

# aiwa

DVD PLAYER  
PLATINA DVD

# XD-SPM823

**OPERATING INSTRUCTIONS  
MANUAL DE INSTRUCCIONES**

### Owner's record

For your convenience, record the model number and serial number (you will find them on the rear of your set) in the space provided below. Please refer to them when you contact your Aiwa dealer in case of difficulty.

Model No.	Serial No. (Lot No.)
XD-SPM823	

**En** (English)

**E** (Español)

For assistance and information,  
***call toll free 1-800-BUY-AIWA.***

(United States and Puerto Rico)



8C-AVL-903-01  
020401AMK-H-L



**WARNING**

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

**Explanation of Graphical Symbols:**

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING:**

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

**CAUTION:**

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

**CAUTION:**

This Digital Video Disc Player employs a Laser System. To ensure proper use of this product, please read this operating instructions carefully and retain for future reference, should the unit require maintenance, contact an authorized service location - see service procedure. Use of controls, adjustments or the performance of procedures other than those specified herein may result hazardous radiation exposure. To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

# IMPORTANT SAFETY INSTRUCTIONS

## CAUTION:

**PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THESE OPERATING INSTRUCTIONS AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.**

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use and servicing.

This unit is fully transistorized and does not contain any parts that can be repaired by the user.

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

### 1. Read operating instructions

After unpacking this product, read the operating instructions carefully, and follow all the operating and other instructions.

### 2. Power sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply in your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

### 3. Grounding or polarization

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

### 4. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface.

This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

### 5. Heat

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

### 6. Water and moisture

Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool and the like.

### 7. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

### 8. Power cord protection

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

### 9. Overloading

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

### 10. Lightning

For added protection of this product during storms, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet.

This will prevent damage to the product due to lightning and power line surges.

### 11. Object and liquid entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

### 12. Attachements

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

### 13. Accessories, carts and stands

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



### 14. Disc tray

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

**15. Burden**

Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.

**16. Connecting**

When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the operating instructions of the other equipment carefully and follow the instructions when making any connections.

**17. Sound volume**

Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.

**18. Sound distortion**

Do not allow the product to output distorted sound for a long time. It may cause speaker overheating and fire.

**19. Headphones**

When you use the headphones, keep the volume at a moderate level. If you use the headphones continuously with high volume sound, it may cause hearing damage.

**20. Laser beam**

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

**21. Disc**

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

**22. Damage requiring service**

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

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

**23. Servicing**

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

**24. Replacement parts**

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

**25. Safety check**

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

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### Features

#### High quality digital audio and images

- Including a progressive scan conversion circuit
- The linear PCM sound of a 96 kHz/24 bit creates audio quality superior to that of audio CDs.
- Compatible with audio CDs, as well as DVDs
- MP3 playback

#### Accessory checklist

- Remote control (1)
- Audio cord (1)
- Video cord (1)
- Operating Instructions

# Before Use

Please read the following before operating the unit.

## Disc symbols used in this manual

Although this unit can play DVDs, audio CDs and MP3 discs, some of the functions are restricted depending on the type of disc.

The following symbols are used to make distinctions.

**No symbols:** The function works for DVDs, audio CDs and MP3 discs.

**DVD** : Indicates a function or display for DVDs only.

**CD** : Indicates a function or display for audio CDs only.

**MP3** : Indicates a function or display for MP3 discs only.

Playback of MP3 discs is different from that of other kinds of discs. For information about playing MP3 discs, see "Playing an MP3 Disc" on page 41.

## Supported disc formats

This unit can play discs with the following marks.

	DVD (8-cm and 12-cm discs)
	Audio CD (8-cm and 12-cm discs)

In addition, the unit can play DVD-R and DVD-RW discs recorded in Video mode, and CD-R and CD-RW discs that contain audio titles or MP3 files.

### NOTES

- The unit can play DVD-R/RW discs recorded in Video mode only. DVD-R/RW discs recorded in Video Recording (VR) mode cannot be played on the unit.
- Depending on the conditions of the recording equipment, some DVD-R/RW discs cannot be played on the unit even if they have been recorded in Video mode.
- Some DVD-R/RW discs cannot be played on the unit due to scratches on the surface or warp of the disc, etc.
- Because of their relatively low reflectance, DVD-RW discs are more likely not to be playable on the unit than DVD-R discs.
- Audio CDs which contain copy protection signals cannot be played on the unit.
- Depending on the conditions of the recording equipment or the CD-R/RW disc itself, some CD-R/RW discs cannot be played on the unit.
- The unit cannot play the CD-R/RW discs that contain no data, or contain different kinds of formatted data other than MP3. For more information about MP3, see page 41.
- Some 8-cm CD-R discs cannot be played on the unit.
- Do not attach any seal or label to either side (the labeled side or recorded side) of a disc.
- Do not use irregular shaped CDs (e.g. heart-shaped or octagonal). It may result in malfunctions.

### Notes on color system

***This unit is designed for the NTSC color system only.***

The materials for DVD discs are recorded in the PAL and NTSC color systems.

Select the DVD recorded in the NTSC color system.

### Notes on DVDs

Some playback operations of DVDs may be intentionally fixed by software manufacturers. As this unit plays DVDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available, or other functions may be added.

Refer also to the instructions supplied with the DVDs.

Some DVDs made for business purposes may not be played on the unit.

## Region code of the DVD player and DVDs



This DVD player is designed and manufactured for playback of region "1" encoded DVD software. The region code on the labels of some DVD discs indicates which type of player can play those discs. This unit can play only DVD discs labeled "1" or "ALL." If you try to play any other discs, the message "Check Regional Code" will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

## Disc-related terms

### Title **DVD**

The longest section of a picture or a musical piece on a DVD, a movie or a picture piece on video software, or an album for a musical piece on audio software. Each title is assigned a title number enabling you to locate the title you want.

### Chapter **DVD**

Sections of a picture or a musical piece that are smaller than titles.

A title is composed of several chapters. Each chapter is assigned a chapter number, enabling you to locate the chapter you want. Depending on the disc, no chapters may be recorded.

### Track **CD**

Sections of a musical piece on an audio CD. Each track is assigned a track number, enabling you to locate the track you want.

## Handling the unit

### When shipping the unit

The original shipping carton and packing materials come in handy. For maximum protection, repack the unit as it was originally packed at the factory.

### When setting the unit

The picture and sound of a nearby TV, VCR, or radio may be distorted during playback. In this case, position the unit away from the TV, VCR, or radio, or turn off the unit after removing the disc.

### To keep the surface clean

Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber or plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

## Handling discs

Do not touch the playback side of the disc.

Hold the disc by the edges so that fingerprints will not get on the surface.

Do not stick paper or tape on the disc.

## Cleaning the unit

### To clean the cabinet

Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents, such as alcohol, benzene, or thinner, as these might damage the surface of the unit.

### To obtain a clear picture

The DVD player is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn down, the picture quality will be poor.

Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)

For details, please contact your Aiwa dealer.

## Before Use (continued)

### Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.



Do not use strong solvents such as alcohol, benzene, thinner, commercially available cleaners, or anti-static spray intended for analog records.

### Storing discs

After playing, store the disc in its case. Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

### Notes on copyright

*It is forbidden by law to copy, broadcast, show, broadcast via cable, play in public, or rent copyright material without permission.*

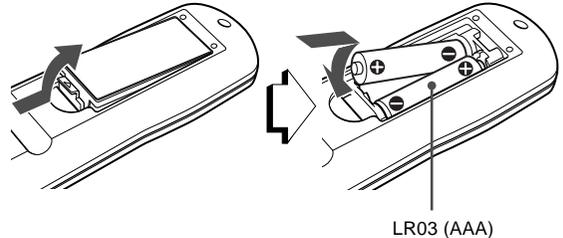
This product features the copy protection function developed by Macrovision. Copy protection signals are recorded on some discs. When recording and playing the pictures of these discs on a VCR, the picture noise will appear.

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

### Remote control

#### Installing batteries

Detach the battery cover on the rear of the remote control, and insert two LR03 (size AAA) batteries with  $\oplus$  and  $\ominus$  aligned correctly.



#### When to replace the batteries

The maximum operating distance between the remote control and the sensor of the unit is approximately 7 meters (23 feet). If the operating range decreases, replace the batteries with new ones.

#### NOTES

- When operating with the remote control, point the top of the remote control toward the DVD player.
- If the unit is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.
- The remote control may not operate correctly when:
  - There is an intense light, such as sunlight, in the line of sight between the remote control and the DVD player.
  - There is fluorescent lighting near the remote sensor in the display window of the unit.
  - Other remote controls are used nearby (those of a TV, etc.).

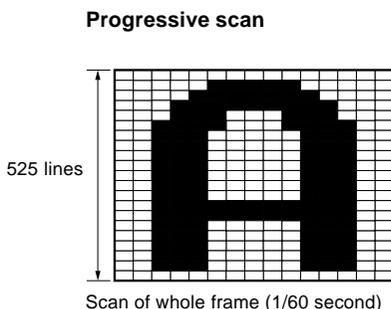
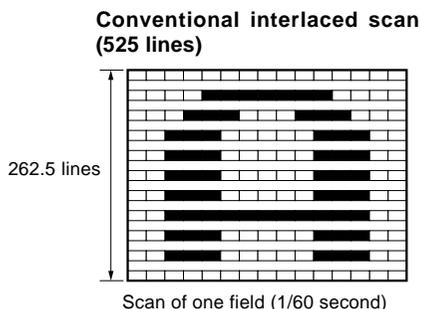
## General information on progressive scan

This unit includes a progressive scan conversion circuit. This generates high-resolution progressive scan video, with a lower flicker rate, allowing you to see the movie at its original quality.

### What is a progressive scan?

The conventional television system has 525 scan lines making up a frame, but these are scanned in alternate interlaced passes of the 262.5 odd scan lines and the 262.5 even scan lines (in the case of the NTSC color system). Since its frame rate is 30 frames per second, one of these passes, termed a field, occurs every 1/60 second. With larger screens, since the whole screen is only refreshed every 1/30 second, there can be noticeable flickers.

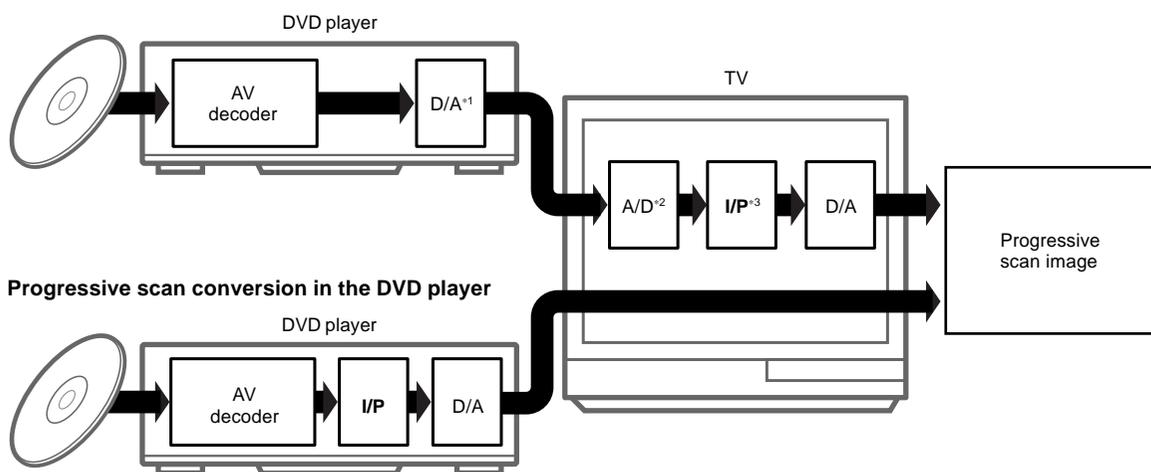
In distinction to this, a progressive scan is one where all of the lines are scanned successively in a single pass. By saving a field in memory, it is possible to convert an interlaced video signal to a progressive scan, which then allows the image to be refreshed every 1/60 second, reducing flickers on a large screen.



