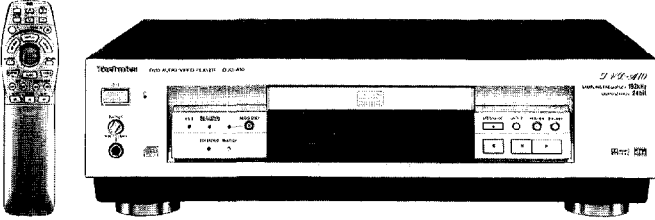


# Technics®

## DVD Audio/Video player

Operating Instructions

Model No. **DVD-A10**



**DVD**  
AUDIO/VIDEO™

COMPACT  
**disc**  
DIGITAL VIDEO



**Note:**

"EB" on the packaging indicates the United Kingdom.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

EB

VQT8399

## Dear customer

Thank you for purchasing this product.

For optimum performance and safety, please read these instructions carefully.

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## For your safety please read the following text carefully

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

## IMPORTANT

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


Blue: Neutral

Brown: Live

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

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

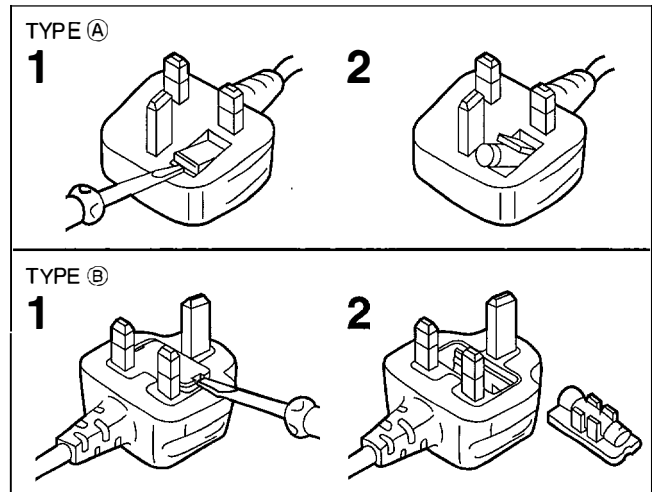
The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or Earth Symbol .

## How to replace the Fuse

• There are two types of the AC Mains Lead: (A) or (B) supplied with the player as shown below.

1. Open the fuse compartment with a screwdriver.
2. Replace the fuse and fuse cover.



Before use

## Safety information

Before use

### CAUTION!

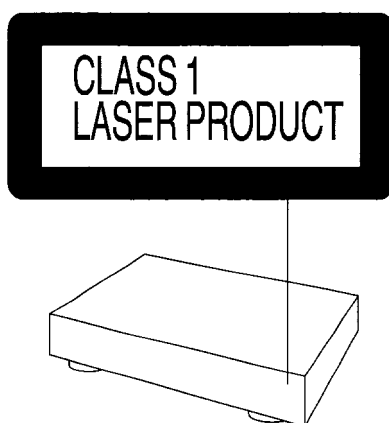
**THIS PRODUCT UTILIZES A LASER.  
USE OF CONTROLS OR ADJUSTMENTS OR  
PERFORMANCE OF PROCEDURES OTHER THAN THOSE  
SPECIFIED HEREIN MAY RESULT IN HAZARDOUS  
RADIATION EXPOSURE.  
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF.  
REFER SERVICING TO QUALIFIED PERSONNEL.**

### CAUTION!

**DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE,  
BUILT IN CABINET OR IN ANOTHER CONFINED SPACE.  
ENSURE THE UNIT IS WELL VENTILATED. ENSURE THAT  
CURTAINS AND ANY OTHER MATERIALS DO NOT  
OBSTRUCT THE VENTILATION TO PREVENT RISK OF  
ELECTRIC SHOCK OR FIRE HAZARD DUE TO  
OVERHEATING.**

CAUTION	-LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.
ATTENTION	-RAYONNEMENT LASER EN CAS D'OUVERTURE. NE PAS REGARDER DANS LE FAISCEAU.
VORSICHT	-LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT IN DEN STRAHL BLICKEN.
ADVARSEL	-LASERSTRÅLING VED ÅBNING. SE IKKE IND I STRÅLEN.
ADVARSEL	-LASERSTRÅLING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN.
VARNING	-LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN.
VARO!	-AVATTAESSA OLET ALTTIINA LASERSÄTEILYLLE. ÄLÄ TUJOTA SÄTEESEEN.
注意	- 当打开这里会出现激光, 请不要直视激光。
注意	- ここを開くとレーザー光が出ます。 レーザー光をのぞき込まないでください。

(Inside of player)



(Back of player)

## Safety precautions

### Placement

Set the unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration. These conditions can damage the cabinet and other components, thereby shortening the unit's service life.

Place it at least 15 cm away from wall surfaces to avoid distortion and unwanted acoustical effects.

Do not place heavy items on the unit.

### Voltage

Do not use high voltage power sources. This can overload the unit and cause a fire.

Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other place where DC is used.

### AC mains lead protection

Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock. Do not pull, bend, or place heavy items on the lead.

Grasp the plug firmly when unplugging the lead. Pulling the AC mains lead can cause electric shock.

Do not handle the plug with wet hands. This can cause electric shock.

### Foreign matter

Do not let metal objects fall inside the unit. This can cause electric shock or malfunction.

Do not let liquids get into the unit. This can cause electric shock or malfunction. If this occurs, immediately disconnect the unit from the power supply and contact your dealer.

Do not spray insecticides onto or into the unit. They contain flammable gases which can ignite if sprayed into the unit.

### Service

Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service center. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons.

Extend operating life by disconnecting the unit from the power source if it is not to be used for a long time.

## Features

### High sound quality

This unit includes a 192 kHz/24-bit audio digital-analogue convertor to get the best from the high quality sound recorded on DVDs. The system incorporates a variety of technologies for delivering high-quality sound, including a virtual battery operation mains-supply circuit providing high resistance to noise generated from the mains supply.

### High picture quality

The unit is equipped with a 10-bit video digital-analog convertor and 21-pin SCART terminals, enabling you to connect to professional class video monitors and to enjoy video with high clarity. By changing the picture mode, you can easily adjust the picture to the optimum settings for the kind of video software you are watching.

### A variety of convenient features

This unit is equipped to deal with the variety of convenient features recorded on DVDs, such as multiple soundtrack and subtitle languages and multiple angles.

### Surround systems

The unit is equipped with both Dolby Digital and DTS decoders to allow you to experience a full-fledged home theater system.

### Compatible with PAL DVD

#### AUDIO/VIDEO (Video CD) and NTSC DVD AUDIO/VIDEO (Video CD)

This player can play discs recorded in either PAL or NTSC format.

However, the player must be connected to a PAL TV which is capable of receiving PAL 525/60 system or to a Multi-system TV to play both PAL DVD AUDIO/VIDEO (Video CD) and NTSC DVD AUDIO/VIDEO (Video CD).

## Disc selection

Use this chart when selecting discs. You can use both 8 cm and 12 cm discs. Do not use a disc adaptor for 8 cm discs.

Disc type	Logo	Region number	Video system	Indication used in instructions
DVD-Audio			NTSC + PAL	
DVD-Video		Example:   	NTSC + PAL	
Video CD			NTSC + PAL	
CD				

Operations not indicated with these marks apply to all four disc types.

### Discs that cannot be played

DVD-ROM, DVD-R/DVD-RAM, CD-ROM, VSD, CDV, CD-G, CD-RW, DVD+RW, CVD, SVCD, Divx Video Discs, Photo CD, and CD-R.

The data on photo CDs and CD-R can be damaged if you attempt to play them.

### Region Management Information (DVD-Video only)

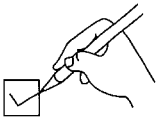
This unit responds to the Region Management Information recorded on DVDs. This unit's region number is "2". You cannot play the disc if the region number on the DVD does not correspond to the region number on the unit.

You can play discs marked "ALL".

You can play discs with labels containing the region number "2" and "ALL".

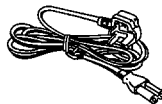
Before use

## Accessories



Please check and identify the supplied accessories.

AC mains lead (VJA0940) .....1



Audio/Video cable (VJA0788-D) .....1



### Note

The included AC mains lead is for use with this unit only. Do not use it with other equipment.

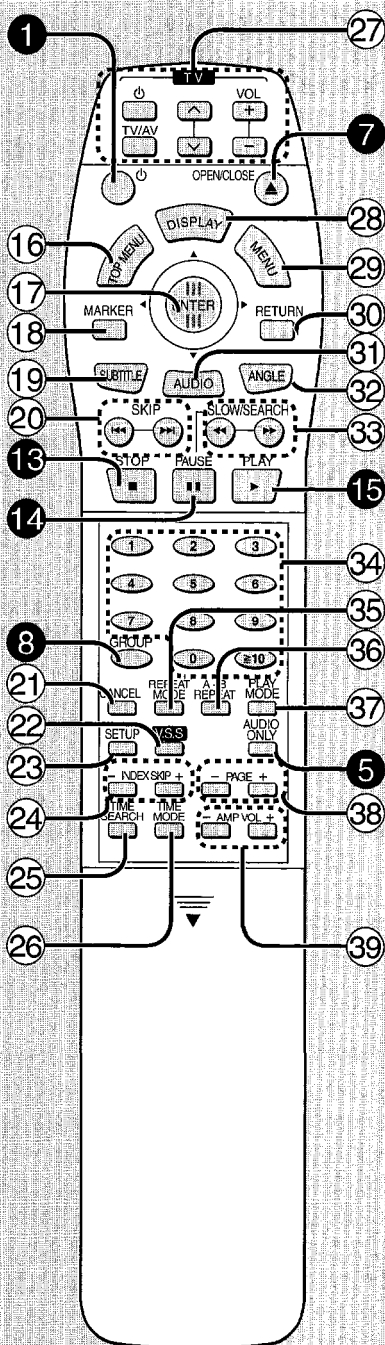
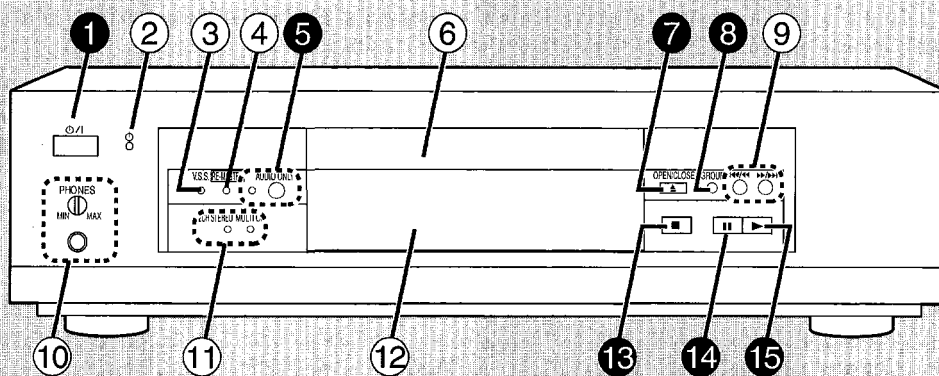
Use numbers indicated in parentheses when asking for replacement parts.

Remote control (VEQ2368) .....1



Batteries .....2





No.	Name	Ref. page
-----	------	-----------

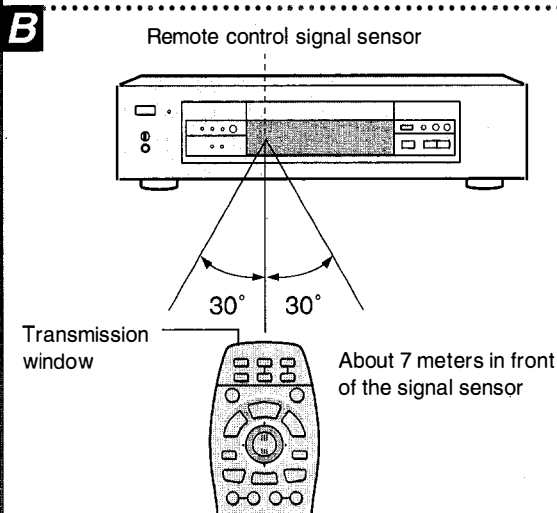
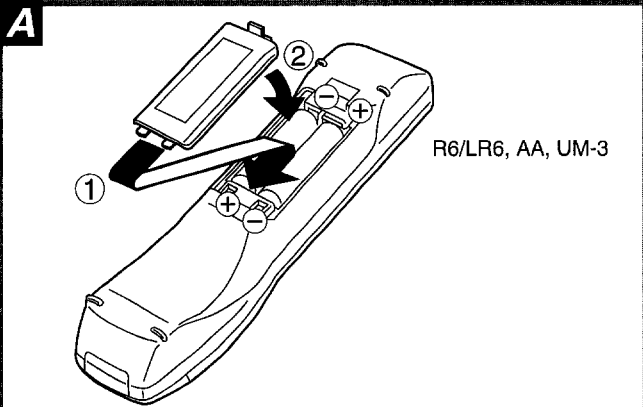
**Main unit**

- 1 Standby/on switch (⏻/⏻) .....10  
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- 2 Standby indicator (⏻)
- 3 V.S.S. (Virtual Surround Sound) indicator .....16
- 4 RE-MASTER indicator .....31  
Lights when the re-master circuit, which improves sound quality, is operating. (The re-master circuit works on 44.1/48 kHz 16 bit audio signals of 2-channels or less.)
- 6 AUDIO ONLY button and indicator .....13  
Disables video output while playing DVD-Audio.
- 6 Disc tray
- 7 OPEN/CLOSE button (▲)
- 6 GROUP select button .....14  
Press to select the groups on DVD-Audio.
- 9 SKIP and SEARCH buttons (◀◀/▶▶, ▶▶/▶▶) .....12
- 10 Headphone jack and headphone level control (PHONES) .....7
- 11 Soundtrack channel indicators  
MULTI CH: Lights when a signal of 3 or more channels is detected.  
2 CH STEREO: Lights when a 2-channel signal is detected.
- 12 Display
- 13 STOP button (■) .....11
- 14 PAUSE button (⏸) .....11
- 15 PLAY button (▶) .....11

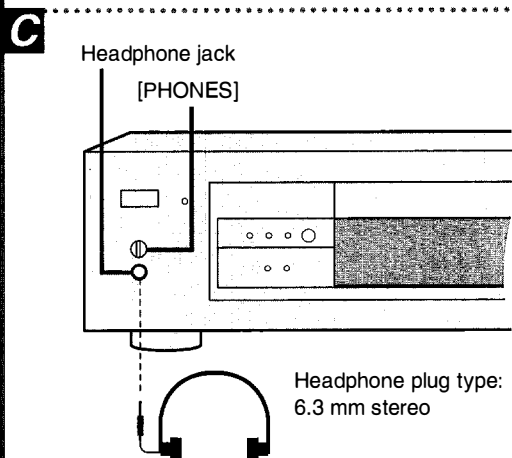
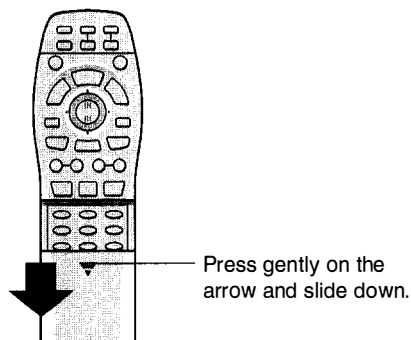
**Remote control**

- Buttons 1, 5, 7, 8 and 13 to 15 function in the same way as the controls on the main unit.
- 16 Top menu display button .....17
  - 17 Joystick .....11
  - 18 Marker button .....21
  - 19 Subtitle language button .....18
  - 20 SKIP buttons (◀◀, ▶▶) .....12
  - 21 Cancel button .....14
  - 22 V.S.S. (Virtual Surround Sound) button .....16
  - 23 Initial settings button .....10, 26
  - 24 Index skip button .....15
  - 25 Time search button .....15
  - 26 Time mode button .....15
  - 27 Television operation section .....43
  - 28 Display button .....22
  - 29 Menu display button .....17
  - 30 Return button .....10
  - 31 Soundtrack button .....17
  - 32 Angle button .....18
  - 33 SLOW/SEARCH buttons (◀◀, ▶▶) .....12, 13
  - 34 Numbered buttons .....11
  - 35 Repeat mode button .....21
  - 36 A-B REPEAT button .....21
  - 37 Play mode button .....15, 19, 20
  - 38 Page skip button .....15
  - 39 Amplifier volume buttons .....43

## The remote control



### How to open the remote control cover



### Battery installation **A**

#### Use of batteries

- Align the poles (+ and -) properly when inserting the batteries.
- Do not mix old and new batteries or different types of batteries.
- Do not recharge ordinary dry cell batteries.
- Do not heat or disassemble the batteries. Do not allow them to contact flame or water.
- Remove the batteries if the unit is not to be used for a long time.
- Do not keep together with metallic objects such as necklaces.
- Do not use rechargeable type batteries.
- Do not use batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.

If electrolyte leaks from the batteries, consult your dealer.

Wash thoroughly with water if electrolyte comes in contact with any part of your body.

### Correct method of use **B**

#### Operation notes

- Do not place obstacles between the remote control signal sensor and remote control unit.
- Do not expose the remote control signal sensor to direct sunlight or to the bright light of a fluorescent light.
- Take care to keep the remote control signal sensor and end of the remote control unit free from dust.
- If this system is installed in a rack with glass doors, the glass doors' thickness or colour might make it necessary to use the remote control a shorter distance from the system.

#### To prevent damage

- Never place heavy items on top of the unit.
- Do not disassemble or reconstruct the unit.
- Do not spill water or other liquids into the unit.

## Using headphones **C**

1. Set [PHONES] to "MIN" and connect the headphones (not included).
2. Adjust headphone volume with [PHONES].

#### Note

Avoid listening for prolonged periods of time to prevent hearing damage.



# Simple setup - Connection to a television

These pages explain how to connect the unit to a television and set it up so that you hear the audio through the television's speakers. Connections and procedures that enable you to enjoy the high-quality sound found on DVDs are described beginning on page 33.

## Connection

### Before connection

Turn off the power to all units. Read the operating instructions of the other equipment carefully.

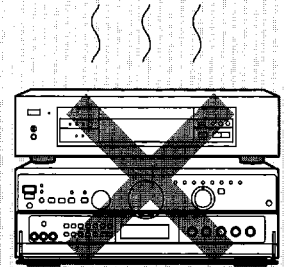
**Do not connect the AC mains lead until all other connections are complete.**

**(For UNITED KINGDOM ONLY)**  
**READ THE CAUTION FOR THE AC MAINS LEAD ON PAGE 3 BEFORE CONNECTION.**

### Connect Your DVD Audio/Video player Directly To Your TV Set

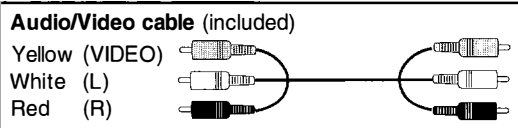
If the DVD-Audio/Video player is connected to the TV through a video cassette recorder, the picture may not be played back normally with some DVDs. So we strongly recommend you not to connect the DVD-Audio/Video player to your video cassette recorder when setting up your home entertainment system.

**Do not place the player on amplifiers or other equipment which may become hot.**



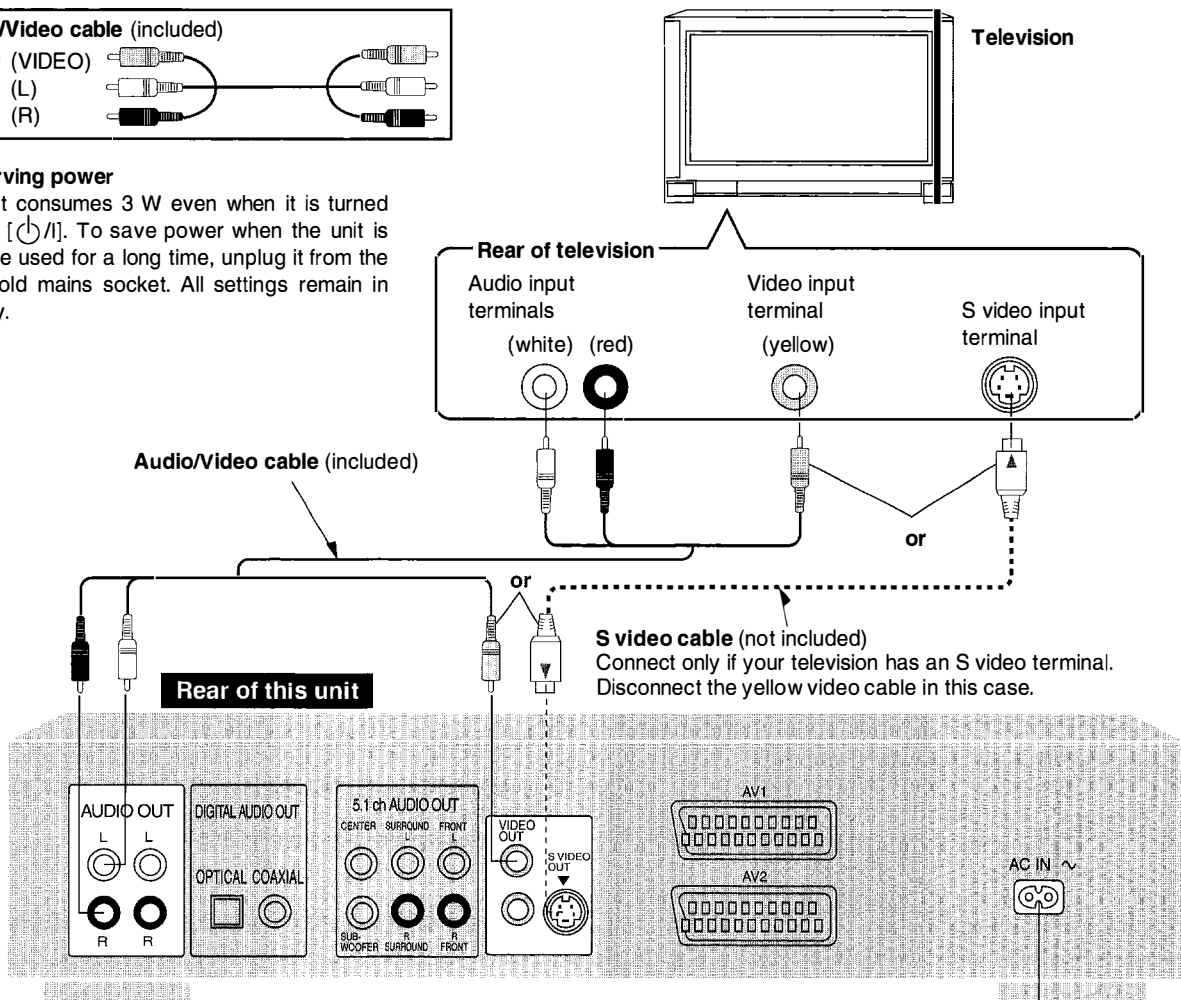
Before use

### • Connect the player to a television equipped with video and audio terminals



#### Conserving power

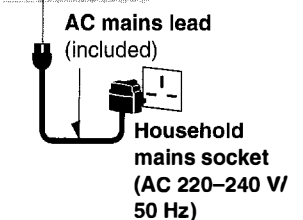
The unit consumes 3 W even when it is turned off with [Power/Off]. To save power when the unit is not to be used for a long time, unplug it from the household mains socket. All settings remain in memory.



