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 6 and 7.) Is there dew in the Player? (See page 5.)
<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 15 – 20.) Is the disc scratched? (See pages 6 and 70.) Is the disc dirty? (See pages 6 and 70.) 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 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 Player? Is the Remote too far from the Player, or is there any obstacle between the Remote and the Player?
<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)? Did you use AUDIO to select Dolby Digital (5ch or 5.1ch) sound? (See page 57.)
<ul style="list-style-type: none"> The image and sound are garbled. 	<ul style="list-style-type: none"> Is the disc scratched? (See pages 6 and 70.) Are vibrations from the speakers affecting the Player?

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 Player and plug it in again after a few minutes.



Specifications

Signal System	NTSC/PAL
Video input	Input jack: Pin-jack/SCART
Video output	Output jack: Pin-jack/SCART Output level: 1 Vp-p (75Ω)
S video output	Y output level: 1 Vp-p (75Ω) C output level: 0.3 Vp-p (75Ω) Output jack: S connector
Audio output	Output jack: Pin-jack/SCART Output level: 2 Vrms (1 kHz, 0 dB)
Digital audio output	Optical digital output: Optical jack Coaxial digital output: Pin-jack
Video signal horizontal resolution	500 lines (DVD)
S/N ratio	60 dB
Audio signal frequency characteristics	For DVD linear PCM playback: 4 Hz to 22 kHz (48 kHz sampling) 4 Hz to 44 kHz (96 kHz sampling) CD playback: 4 Hz to 20 kHz (EIAJ)
S/N ratio	CD: 115 dB, 1 kHz (EIAJ)
Dynamic range	DVD linear PCM: 103 dB (EIAJ) CD: 103 dB (EIAJ)
Total harmonic distortion ratio	CD: 0.006% (EIAJ)
Pickup	Wave length: 650 nm Laser output: Max. 0.7 mW
Operating temperature	5°C to 40°C
Storage temperature	-20°C to 55°C
Power supply	220 V to 240 V AC, 50/60 Hz
Power consumption	15 W (during playback) Less than 3 W (standby mode)
Dimensions	430 mm × 90.5 mm × 252 mm (W × H × D) (including attachments)
Weight	2.7 kg

Specifications are subject to change without notice.

Weight and dimensions are approximate.

Digital Output (Linear PCM)

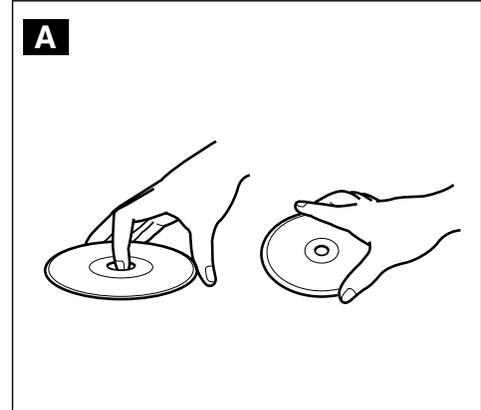
- The digital output format (optical or coaxial) used in this Player is linear PCM audio sampled at 44.1 kHz or 48 kHz. Linear PCM sound for DVD video discs sampled at 96 kHz cannot be output digitally. Check the disc jacket for information on the audio sampling used.



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, benzene, 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.



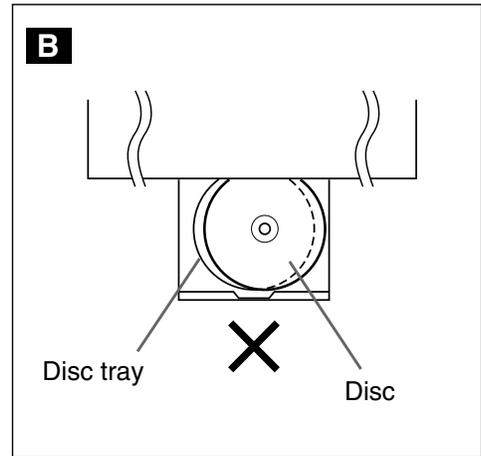
If the Surface is Soiled **(C)**

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

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

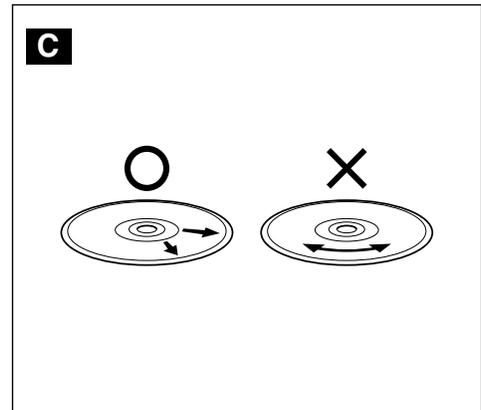
(If you wipe the discs using a circular motion, circular scratches are likely to occur, which will cause noise.)

If the playing surface of a disc is soiled or scratched, the Player 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 this 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 Player 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, benzene, thinner, cleaning fluid or other chemicals. And do not use compressed air to remove dust.

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DV-720S

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وظائف خاصة

معلومات اخرى

عربي 1 - 70 - A



رقم المنطقة لمشغل اسطوانة الفيديو الرقمية هذا، هو ٢.



NTSC/PAL

DOLBY DIGITAL