### Advantages of progressive scan conversion in the DVD player

Since the DVD player converts the video signal to a progressive scan before digital-analog conversion, the total number of conversions the signal undergoes is reduced, compared with using a progressive scan conversion in the television (see following figure). This reduces signal degradation, and allows higher quality video playback.

#### Progressive scan conversion in the TV



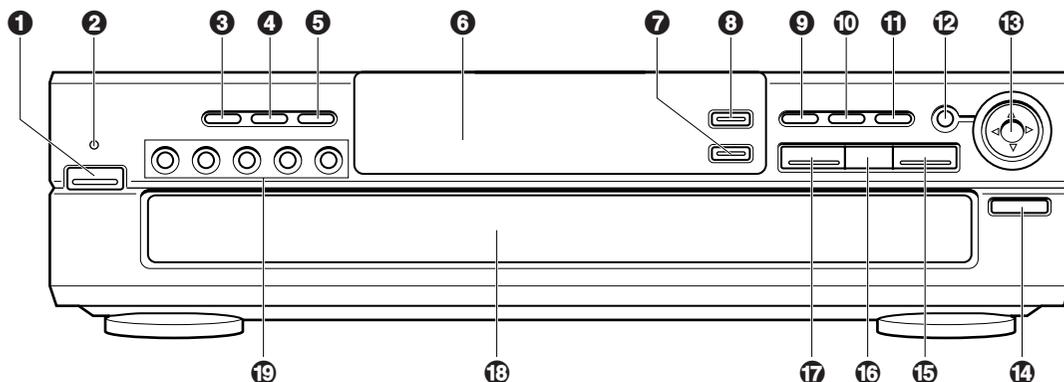
\*1: Digital-to-analog conversion

\*2: Analog-to-digital conversion

\*3: Interlaced-to-progressive scan conversion

# Parts and Controls

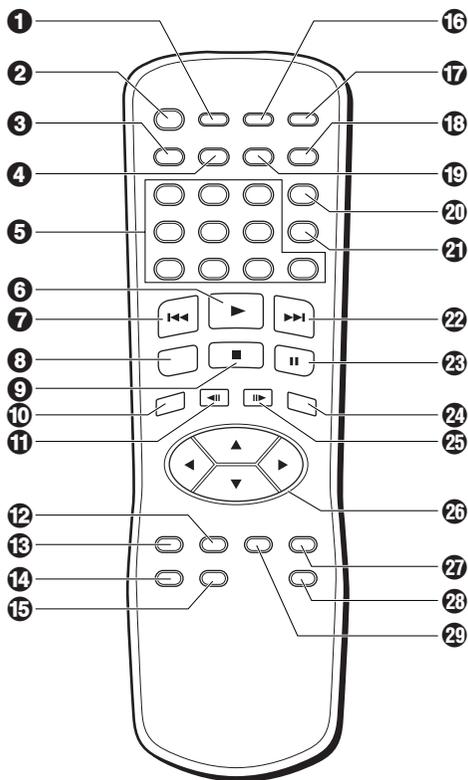
## Front panel



- 1 POWER** button  
Press to turn on and off the unit.
- 2** **STANDBY/ON** indicator
  - Lights in red when the unit is in power-off standby mode.
  - Lights in green when the unit is turned on.
- 3 RANDOM** button  
**KARAOKE DVD CD**  
Press to play in random order.
- 4 REPEAT** button  
Press to repeat playback.
- 5 CLEAR** button
  - Press to cancel an input number.
  - DVD**
  - Press to clear the mark memory.
  - Press to turn off the zoom function.
  - CD MP3**
  - Press to delete a track from the program list.
- 6 Display window**  
Displays information on the unit status.
- 7 DISC CHANGE** button  
Press to change a disc while playing back another disc.
- 8 DISC SKIP** button
  - Press to skip to the next disc.
  - Press to rotate the disc trays while the disc compartment is open.
- 9** **REVERSE** button  
  - Press to return to the beginning of the current chapter/track or skip back to the previous chapter/track.
  - DVD CD**
  - Press and hold to fast reverse a disc.
- 10** **SKIP** button  
  - Press to skip to the next chapter/track.
  - DVD CD**
  - Press and hold to fast forward a disc.
- 11 MENU** button  
**DVD**  
  - Press to display menu programs.
  - MP3**
  - Press to move to the previous page of the track/program list in the OSD menu.
- 12 ENTER** button  
Press to execute or fix the selected item from a disc menu.
- 13** **UP/DOWN** button  
  - Press to select an item.
  - DVD**
  - Press to move the zoom area.
- 14** **OPEN/CLOSE** button  
Press to open and close the disc compartment.
- 15 STOP** button  
Press to stop playing back a disc.
- 16 PAUSE** button  
  - Press to pause playback.
  - DVD**
  - Press to advance the picture by one frame.
- 17 PLAY** button  
Press to start playback.
- 18 Disc compartment**  
Accepts up to five discs.
- 19 DISC DIRECT PLAY (1-5)** buttons  
Press to start playback of the desired disc.

## Remote control

- 1 MARK** button **DVD CD**  
Press to mark a point on a disc during playback.
- 2 POWER** button  
Press to turn on and off the unit.
- 3 AUDIO** button **DVD CD**  
Press to select the audio track/channel during playback.
- 4 SUBTITLE** button **DVD**  
Press to change the subtitle language during playback.
- 5 Number** buttons
- 6** **PLAY** button  
Press to start playback.



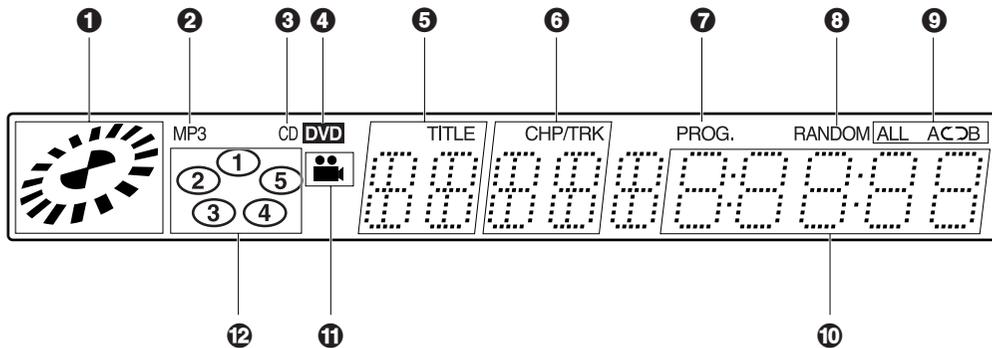
- 7** **◀◀** button
- Press to return to the beginning of the current chapter/track or skip back to the previous chapter/track.
- DVD CD**
- Press and hold to fast reverse a disc.
- 8** **ZOOM** button **DVD**
- Press to enlarge the picture.
- 9** **■** button
- Press to stop playback.
- 10** **DISPLAY** button **DVD CD**
- Press to display the OSD (On-Screen Display) menu during playback.
- 11** **◀|| SLOW** button **DVD**
- Press to perform backward slow playback.
- 12** **TOP MENU** button
- DVD**
- Press to display the title menu of a DVD.
- MP3**
- Press to move to the next page of the track/program list in the OSD menu.
- 13** **MENU** button
- DVD**
- Press to display menu programs.
- MP3**
- Press to move to the previous page of the track/program list in the OSD menu.
- 14** **REPEAT** button
- Press to repeat playback.
- 15** **A-B** button **DVD CD**
- Press to specify the starting and ending points of a section to be repeated.
- 16** **SEARCH** button **DVD CD**
- Press to display the mark search menu.
- 17** **▲ OPEN/CLOSE** button
- Press to open and close the disc tray.
- 18** **RANDOM** button **KARAOKE DVD CD**
- Press to play a disc in random order.
- 19** **ANGLE** button **DVD**
- Press to change the picture angle during playback.
- 20** **PROGRAM** button **CD MP3**
- Press to enter program edit mode.
- 21** **CLEAR** button
- Press to cancel an input number.
- DVD**
- Press to clear the mark memory.
  - Press to turn off the zoom function.
- CD MP3**
- Press to delete a track from the program list.
- 22** **▶▶ I** button
- Press to skip to the next chapter/track.
- DVD CD**
- Press and hold to fast forward a disc.
- 23** **||** button
- Press to pause playback.
- DVD**
- Press to advance the picture by one frame.
- 24** **SELECT/ENTER** button
- Press to execute or confirm the selected item in a menu.
- 25** **||▶ SLOW** button **DVD**
- Press to perform forward slow playback.
- 26** **▲/▼/◀/▶** buttons
- Press to select an item.
- DVD**
- Press to move the zoom area.
- 27** **RETURN** button
- Press to exit the setup menu.
- 28** **DISC SKIP** button
- Press to skip to the next disc.
  - Press to rotate the disc trays while the disc compartment is open.
- 29** **SETUP** button
- Press to display the setup menu on the TV screen.

# Parts and Controls (continued)

## Display window

The unit shows on-screen display menus and messages on the TV screen, and LCD indications in the unit's display window. They make operations simple and easy, especially when playing DVDs.

The instructions in this manual refer mainly to the on-screen display on the TV screen.



- 1** Operating status indicator  
Rotates when loading and playing a disc.
- 2** MP3 indicator **MP3**  
Lights up when an MP3 disc is loaded.
- 3** CD indicator **CD**  
Lights up when a CD is loaded.
- 4** DVD indicator **DVD**  
Lights up when a DVD is loaded.
- 5** TITLE indication **DVD**
  - Indicates the current title number during playback.
  - In stop mode
    - When the resume function is on, indicates the current title number.
    - When the resume function is off, "STOP" is displayed here.
- 6** CHP/TRK indication
  - Indicates the current chapter/track number during playback.
  - In stop mode when the resume function is on, indicates the current chapter/track number.
  - In stop mode when the resume function is off
    - "STOP" is displayed here.
    - Indicates the total number of tracks.
    - Indicates the current track number.
- 7** PROG. indicator **CD** **MP3**  
Lights up during program edit mode and programmed playback.
- 8** RANDOM indicator **KARAOKE DVD** **CD**  
Lights up during random playback.
- 9** ALL A↔B repeat indicator  
**DVD** **CD** **MP3**
  - **A↔B** appears in title/chapter, one-track or one-disc repeat play mode.
  - **CD** **MP3**
  - ALL **A↔B** appears in all-disc repeat play mode.
  - **A↔B** appears in A-B repeat play mode.
- 10** Time counter
  - Indicates the elapsed time of the current chapter/track during playback.
  - In stop mode when the resume function is on, indicates the elapsed time of the current chapter/track.
  - In stop mode when the resume function is off
    - No indication.
    - Indicates the total play time of the disc.
- 11**  (angle) indicator **DVD**  
Blinks when a multi-angle scene comes on during playback.
- 12** Disc tray indicators
  - When the power is turned on, all the indicators light up. After the disc trays rotate and the unit detects that there is no disc, the corresponding indicator goes off.
  - The indicator corresponding to the currently selected disc flashes.