**S video cable (not included)**  
 Connect only if your television has an S video terminal. Disconnect the yellow video cable in this case.

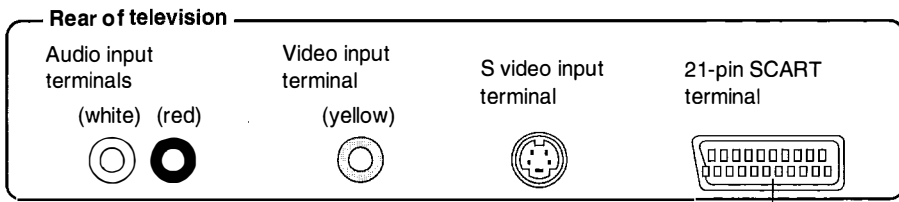
#### The S video terminals

Connections through these terminals provide higher quality pictures than through the video terminal.





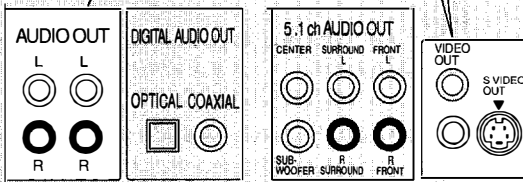
● Connection to a television with 21-pin SCART terminal



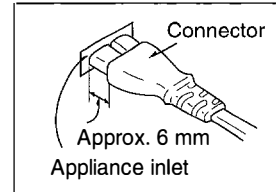
**Insertion of connector:**

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing. However there is no problem using the unit.

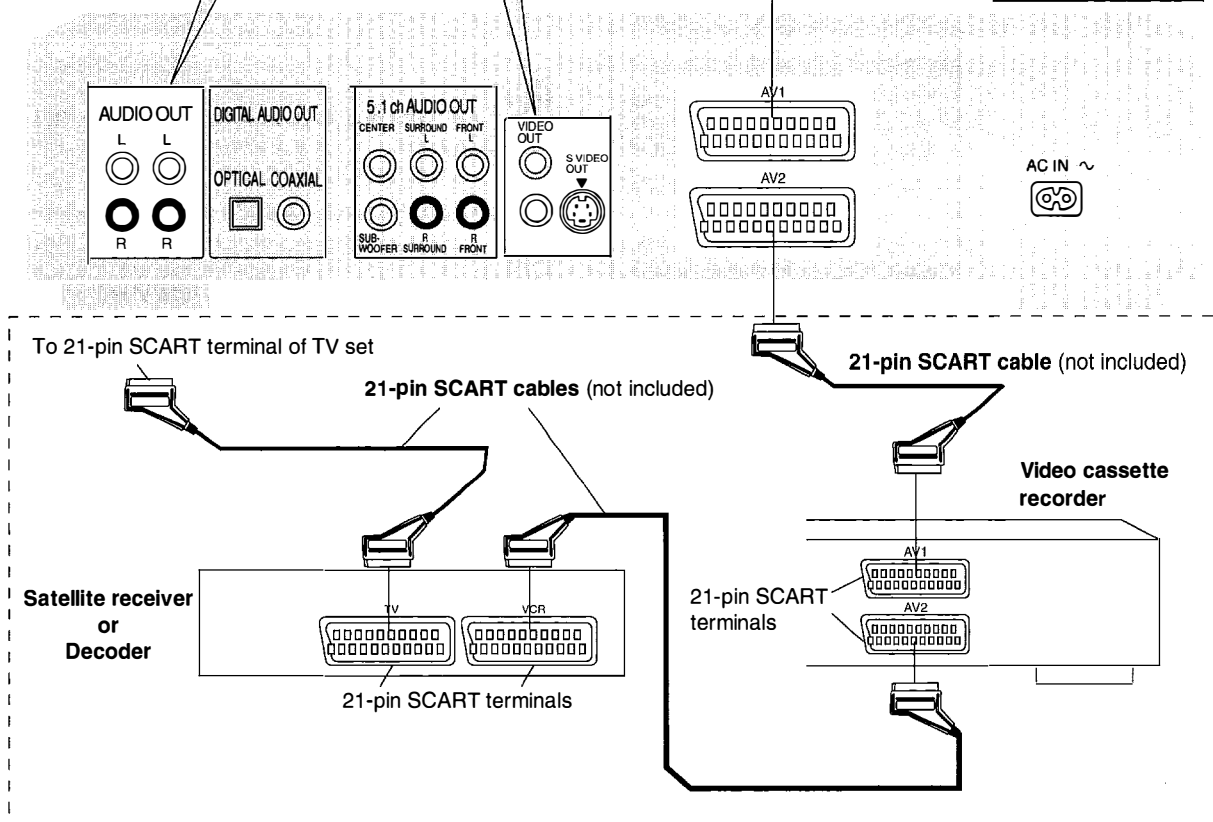
**Note:**  
Audio and video out through AUDIO OUT connectors (red and white)/VIDEO OUT connector (yellow) are only from DVD playback, not from other sources connected to the SCART terminals.



21-pin SCART cable (not included)

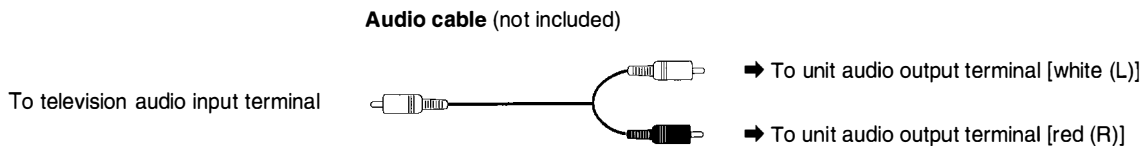


**Rear of this unit**

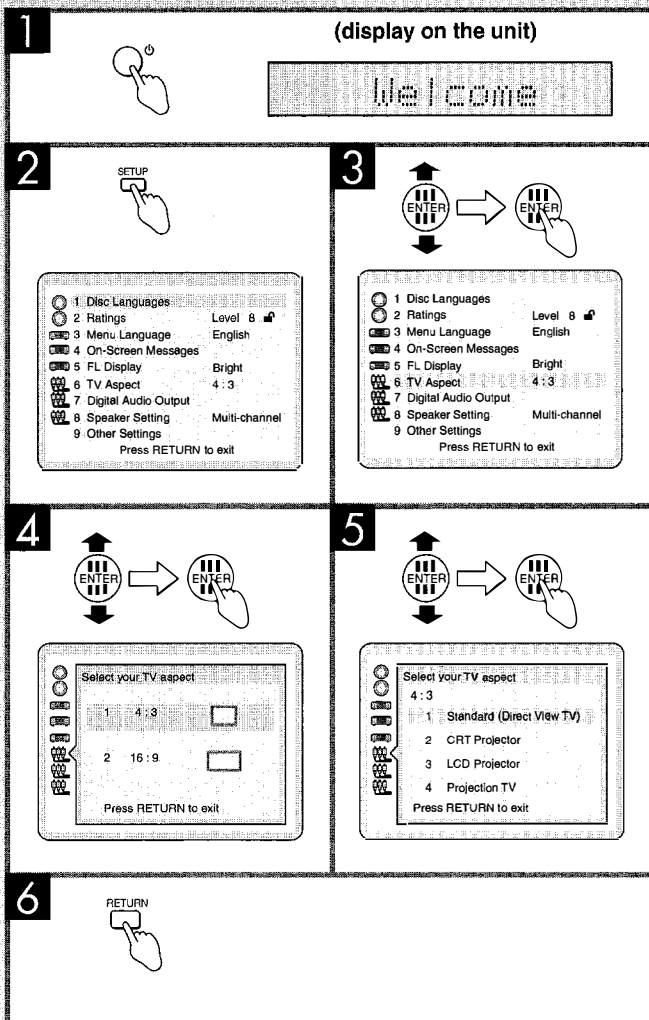
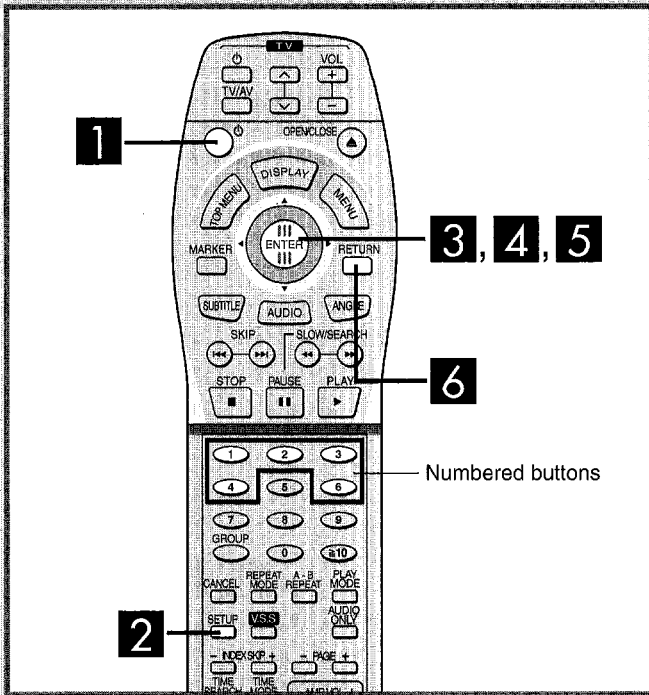


● If your television is monaural

Use a stereo-monaural audio cable instead of the supplied Audio/Video cable. The video part of the cable (yellow) can still be used if required.



Before use



## Settings

Carry out the following operation to suit the type of television you are using. The factory setting is for a regular 4:3 television.

### Before operation

- Turn the television on.
- Switch the video input mode on the television to suit the type of connection you have made (e.g., VIDEO 1).
- The On-Screen menu language of your player has been factory preset to English. If you would like to change the menu language to French, German, Italian or Spanish, please refer to "Menu Language" on page 29. In the explanations given below it is assumed that English has been selected as the menu language.

**1** Press [POWER] to turn the unit on.

**2** Press [SETUP] to display the initial settings screen on the television.

**3** Operate the joystick to highlight "6 TV Aspect".

Press the joystick to proceed to the next screen.

**4** Operate the joystick to highlight the size of your television.

1. 4:3 (factory setting)
2. 16:9 (wide-screen television)

Press the joystick to proceed to the next screen.

**5** Operate the joystick to highlight the type of television you have connected.

1. Standard (Direct View TV) (factory setting)
2. CRT Projector
3. LCD Projector
4. Projection TV

Press the joystick to confirm your selection and return to the initial settings screen.

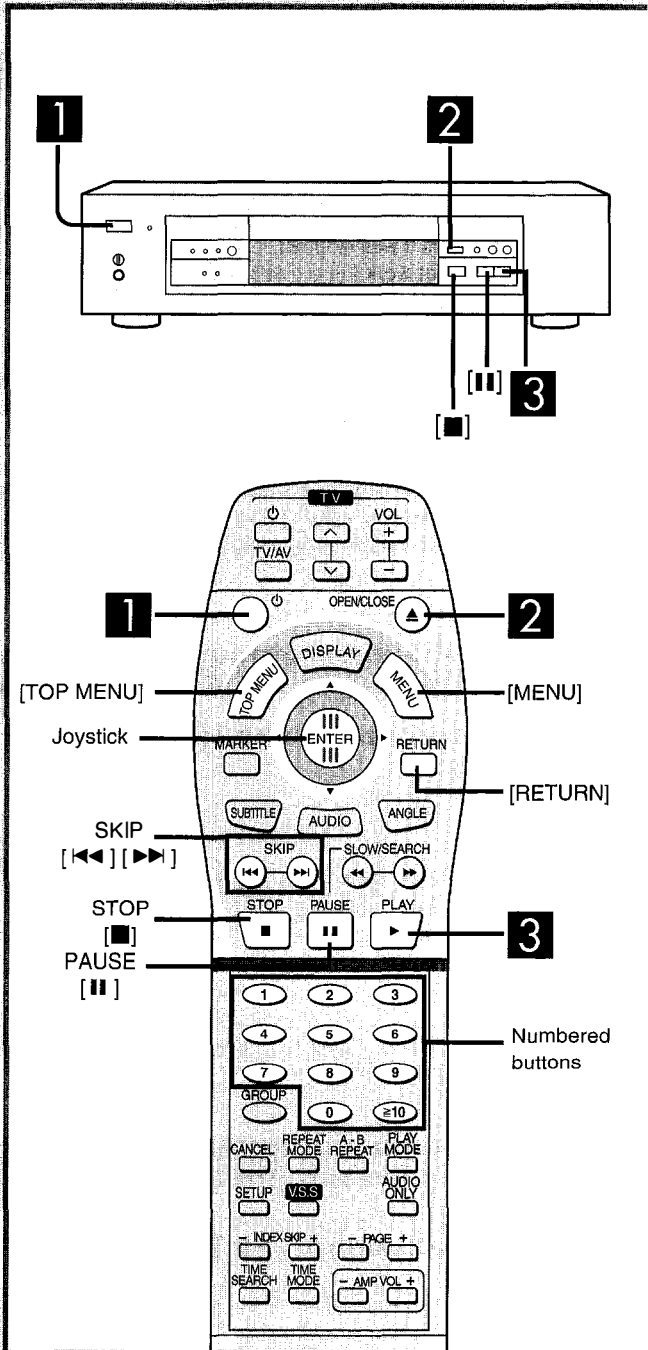
**6** Press [RETURN] to exit the initial settings screen.

### [RETURN] button

Press to return to the previous screen. Settings are not entered.

### Numbered buttons

Press the number corresponding to the menu item to enter a setting.



- Turn the television on.
- Switch the video input mode on the television to suit the type of connection you have made (e.g., VIDEO 1).

## 1 Press [⏻] to turn the unit on.

Main unit: Press [⏻ / I]

## 2 Press [▲] (OPEN/CLOSE) to open the disc tray.

The unit also comes on if you press this button first.

Set a disc label up on the tray.

Most DVDs start automatically when you close the disc tray.

## 3 Press [▶] to start play.

The disc tray closes automatically.

### When play finishes

The unit automatically stops and, depending on the disc, a group selection menu is shown on the television.

### To stop play

Press [■] (→ "Resume function", page 12).

### To pause play

Press [⏸].

Press [▶] to resume play.

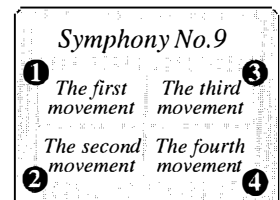
The disc is still spinning if a menu is on the screen or if the picture is frozen. Press [■] when you have finished play.

### If a menu screen is shown

#### DVD-V VCD

A menu screen is shown on your television shortly after starting some DVD-Video and Video CDs. To continue play you must make a selection.

(menu example)



### Operate the joystick to highlight an item.

Press the joystick to confirm your selection.

OR

### Press the numbered buttons corresponding to the menu item.

For items numbered 10 and over, press [≥10] then the two digits.

e.g. 10: [≥10] → [1] → [0]

e.g. 25: [≥10] → [2] → [5]

### Other buttons used to operate menus

The operation of these buttons differs with the disc so read the instructions that came with the disc for further details.

[SKIP]: Shows the next menu.

[RETURN]: Shows the previous menu.

[MENU]: Shows the menu screen (DVD).

[TOP MENU]: Shows the first menu screen (DVD).

### Playing DVD and Video CDs

The producer of the material can control how these discs are played. This means that you may not be able to control play with some of the operations described in these operating instructions. Read the disc's instructions carefully.

The symbol "⊘" appears on the television when you perform an operation to indicate it is not allowed at that time.

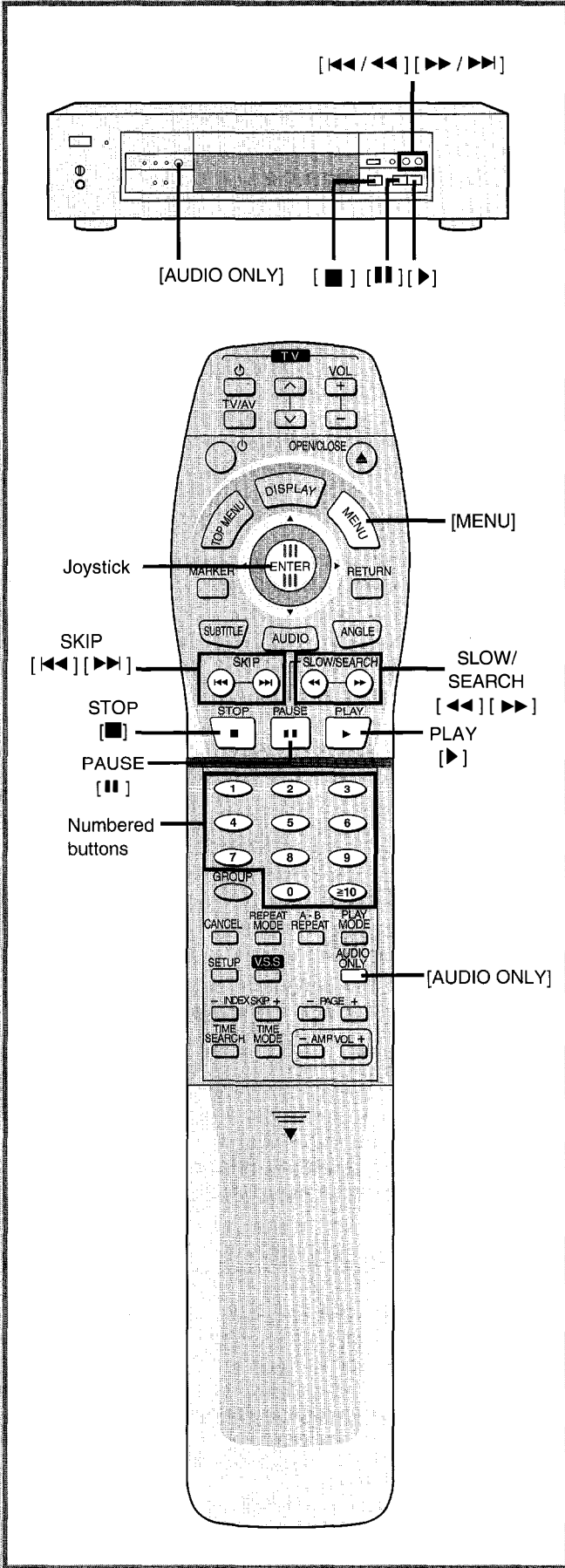
### Playing karaoke discs

After playing a track, you will normally be shown a menu. Some discs allow you to play all the tracks in succession. Others will play all the tracks in succession automatically.

### DVD volume

Volume may be lower when playing DVDs than when playing other discs.

If you turn the volume up on the television or amplifier, ensure you reduce the volume again before playing other sources so that a sudden increase in output does not occur.



## Other methods of play

### Resume function

When [■] is pressed.

"▷" flashes to indicate that the resume function is active.

#### Using the resume function to restart play

While "▷" is flashing, press [▶].

Play starts from where it was stopped.

This function does not work if the disc's play time is not displayed, [■] is pressed again, the disc tray is opened. This function is available when "▷" is flashing.

If you are playing DVD-Video, you can activate the CHAPTER REVIEW function while the message, "Press PLAY to Chapter Review" is shown on your television. This message appears for a few seconds before play is resumed.

Press [▶] while this message is shown on your television and the beginning portions of each chapter up to the current one are played. Full play resumes from the point play was stopped at.

CHAPTER REVIEW is not possible with some DVD-Video.

### Skipping tracks and chapters

Press [◀◀] (backward) or [▶▶] (forward) on the remote control.

OR

[◀◀/◀◀] or [▶▶/▶▶] on the main unit.

Each press increases the number of skips.

The first skip backwards takes you to the beginning of the current track or chapter.

#### Note

If pressed while a DVD or Video CD menu is on the screen, you may return to the previous menu.

### Fast forward and rewind - SEARCH

During play

Press [◀◀] (backward) or [▶▶] (forward) on the remote control.

Each press increases the speed of the search. There are five speeds.

OR

Press and hold [◀◀/◀◀] or [▶▶/▶▶] on the main unit.

The search speed increases in five steps if the button is held down.

Audio will be heard during search.

You can turn off audio output during search with DVD-Video and Video CDs (➔ page 31).

#### Note

If pressed while a DVD or Video CD menu is on the screen, you may return to the previous menu.

## Starting play from a selected track or chapter

While stopped or playing

### Press the numbered buttons.

To select a track or chapter numbered 10 and over, press  $\geq 10$  then the two digits.

e.g. 10:  $\geq 10$  → [1] → [0]

e.g. 25:  $\geq 10$  → [2] → [5]

When playing-DVD-Audio and you want to start play from a track in a different group, select the group first (→ page 14).

## Slow motion

### DVD-A DVD-V VCD

While paused

### Press [◀◀] (backward) or [▶▶] (forward) on the remote control.

Each press increases the speed of the slow motion. There are five speeds.

OR

### Press and hold [◀◀/◀◀] or [▶▶/▶▶] on the main unit.

The slow motion speed increases in five steps if the button is held down.

Press [▶] to resume play.

#### Note

Only the motion picture parts of DVD-Audio are affected.

## Frame-by-frame viewing

### DVD-A DVD-V VCD

While paused

### Move the joystick left (backward) or right (forward) on the remote control.

You can move backward only with DVDs.

The frame changes each time you move the joystick.

The frames change in succession if you hold the joystick in position.

Press [▶] to resume play.

You also can move forward frame-by-frame by pressing [■].

#### Note

Only the motion picture parts of DVD-Audio are affected.

## Canceling the playback control feature on Video CDs

### VCD

Canceling playback control allows you to play the disc all the way through from the beginning.