# Connections

Before making connections, identify the type of your audio equipment and TV referring to the respective charts. Then, decide the connection and setup procedures accordingly.

## Before making connections

- Connect the AC cords of the unit and any external equipment last, after finishing all other connections.
- Insert the plugs completely into the jacks. Loose connections may produce a humming sound or other noise interference.
- Refer to the instructions of the connected equipment. For speaker connections, refer to the instructions of the connected AV receiver.

## Connecting to a TV

Type of the TV to be connected to the unit	Refer to
Standard TV equipped with a composite video input jack	A-1 on page 15
TV equipped with an S-video input connector	A-2 on page 16
TV equipped with component video input connectors	A-3 on page 17

## Notes on connecting to a TV

- If picture noise appears while playing copy-protected DVDs, connect the unit directly to a TV. Do not connect through a VCR, TV/VCR or AV selector.
- The unit cannot be connected to a TV which is not equipped with a video input connector.
- Use a commercially available stereo-monaural audio cord when connecting to a monaural TV.
- If you are connecting the unit to a TV equipped with an S-video input connector, it is recommended that a commercially available S-video cord be used to achieve the best possible picture clarity.

## About component video output jacks (Y, P<sub>R</sub>/C<sub>R</sub>, P<sub>B</sub>/C<sub>B</sub>)

The component video output jacks output the different color signals (P<sub>R</sub>/C<sub>R</sub>, P<sub>B</sub>/C<sub>B</sub>) and luminance signal (Y) separately in order to achieve high fidelity in reproducing colors.

The descriptions of the component video input connectors on TV sets may differ depending on the TV or monitor. Among descriptions generally used are P<sub>R</sub>/P<sub>B</sub>/Y, C<sub>R</sub>/C<sub>B</sub>/Y and R-Y/B-Y/Y.

## Progressive scan connection

If you are using a high-definition or "digital ready" TV that is compatible with progressive scan signals, you can take advantage of the unit's progressive scan output for high quality video with less flickers. For more information on the mechanism and features of progressive scan, see page 9.

### To use the unit's progressive scan output, you need to:

- Use a TV that is compatible with progressive scan signals.
- Set the VIDEO OUTPUT switch on the rear of the unit to "COMPONENT/PROGRESSIVE SCAN" before connecting to the TV.
- Connect the COMPONENT VIDEO OUT (Y, P<sub>R</sub>/C<sub>R</sub>, P<sub>B</sub>/C<sub>B</sub>) jacks on the unit to the component video input connectors on the TV using commercially available video cables.
- Set the "Progressive Scan" in the setup menu to "On" for output of progressive scan signals.

### CAUTION

DO NOT set the "Progressive Scan" in the setup menu to "On" when connecting to a TV that is not compatible with progressive scan signals. If you set "Progressive Scan" to "On" in error, the picture will appear scrambled. In this case, reset the unit by holding down ■ for more than 5 seconds in stop mode. The original video output will be restored and the picture will become visible again.

# Connections (continued)

## Connecting to audio equipment

Audio equipment to be connected to the unit	Input jack of the audio equipment	Refer to
None (only a TV is connected)	—	<b>A</b> on pages 15-17
• Amplifier • Stereo system	Digital input jack	<b>B</b> on page 18
	Analog audio input jacks (L/R)	<b>C</b> on page 19
• Dolby Digital decoder • AV receiver equipped with a Dolby Digital or Dolby Pro Logic decoder	Digital input jack	<b>D</b> on page 20
	Analog audio input jacks (L/R)	<b>F</b> on page 22
• DTS decoder • AV receiver equipped with a DTS decoder	Digital input jack	<b>E</b> on page 21

### Notes on digital audio connections

- When using an optical connection, remove the dust cap from the DIGITAL OUT OPTICAL jack on the rear of the unit. Keep the cap handy. When not using the optical connection, the dust cap should be replaced.
- Use either a commercially available optical cord or a 75-ohm coaxial cord when connecting the unit to an AV amplifier with a digital input jack. The supplied video cord can also be used instead of a coaxial cord.

#### CAUTION

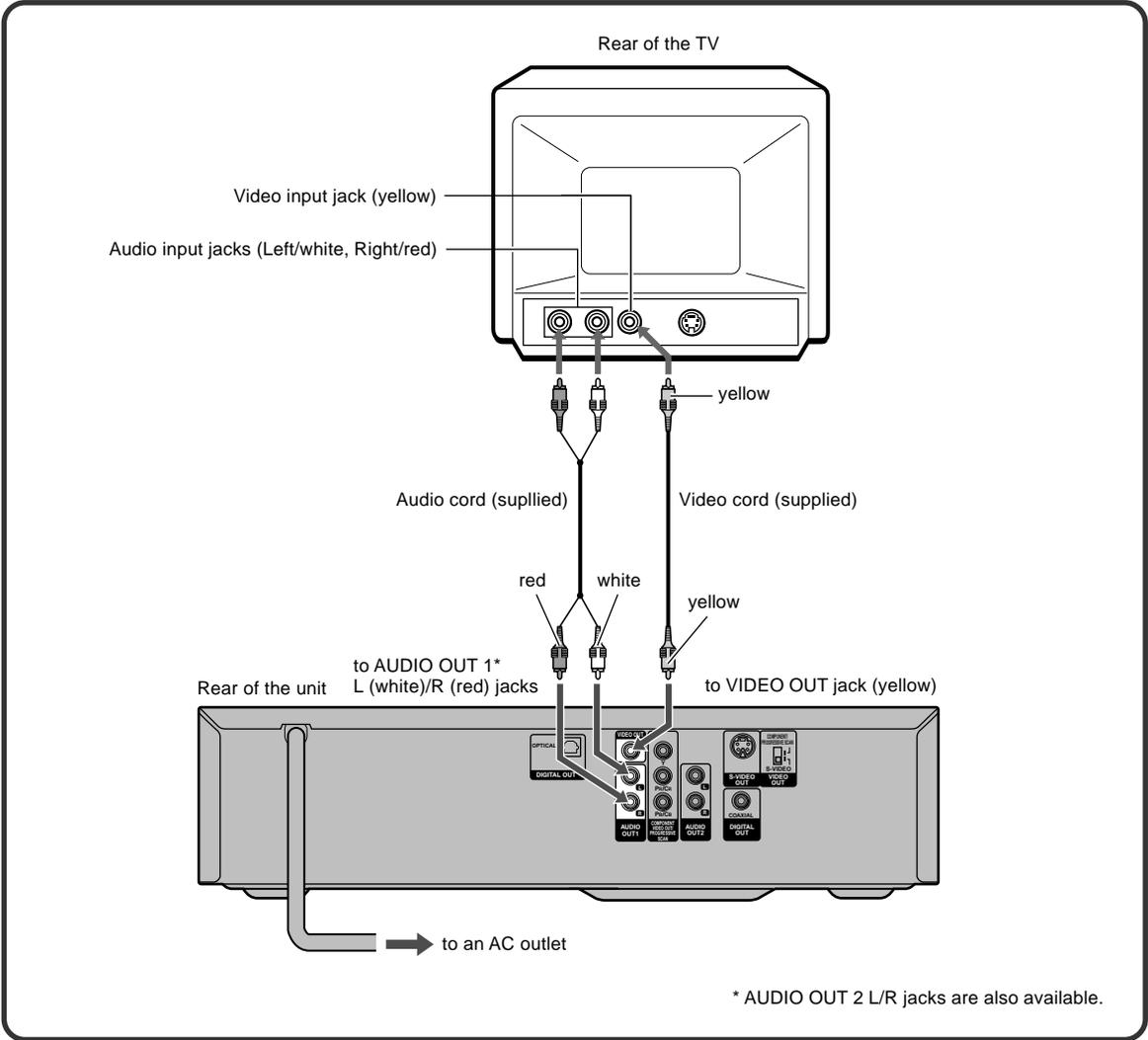
DO NOT select "DOLBY DIGITAL/PCM" or "Stream/PCM" for the "Digital Audio Output" in the setup menu when connecting to an AV receiver not equipped with a Dolby Digital decoder or DTS decoder (with an optical or coaxial connecting cord).

Merely attempting to play a disc may cause a screeching noise which could be harmful to your ears and damage the speakers. In this case, be sure to select "PCM" for the "Digital Audio Output".

### Note on DTS-encoded discs

Set "Digital Audio Output" to "Stream/PCM" in the setup menu, after connecting the digital output of this unit to an AV receiver equipped with a DTS decoder.

**A-1 Connecting to a TV**



En

**Set the setup menu correctly after connecting**

Set the "TV Aspect" in the setup menu according to the TV connected to the unit as follows:  
(See "Changing Setup Values" on page 46 for details.)

**TV Aspect**

When the TV has a conventional 4:3 screen:

4:3 Letterbox or 4:3 Panscan

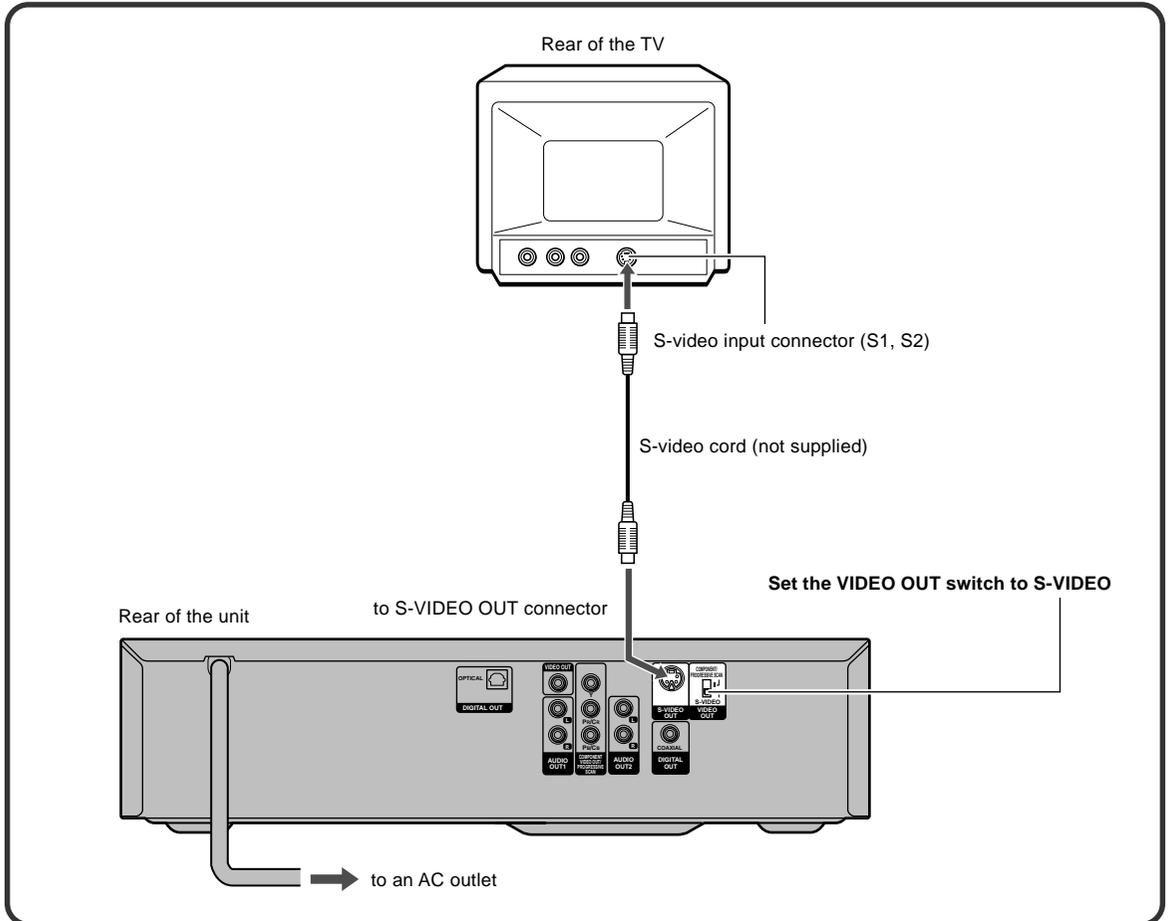
When the TV has a wide 16:9 screen:

16:9 Wide

CONTINUE

## Connections (continued)

### A-2 Connecting to a TV equipped with an S-video input connector



#### Set the VIDEO OUTPUT switch before connecting

Set the VIDEO OUTPUT switch to "S-VIDEO" before connecting to a TV with an S-video input connector.

#### Set the setup menu correctly after connecting

Set the "TV Aspect" in the setup menu according to the TV connected to the unit as follows:  
(See "Changing Setup Values" on page 46 for details.)

#### TV Aspect

When the TV has a conventional 4:3 screen:

4:3 Letterbox or 4:3 Panscan

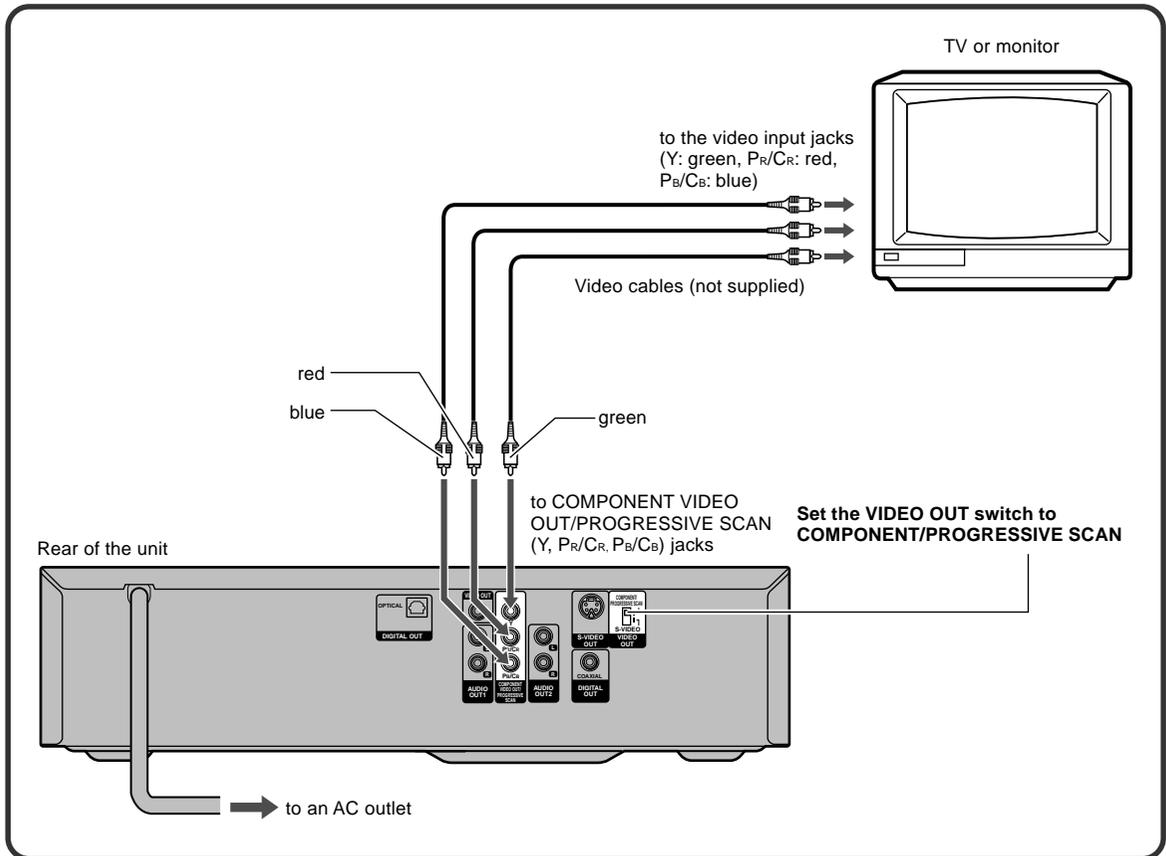
When the TV has a wide 16:9 screen:

16:9 Wide

#### NOTE

For the best possible picture clarity, it is recommended that an S (separate) video cord (not supplied) be used when connecting the unit to a TV equipped with an S-video input connector.

## A-3 Connecting to a TV or monitor with component video input connectors



### Set the VIDEO OUTPUT switch before connecting

Set the VIDEO OUTPUT switch to "COMPONENT/PROGRESSIVE SCAN" before connecting to a TV with component input connectors.

### Set the setup menu correctly after connecting

Set the "TV Aspect" and "Progressive Scan" in the setup menu according to the TV connected to the unit as follows: (See "Changing Setup Values" on page 46 for details.)

#### TV Aspect

When the TV has a conventional 4:3 screen:

4:3 Letterbox or 4:3 Panscan

When the TV has a wide 16:9 screen:

16:9 Wide

#### Progressive Scan

When the TV is compatible with progressive scan signals:

On

When the TV is not compatible with progressive scan signals:

Off

### CAUTION

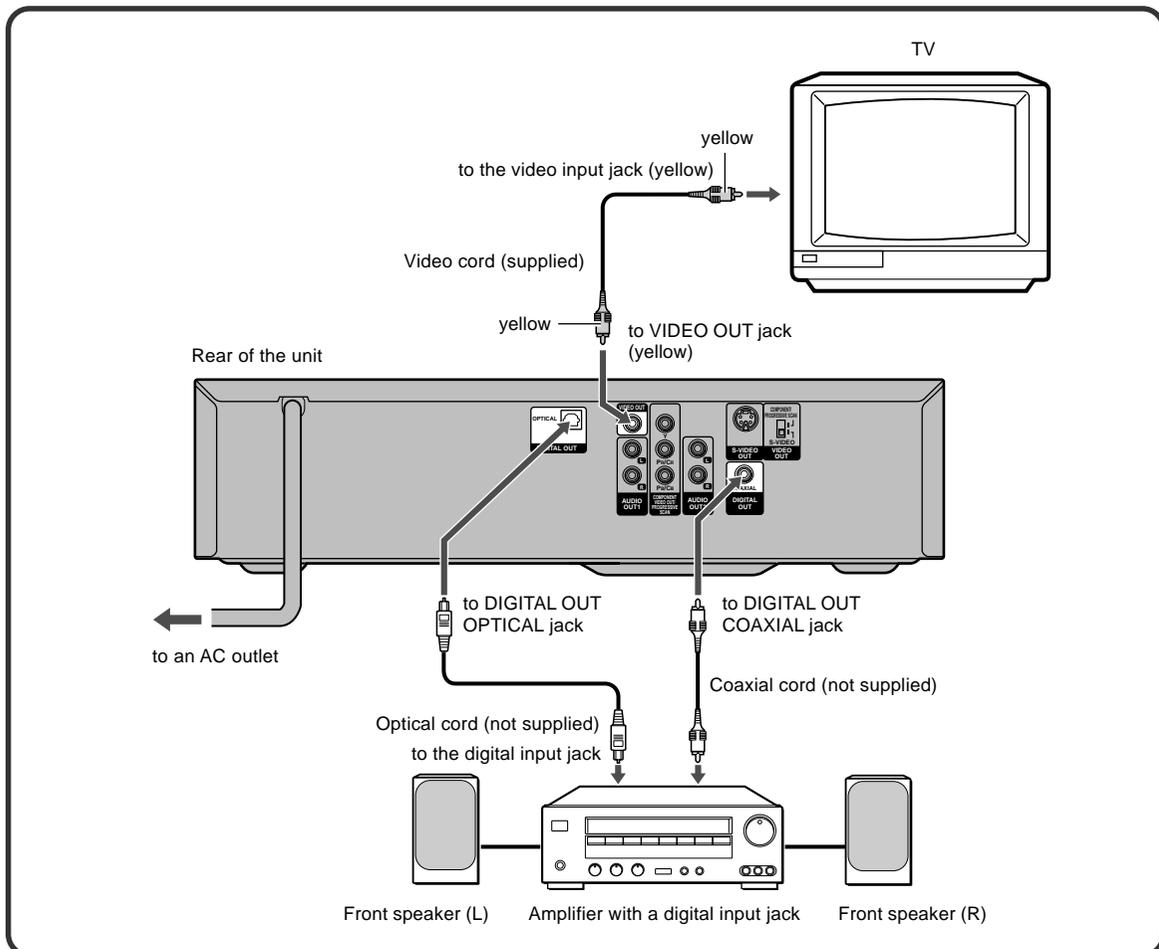
DO NOT set the "Progressive Scan" in the setup menu to "On" when connecting to a TV that is not compatible with progressive scan signals. If you set "Progressive Scan" to "On" in error, the picture will appear scrambled. In this case, reset the unit by holding down **■** for more than 5 seconds in stop mode. The original video output will be restored and the picture will become visible again.

### NOTE

Composite video signals are not output from the VIDEO OUT jack on the unit if "Progressive Scan" is set to "On".

## Connections (continued)

### Connecting to a TV and an amplifier with a digital input jack



#### Set the setup menu correctly after connecting

Set the "TV Aspect" and "Digital Audio Output" in the setup menu according to the TV and audio equipment connected to the unit as follows:

(See "Changing Setup Values" on page 46 for details.)

#### TV Aspect

When the TV has a conventional 4:3 screen:  
4:3 Letterbox or 4:3 Panscan

When the TV has a wide 16:9 screen:  
16:9 Wide

#### Digital Audio Output

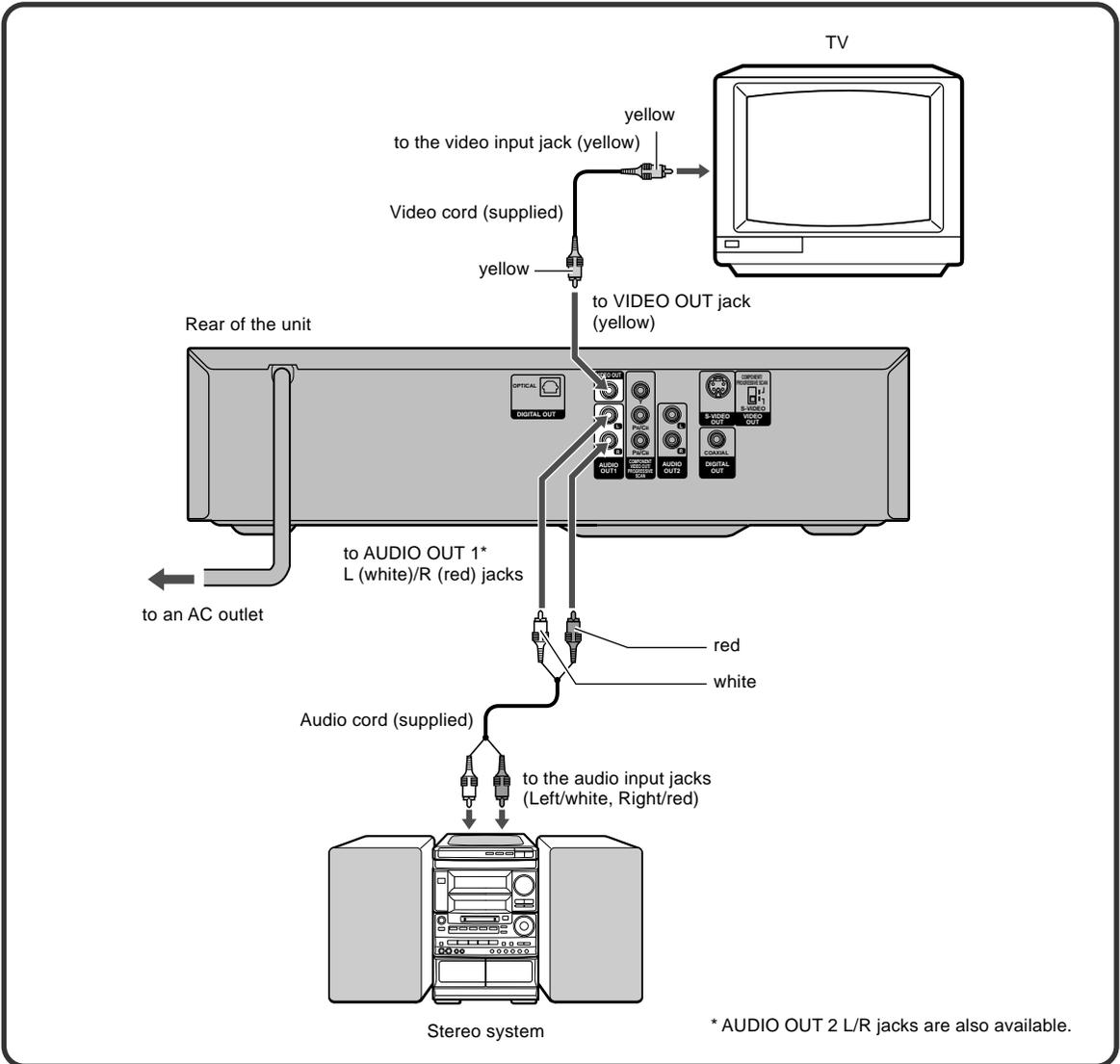
PCM

#### CAUTION

DO NOT select "DOLBY DIGITAL/PCM" or "Stream/PCM" for the "Digital Audio Output" in the setup menu when connecting to an AV receiver not equipped with a Dolby Digital decoder or DTS decoder (with an optical or coaxial connecting cord).

Merely attempting to play a disc may cause a screeching noise which could be harmful to your ears and damage the speakers. In this case, be sure to select "PCM" for the "Digital Audio Output".

## Connecting to a TV and a stereo system



### Set the setup menu correctly after connecting

Set the "TV Aspect" in the setup menu according to the TV connected to the unit as follows:

(See "Changing Setup Values" on page 46 for details.)

#### TV Aspect

When the TV has a conventional 4:3 screen:

4:3 Letterbox or 4:3 Panscan

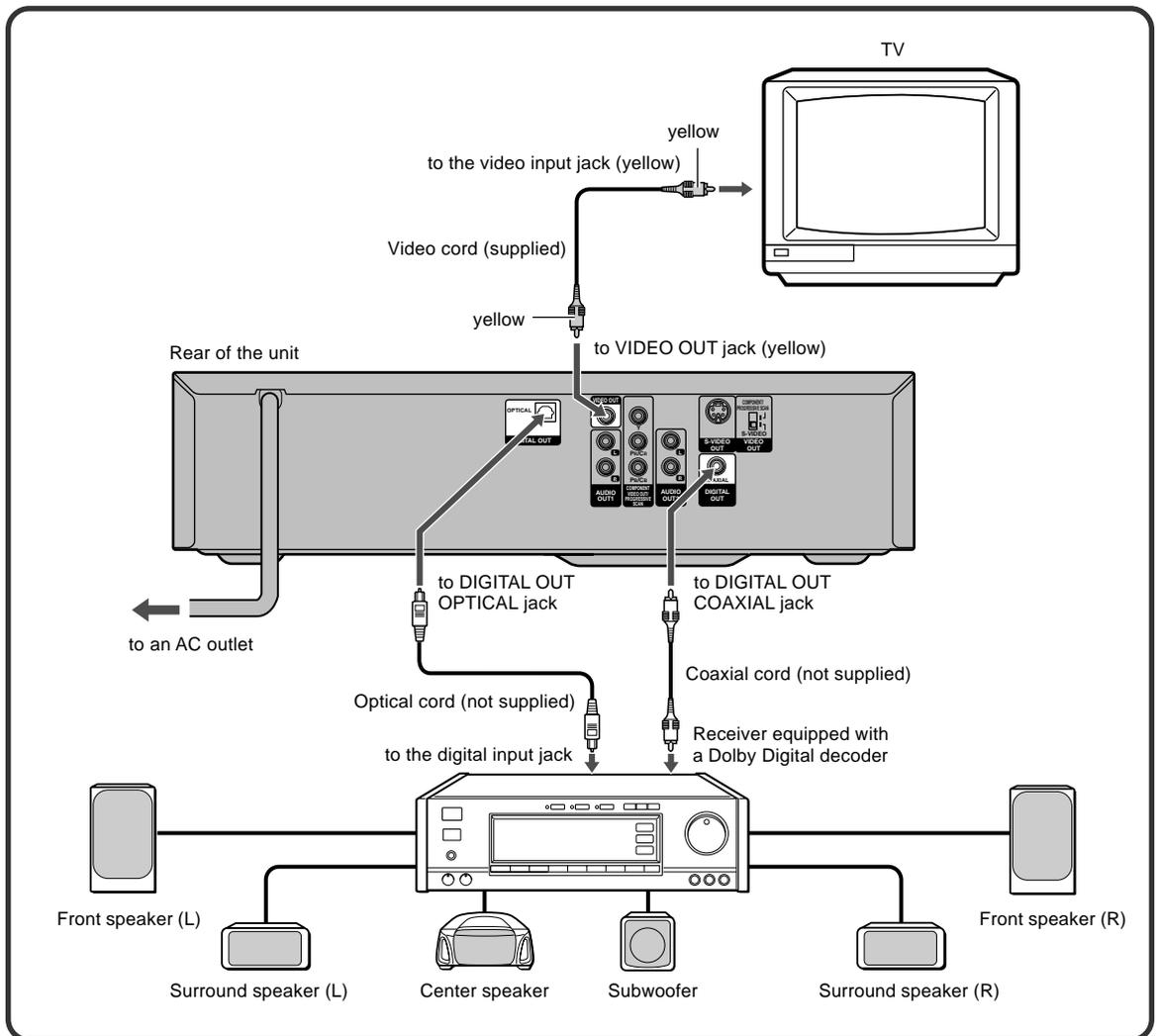
When the TV has a wide 16:9 screen:

16:9 Wide

CONTINUE

## Connections (continued)

### Connecting to a TV and an AV receiver equipped with a Dolby Digital (AC-3) decoder



#### Set the setup menu correctly after connecting

Set the "TV Aspect" and "Digital Audio Output" in the setup menu according to the TV and audio equipment connected to the unit as follows:  
(See "Changing Setup Values" on page 46 for details.)

##### TV Aspect

When the TV has a conventional 4:3 screen:  
4:3 Letterbox or 4:3 Panscan  
When the TV has a wide 16:9 screen:  
16:9 Wide

##### Digital Audio Output

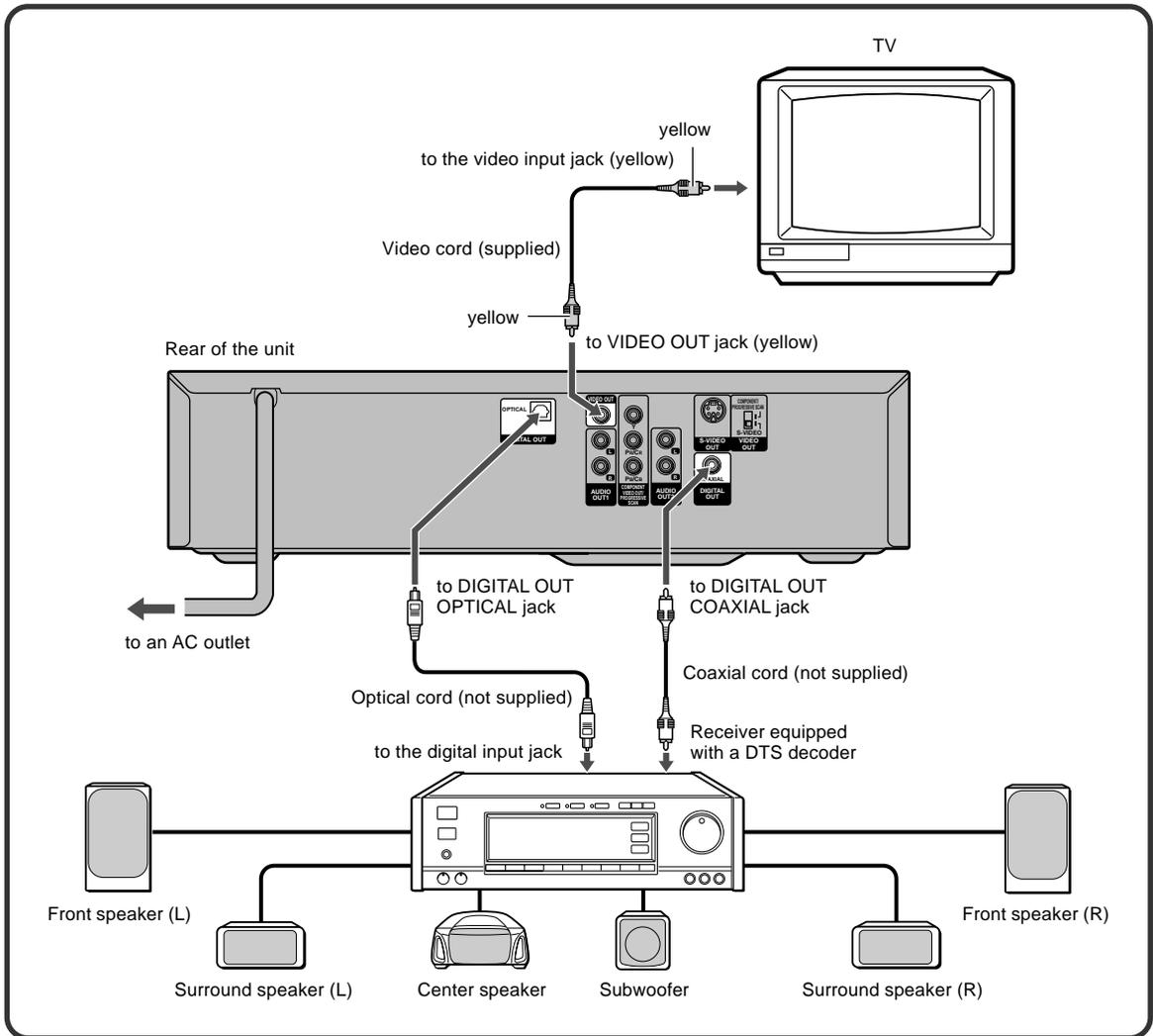
DOLBY DIGITAL/PCM

#### CAUTION

DO NOT select "DOLBY DIGITAL/PCM" for the "Digital Audio Output" in the setup menu when connecting to an AV receiver not equipped with a Dolby Digital decoder (with an optical or coaxial connecting cord).