1. Press [■].  
The "PBC" indicator on the unit's display goes out.
2. Press the numbered buttons to select the track where you want to start play.  
See the disc's jacket for the track numbers.

### To restore playback control

1. Press [■] to stop play.
2. Press [MENU] on the remote control.  
The "PBC" indicator on the unit's display comes on.

## To enjoy even higher quality sound - AUDIO ONLY

### Press [AUDIO ONLY].

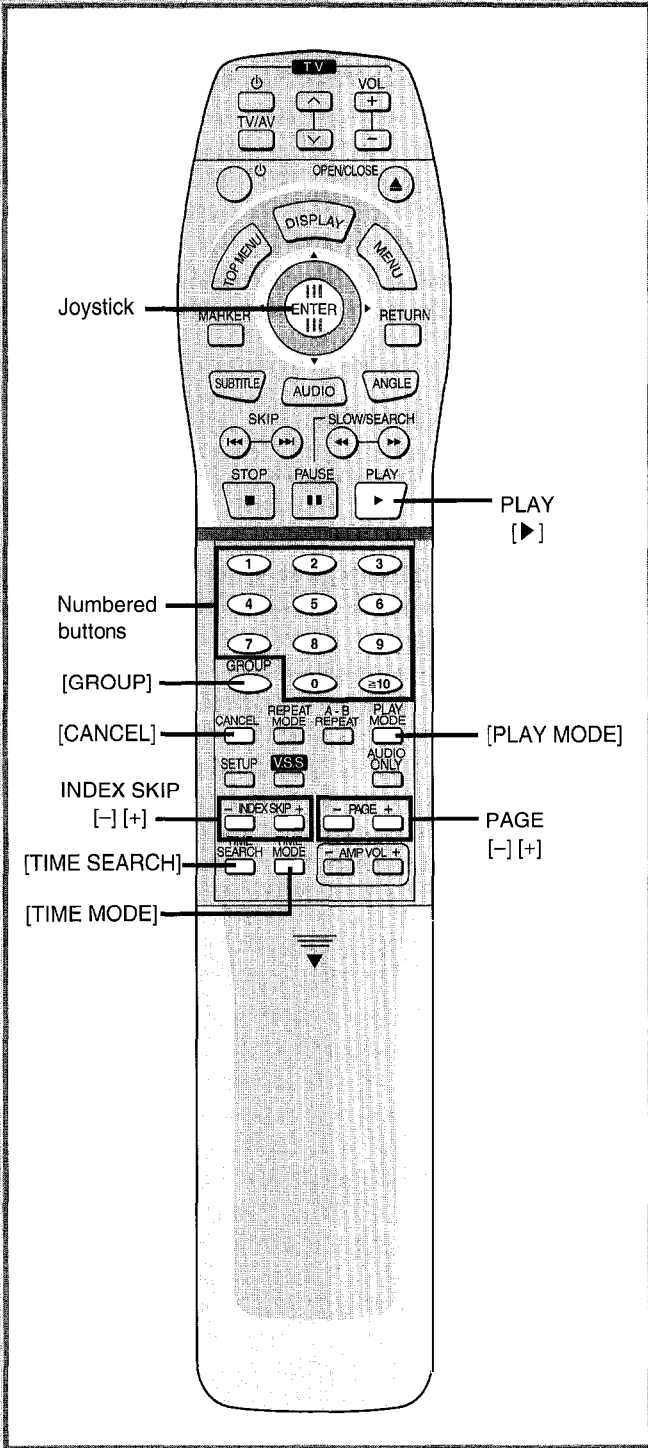
The lamp next to the button lights.

The video signal is cut off so only the audio signals are output.

AUDIO ONLY is canceled if the button is pressed again or if the unit is turned off.

#### Note

- Video signals are output while the disc is stopped and when operations such as skipping or searching are performed. The television can appear unusual while video signals are not being output.
- Turn the television off for a better effect if you have connected the VIDEO OUT on this unit through an amplifier.



Other methods of play

Groups

DVD-A

Selecting a group

Groups

The tracks on DVD-Audio are divided into groups.

e.g. Group 1: All tracks

Group 2: 60s pops

Group 3: 70s pops

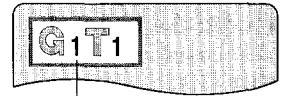
How these groups are played differs with the disc so read the instructions that came with the disc for further details.

Bonus groups

Some discs contain bonus groups. To enjoy these groups you may have to enter a password.

Press [GROUP].

Press [▶] when the required group is selected to start play of that group.



The group changes each time the button is pressed.

To select by number (Remote control only)

1. Press [GROUP].
2. Press the numbered button corresponding to the required group.
3. Press [▶].

Note

Selection may not be allowed in some situations (e.g., while a menu is being displayed).

Playing bonus groups

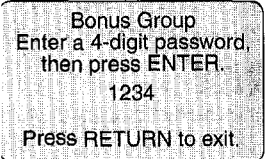
You can play the bonus groups contained on some DVD-Audio by entering a password. The password is written on the instructions that came with the disc.

**1** Press [GROUP] to select the bonus group.

**2** Press [▶].

**3** Enter the 4-digit password with the numbered buttons and press the joystick.

e.g. 1234



If you enter the wrong password, the previous screen will be displayed. Start again from the beginning. You can erase it by pressing [CANCEL].

**4** Use the joystick to select a track and press to start play.

This operation must also be performed if the group is selected during program or random play.

Some discs will show a menu screen for you to enter your password. Follow the instructions on the screen.

The bonus group can be played as many times as you like after the password has been entered until the disc is removed from the player.

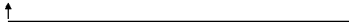
## Playing all the groups in succession

Use this operation if the disc does not give you the choice to play all the groups.

While stopped

**1** Press [PLAY MODE] to display "All Group".

Each time the button is pressed  
All Group → Program → Random → Stop (cancel)



**2** Press [▶] to start play.

## Selecting still pictures - Page Skip

### DVD-A

Some DVD-Audio include still pictures. You can select these pictures with the following operation.

During play

Press [PAGE (- or +)].

-: backward

+: forward

#### Note

There are some cases where the disc does not allow you to select pictures with this feature.

## Selecting indexes - Index Skip

### DVD-A

DVD-Audio tracks are divided by indexes. You can find a particular position by skipping these indexes.

While playing or paused

Press [INDEX SKIP (- or +)].

-: backward

+: forward

If the disc was playing, it will continue to play from the position you skipped to. If the disc was paused, it will remain paused at the position you skipped to.

#### Note

Sound is interrupted during this operation.  
Some tracks do not have indexes.

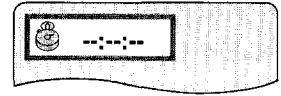
## Starting play from a specified time - Time Search

### DVD-A DVD-V

You can specify times within groups on DVD-Audio, or within titles on DVD-Video.

During play

**1** Press [TIME SEARCH].

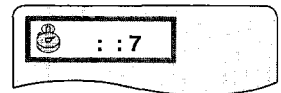


**2** Specify the time with the numbered buttons.

e.g. 7 minutes 5 seconds

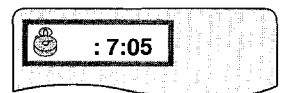
①

① Enter the minutes (7).



②

② Enter the seconds (05).



#### Other examples

7 minutes and 30 seconds: [7] → [3] → [0]

1 hour, 2 minutes and 30 seconds: [1] → [0] → [2] → [3] → [0]

If you enter the wrong time, you can start again by pressing [CANCEL].

**3** Press the joystick to start play.

#### Note

- You cannot specify a time beyond the current title or group. If the title or group finishes while you are still entering the time, the time search screen is canceled.  
When playing DVD-Audio, the track's elapsed time is shown on the display after time search is complete.
- Press [TIME SEARCH] to cancel partway through.
- You cannot do time search during random or program play.

## Switching time displays - Time Mode

### DVD-A VCD CD

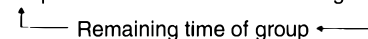
Press [TIME MODE].

The display changes each time the button is pressed.

The displays shown depend on the condition of the player.

e.g. When playing DVD-Audio in group mode.

Elapsed time of track → Remaining time of track



#### Note

You can use this feature with Video CD if you cancel playback control (➔ page 13).



# Enjoying Virtual Surround Sound (V.S.S.)

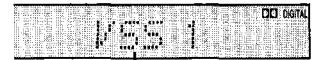
## DVD-A DVD-V

Use this feature to enjoy a surround-like effect if you are using two speakers or headphones. This effect only works with DVD recorded using Dolby Digital with two or more channels.

During play

### Press [V.S.S.] to select the V.S.S. level.

The V.S.S. indicator lights when set to level 1 or 2.



Each time you press the button:  
VSS 1 → VSS 2 → VSS OFF (cancel)

#### Note

- V.S.S. does not work with DVD recorded in one channel or with karaoke discs.
- Turn V.S.S. off when using more than just the two front speakers. Sound will only come from the two front speakers if V.S.S. 1 or 2 is on.

### Enjoying V.S.S. through headphones

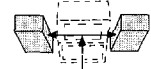
1. Press [DISPLAY] to show the GUI screen on the television and select the V.S.S. icon.
2. Select the headphone mode (➔ page 25 for more details).

#### Note

Restore speaker mode when you are not using headphones or else the sound from the speakers will sound strange.



### To get the most from V.S.S.

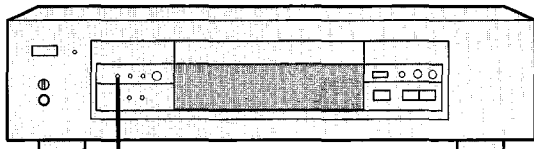
Situate yourself in front of the television approximately 3 to 4 times the distance between the left and right front speakers.



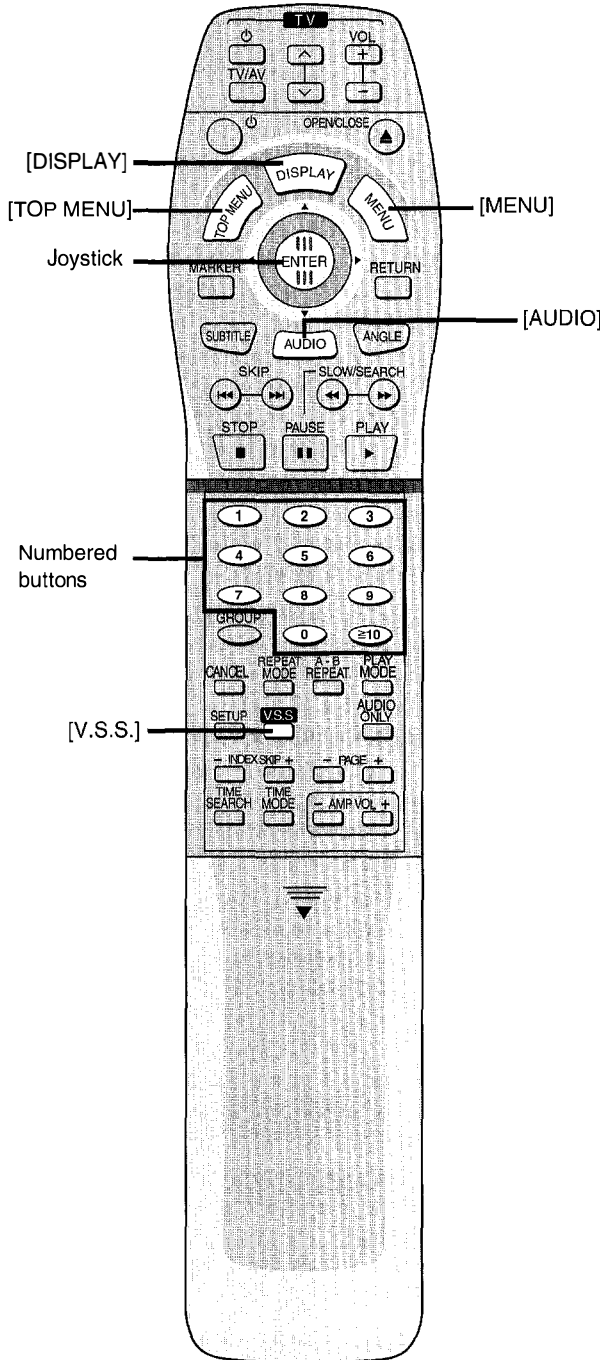
Listening position

### V.S.S. 1 and 2 effects

Level Mode	V.S.S. 1	V.S.S. 2
 (Speakers)	The front speakers sound like they are further apart. If the disc has surround speaker channels recorded on it, then sound appears to come from the sides even if surround speakers aren't being used.	The V.S.S. 1 effects are broadened.
 (Headphones)	Sound appears to come from left and right front speakers.	The V.S.S. 1 effect is broadened.



V.S.S. indicator



## DVD menus

### DVD-V

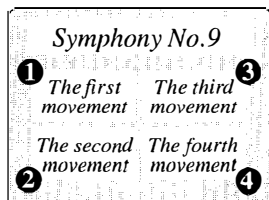
Apart from the main feature, DVDs may have other material recorded on them. Other DVDs require you to use menus to enjoy them. The actual operation of the menus depends on the disc, so here we will explain only the basic steps.

While stopped or playing

- 1 Press [MENU] to display the menu.

Press again to restore the previous condition.

(menu example)

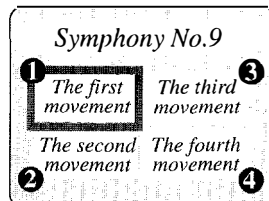


- 2 Use the joystick or numbered buttons to select the required item.

Move the joystick around to highlight the menu items. Press the joystick while the item is highlighted to start play or show the next menu.

If you selected the item with the numbered buttons, play starts immediately or the next menu is shown.

(menu example)



## Top menu

### DVD-A DVD-V

The top menu is used if there are different titles included on the one DVD.

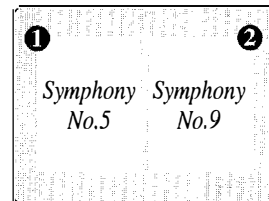
The group menu is displayed if you are playing DVD-Audio.

While stopped or playing

- 1 Press [TOP MENU] to display the title menu.

Press again to restore the previous condition.

(menu example)

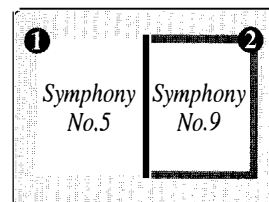


- 2 Use the joystick or numbered buttons to select the required title.

Press the joystick while the item is highlighted to start play or show the next menu.

If you selected the item with the numbered buttons, play starts immediately or the next menu is shown.

(menu example)



## DVD-A DVD-V

Some DVDs have more than one soundtrack recorded on them, such as multiple languages or PCM, and you can change soundtracks during play.

During play

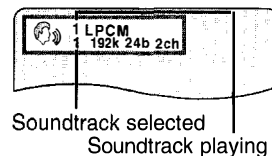
- Press [AUDIO] to display the audio number.

The audio number changes each time you press the button. You can also use the joystick (▲, ▼) to change the number.

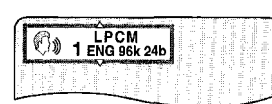
When playing DVD-Audio, play starts again from the beginning of the track.

Even if a second soundtrack isn't recorded on a DVD-Audio, two soundtrack numbers will normally be shown when you press [AUDIO]. The soundtrack currently playing is number 1.

(Display example: DVD-Audio)



(Display example: DVD-Video)



### To clear the display

Press the joystick.

### Note

- You can only select languages or sound formats if they have been recorded on the disc you are playing.
- You can also make language settings before play with the Audio language settings (➔ page 26). Some discs are designed to start in a certain language despite any changes you make to the initial settings.

### Using this feature with karaoke discs

#### DVD-V VCD

You can do the following with karaoke discs.

While playing a karaoke disc

- Press [AUDIO] and use the joystick to change the mode.

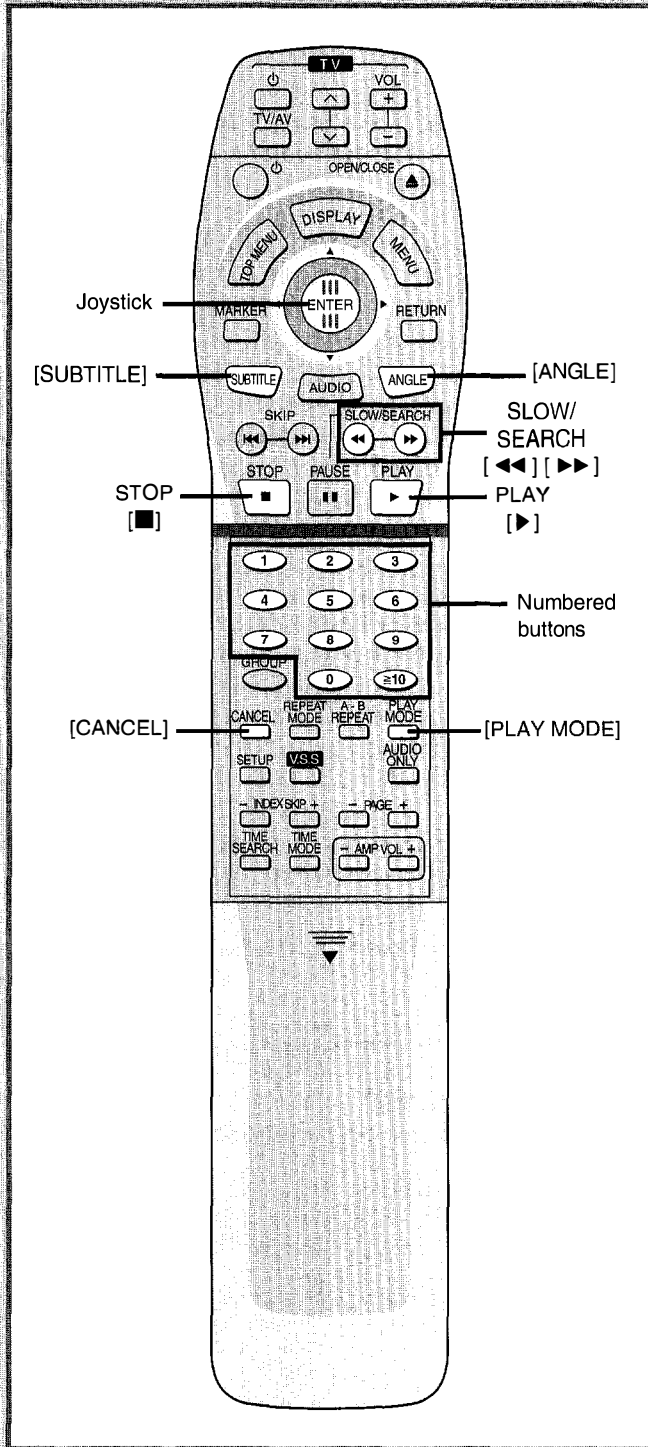
The mode switches each time you press the button.

#### Move the joystick left and right to turn the vocals on and off.

DVD karaoke disc (Solo)	DVD karaoke disc (Duet)
[---]: Vocal OFF	[---]: Vocal OFF
[ON]: Vocal ON	[1+2]: Vocal 1, 2 ON
	[V1]: Vocal 1 only ON
	[V2]: Vocal 2 only ON

#### Move the joystick up and down to change the audio mode.

Multi-audio disc (Video CD)
[LR]: Left and right channel sound from each speaker
[L]: Only left channel sound
[R]: Only right channel sound



## Changing subtitle language

### DVD-A DVD-V

Some DVDs have more than one subtitle language recorded on them, and you can change the language during play.

During play

**Press [SUBTITLE] to change the subtitle number.**



The subtitle number changes each time you press the button. You can also use the joystick (▲, ▼) to change the number. “-” is displayed if subtitles are not recorded on the disc.

**To turn the subtitles on and off**

Move the joystick left or right (◀, ▶).

**To clear the display**

Press the joystick.

#### Note

- There may be a slight delay before subtitles are shown.
- You can only select languages if they have been recorded on the disc you are playing.
- You can also make language settings before play with the Subtitle language settings (➔ page 26). Some discs are designed to start in a certain language despite any changes you make to the initial settings.

## Switching angles

### DVD-A DVD-V

Some DVDs allow you to view the same scene from different angles.

“◻” lights up on the unit’s display during scenes with multiple angles recorded to indicate this feature is available.

While playing a scene with multiple angles

**Press [ANGLE] to change the current angle number.**



The angle number changes each time you press the button.

You can also use the joystick (▲, ▼) to change the number.

**To clear the display**

Press the joystick.

#### Note

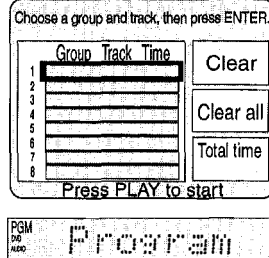
Some discs allow you to set angles before multi-angle scenes are played. Read the instructions that come with the DVD.

## DVD-A VCD CD

You can program up to 100 tracks to play in the order you choose. When playing DVD-Audio, you can program tracks from different groups.

While stopped

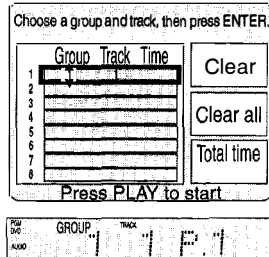
- 1 Press [PLAY MODE] (Display example: DVD-Audio) to display "Program".



Each time you press the button:

- While playing DVD-Audio  
All Group → Program → Random → Stop (cancel)
- While playing Video CDs and CDs  
Program → Random → (cancel)

- 2 1. Press the joystick. (Display example: DVD-Audio)
2. Use the joystick to select a group.

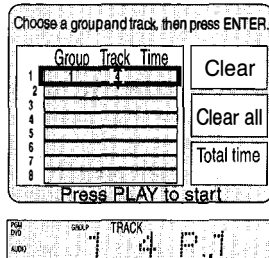


- 3 1. Press the joystick. (Display example: DVD-Audio)
2. Use the joystick to select a track.

Press the joystick to confirm selection.

All the tracks in the group are selected if you select "All". If the program contains more than 100 tracks after the group is entered, the extra tracks are canceled from the program.

It takes some time for the total time to be displayed for DVD-Audio.



Programmed order

- 4 Make other selections.

**While playing DVD-Audio**

Repeat steps 2 and 3.

**While playing Video CDs and CDs**

Repeat step 3.

The screen changes automatically if the number of items exceeds eight.

- 5 Press [▶] to start program play.

### When program play is finished

The disc stops and the program selection screen is shown. The program you selected is ready to play again, or you can add or erase tracks.