Merely attempting to play a disc may cause a screeching noise which could be harmful to your ears and damage the speakers. In this case, be sure to select "PCM" for the "Digital Audio Output".

## Connecting to a TV and an AV receiver equipped with a DTS decoder



### Set the setup menu correctly after connecting

Set the "TV Aspect" and "Digital Audio Output" in the setup menu according to the TV and audio equipment connected to the unit as follows:  
(See "Changing Setup Values" on page 46 for details.)

#### TV Aspect

When the TV has a conventional 4:3 screen:  
4:3 Letterbox or 4:3 Panscan  
When the TV has a wide 16:9 screen:  
16:9 Wide

#### Digital Audio Output

Stream/PCM

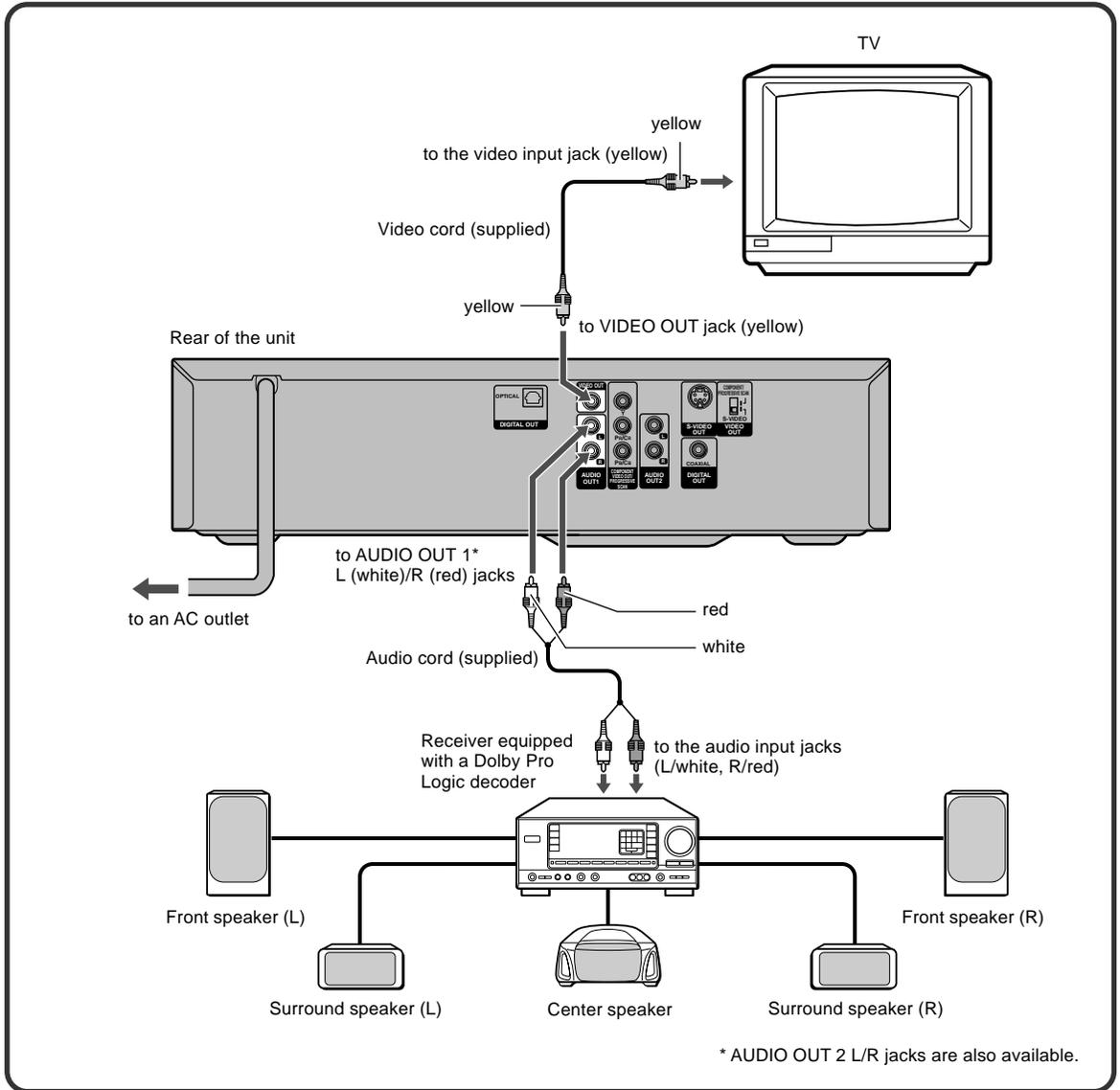
#### CAUTION

DO NOT select "Stream/PCM" for the "Digital Audio Output" in the setup menu when connecting to an AV receiver not equipped with a DTS decoder (with an optical or coaxial connecting cord).

Merely attempting to play a disc may cause a screeching noise which could be harmful to your ears and damage the speakers. In this case, be sure to select "PCM" for the "Digital Audio Output".

## Connections (continued)

### Connecting to a TV and an AV receiver equipped with a Dolby Pro Logic decoder



### Set the setup menu correctly after connecting

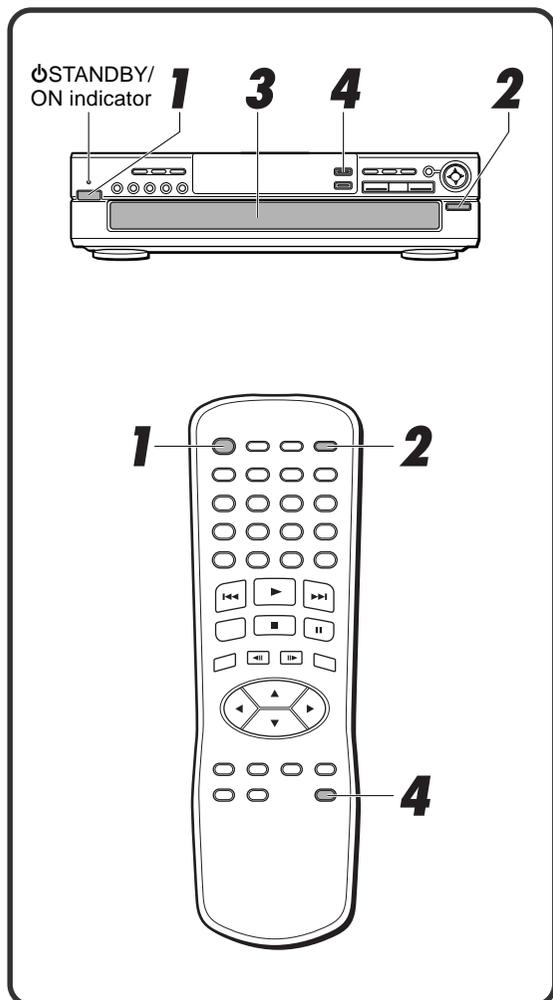
Set the "TV Aspect" in the setup menu according to the TV connected to the unit as follows:  
(See "Changing Setup Values" on page 46 for details.)

#### TV Aspect

When the TV has a conventional 4:3 screen:  
4:3 Letterbox or 4:3 Panscan

When the TV has a wide 16:9 screen:  
16:9 Wide

# Playback



## About the symbol display

- The  symbol will be displayed on the TV screen if you press a button which cannot be used or enter an invalid number.
- Some DVDs may have places where they do not allow pressing certain buttons. The  symbol will be displayed on the TV screen if you press a button that is not allowed in such a place.

## Getting ready to play

- Turn on the TV, and set its video source (Video 1, Video 2, Video 3, etc.) to the one connected to the unit.
- Turn on the audio equipment connected to the unit. Set its input source to the one connected to the unit.

## Loading discs

### 1 Press POWER.

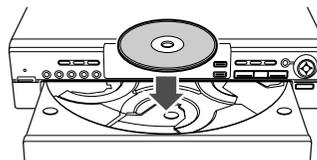
The unit turns on and the  STANDBY/ON indicator turns green. The "aiwa" screen appears on the TV screen.

### 2 Press OPEN/CLOSE.

The disc compartment opens.

### 3 Load a disc in the tray at the center position.

Place a disc in the tray guides (round slotted area) with the label side facing up. When loading an 8-cm disc, place it in the inner slotted area correctly.



### 4 To load another disc, press DISC SKIP.

The disc trays rotate and the next tray comes to the center position.

Place a disc in the tray.

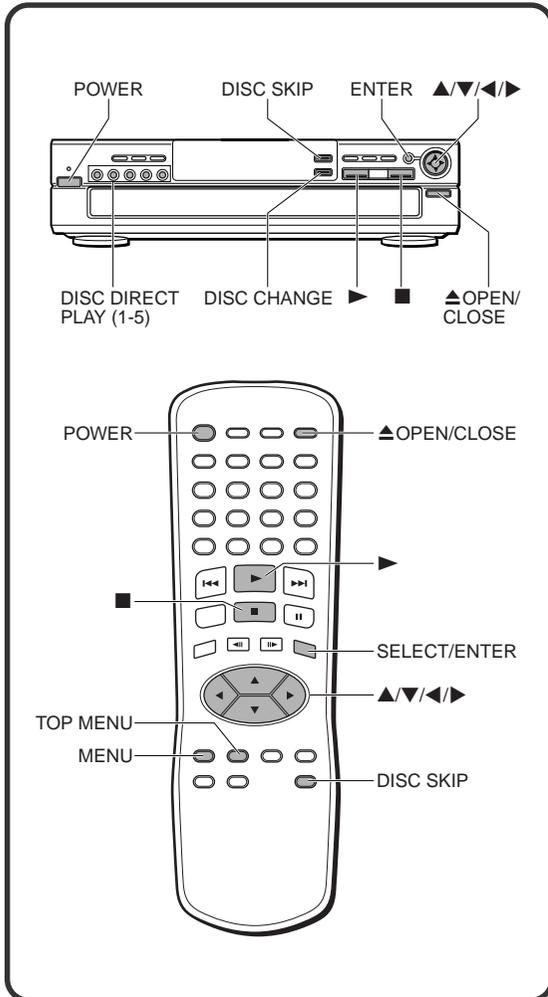
Repeat this step to load other discs (up to five discs).