### To cancel program play

1. Press [■].
2. Press [PLAY MODE] to select the required mode.  
The program remains intact so when you next select program play it is ready to play again.

### To change the program

1. Use the joystick to highlight the track (or group) you want to change.
2. Do step 3 (or 2 and 3) to make the changes.

### Note

- Press [◀◀] and [▶▶] to turn the pages of the program to make selection quicker.
- You can also use the numbered buttons to select groups and tracks.

### Erasing tracks

Use the joystick to highlight the item then press [CANCEL].

OR

Use the joystick to highlight the items, then highlight "Clear" and press the joystick.

### To erase the whole program

Use the joystick to select "Clear all" and press it to erase the entire program.

The program is also canceled if the disc tray is opened.

# Random play

## DVD-A VCD CD

You can play all the tracks on the disc once each in random order. When playing DVD-Audio, tracks in the groups you specified are played in random order.

While stopped

- 1 Press [PLAY MODE] to display "Random".

(Display example: DVD-Audio)

Random Playback  
Choose a group or groups,  
then press ENTER.

Group: All 1 2 3 4 5  
Press PLAY to start

RND  
RND Random

Each time you press the button:

- While playing DVD-Audio  
All Group → Program → Random → Stop (cancel)

- While playing Video CDs and CDs  
Program → Random → (cancel)

While playing DVD-Audio

- 2 Use the joystick to select a group.

(Display example: DVD-Audio)

Random Playback  
Choose a group or groups,  
then press ENTER.

\*  
Group: All 1 2 3 4 5  
Press PLAY to start

RND  
RND All 1 2 3 4 5

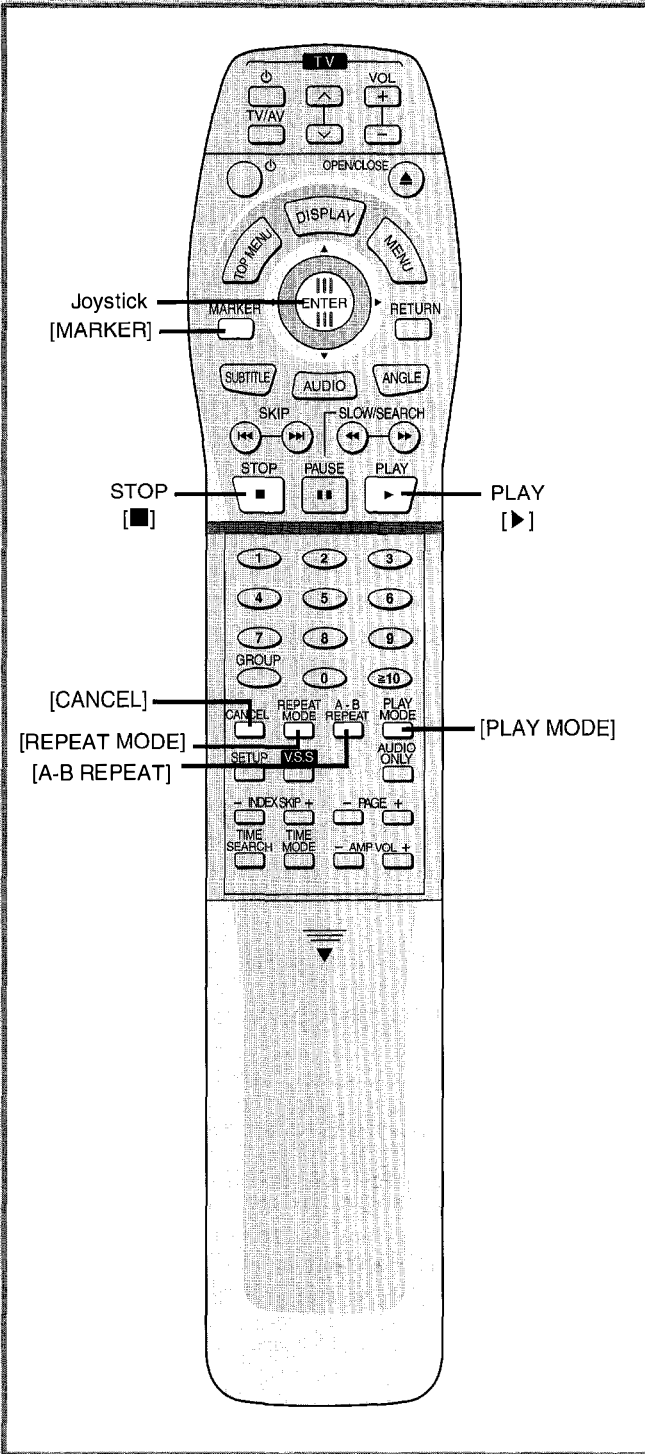
- 3 Press [▶] to start random play.

### When random play finishes

The disc stops and the random play screen is shown.

### To cancel random play

1. Press [■].
2. Press [PLAY MODE] to select the required mode.



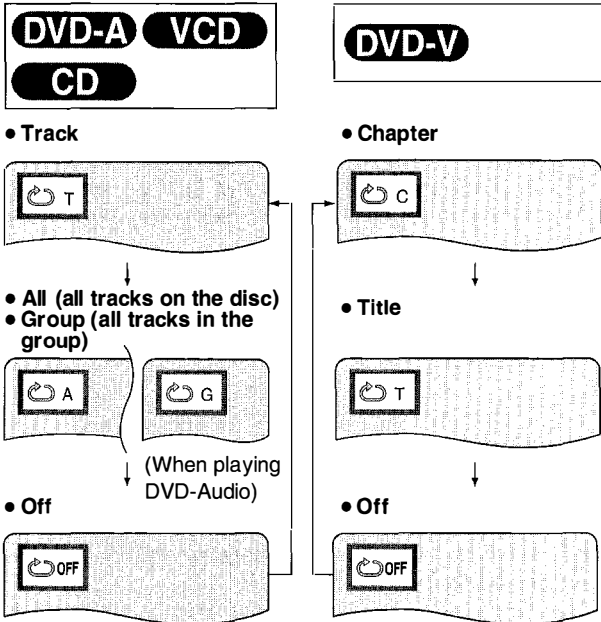
## Repeat play

### Repeat play

This feature allows you to repeat titles, tracks and chapters. When playing DVD-Audio, the selected group play mode (normal or all groups) is repeated.

Press **[REPEAT MODE]** during play to select the required repeat play mode.

The mode changes each time you press the button. The modes depend on the type of disc you are playing.



#### Note

- This feature can not be used with some DVDs or when "PBC" (→ page 13) is on.
- There is no feature to repeat the whole disc for DVD-Video that contain more than one title.
- Track and chapter repeat play are canceled if you select another track or chapter.

#### To repeat a program

1. Start program play (→ page 19).
2. Press **[REPEAT MODE]** so "A" is displayed.

### A-B repeat

This feature repeats play between two points that you specify.

During play

1. Press **[A-B REPEAT]** at the starting point (A).
2. Press **[A-B REPEAT]** at the finishing point (B).  
Play repeats continuously between these two points.

#### To cancel

Press **[A-B REPEAT]**.

#### Note

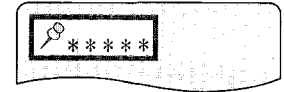
- This feature does not work with some DVDs.
- The unit automatically determines the end of a title or track as point B.
- Subtitles may not appear between A and B.
- Repeat play is canceled when you press **[A-B REPEAT]**.

## Marking a position you want to play again: MARKER

This feature allows you to mark a specific point on a disc so you can return to it easily at a later time. It only works if the elapsed playing time of the disc you are playing is shown on the unit's display.

### Marking a position

1. Press **[MARKER]** during play.



"\*" indicates markers available. Press again to cancel.

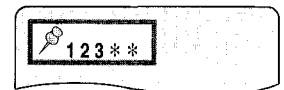
2. Press the joystick at the point you want to mark.



"\*" changes to a number. Move the joystick left and right to highlight another available marker. Press **[MARKER]** to clear the display.

### Playing from a marked position

1. Press **[MARKER]**.



2. Use the joystick to highlight the marker.



3. Press the joystick to recall the position. Play resumes from the marked position.



#### To clear a marker

1. Press **[MARKER]**.
2. Highlight the marker you want to clear and press **[CANCEL]**.

#### Note

- This feature can not be used with some DVDs or when "PBC" (→ page 13) is on.
- Some subtitles or pictures may fail to appear around the marker (DVD).
- Markers are cleared when you turn off the unit or open the disc tray.

GUI are icons that appear on the screen that allow you to interact with the player. The long thin GUIs that show information about the player and discs are called GUI screens.

Operations you can perform with GUIs may be performed with other buttons (➔ see the preceding pages) or they may only be available with GUI.

### Operations available only with GUI

- Raising dialogue volume - cinema voice mode
- Picture quality adjustments
- Switching between speaker and headphone V.S.S.
- Master volume adjustments

### Basic GUI operation

**1** Press [DISPLAY] to select the GUI screen.  
The screen changes each time the button is pressed. See the next page for details.

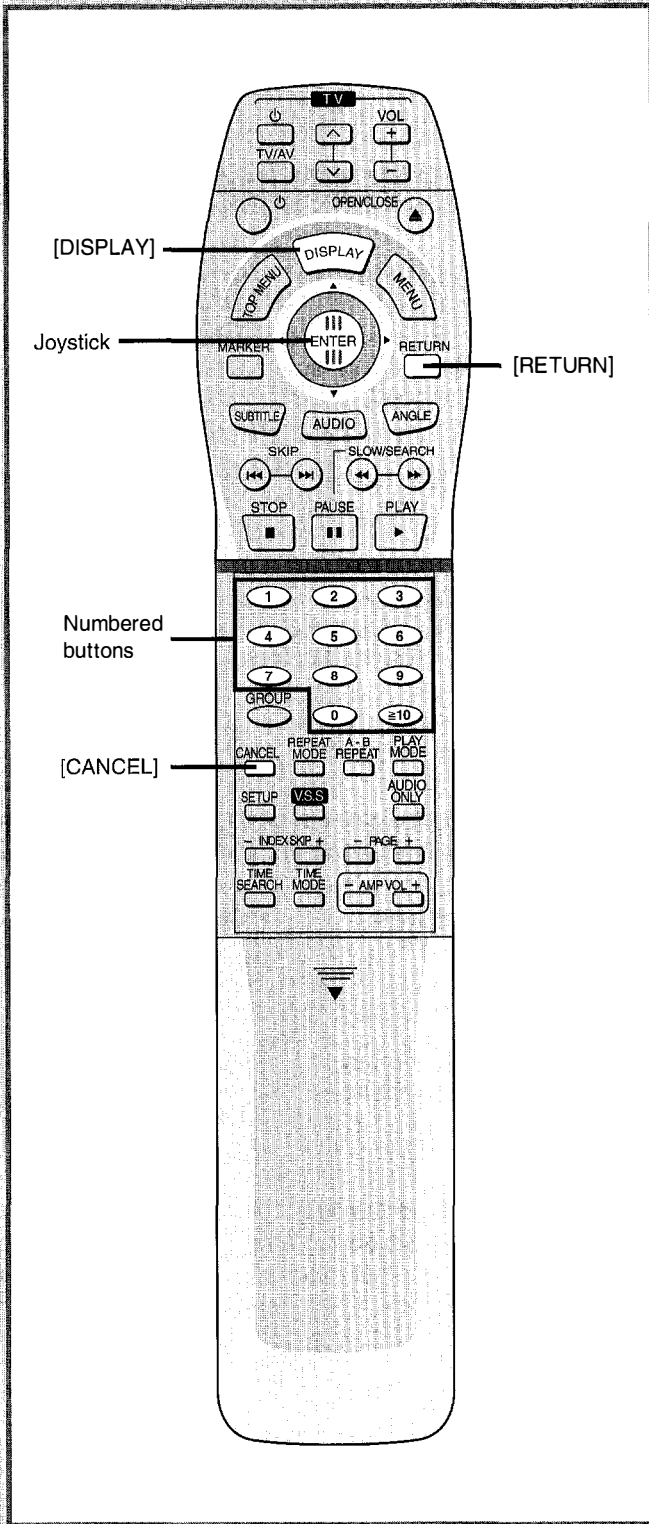
**2** Move the joystick to the left and right to select the item.

**3** Make your selection and enter it.  
See pages 23, 24 and 25 for details on operation. Most GUIs can be changed by moving the joystick up and down and pressing it to confirm. If numbers are used, you can change and confirm with the numbered buttons.  
See the preceding pages for details about operations that can also be performed with other methods.

**To clear the GUI screen**  
Press [CANCEL] or [RETURN].

### Note

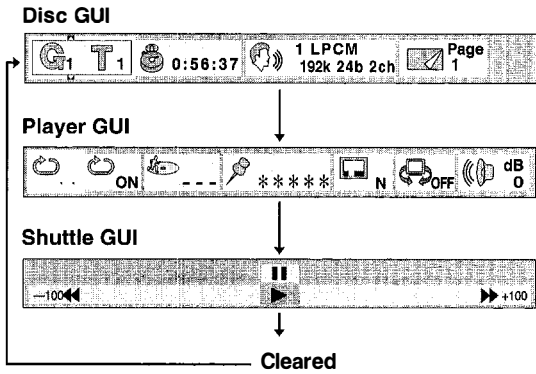
If part of the GUI screen is cut off or fails to appear, go to the initial settings menu to change the position of on-screen messages (➔ page 30).



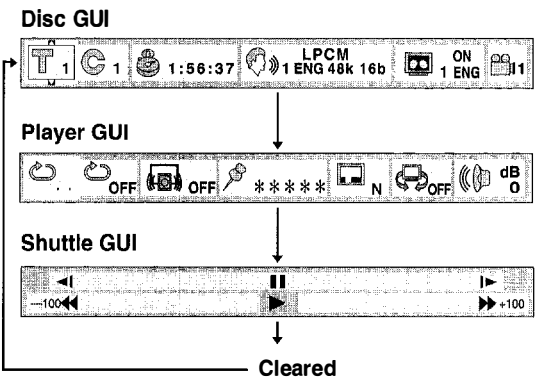


**Screen examples:**

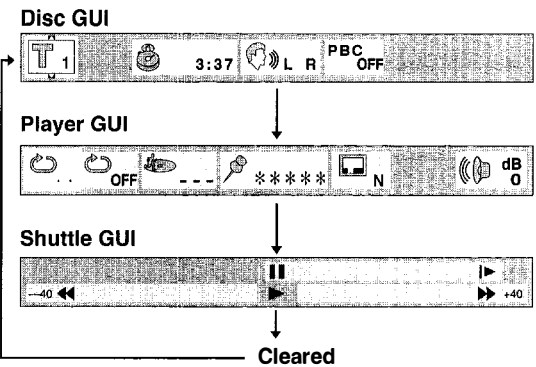
● **DVD-Audio**



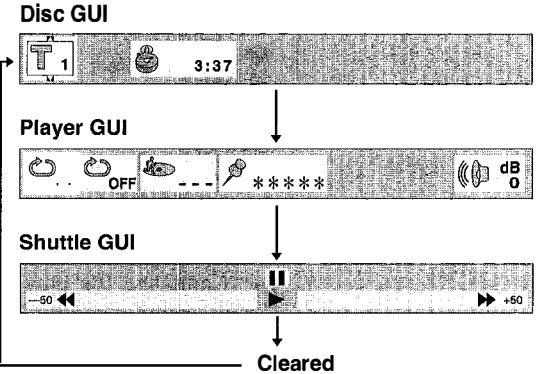
● **DVD-Video\***



● **Video CD**



● **CD**

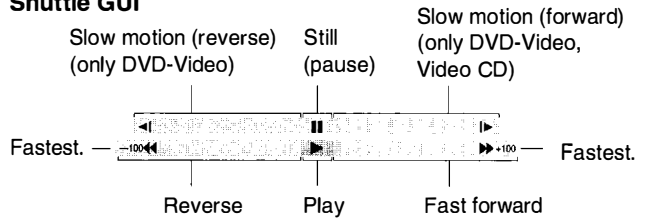


**GUI screens**

There are three different GUI screens and the contents of each screen depends on the kind of disc being played.  
 Disc GUI screen: You can change things like the track or chapter and audio.  
 Player GUI screen: You can start repeat play or mark parts you want to play again.  
 Shuttle GUI screen: You can fast forward, reverse, or start slow motion play.

\* Similar screens will also appear if you play DVD-Audio in DVD-Video Mode (→ page 32).

**Shuttle GUI**



Operation	
	Select the item you want to operate.
(Slow motion, rewind and fast forward)	
	Move the joystick to select one of 5 speeds.

Disc GUI screen

Icon	Content you can change	Operation																		
	<b>Group number</b> (DVD-Audio)	Select and press																		
	<b>Track number</b> (DVD-Audio, Video CD and CD) <b>Title number</b> (DVD-Video)	Select and press																		
	<b>Chapter number</b> (DVD-Video)	Select and press																		
	<b>Time</b> (select a position to start play by specifying a time) (DVD) <b>Play time display</b> (DVD-Audio, Video CD and CD) (e.g., Elapsed time of current track → remaining time of current track → remaining time on disc)	Press the numbered buttons and press joystick. Select																		
<p>Example 1</p> <p>Example 2</p>	<p><b>Audio number</b> (DVD-Audio, DVD-Video)</p> <p>Ⓐ Audio number Ⓑ Signal type LPCM - linear PCM/PPCM/□□ (Dolby digital)/DTS/MPEG/Vocal Ⓒ Signal data: k (sampling rate)/b (bits)/ch (number of channels) Ⓓ Soundtrack language code</p> <table border="1"> <tr> <td>ENG : English</td> <td>POR : Portuguese</td> </tr> <tr> <td>FRA : French</td> <td>RUS : Russian</td> </tr> <tr> <td>DEU : German</td> <td>JPN : Japanese</td> </tr> <tr> <td>ITA : Italian</td> <td>CHI : Chinese</td> </tr> <tr> <td>ESP : Spanish</td> <td>KOR : Korean</td> </tr> <tr> <td>NLD : Dutch</td> <td>MAL : Malay</td> </tr> <tr> <td>SVE : Swedish</td> <td>VIE : Vietnamese</td> </tr> <tr> <td>NOR : Norwegian</td> <td>THA : Thai</td> </tr> <tr> <td>DAN : Danish</td> <td>* : Others</td> </tr> </table>	ENG : English	POR : Portuguese	FRA : French	RUS : Russian	DEU : German	JPN : Japanese	ITA : Italian	CHI : Chinese	ESP : Spanish	KOR : Korean	NLD : Dutch	MAL : Malay	SVE : Swedish	VIE : Vietnamese	NOR : Norwegian	THA : Thai	DAN : Danish	* : Others	<p> Select</p> <p><b>When playing Karaoke DVD</b> The vocals change in the following ways. Solo karaoke --- (off) → ON Duet karaoke --- (off) → V1 + V2 (duet) → V1 (vocal 1) → V2 (vocal 2)</p>
ENG : English	POR : Portuguese																			
FRA : French	RUS : Russian																			
DEU : German	JPN : Japanese																			
ITA : Italian	CHI : Chinese																			
ESP : Spanish	KOR : Korean																			
NLD : Dutch	MAL : Malay																			
SVE : Swedish	VIE : Vietnamese																			
NOR : Norwegian	THA : Thai																			
DAN : Danish	* : Others																			
	<b>Audio mode</b> (Video CD) LR → L → R	Select and press																		
	<b>Page number of still picture</b> (DVD-Audio)	Select You will usually return to a menu screen if "Return" appears and you select it.																		
	<b>Subtitles</b> (DVD-Video) Ⓐ <b>Subtitle number</b> Ⓑ <b>Subtitles on or off</b> (→ above for language codes)	Select Ⓐ or Ⓑ Select																		
	<b>Angle number</b> (DVD-Video)	Select																		
	<b>Menu play</b> (version 2.0 Video CDs) Indicates whether menu play (PBC) is on or off	No change can be made with the GUI screen. (→ "Canceling the playback control feature on Video CDs", page 13)																		

Depending on the condition of the unit (playing, stopped, etc.) and the type of software you are playing, there are some GUI items that cannot be selected or changed.

Unit GUI screen

Icon	Content you can change	Operation
	<b>The start (A) and finish (B) points of A-B repeat</b>	Press at the two points. Press again to cancel.
	<b>Repeat play modes</b> DVD-Audio, Video CD, CD: T (Track) → A (All)/G (Group) → OFF DVD-Video: C (Chapter) → T (Title) → OFF	Select
	<b>Play modes</b> (DVD-Audio, Video CD and CD) --- (Normal)/PGM (Program)/RND (Random)/ALL (All group)	Play modes cannot be changed here.
	<b>Cinema voice mode</b> (Only with DVD recorded with Dolby Digital that contain a center channel.) ON (dialog is emphasized) → OFF	Select and press
	<b>Marker</b> Up to five positions can be marked Marker number  1 2 * * *	Press once to highlight a marker. Press at the point you want to mark.
	To recall a position	Select the number and press
	To clear a marker	Select the number and press [CANCEL]. 
	<b>Picture modes</b> (DVD, Video CD) N (normal) → U → C → F → S U (user): The following GUI appears allowing you to adjust the picture.  <div style="text-align: center;"> <p><b>Contrast (-7 to +7)      Sharpness (-1 to +1)</b></p> <p><b>Colour (-7 to +7)      Brightness (0 to 15)</b></p> </div> C (cinema): Picture suited for movie viewing F (fine): Details are sharper S (soft): Soft picture with fewer video artifacts	Select ↓ With the U GUI Press to select "U" ↓ Select the item ↓ Adjust the level and press
	<b>V.S.S. mode</b> (When playing DVD recorded in Dolby Digital with 2 or more channels) (Speakers) →  (headphones V.S.S.)  Select the V.S.S. level 1 (normal) → 2 (broad) → OFF	Select the mode ↓ Select the level
	<b>Master volume</b> (Analogue output only) 0 dB (maximum) ↔ -127 dB (minimum), -∞ (mute) The level can be set differently for DVD, Video CD, and CD	Select

Cinema voice mode raises dialog from the center speaker. It has no effect on dialog in other channels.

# Language, display, and ratings settings

Various settings are made at the time of shipment that determine the way DVDs are played and viewed. Some of these settings can be changed during play, and these operations have been described earlier. You can also change the initial settings to suit your individual needs.

## Disc Languages

### DVD-A DVD-V

These settings allow you to choose the languages used when a disc is played.

- Audio languages
- Subtitle languages
- DVD menu languages

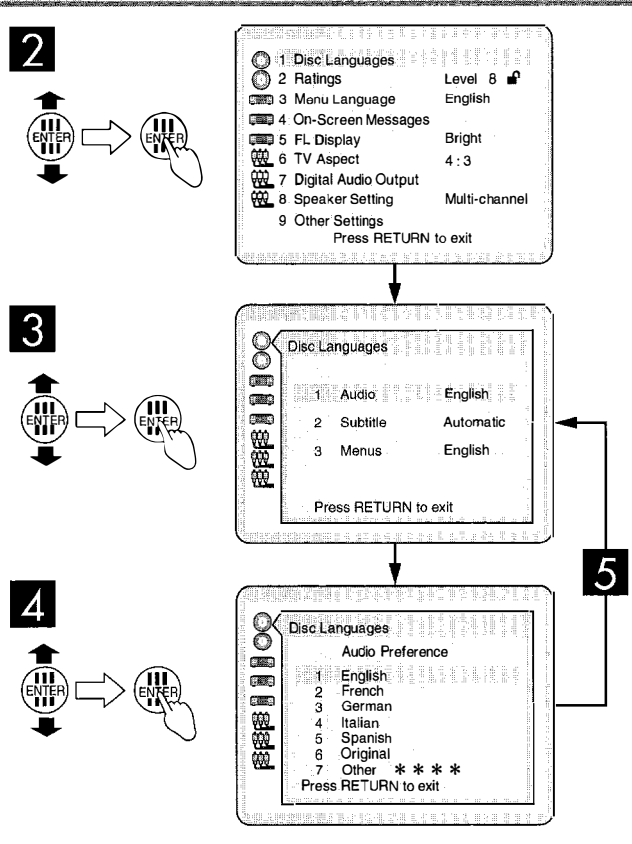
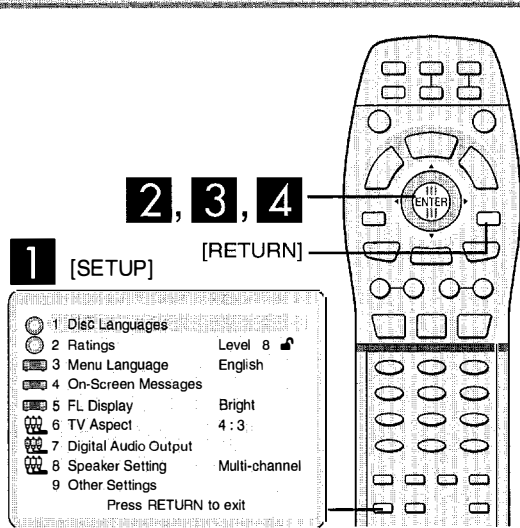
**1** While stopped, press [SETUP].

**2** Select "1 Disc Languages" and press [ENTER].

**3** Select the item you want to change and press [ENTER].

**4** Select the new setting and press [ENTER].

**5** Repeat steps 3 and 4 to make other changes.



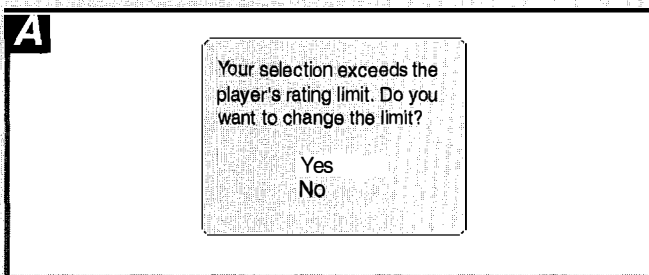
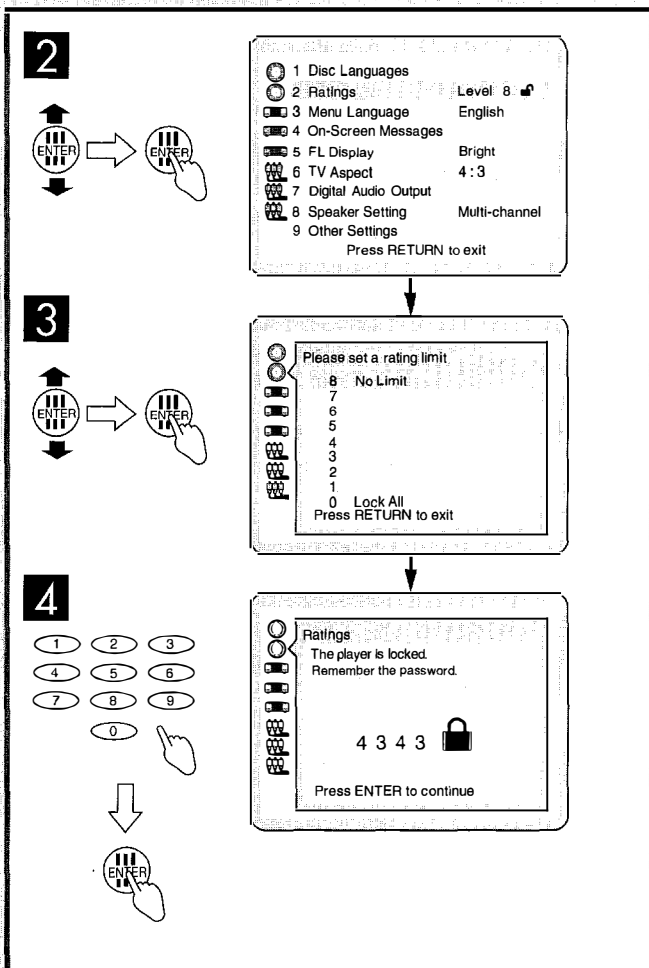
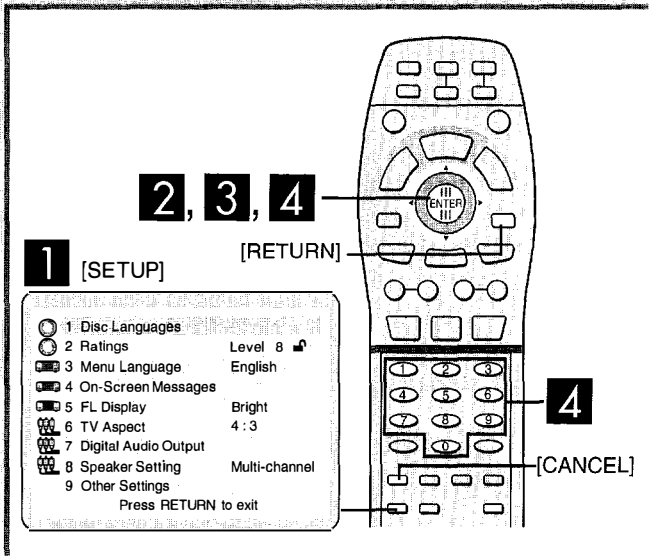
Item	Content
<b>1. Audio</b>	1. English (factory setting) 2. French 3. German 4. Italian 5. Spanish 6. Original The original language of each disc will be selected. 7. Other Another language can be selected. (→ the language codes on page 42.)
<b>2. Subtitle</b>	1. Automatic (factory setting) Subtitle language will automatically be selected in accordance with the audio soundtrack language. 2. English 3. French 4. German 5. Italian 6. Spanish 7. Other Another language can be selected. (→ the language codes on page 42.)
<b>3. Menus</b>	1. English (factory setting) 2. French 3. German 4. Italian 5. Spanish 6. Other Another language can be selected. (→ the language codes on page 42.)

**If you select "1 Automatic" in "2 Subtitle"**  
 If the soundtrack language is set to English, then subtitles will not appear if the DVD has an English soundtrack. English subtitles will appear if the soundtrack is in another language.

**To return to the previous menu**  
 Press [RETURN].

**To clear the menus**  
 Press [RETURN] until you return to the previous screen.

Settings



**Ratings**

**DVD-V**

You can limit play of DVDs that have ratings recorded on them by changing this setting.

You can also set the player to prohibit play of any DVD (such as adult material without ratings recorded on them) by selecting "0 Lock All".

- 1** While stopped, press [SETUP].
- 2** Select "2 Ratings" and press [ENTER].
- 3** Select rating level and press [ENTER].

<b>Level 8</b>	All DVDs can be played.
<b>Levels 7 to 1</b>	Prevents play of DVDs with ratings recorded on them (those that contain adult or violent scenes).
<b>Level 0</b>	Play of all DVDs is prohibited.

- 4** For levels 7 to 0  
Enter a 4-digit password and press [ENTER] twice.

**Do not forget your password as ratings settings cannot be changed without it.**

**When you insert a DVD that exceeds the ratings level you set**  
The illustrated message appears on the television. **A**

To play the disc

1. Select "Yes" and press [ENTER].
  2. Enter your 4-digit password and press [ENTER].
  3. Press [ENTER] again to start play.
- The unit locks again when the disc tray is opened or the unit is turned off.

**To return to the previous menu**

Press [RETURN].

**If you make a mistake entering your password**

Press [CANCEL] to erase the number.

**To clear the menus**

Press [RETURN] until you return to the previous screen.

Changing the ratings settings

- Unlocking the player
- Changing your password
- Changing the ratings level
- Temporarily unlocking the player:  
DVD-Video can be played without unlocking the player. This is canceled if the unit is turned off or if the disc is removed.

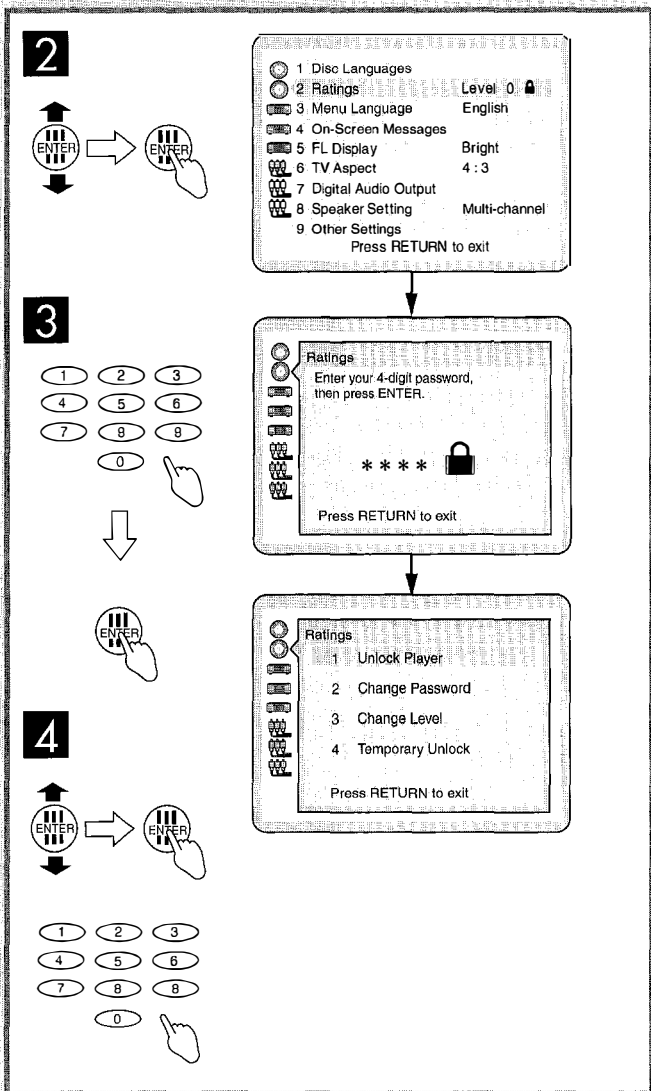
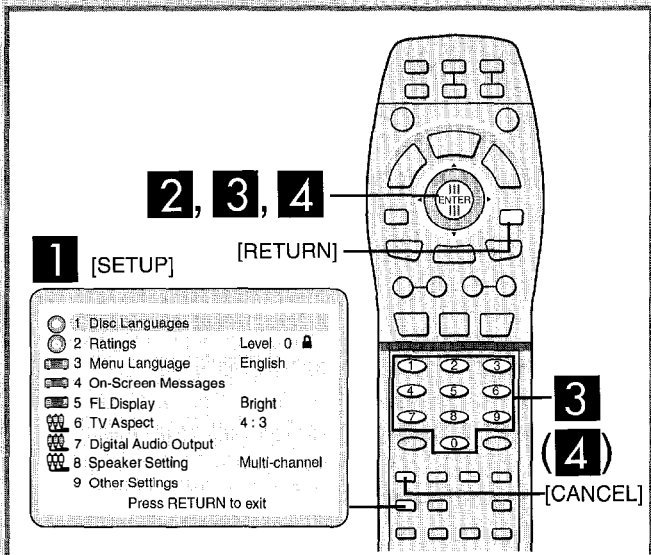
- 1** While stopped, press [SETUP].
- 2** Select "2 Ratings" and press [ENTER].
- 3** Enter your 4-digit password and press [ENTER].
- 4** Select the item and make the required changes.

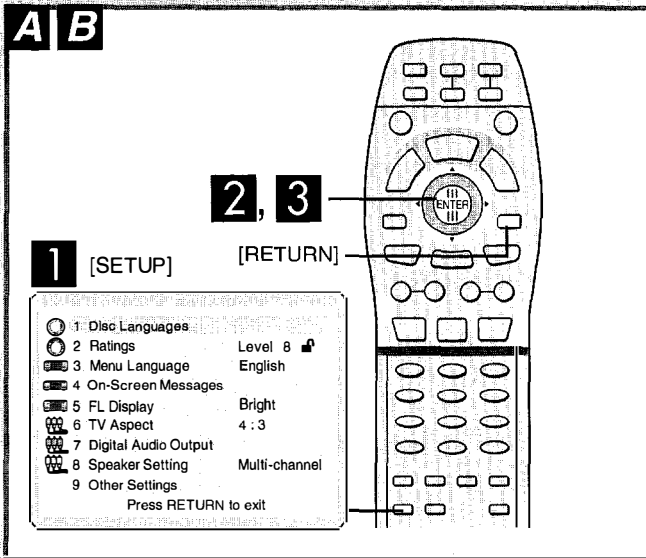
<b>Unlock Player</b> (Rating is reset to "8")	Select "1 Unlock" and press [ENTER] twice
<b>Change Password</b>	① Select "2 Change Password" ② Enter the new password ③ Press the joystick twice
<b>Change Level</b>	① Select "3 Change Level" ② Select the new level and press [ENTER]
<b>Temporary Unlock</b>	Select "4 Temporary Unlock" and press [ENTER] twice

**To return to the previous menu**  
Press [RETURN].

**If you make a mistake entering your password**  
Press [CANCEL] to erase the numbers.

**To clear the menus**  
Press [RETURN] until you return to the previous screen.



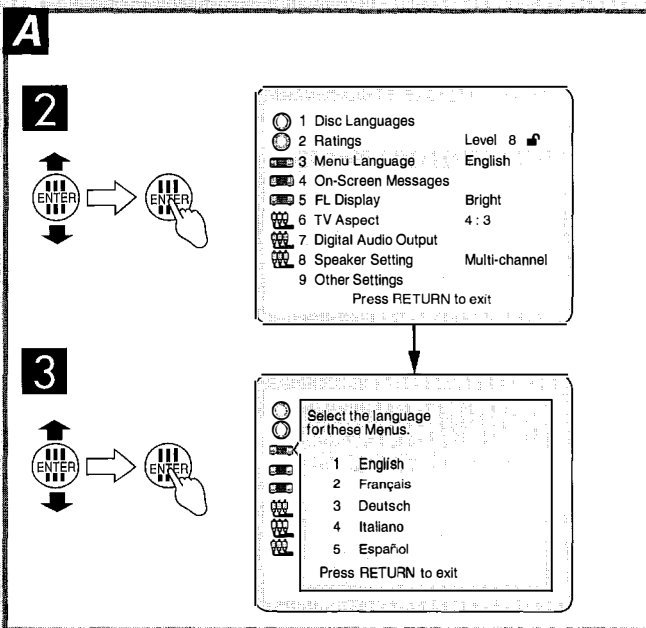


**Menu Language**

You can change the language used for menus shown on the television.

- 1** While stopped, press [SETUP].
- 2** Select "3 Menu Language" and press [ENTER].
- 3** Select the Language and press [ENTER].

1. English (factory setting)
2. Français
3. Deutsch
4. Italiano
5. Español



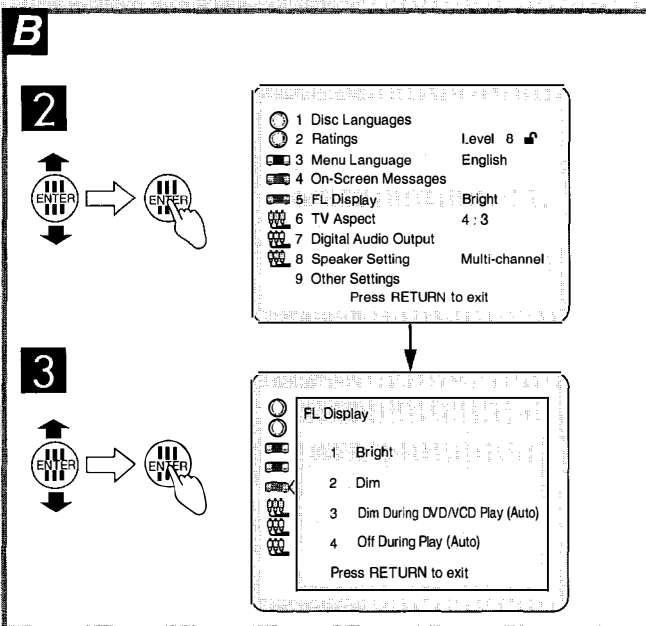
**FL Display**

You can dim the unit's display.

- 1** While stopped, press [SETUP].
- 2** Select "5 FL Display" and press [ENTER].
- 3** Select the brightness and press [ENTER].

1. Bright (factory setting)
2. Dim
3. Dim During DVD/VCD Play (Auto)
4. Off During Play (Auto)

Settings 3 and 4 are recommended for movie viewing. The display brightens temporarily during some operations such as fast forward and reverse. The unit's lights are also turned off if 3 or 4 is chosen.



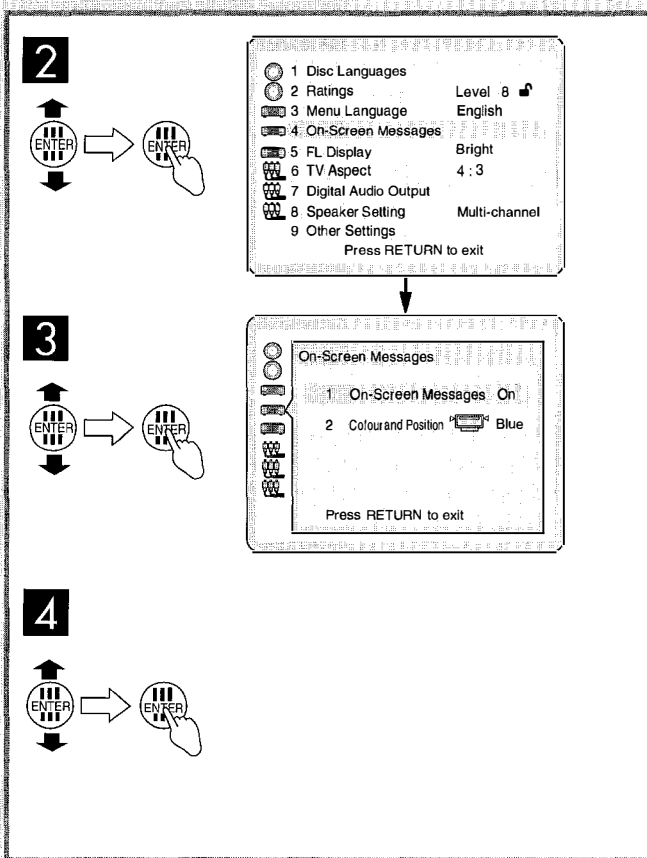
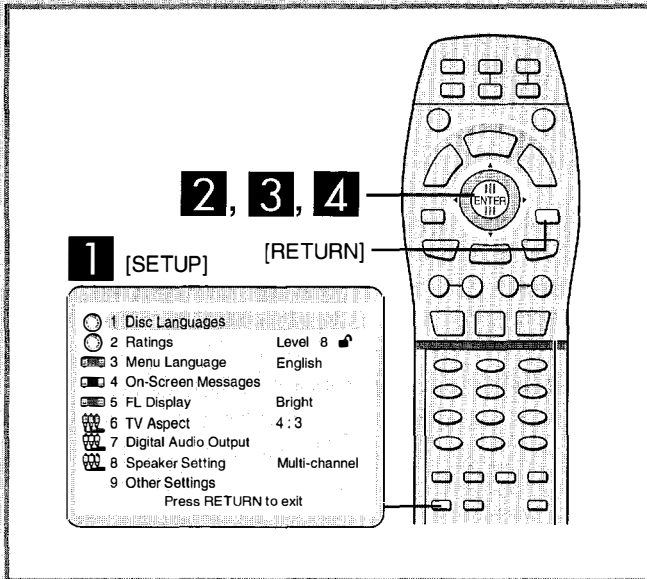
**To return to the previous menu**

Press [RETURN].

**To clear the menus**

Press [RETURN] until you return to the previous screen.





### On-Screen Messages

You can choose to show or not show the messages that appear on the screen when you perform an operation. You can also change colour and position on the television of these messages and GUI screens.

- 1 While stopped, Press [SETUP].
- 2 Select "4 On-Screen Messages" and press [ENTER].
- 3 Select the item you want to change and press [ENTER].
- 4 Select the new setting and press [ENTER].