Now you are ready to start playback.

## NOTES

- Do not shock or vibrate the unit while playing.
- Do not push or shock the disc compartment while rotating the disc trays.
- Do not put any objects other than discs on the disc trays.

## Playback (continued)



### Starting playback

After loading discs, you can start playback by either one of the following ways; A or B.

#### Single disc playback

**A** Press **DISC DIRECT PLAY (1-5)** on the unit.

Press the desired button corresponding to the disc number you want to play.

The disc compartment closes automatically, and playback starts with the specified disc. Playback stops after playing the disc.

#### All discs playback

**B** Press **▶**.

Alternatively, press **▲ OPEN/CLOSE** to close the disc compartment, and then press **▶**.

The disc compartment closes automatically, playback starts with the disc located at the center position, and all the discs are played back. The unit always enters the All discs playback mode when **▶** is pressed at any time. Playback stops after playing all the discs.

- If a disc is placed in upside down, "DISC Error" will be indicated and the disc compartment opens automatically. Place the disc correctly.

#### NOTES

##### MP3

- The All discs playback mode does not work with MP3 discs.

##### DVD

- The All discs playback mode does not work with certain DVDs, depending on the DVD navigation system.

**DVD****When the menu screen is displayed**

The OSD menu for the CD is displayed on the TV screen. The menu screen may be displayed first after loading a DVD which contains a menu.

Use the ▲/▼/◀/▶ buttons to select the title/chapter you want to view, then press **ENTER** or ▶ on the unit (or **SELECT/ENTER** or ▶ on the remote control) to start playback.

Press **TOP MENU** or **MENU** to return to the menu screen.

**To replace discs during playback**

While one disc is playing, the other discs can be replaced without interrupting playback.

- 1 Press **DISC CHANGE** to open the disc compartment.
- 2 Press **DISC SKIP** to rotate the disc trays.
- 3 Exchange the discs.
- 4 Press **DISC CHANGE** or ▲ **OPEN/CLOSE** to close the disc compartment.

**To skip to the next disc**

While the unit is in stop or playback mode, press **DISC SKIP**.

The disc trays rotate, and playback begins from the beginning of the next disc.

**To skip to the desired disc**

While the unit is in stop or playback mode, press one of the **DISC DIRECT PLAY (1-5)** buttons on the unit.

Playback begins from the beginning of the specified disc. Playback stops after playing the disc.

**To stop playback**

Press ■.

**To turn the power off**

Press **POWER**. The unit enters power-off standby mode and the ⏻STANDBY/ON indicator turns red.

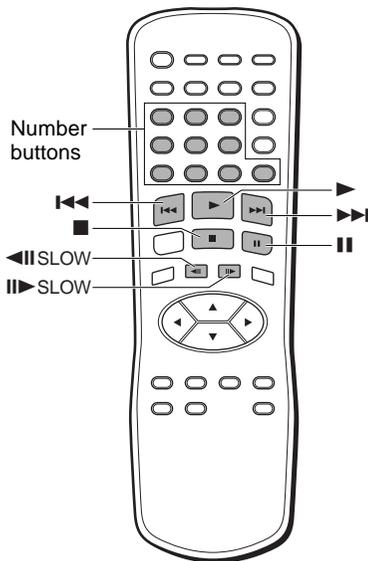
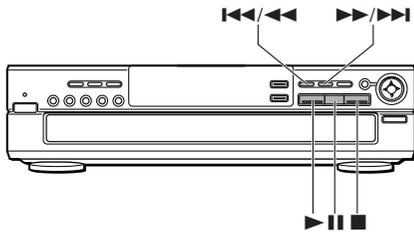
**Auto power-off**

If the unit is left for 8 minutes in stop mode without any operation, the unit automatically enters power-off standby mode.

**NOTE**

The disc continues to spin while the menu screen is displayed even if ■ is pressed. When you are finished using the unit, turn the power off after pressing ■.

## Playback (continued)



### Still (pause)

DVD CD

Press **||** during playback.

To return to normal playback

Press **▶**.

CD

You can also press **||** to return to normal playback.

### Frame advance

DVD

Press **||** during pause.

Each time you press the button, the picture advances one frame.

There is no audio during frame advance playback.

To return to normal playback

Press **▶**.

### Resuming playback

DVD CD

When the unit enters stop mode with the resume function turned on, the unit remembers the point where you stopped the disc so that you can resume playback from that point.

Press **▶** in stop mode.

The unit starts playback from the point where you stopped the disc last time.

When the resume function is turned on, the **||■** mark appears on the upper right corner of the TV screen or the OSD menu.

To cancel the resume function

Press **■** again after you stop playback.

The resume function is also canceled when:

- you change the disc to be played.
- you press **▲ OPEN/CLOSE** to open the disc compartment.
- you press **POWER** to turn the power off.

## Fast forward and fast reverse

DVD CD

Press and hold **I◀◀ (/◀◀) or (▶▶/) ▶▶I** for about 2 seconds during playback.

Each time you press and hold the button, the play speed changes as shown below.

DVD



There is no audio during fast forward or fast reverse playback of a DVD.

CD



**To return to normal playback**

Press ▶.

## Slow playback

DVD

Press **◀II SLOW or II▶ SLOW** during playback.

Each time you press the button, the play speed changes as shown below.



There is no audio during slow playback.  
Subtitles are not displayed during backward slow playback.

**To return to normal playback**

Press ▶.

## Skipping

DVD CD

Press **I◀◀ (/◀◀) or (▶▶/) ▶▶I** during playback.

**To skip to the next chapter/track**

Press **(▶▶/) ▶▶I**.

The disc position advances one chapter/track each time you press the button.

**To skip back to the previous chapter/track**

Press **I◀◀ (/◀◀)** once to skip back to the beginning of the chapter/track currently being played.

Press **I◀◀ (/◀◀)** twice in rapid succession to skip back to the beginning of the previous chapter/track.

**To skip to the desired track using the number buttons**

CD

Enter the desired track number using the number buttons.

Example: To play track 3

Press **3**.

To play track 20

Press **2** and then **0**.

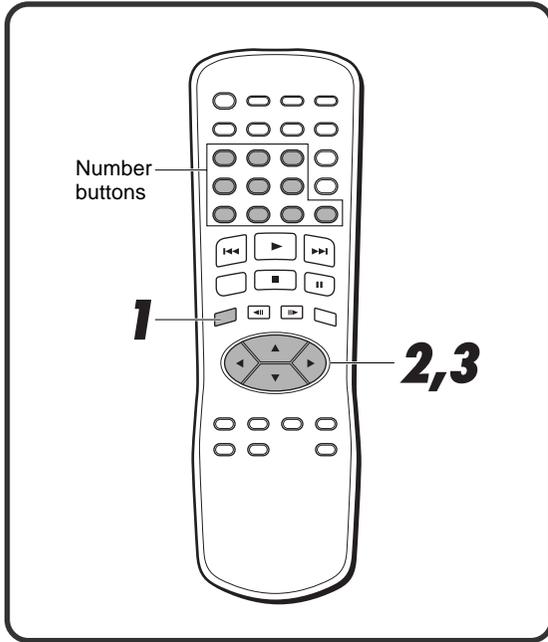
Playback starts from the beginning of the selected track.

CONTINUE

# Playback (continued)

## Basic operation of the OSD (On-Screen Display) menu

You can check the general playback status or start playback from a desired point on the disc, etc. by displaying and operating the OSD menu.



**DVD** **CD**

- 1** Press **DISPLAY** during playback.
- 2** Press **▲/▼** to select a desired menu item.
- 3** Press **◀/▶** to change the setting of the selected menu item.

A yellow frame in the OSD menu indicates the currently selected item.

The number buttons can also be used for entering numbers (for example, title number).

### To turn off the OSD menu

Press **DISPLAY**.

### NOTE

If no button is pressed for 10 seconds, the OSD menu disappears.

### Example OSD (On-Screen Display) menu

**DVD**

T	1/3
C	1/12
⌚	0:16:57
🗣️	1 ENG □□□ 6 CH
📺	OFF
📡	1/3
🔊	NORM.

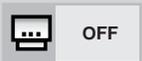
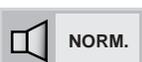
**CD**

T	1/16
⌚	16:57
🗣️	STER.
🔊	NORM.

## Description of each OSD menu item

Each menu item shows its current status/setting which can be changed on the OSD menu. For details of the functions or optional settings, refer to the page in parentheses.

### DVD

Menu item	Current status/setting	Function
	Title number/total number of titles	Skip to the desired title (page 30).
	Chapter number/total number of chapters	Skip to the desired chapter (page 31).
	Elapsed play time	Skip to the desired time point (page 31).
	<ul style="list-style-type: none"> <li>• Soundtrack language</li> <li>• Encoding format</li> <li>• Channel number</li> </ul>	Change the setting (page 39).
	Subtitle language	Turn on/off subtitle display or change the subtitle language (page 40).
	Angle number/total number of angles	Change the angle (page 33).
	Surround on/off	Turn on/off the 3D surround effect (page 38).

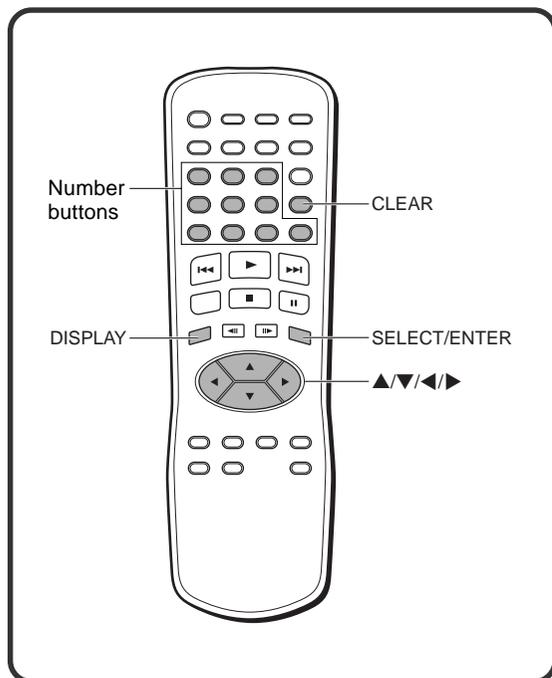
### CD

Menu item	Current status/setting	Function
	Track number	Skip to the desired track (Track search on page 30)
	Elapsed playing time	
	Audio channel	Change the setting (page 39)
	Sound	Change the setting (page 38)

### NOTE

Some discs may not provide all of the above OSD menu items.

# Search



This unit provides 5 disc search functions.

**DVD**

## Title search

When a disc has more than one title, you can select a desired title to start playback.

**CD**

## Track search

You can specify a desired track number.

**DVD**

## Chapter search

When a title on a disc has more than one chapter, you can select a desired chapter to start playback.

**DVD**

## Time search

You can start playback from a desired point on the disc by specifying the time.

**DVD CD**

## Mark search

You can start playback from a marked point.

## Title/Track search

**DVD CD**

**1** Press **DISPLAY** during playback or in stop mode.

If the unit is in stop mode, continue to step 3.