Item	Content
1. On-Screen Messages	<ol style="list-style-type: none"> <li>1. On (factory setting) Messages appear on the television when you perform operations.</li> <li>2. Off Messages will not appear.</li> </ol>
2. Colour and Position	<ol style="list-style-type: none"> <li>1  Blue (factory setting)</li> <li>2  Violet</li> <li>3  Green</li> <li>4  Blue</li> <li>5  Violet</li> <li>6  Green</li> </ol> <p>Messages appear slightly lower on the screen.</p>

#### The position of the messages on the screen

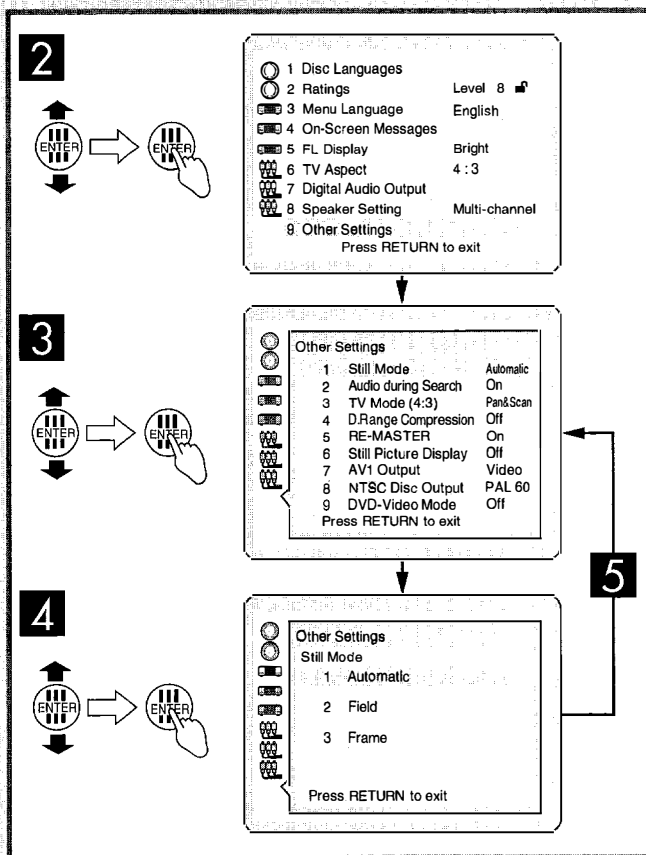
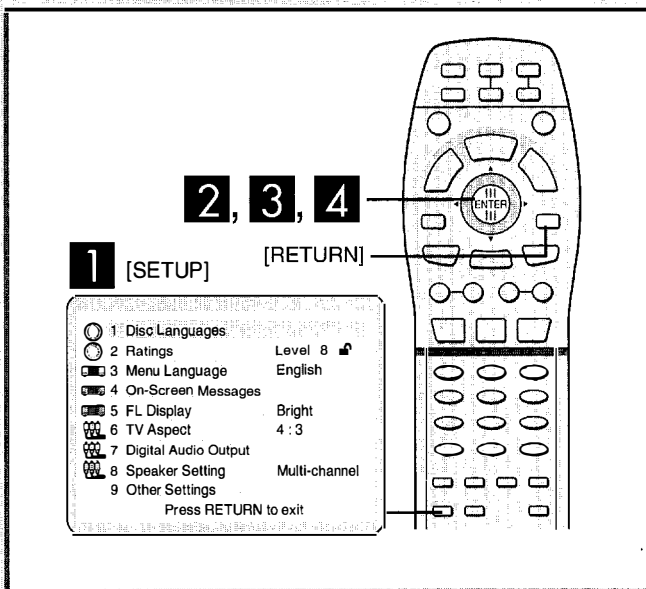
Select settings 4, 5, or 6 if the messages are cut off at the top of the screen.

#### To return to the previous menu

Press [RETURN].

#### To clear the menus

Press [RETURN] until you return to the previous screen.



**Other settings**

Other settings are possible to enhance your viewing experience.

- **Still Mode**  
Change these settings to eliminate blurring and improve picture quality when the picture is paused.
- **Audio during Search**  
You can choose to have the sound on or off during search (DVD-Video and Video CDs only).
- **TV Mode (4:3)**  
You can choose how software made for a widescreen television is displayed on a regular television.
- **Dynamic Range Compression**  
You can reduce the dynamic range for late night viewing.
- **RE-MASTER**  
You can turn the RE-MASTER function on and off.
- **Still Picture Display**  
You can choose to show or not show the picture type when the picture is paused.
- **AV1 Output**  
You can select the signal format (Video, S-Video, or RGB) to output from the AV1 SCART terminals,
- **NTSC Disc Output**  
You can select whether PAL 60 or NTSC signals are output during play of NTSC discs.
- **DVD-Video Mode**  
You can decide how the pictures contained on some DVD-Audio discs are shown.

- 1** While stopped, press [SETUP].
- 2** Select "9 Other Settings" and press [ENTER].
- 3** Select the item you want to change and press [ENTER].
- 4** Select the new setting and press [ENTER].
- 5** Repeat steps 3 and 4 to make other changes.

Item	Content
1. Still Mode	<p><b>1. Automatic</b> (factory setting) The unit automatically selects field still or frame still.</p> <p><b>2. Field</b> The unit shows field stills, which are less blurred. Fields contain only half a frame so picture quality is poor.</p> <p><b>3. Frame</b> The unit shows frame stills, which are sharper. Frames are composed of two fields so the picture appears blurred.</p> <p><b>Reference</b> See the glossary for more information about fields and frames (➔ page 44).</p>
	<p><b>2. Audio during Search</b></p> <p><b>1. On</b> (factory setting) Sound is heard during search.</p> <p><b>2. Off</b> Sound is not heard during search (DVD-Video and Video CD only).</p>

Continued on next page

Item	Content
3. TV Mode (4:3)	<p><b>1. Pan &amp; Scan</b> (factory setting) During play of software designed for widescreen televisions on a regular television, the picture is enlarged. This causes the sides of the picture to be cut off, but the screen is filled. Software not designated pan and scan is played as letterbox.</p> <p><b>2. Letterbox</b> During play of software designed for wide-screen televisions on a regular television, the entire picture is shown. This causes black portions to appear at the top and bottom of the screen.</p>
4. Dynamic Range Compression	<p><b>1. Off</b> (factory setting) Sound is heard at normal volume.</p> <p><b>2. On</b> Dynamic range is compressed. This only works with software recorded with Dolby Digital. Turning this feature on allows you to have the volume at a level so dialogue is clear, but loud parts of the soundtrack are made softer than usual.</p>
5. RE-MASTER	<p><b>1. On</b> (factory setting) (➡ ④, page 6)</p> <p><b>2. Off</b></p>
6. Still Picture Display	<p><b>1. Off</b> (factory setting) The picture type is not shown when paused.</p> <p><b>2. On</b> The picture type (I/P/B) is shown when paused.</p> <p><b>Reference</b> See the glossary for more information about the picture types (➡ page 44).</p>
7. AV1 Output	<p><b>1. Video</b> (factory setting) Composite video signals will be output from the AV1 SCART terminal.</p> <p><b>2. S-Video</b> S Video signals will be output.</p> <p><b>3. RGB</b> RGB signals will be output.</p>
8. NTSC Disc Output	<p><b>1. PAL 60</b> (factory setting) During play of NTSC discs, PAL 60 signals will be output. Select this setting when the player is connected to a PAL TV which is capable of receiving PAL 525/60 system.</p> <p><b>2. NTSC</b> During play of NTSC discs, NTSC signals will be output. Select this setting when the player is connected to a Mutli-system TV.</p>
9. DVD-Video Mode	<p><b>1. Off</b> (factory setting) DVD-Audio discs are played as DVD-Audio discs.</p> <p><b>2. On</b> DVD-audio discs are played in a similar fashion to DVD-Video discs.</p> <p><b>Note</b> The setting reverts to "Off" if the disc tray is opened or the unit is turned off.</p>

**To return to the previous menu**

Press [RETURN].

**To clear the menus**

Press [RETURN] until you return to the previous screen.

Use the following chart when you wish to add an amplifier and speakers to your system. Further information is given on the following pages.

	Connection*1	Digital output setting (⇒ Page 37)	Speaker setting (⇒ Page 39)
<b>You want to play through the a 2-channel front speaker.</b>	<ul style="list-style-type: none"> <li>● An amplifier</li> <li>● Front speakers (⇒ page 34)</li> </ul>	<ul style="list-style-type: none"> <li>● Set PCM Down Conversion to "No"</li> </ul>	<ul style="list-style-type: none"> <li>● Set the center and surround speakers and subwoofer to "No".</li> </ul>
<b>You want to enjoy the 5.1-channel surround sound recorded on DVDs using the unit's built-in decoder.</b>	<ul style="list-style-type: none"> <li>● An amplifier with 5.1-channel input terminals</li> <li>● A 5.1-channel speaker system (⇒ page 34, 35)</li> </ul>	<ul style="list-style-type: none"> <li>● Set PCM Down Conversion to "No"</li> </ul>	<ul style="list-style-type: none"> <li>● Set all speakers to on (Large, Small or Yes).</li> <li>● Correct output balance</li> <li>● Set delay time</li> </ul>
<b>You want to enjoy the 5.1-channel surround sound recorded on DVDs using the decoder in another unit (e.g., a digital sound processor).</b>	<ul style="list-style-type: none"> <li>● A decoder</li> <li>● An amplifier with 5.1-channel input terminals</li> <li>● A 5.1-channel speaker system (⇒ page 35)</li> </ul>	<ul style="list-style-type: none"> <li>● Set PCM Down Conversion to "Yes"</li> <li>● Set Dolby Digital and DTS Digital Surround to "Bitstream"*2</li> </ul>	<ul style="list-style-type: none"> <li>● No settings required</li> <li>● Make speaker settings on the decoder</li> </ul>
<b>You want to connect a 2-channel digital amplifier.</b>	<ul style="list-style-type: none"> <li>● A 2-channel digital amplifier (⇒ page 36)</li> </ul>	<ul style="list-style-type: none"> <li>● Set PCM Down Conversion to "Yes"</li> <li>● Set Dolby Digital and DTS Digital Surround to "PCM"</li> </ul>	<ul style="list-style-type: none"> <li>● No settings required</li> </ul>
<b>You want to record onto an MD deck or other digital recording device.*3</b>	<ul style="list-style-type: none"> <li>● An MD deck (⇒ page 36)</li> </ul>	<ul style="list-style-type: none"> <li>● Set PCM Down Conversion to "Yes"</li> <li>● Set Dolby Digital and DTS Digital Surround to "PCM"</li> </ul>	<ul style="list-style-type: none"> <li>● No settings required</li> </ul>
<b>You want to record onto a cassette deck or other analog recording device.</b>	<ul style="list-style-type: none"> <li>● A cassette deck</li> <li>● An amplifier (⇒ page 36)</li> </ul>	<ul style="list-style-type: none"> <li>● Set PCM Down Conversion to "No"</li> </ul>	<ul style="list-style-type: none"> <li>● No settings required</li> </ul>
<b>You want to connect 3 speakers.</b>	<ul style="list-style-type: none"> <li>● An amplifier with 5.1-channel input terminals</li> <li>● Your speakers, two front and one center. (⇒ page 34)</li> </ul>	<ul style="list-style-type: none"> <li>● Set PCM Down Conversion to "No"</li> </ul>	<ul style="list-style-type: none"> <li>● Set center to on (Large or Small).</li> <li>● Set surround to "No".</li> <li>● Correct output balance</li> <li>● Set delay time</li> </ul>
<b>You want to connect 4 speakers.</b>	<ul style="list-style-type: none"> <li>● An amplifier with 5.1-channel input terminals</li> <li>● Your speakers, two front and two surround. (⇒ page 34, 35)</li> </ul>	<ul style="list-style-type: none"> <li>● Set PCM Down Conversion to "No"</li> </ul>	<ul style="list-style-type: none"> <li>● Set surround to on (Large or Small).</li> <li>● Set center to "No".</li> <li>● Correct output balance</li> <li>● Set delay time</li> </ul>

\*1 Equipment listed are examples.

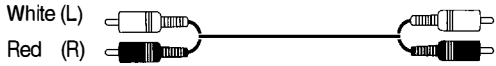
\*2 If your decoder is not able to handle DTS signals, set Dolby Digital to "Bitstream" and DTS Digital Surround to "PCM".

\*3 Connect digital equipment that is able to handle a 48 kHz/16 bit sampling rate. You cannot record digitally if there is a copy guard on the disc.

### Note

Turn V.S.S. (⇒ page 16) off when you connect more than just the two front speakers. Sound will not be output from the other speakers if V.S.S. is on.

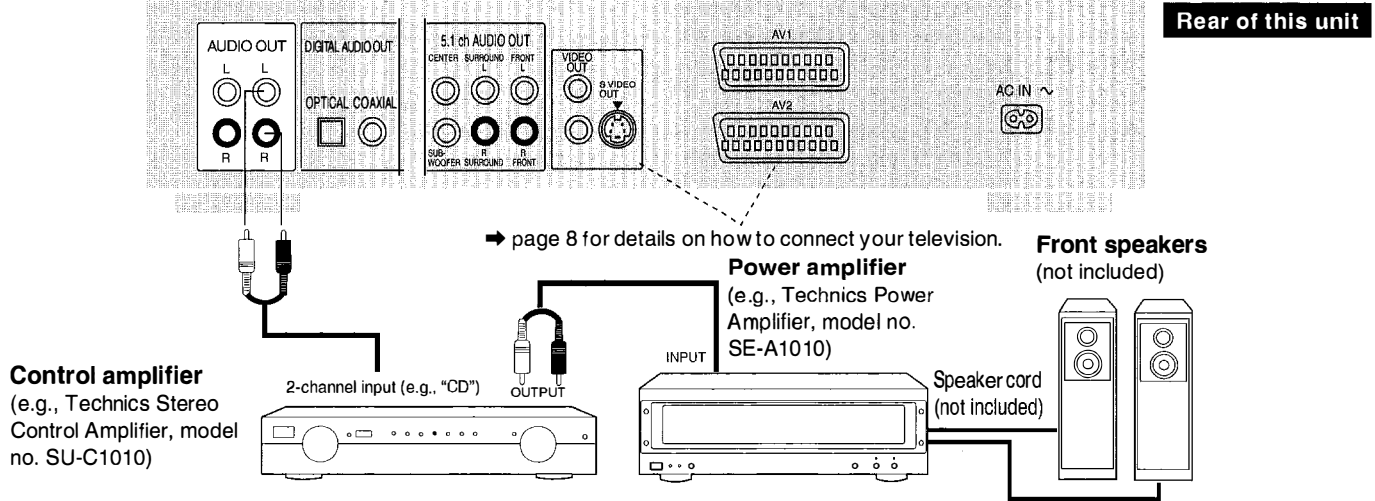
## Stereo connection cable (not included)



When making the connections, be sure to also refer to the operations manuals for the amplifier, speakers, and other components.

## Playing through the front speakers (2ch) (Basic system)

This is the basic system for enjoying high-quality DVD-Audio.

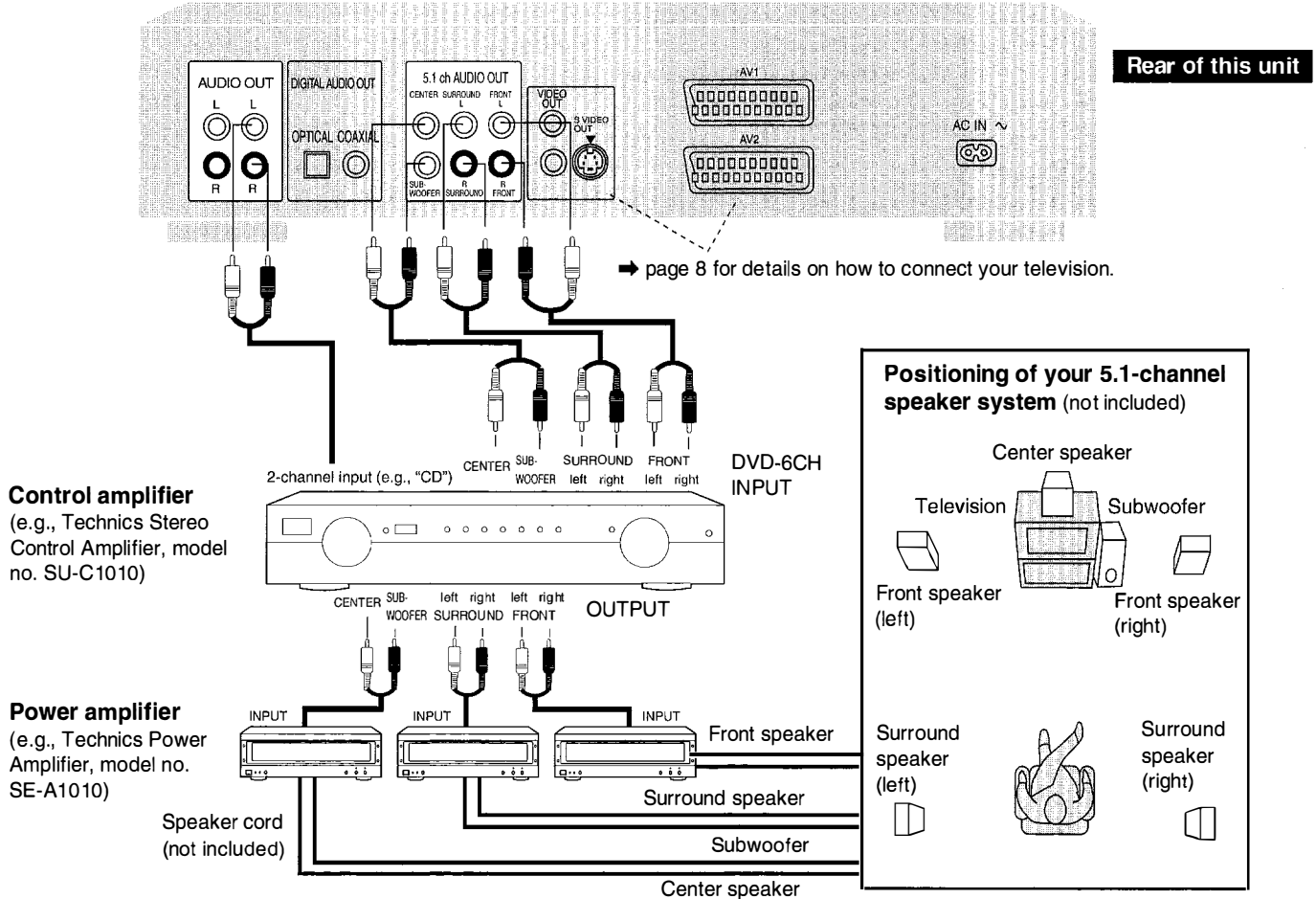


Settings

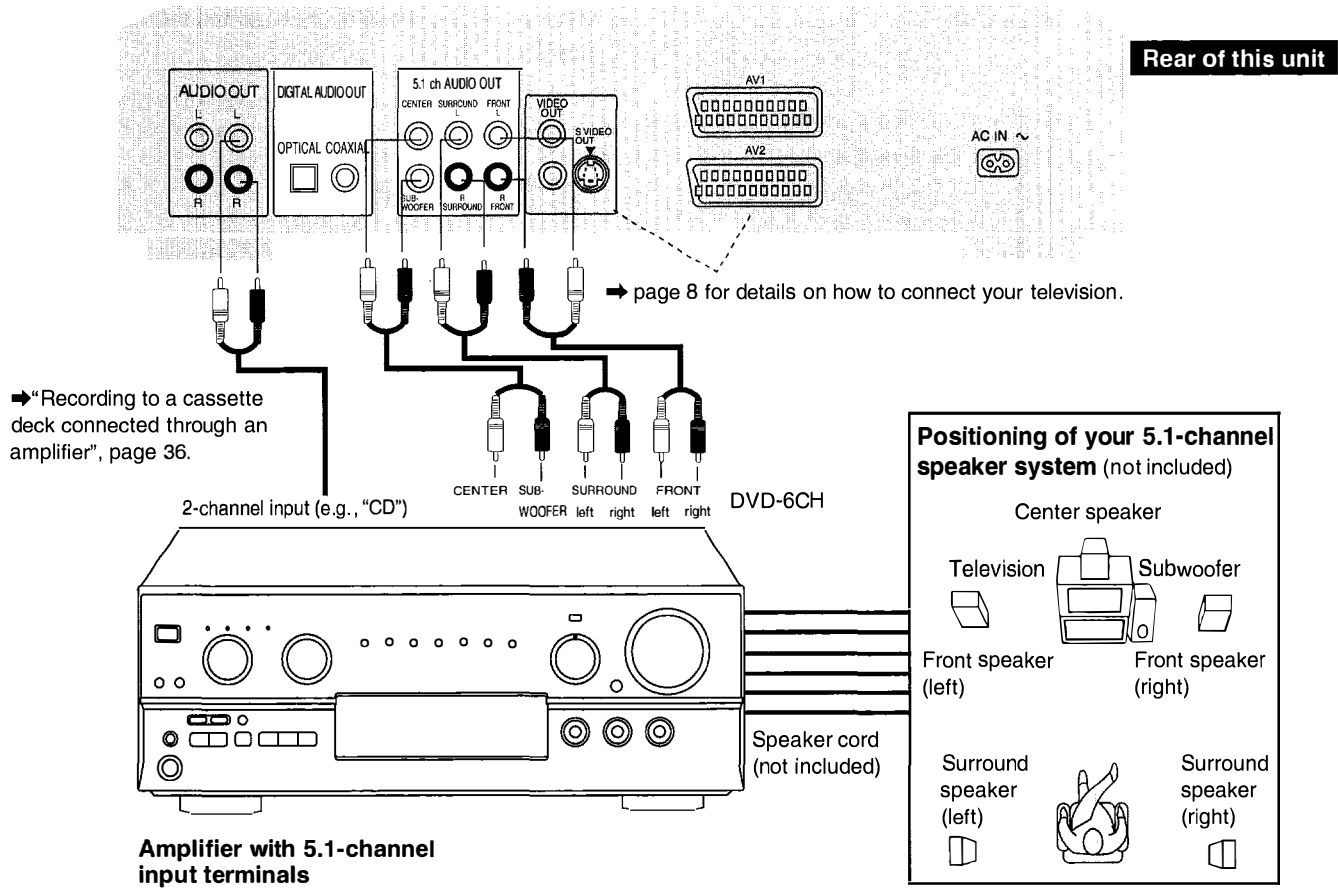
## Connecting 5.1-channel surround system

Use this system is for play DVD-Audio and DVD-Video surround sound.

### Example 1: When using separate amplifiers (with DVD 5.1ch input)

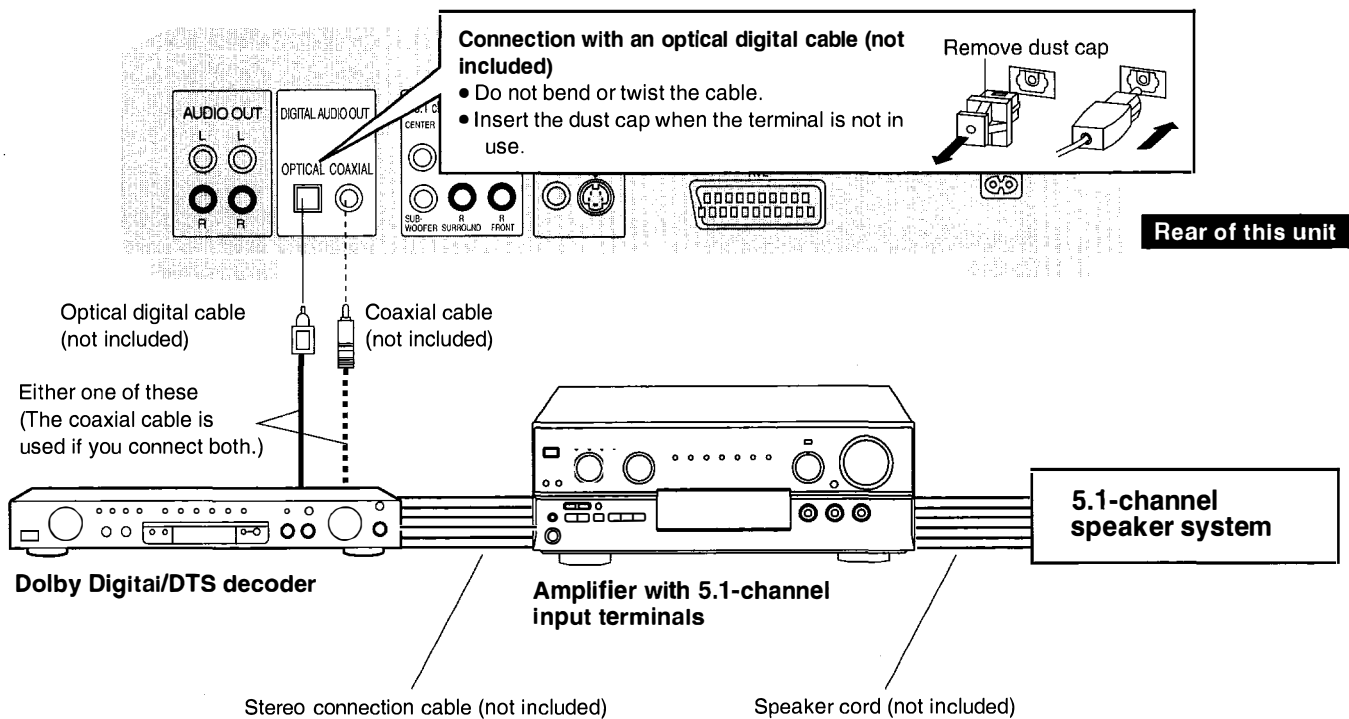


**Example 2: When using an AV control amplifier (with DVD 5.1ch input)**



**Connecting a surround system through a digital sound decoder**

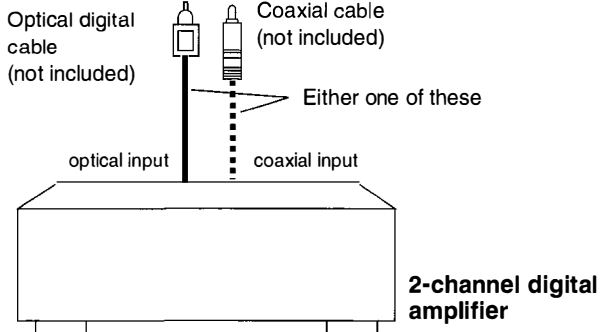
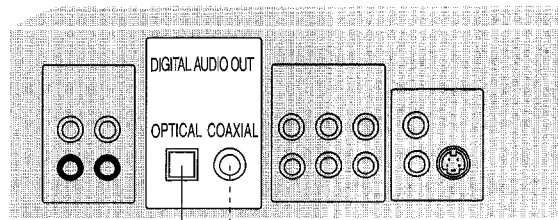
This is useful for expanding the system configuration when connecting a Dolby Digital or DTS decoder with multiple input jacks.



Other connections

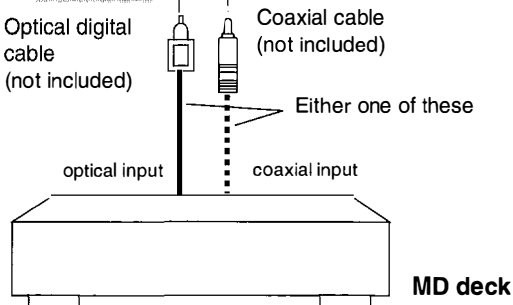
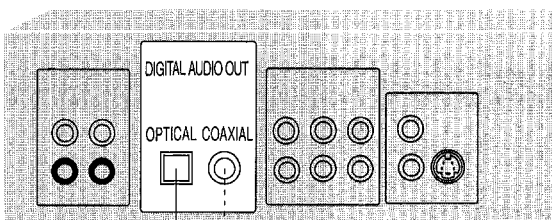
Connecting a 2-channel digital amplifier

Rear of this unit



Recording directly to an MD deck

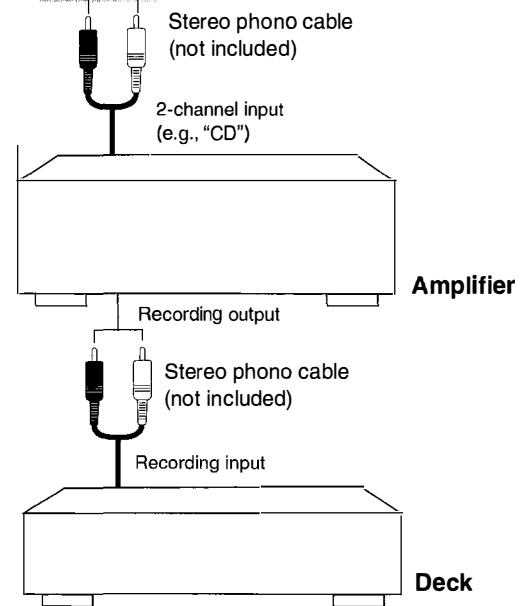
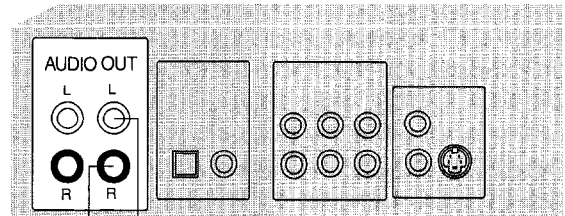
Rear of this unit



Recording to a cassette deck connected through an amplifier

Connect the amplifier to one set of the AUDIO OUT terminals. If you use 5.1-channel connection, only the sound for the front speakers will be recorded.

Rear of this unit





## Digital Audio Output

You must change the digital output signal settings on this unit to suit the kind of equipment you have connected.

### • PCM Down conversion

Choose whether or not to convert the 96 kHz signals contained on DVD-Video to 48 kHz/16 bit.

### • Dolby Digital

Choose whether to output Dolby Digital signals as they are (bitstream) or to convert them to PCM 2-channel signals so audio can be heard without passing through a decoder.

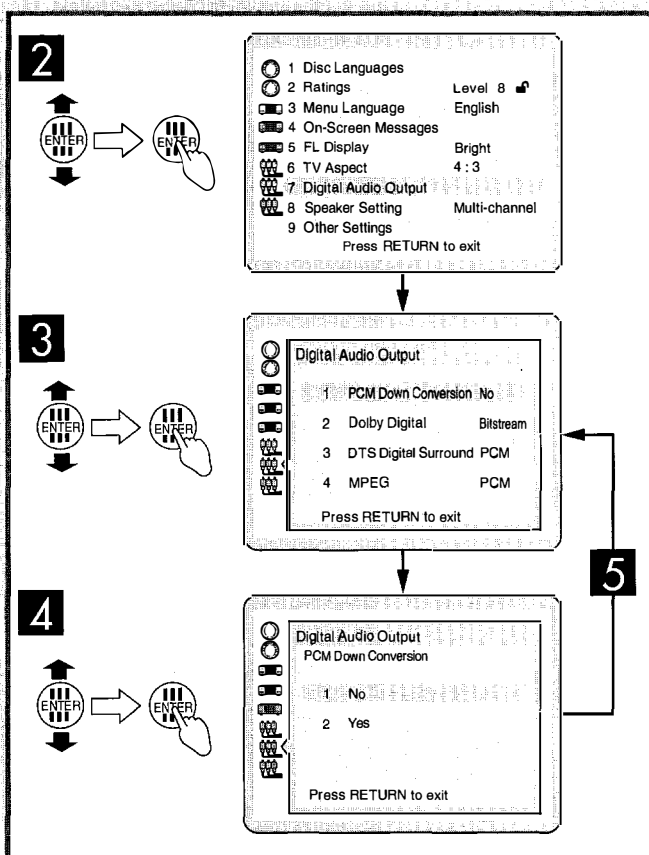
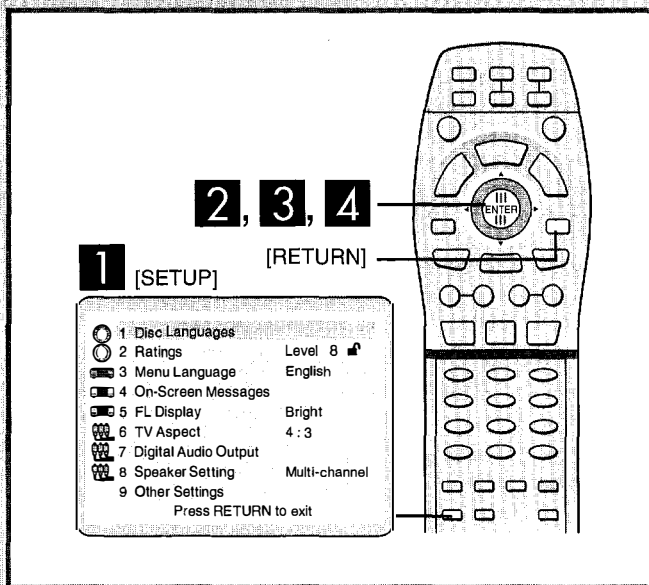
### • DTS Digital Surround

The same choices are available with DTS as are available for Dolby Digital.

### • MPEG

The same choices are available with MPEG as are available for Dolby Digital.

To enjoy high quality 192 kHz or 96 kHz audio, you should use 5.1-channel output connection and set PCM Down Conversion to "NO".



- 1 While stopped, Press [SETUP].
- 2 Select "7 Digital Audio Output" and press [ENTER].
- 3 Select the item you want to change and press [ENTER].
- 4 Select the new setting and press [ENTER].
- 5 Repeat steps 3 and 4 to make other changes.

Continued on next page

Item	Content
1. <b>PCM Down Conversion</b> * (DVD-Video only)	<p><b>1. No</b> (factory setting)</p> <ul style="list-style-type: none"> <li>● 96 kHz LPCM signals are not output.</li> <li>● 48 kHz signals are output as 48 kHz/16 bit signals.</li> <li>● Signals from DVDs without copyright protection may be output as they are.</li> </ul> <p><b>2. Yes</b></p> <ul style="list-style-type: none"> <li>● 96 kHz and 48 kHz digital and analogue signals are output as 48 kHz/16 bit signals. (This is for copyright protection.)</li> </ul>
2. <b>Dolby Digital</b>	<p><b>1. Bitstream</b> (factory setting) Choose this setting if you have connected this unit to a Dolby Digital decoder.</p> <p><b>2. PCM</b> Choose this setting if you have connected this unit to a digital amplifier or digital recording device that doesn't have a decoder.</p>
3. <b>DTS Digital Surround</b>	<p><b>1. PCM</b> (factory setting) Choose this setting if you have connected this unit to a digital amplifier or digital recording device that does not have a decoder.</p> <p><b>2. Bitstream</b> Choose this setting if you have connected this unit to a DTS decoder.</p>
4. <b>MPEG</b>	<p><b>1. PCM</b> (factory setting) Choose this setting if you have connected this unit to a digital amplifier or digital recording device that does not have a decoder.</p> <p><b>2. Bitstream</b> Choose this setting if you have connected this unit to a MPEG audio decoder.</p>

\* When playing DVD-Audio, all digital output is in the down sampled PCM form.

**To return to the previous menu**

Press [RETURN].

**To clear the menus**

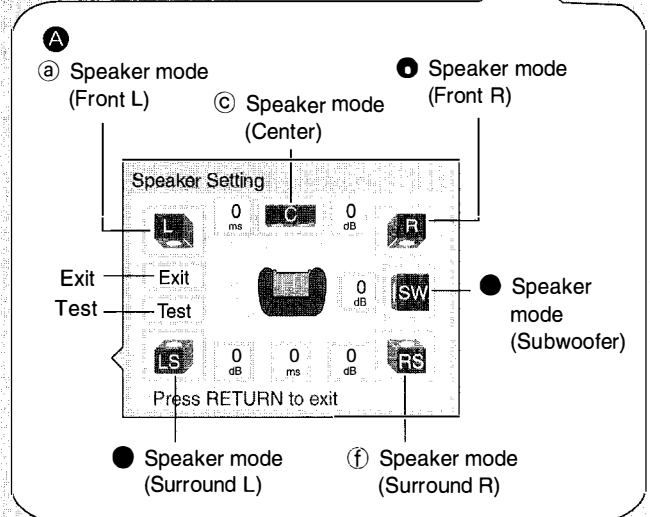
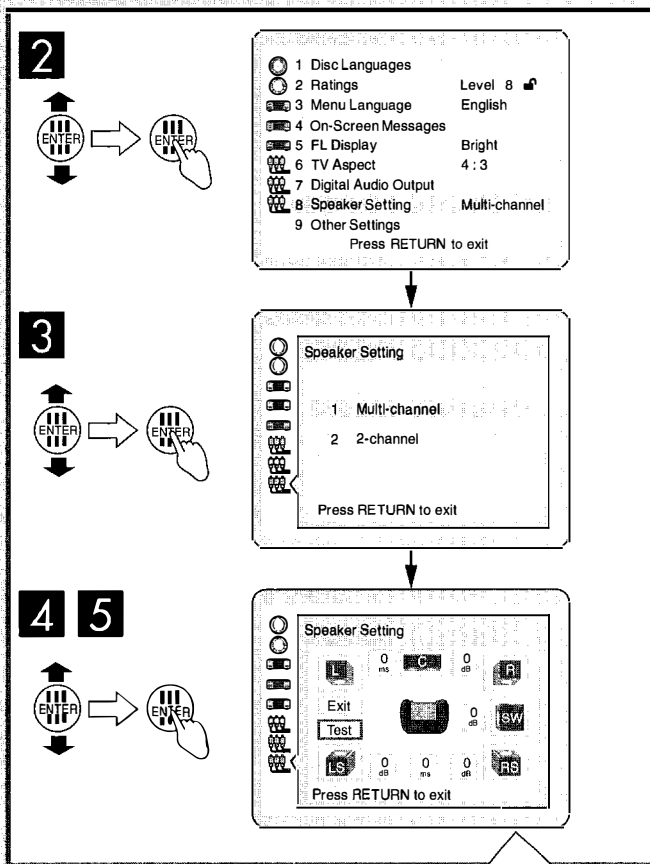
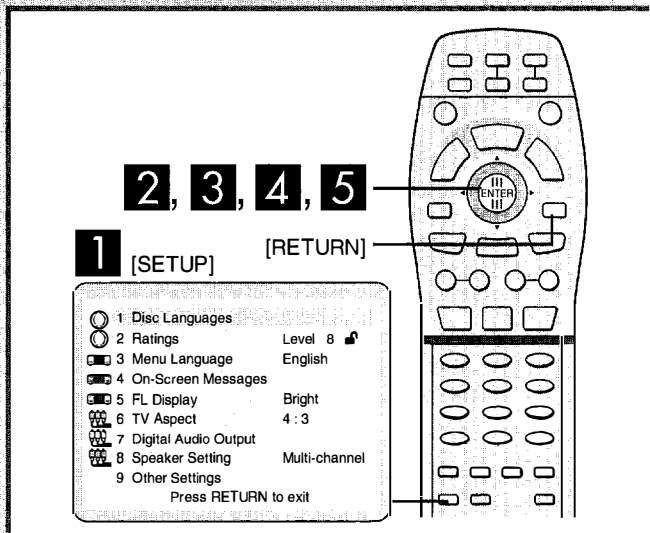
Press [RETURN] until you return to the previous screen.

**Caution for the optical/coaxial digital audio output connector:**

Ensure Dolby Digital and DTS are set to "PCM" if you connect this unit to a digital amplifier without a decoder. If the signals are output as bitstream, "noise" will be output, which can cause harm to your ears and speakers.

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories. Confidential unpublished works. © 1992 - 1999 Dolby Laboratories. All rights reserved.

Manufactured under license from Digital Theater Systems, Inc. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc. © 1996 Digital Theater Systems, Inc. All rights reserved.

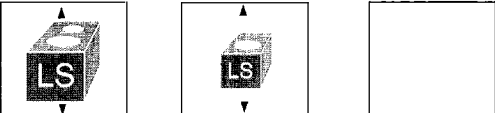


**Speaker Setting**

Choose the settings to suit your speaker system.

- **Speaker mode**  
Choose the size of your speakers and whether they are connected or not. If you set a speaker as being not present, sound will not be output from that speaker even if it is connected.
- **Delay time**  
Change these settings to make up for differences in the distances between the speakers and the listening position.
- **Test**  
Use this test to adjust the volume balance of your speakers.

- 1** While stopped, press [SETUP].
- 2** Select "8 Speaker Setting" and press [ENTER].
- 3** Select "1 Multi-channel" and press [ENTER].  
See the note at the foot of this page for details about "2-channel".
- 4** Select the item you want to change and press [ENTER].
- 5** Select the new setting and press [ENTER].
- 6** Repeat steps 4 and 5 to make other changes.

Item	Content
	Underlined values are factory settings. "Large" speakers are capable of reproducing sounds below 100 Hz. "Small" speakers are other types.
	Ⓐ Ⓒ <b>Front speakers (L/R)</b> Large/Small
	Ⓒ <b>Center speaker</b> Large/Small/No
	● <b>Subwoofer</b> Yes/No
	●● <b>Surround speakers (LS/RS)</b> Large/Small/No
Ⓐ <b>Speaker mode</b>	Example (LS): ● Large                      ● Small                      ● No
	
	<b>Note</b> If you set the subwoofer to "No", the front speakers will be automatically set to "Large".

**Note**  
When playing DVD-Audio, the software settings may override any settings you change here. "P.PCM" appears or "D.MIX" disappears on the main unit.

**"2-channel"**  
Select if you have connected the unit to other equipment with a stereo connection cable through the front left and right terminals of the 5.1-channel connection terminals. You will return to the initial settings menu when you press [ENTER].

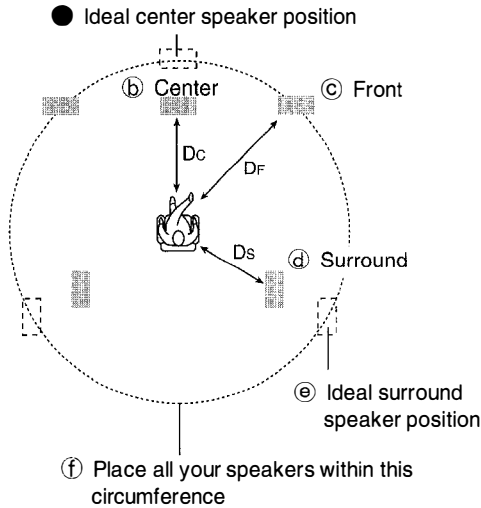
**To return to the previous menu**  
Press [RETURN].

**To clear the menus**  
Press [RETURN] until you return to the previous screen.

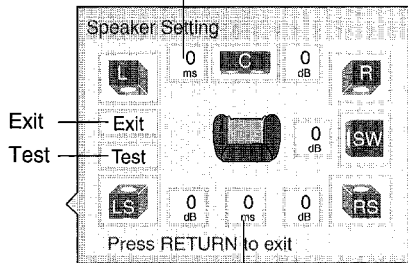
**To exit**  
Highlight the "Exit" box and press [ENTER].

**Continued on next page**

B

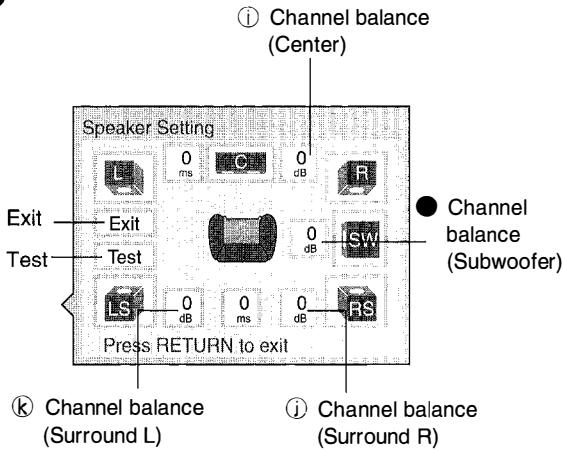


g Delay time (Center)



h Delay time (Surround L/R)

C



B Delay time

Item	Content																		
	<p>The optimum when listening to 5.1-channel sound is for all the speakers, except for the subwoofer, to be the same distance from the listening position. With Dolby Digital, you can adjust the delay time for the center and surround speakers to make up for differences in distances between the speakers. These adjustments will have no effect on DTS or DVD-Audio sources.</p> <p><b>g Center speaker</b> Set delay time to 0 ms if <math>D_f</math> is less than or equal to <math>D_c</math>.</p> <table border="1"> <thead> <tr> <th>If <math>D_f - D_c =</math></th> <th>then set to</th> </tr> </thead> <tbody> <tr> <td>50 cm</td> <td>1.3 ms</td> </tr> <tr> <td>100 cm</td> <td>2.6 ms</td> </tr> <tr> <td>150 cm</td> <td>3.9 ms</td> </tr> <tr> <td>200 cm</td> <td>5.3 ms</td> </tr> </tbody> </table> <p><b>h Surround speakers</b> Set delay time to 0 ms if <math>D_f</math> and <math>D_s</math> are equal.</p> <table border="1"> <thead> <tr> <th>If <math>D_f - D_s =</math></th> <th>then set to</th> </tr> </thead> <tbody> <tr> <td>200 cm</td> <td>5.3 ms</td> </tr> <tr> <td>400 cm</td> <td>10.6 ms</td> </tr> <tr> <td>600 cm</td> <td>15.9 ms</td> </tr> </tbody> </table> <p>The factory setting is 0 ms for both types of speakers.</p>	If $D_f - D_c =$	then set to	50 cm	1.3 ms	100 cm	2.6 ms	150 cm	3.9 ms	200 cm	5.3 ms	If $D_f - D_s =$	then set to	200 cm	5.3 ms	400 cm	10.6 ms	600 cm	15.9 ms
If $D_f - D_c =$	then set to																		
50 cm	1.3 ms																		
100 cm	2.6 ms																		
150 cm	3.9 ms																		
200 cm	5.3 ms																		
If $D_f - D_s =$	then set to																		
200 cm	5.3 ms																		
400 cm	10.6 ms																		
600 cm	15.9 ms																		
	<p>A test signal is output from one speaker at a time, starting with the front left speaker and proceeding clockwise.</p> <p style="text-align: center;">             Front (left) → ● Center → Front (right)              ↑ ↓              k Surround (left) ← i Surround (right)         </p> <p>Adjust the volume of the center and surround speakers so they are the same apparent volume as the front speakers. The front speakers cannot be adjusted here and there is no signal output from the subwoofer.</p> <p><b>Adjusting volume</b> Move the joystick up or down when the test signal is output from the speaker you want to adjust. The signal will continue to come from that speaker as long as you continue adjustments.</p> <p><b>To stop the test signal</b> Press the joystick.</p> <p><b>To adjust the volume of the subwoofer (i)</b></p> <ol style="list-style-type: none"> <li>1. Use the joystick to highlight the channel balance box for the subwoofer and press.</li> <li>2. Move the joystick up to raise the volume or down to lower the volume and press.</li> </ol>																		
C Test (to adjust channel balance)																			

## Summary of initial settings


















This is a list of items you are able to change before playing discs (initial settings).  
See the relevant pages for more details. Underlined values are factory settings.

Settings	Item and content		Page	
1. Disc Languages	Audio	<u>English</u> /French/German/Italian/Spanish/Original/Other	26	
	Subtitle	<u>Automatic</u> /English/French/German/Italian/Spanish/Other		
	Menus	<u>English</u> /French/German/Italian/Spanish/Other		
2. Ratings	8 <u>No Limit</u> /7/6/5/4/3/2/1/0 Lock All		27	
3. Menu Language	<u>English</u> /Français/Deutsch/Italiano/Español		29	
4. On-Screen Messages	On-Screen Messages	<u>On</u> /Off	30	
	Colour and Position	<u>Blue</u> /Violet/Green Blue (slightly lower)/Violet (slightly lower)/Green (slightly lower)		
5. FL Display	<u>Bright</u> /Dim/Dim During DVD/VCD Play (Auto)/Off During Play (Auto)		29	
6. TV Aspect	4:3	<u>Standard</u> (Direct View TV)/CRT Projector/LCD Projector/ Projection TV	10	
	16:9	<u>Standard</u> (Direct View TV)/CRT Projector/LCD Projector/ Projection TV		
7. Digital Audio Output	PCM Down Conversion	<u>No</u> /Yes	37–38	
	Dolby Digital	<u>Bitstream</u> /PCM		
	DTS Digital Surround	<u>PCM</u> /Bitstream		
	MPEG	<u>PCM</u> /Bitstream		
8. Speaker Setting	Multi-channel	Speaker mode	Front speaker(L/R): <u>Large</u> /Small Center speaker: <u>Large</u> /Small/No Subwoofer: <u>Yes</u> /No Surround speaker(LS/RS): <u>Large</u> /Small/No	39–40
		Delay time	Center speaker: <u>0</u> /1.3/2.6/3.9/5.3 ms Surround speaker: <u>0</u> /5.3/10.6/15.9 ms	
		Channel balance	All channels: <u>0</u> /±6 dB	
	2-channel			
9. Other Settings	Still Mode	<u>Automatic</u> /Field/Frame	31–32	
	Audio during Search	<u>On</u> /Off		
	TV Mode (4:3)	<u>Pan &amp; Scan</u> /Letterbox		
	D.Range Compression	<u>Off</u> /On		
	RE-MASTER	<u>On</u> /Off		
	Still Picture Display	<u>Off</u> /On		
	AV 1 Output	<u>Video</u> /S-Video/RGB		
	NTSC Disc Output	<u>PAL 60</u> /NTSC		
DVD-Video Mode	<u>Off</u> /On			

## How different kinds of software appear on your television

DVD software is recorded in a variety of picture formats, and how they appear on your TV depends on the software, the kind of TV you have, and the picture mode your TV is set to.

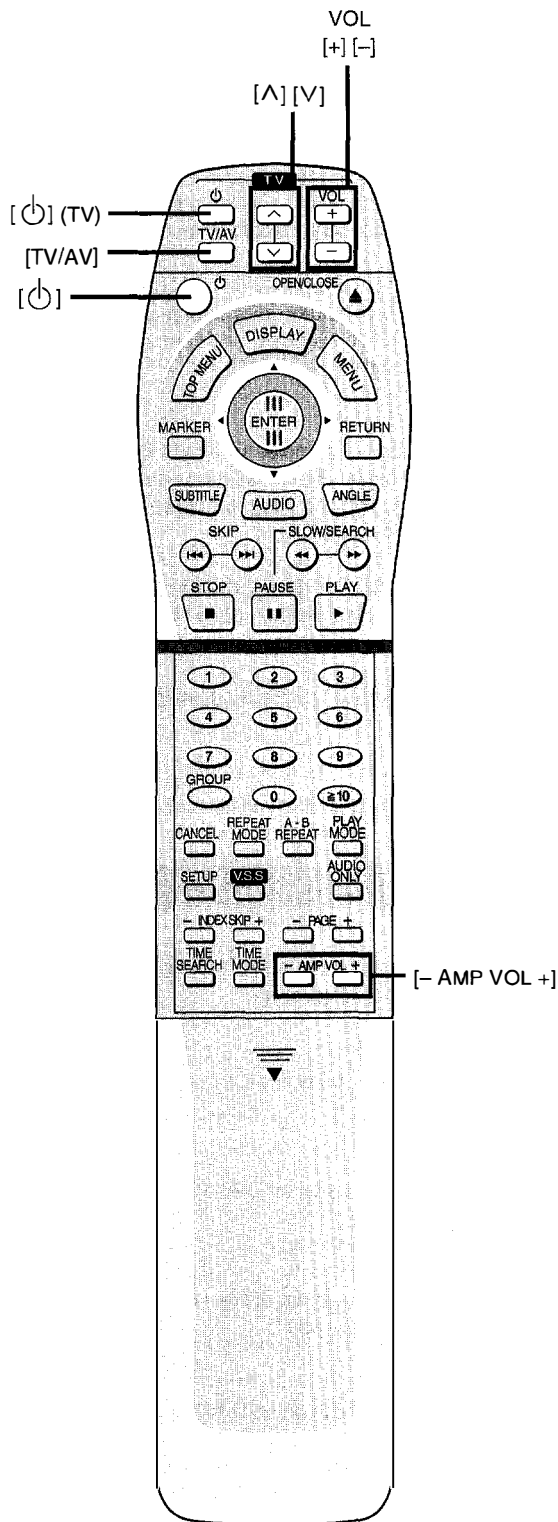
- Letterbox refers to pictures where black bands appear at the top and bottom.
- Pan and scan refers to pictures where part of the picture is cut off so it fills the whole screen.

Television and picture mode / Software format	4:3	16:9 full mode	16:9 zoom mode	16:9 auto mode
<b>Wide screen, pan and scan</b> 	Edges cut off 	Full screen 	Top and bottom cut off 	Full screen 
<b>Wide screen, non-pan and scan</b> 	Letterbox 			
<b>Regular (4:3)</b> 	Full screen 	Screen stretched horizontally 	Top and bottom cut off 	Full screen with black bands on the left and right 
<b>Regular (4:3) letterbox</b> 	Letterbox 	Letterbox with screen stretched horizontally 	Full screen 	Letterbox with extremities of picture stretched 

- The names given to the television picture modes depend on the make of your television. There may also be slight differences in how the pictures appear on the screen. Refer to your television's operating instructions for details.

## Language code list

6565: Afar	6984: Estonian	7565: Georgian	7876: Dutch	8469: Telugu
6566: Abkhazian	6985: Basque	7575: Kazakh	7879: Norwegian	8471: Tajik
6570: Afrikaans	7065: Persian	7576: Greenlandic	7982: Oriya	8472: Thai
6577: Ameharic	7073: Finnish	7577: Cambodian	8065: Punjabi	8473: Tigrinya
6582: Arabic	7074: Fijii	7578: Kannada	8076: Polish	8475: Turkmen
6583: Assamese	7079: Faroese	7579: Korean	8083: Pashto, Pushto	8476: Tagalog
6588: Aymara	7082: French	7583: Kashmiri	8084: Portuguese	8479: Tonga
6590: Azerbaijani	7089: Frisian	7585: Kurdish	8185: Quechua	8482: Turkish
6665: Bashkir	7165: Irish	7589: Kirghiz	8277: Rhaeto- Romance	8484: Tatar
6669: Byelorussian	7168: Scots Gaelic	7665: Latin	8279: Romanian	8487: Twi
6671: Bulgarian	7176: Galician	7678: Lingala	8285: Russian	8575: Ukrainian
6672: Bihari	7178: Guarani	7679: Laotian	8365: Sanskrit	8582: Urdu
6678: Bengali; Bangla	7185: Gujarati	7684: Lithuanian	8368: Sindhi	8590: Uzbek
6679: Tibetan	7265: Hausa	7686: Latvian, Lettish	8372: Serbo- Croatian	8673: Vietnamese
6682: Breton	7273: Hindi	7771: Malagasy	8373: Singhalese	8679: Volapük
6765: Catalan	7282: Croatian	7773: Maori	8375: Slovak	8779: Wolof
6779: Corsican	7285: Hungarian	7775: Macedonian	8376: Slovenian	8872: Xhosa
6783: Czech	7289: Armenian	7776: Malayalam	8377: Samoan	8979: Yoruba
6789: Welsh	7365: Interlingua	7778: Mongolian	8378: Shona	9072: Chinese
6865: Danish	7378: Indonesian	7779: Moldavian	8379: Somali	9085: Zulu
6869: German	7383: Icelandic	7782: Marathi	8381: Albanian	
6890: Bhutani	7384: Italian	7783: Malay	8382: Serbian	
6976: Greek	7387: Hebrew	7784: Maltese	8385: Sundanese	
6978: English	7465: Japanese	7789: Burmese	8386: Swedish	
6979: Esperanto	7473: Yiddish	7865: Nauru	8387: Swahili	
6983: Spanish	7487: Javanese	7869: Nepali	8465: Tamil	



You can use the remote control to operate your television and to control the volume of amplifiers manufactured by Technics.

## Television operation

First enter the code for your television.

Press and hold the **[⏻]** button for this unit and enter the two-digit code.

Refer to this chart for the code for your television.

Code	Manufacturer	Code	Manufacturer
01	PANASONIC 1	16	TELEFUNKEN 5
02	PANASONIC 2	17	HITACHI 1
03	PANASONIC 3	18	HITACHI 2
04	PANASONIC 4	19	SIEMENS
05	GRUNDIG BP.	20	SAMSUNG
06	PHILIPS LOEWE	21	ITT NOKIA 1
07	SONY	22	NOKIA 2 SALORA
08	METZ	23	MIVAR
09	FERGUSON	24	TOSHIBA
10	THOMSON 1	25	SANYO
11	THOMSON 2	26	SHARP
12	TELEFUNKEN 1	27	JVC
13	TELEFUNKEN 2	28	MITSUBISHI
14	TELEFUNKEN 3	29	HITACHI 3
15	TELEFUNKEN 4	30	HITACHI 4

- If there is more than one code for the manufacturer of your television, try each code until you find the correct one.
- You must repeat this procedure after you change the remote control's batteries.

### To turn the television on and off

Press **[⏻]** (TV).

### To select the TV input source

Press **[TV/AV]** (TV).

### To change channels

Press **[⬆️⬆️]** or **[⬆️⬆️]**.

### To control the volume

Press **[-]** to decrease the volume or **[+]** to increase the volume.

## To control the volume of a Technics amplifier

Press **[AMP VOL (- or +)]**.

-: decreases volume

+: increases volume

### Note

There are some televisions and amplifiers that cannot be operated with this remote control.

## Video

### Frame

Frames are the still pictures that go together to make a moving picture.

There are about thirty frames shown each second.

### Field

One frame is made up of two fields.

A regular television shows these fields one after the other to create frames.

### Frame still and field still

A still is shown when you pause a moving picture.

A frame still is made up of two alternating fields, so the picture may appear blurred, but overall quality is high.

A field still is not blurred, but it has only half the information of a frame still so picture quality is lower.

### I/P/B

MPEG 2, the video compression standard adopted for use with DVD, codes frames using these three picture types.

I: Intra coded picture (I-picture)

This is the standard picture and is a complete picture in itself. This means it has the best picture quality and is the best to use when adjusting the picture.

P: Predictive coded picture (P-picture)

This picture is calculated based on past I and P-pictures.

B: Bidirectionally-predictive coded picture (B-picture)

This picture is calculated by comparing past and future I and P-pictures so it has the lowest volume of information.

## Digital audio

### Decoder

A decoder restores the coded audio signals on DVDs to normal. This is called decoding.

### Dolby Digital

This is a method of coding digital signals developed by Dolby Laboratories. The signals are highly compressed, enabling a large amount of information to be recorded on one disc.

### Digital Theater Systems (DTS) Digital Surround

This is a method of coding digital signals developed by Digital Theater Systems. The signals are compressed at a low ratio to maintain sound quality.

### Sampling rate

This is the number of samples of sound taken per second during conversion to a digital signal. Sampling frequency is expressed in kilohertz (kHz). A high sampling frequency results in a sound close to the original when played back.

### Linear PCM (pulse code modulation)

PCM is the usual digital method used for music CDs. DVDs have a greater volume so they use linear PCM, which has a higher sampling rate.

The compressed version of this is called Packed PCM.

### Bitstream

This is the digital form of multiple channel audio data (e.g., 5.1-channel) before it is decoded into its various channels.

## Other

### Track

This is the smallest division on DVD-Audio, CD, and Video CD, and usually equates to a single song.

### Index

Indexes are included on some DVD-Audio to further divide tracks into smaller sections.

### Chapter

This is the smallest division on DVD-Video and is roughly equivalent to a track.

### Group

The tracks on DVD-Audio are divided up into groups. The method of grouping depends on the disc.

### Title

This is the largest division on DVD-Video.

### Playback control (PBC)


This method of controlling disc play is included on version 2.0 Video CDs. You are able to interact with the disc through menus.



# Troubleshooting guide

Before requesting service for this player, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, consult your dealer for instructions.

Symptom	Remedy	Page
Unit turns off automatically.	<ul style="list-style-type: none"> <li>The unit switches to standby after it has been stopped for about thirty minutes to conserve power. Press [⏻/I] again.</li> </ul>	–
Play fails to start or stops soon after starting.	<ul style="list-style-type: none"> <li>Condensation may have formed inside the player. Wait for one hour for it to clear.</li> <li>This unit cannot play discs other than those specified.</li> </ul>	–
No video or size of picture is unusual.	<ul style="list-style-type: none"> <li>Check the settings on the television.</li> </ul>	8–10
No audio or unusual audio.	<ul style="list-style-type: none"> <li>If you are playing DVD-Audio with multiple channels and “D.MIX” does not light on the unit’s display, the unit cannot play the audio correctly unless you have connected the speakers specified by the software.</li> <li>Turn V.S.S. off or select the appropriate V.S.S. mode.</li> <li>“Error Track” on the unit’s display indicates that the track playing has been recorded with a nonstandard system.</li> <li>Due to the specifications on some types of televisions, both video and audio may be cut off when you turn the AUDIO ONLY feature on.</li> </ul>	33 16 – –
The unit does not respond when buttons are pressed.	<ul style="list-style-type: none"> <li>Some discs prohibit certain operations.</li> <li>If there is no response at all, the unit may have been affected by lightning or static electricity. Try turning the unit off and on again.</li> </ul>	–
Messages do not appear on the television.	<ul style="list-style-type: none"> <li>Go to the initial settings menu and turn the On-Screen Messages on.</li> </ul>	30
GUI icons are cut off at the top of the screen.	<ul style="list-style-type: none"> <li>Go to the initial settings menu and change the position of the GUI icons.</li> </ul>	30
The unit’s display is dim.	<ul style="list-style-type: none"> <li>Go to the initial settings menu and change the display settings.</li> </ul>	29
The picture is disrupted during fast forward and rewind, and briefly when AUDIO ONLY is canceled.	<ul style="list-style-type: none"> <li>Some disruption will occur. This is not a malfunction.</li> </ul>	–
There is noise from the tuner or disturbance on the TV screen.	<ul style="list-style-type: none"> <li>Use the unit further away from the tuner or TV.</li> <li>If the tuner or TV’s antenna is an indoor type, use an outdoor one.</li> </ul>	–
The remote control does not work.	<ul style="list-style-type: none"> <li>Check the batteries are inserted correctly.</li> <li>Aim the remote control at the main unit and remove obstacles between them.</li> <li>If the remote control doesn’t operate the television, try changing the code. This remote control cannot operate some televisions.</li> </ul>	7 43
Play does not start after selecting a title.	<ul style="list-style-type: none"> <li>Some titles cannot be played if you have set a ratings level.</li> </ul>	27
Subtitles not shown.	<ul style="list-style-type: none"> <li>Subtitles appear only if they are recorded on the DVD.</li> <li>Turn the subtitles on.</li> </ul>	18
The soundtrack or subtitle language cannot be changed.	<ul style="list-style-type: none"> <li>Languages can only be selected if they are recorded on the DVD.</li> <li>Some DVDs require you to change the languages through menus. Read the instructions that came with the DVD.</li> </ul>	26
Angles cannot be changed.	<ul style="list-style-type: none"> <li>There may be parts of multi-angle DVDs where different angles are not recorded. “” lights up on the unit’s display to indicate this feature is available. An indication may also appear on the television.</li> </ul>	18
Languages you selected in the initial settings menu are not used for the soundtrack and subtitles.	<ul style="list-style-type: none"> <li>The selected languages are not recorded on the DVD.</li> </ul>	–
You have forgotten your ratings password.	<ul style="list-style-type: none"> <li>Reset the unit to its original factory settings. Do the following to restore the unit to the condition it was in at the time of shipment. This clears the ratings settings. Press [◀◀/◀◀], [  ], and [▲] (OPEN/CLOSE) on the main unit at the same time for about 3 seconds until the message “Initialized” disappears from the television screen.</li> </ul>	–

## Self-diagnosis display function

When an error or trouble is detected during operation, a service number appears in the FL display.  
When a service number appears, check out the details given below.

Service number	Player status	Remedy
Check Disc	Disc is dirty.	<ul style="list-style-type: none"> <li>Wipe the disc clean.</li> </ul>
H□□ □□ stands for a number.	Trouble may have occurred. The number following "H" differs depending on the status of the player.	<ul style="list-style-type: none"> <li>Press [⏻/⏻] to set the player to the standby mode and then back to ON. Alternatively, press [⏻/⏻] to set the player to the standby mode, disconnect the AC mains lead, and then reconnect it.</li> </ul>

- If the service number fails to be cleared even when the remedial action is taken, ask a service technician to repair the player.

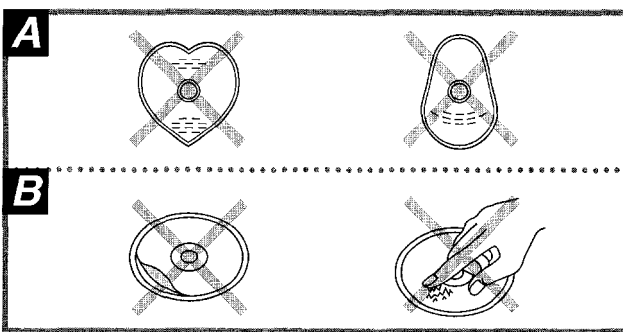
## Maintenance

To clean this unit, wipe with a soft, dry cloth.

If the surfaces are extremely dirty, use a soft cloth dipped in a soap-and-water solution or a weak detergent solution.

- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

### Disc selection and care



Store the disc in its case when not in use.

#### Do not;

- use irregularly shaped discs. (A)
- attach extra labels and stickers.
- use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers. (B)
- attach scratch-proof covers or any other kind of accessory.
- write anything on the disc.
- clean discs with liquids. (Wipe with a soft, dry cloth.)

# Specifications

## POWER

requirements: AC 220–240 V, 50 Hz

## POWER

consumption: 27 W

Signal system: PAL 625/50, PAL 525/60, NTSC

Mass: 8.6 kg

Dimensions: 430 (W)×275 (D)×125 (H) mm  
(excluding protrusions)

## Operating temperature range:

+5 to +35°C

## Operating humidity range:

5 to 90% RH (no condensation)

## Discs played:

**DVD disc**  
12 cm single-sided, single-layer  
12 cm single-sided, dual-layer  
12 cm double-sided, single-layer  
8 cm single-sided, single-layer  
8 cm single-sided, dual-layer  
8 cm double-sided, single-layer

## Compact disc (CD- DA, Video CD)

12 cm disc  
8 cm disc

## RGB output:

Output level: 0.7 Vp-p (75 Ω)

Output connector: AV1

## S video output:

Y output level: 1 Vp-p (75 Ω)

C output level: 0.286 Vp-p (NTSC/75 Ω)

Output connector: S terminal/AV1

Number of connectors: 1 system

## Video output:

Output level: 1 Vp-p (75 Ω)

Output connector: Pin jack/AV1/AV2

Number of connectors: 2 systems

## Audio output:

Output level (1 kHz): 200 mVrms (10 kΩ, –20 dB)

Output connector: Pin jack/AV1/AV2

Number of connectors: 2 systems (2ch mixed output)  
1 system (6ch discrete output)

## Audio signal output characteristics:

Frequency response:

- DVD-Audio: 2 Hz–88 kHz
- DVD-Video: 2 Hz–44 kHz
- CD: 2 Hz–20 kHz

S/N:

- CD: 115 dB (EIAJ)

Dynamic range:

- DVD (LPCM): 108 dB
- CD: 100 dB (EIAJ)

Total harmonic distortion:

- DVD (LPCM): 0.0012%
- CD: 0.0017% (EIAJ)

## Digital audio output:

Optical digital output: Optical terminal

Coaxial digital output: Pin jack

## PHONES jack:

Output connector: 6.3 mm stereo jack

Output level: 180 mVrms (32 Ω, –20 dB)

## Pickup:

Wave length: 665 nm

Laser power: CLASS 2

**Power consumption in standby mode: 3 W**

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

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