**2** Press **▲/▼** to select "T" (title/track).



**3** Press **◀/▶** to select a desired title number.



You can also use the number buttons to enter a desired title number.

Example: To play title number 2  
Press 2.

Playback starts from the beginning of the specified title/track.

**NOTE**

If no button is pressed for 10 seconds, the OSD menu disappears.

## Chapter search

DVD

**1** Press **DISPLAY** during playback.

**2** Press **▲/▼** to select "C" (chapter).



**3** Press **◀/▶** to select a desired chapter number.



You can also use the number buttons to enter a desired chapter number.

Example: To play chapter number 17  
Press **1** and then **7**.

Playback starts from the beginning of the specified chapter.

### NOTES

- If no button is pressed for 10 seconds, the OSD menu disappears.
- Chapter search does not function if you specify a chapter number which does not exist on the disc.

## Time search

DVD

**1** Press **DISPLAY** during playback.

**2** Press **▲/▼** to select the time icon.



**3** Use the number buttons to enter the time of the desired position.



Example: To start playback at 1 hour, 17 minutes, 30 seconds (1:17:30)  
Press **1**, **1**, **7**, **3** and then **0**.  
To start playback at 8 minutes 7 seconds (0:08:07)  
Press **8**, **0** and then **7**.

### If you enter wrong numbers

Press **CLEAR** to cancel the numbers. Then enter the correct numbers.

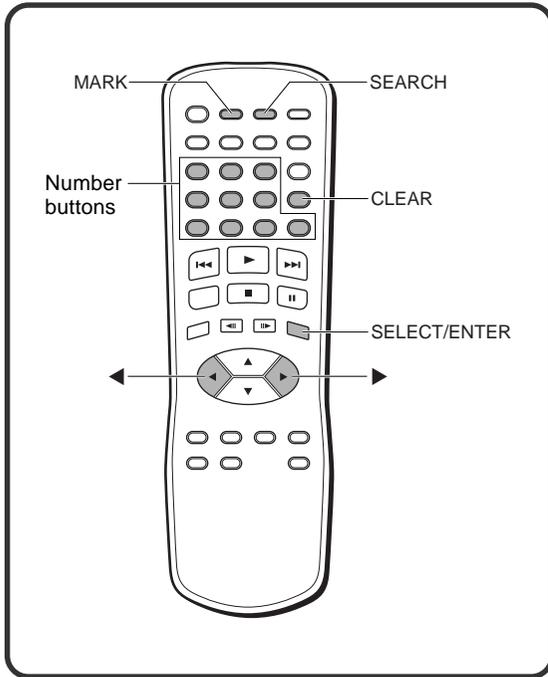
**4** Press **SELECT/ENTER**.

Playback starts from the specified position (time).

### NOTES

- If no button is pressed for 10 seconds, the OSD menu disappears.
- Time search does not function if you specify a time longer than the length of the disc.
- Time search does not function with some discs even if the elapsed time is displayed.

## Search (continued)



### Mark search

**DVD CD**

You can start playback from a desired marked point. Up to 9 points can be marked on the same disc.

#### To mark a desired point

During playback, press **MARK** at a position to be memorized as marked point.



Marked point 1 is memorized.  
Each time you press **MARK**, an additional point is marked.

#### To start playback from a marked point

**1** Press **SEARCH** during playback or in stop mode.

The mark search menu appears on the TV screen.



**2** Within 10 seconds, press **◀/▶** to select a marked point you want to recall.

**3** Press **SELECT/ENTER**.

Playback starts from the selected marked point.

In step 2, you can also use the number buttons (1 - 9) to specify a marked point.

Playback starts immediately without your pressing **SELECT/ENTER**.

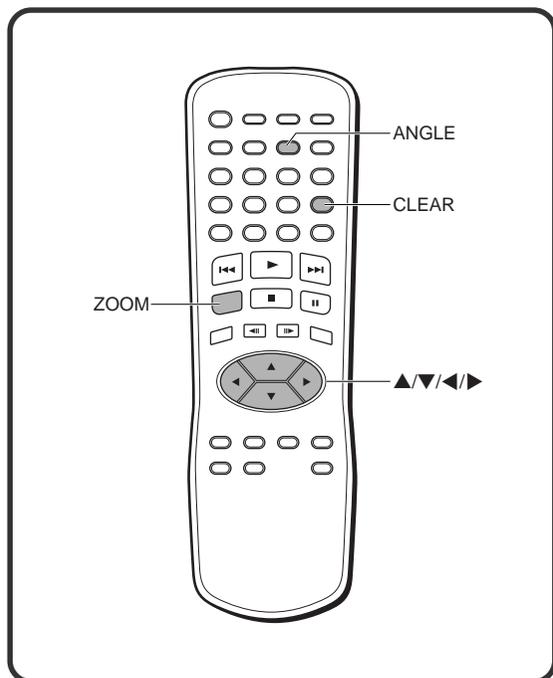
#### To clear a marked point

In step 2 above, select the marked point you want to clear, then press **CLEAR**.

#### NOTES

- It may be prohibited to mark a point at multi-angle scenes or where subtitles are recorded.
- All the marked points are cleared when:
  - you turn off the power.
  - you remove the disc.
  - you select another disc tray.

# Zooming and Changing the Angle



## Changing the angle

### DVD

When playing a DVD with multi-angle scenes (photographed from several different angles), you can select the angle you want to view.

When a multi-angle scene comes on during playback, "❏" will blink in the display window to let you know that you can change the angle.

Although the following is the simpler procedure, you can also change the angle by operating the OSD menu (see page 28).

## 1 Press ANGLE during playback.

The unit displays the current angle number/total number of angles.



## 2 Press ANGLE repeatedly until the desired angle is selected.



The ❏ symbol appears if you press **ANGLE** during playback of a disc with no multi-angle scenes recorded, or at a scene where the angle cannot be changed.

### Tip

The total number of angles recorded on a DVD usually appears on its case within the following symbol.

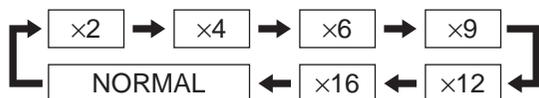


## Zooming the picture

### DVD

Press **ZOOM** during playback or still playback (pause).

Each time you press the button, the magnification changes as shown below.



### To move the zoom area

Press ▲/▼/◀/▶.

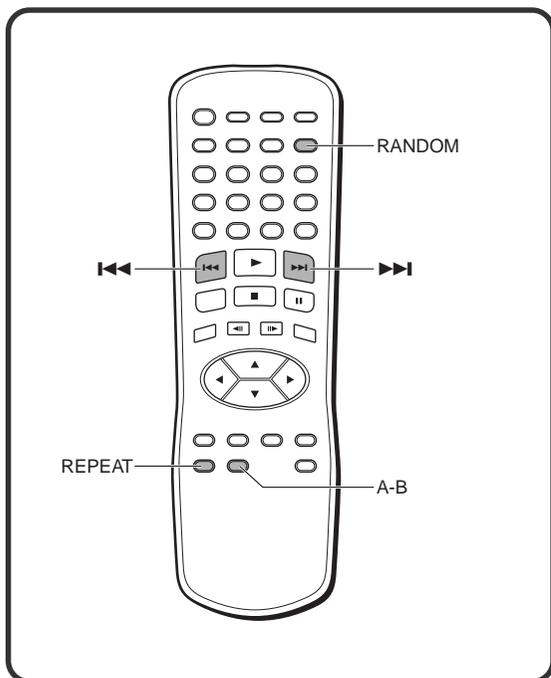
### To return to the normal display

Press **CLEAR**.

### NOTES

- The zoom function may not work with some discs.
- The zoom function may not work at multi-angle scenes.

# Random and Repeat Playback



## Random playback

KARAOKE DVD CD

Press **RANDOM** during playback or in stop mode.

The unit starts random playback and the **RANDOM** indicator lights up in the display window.

**To skip to another title or track during random playback**

Press (▶▶) ▶▶.

The unit selects another title or track and resumes random playback.

Pressing ◀◀ (/◀◀) once makes the unit return to the beginning of the title or track currently being played.

**To return to normal playback**

Press **RANDOM**.

The **RANDOM** indicator disappears from the display window.

## Repeat playback

DVD CD

Press **REPEAT** during playback.

Each time you press the button, repeat play mode changes as follows:

DVD

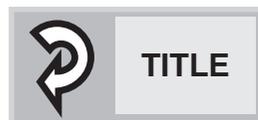
**CHAPT:**

Repeats the chapter currently being played.



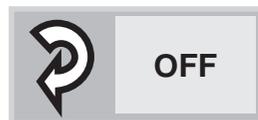
**TITLE:**

Repeats the title currently being played.



**OFF:**

Cancels repeat playback. (Normal playback)



## NOTES

DVD

- Chapter repeat playback does not function on DVDs with no chapters recorded.
- Chapter repeat playback is canceled when you change the chapter by pressing ◀◀ or ▶▶.

**CD**

**TRACK:**

Repeats the track currently being played.



**DISC:**

Repeats all tracks on the disc.



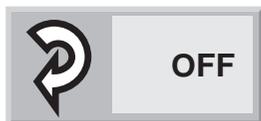
**ALL:**

Repeats all discs loaded in the unit or on the program list.



**OFF:**

Cancels repeat playback. (Normal playback)



**NOTES**

**CD**

- Track repeat playback is canceled when you change the track by pressing **◀◀** or **▶▶**.
- Only track repeat and disc repeat playback work during random playback.

**Repeating a section between two specified points (A-B repeat)**

**DVD CD**

You can specify a section and play it repeatedly.

- 1** During playback, press A-B at the starting point (A) of the section you want to repeat.



- 2** Press A-B again at the ending point (B) of the section you want to repeat.

The unit returns to point A and plays the section between A and B repeatedly.



**To return to normal playback**

Press A-B again.

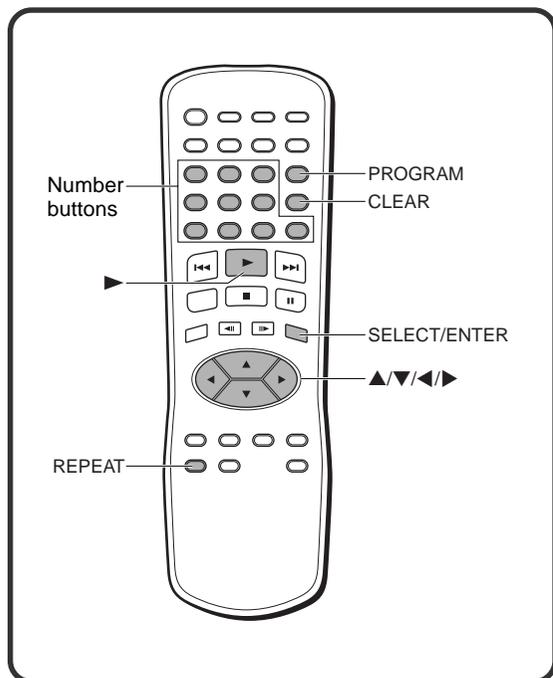


**NOTES**

**DVD**

- The section to be repeated must be within a title and cannot span across the boundary of a title.
- On multi-angle scenes, the unit may play a section other than the one specified for A-B repeat playback.

# Programmed Playback

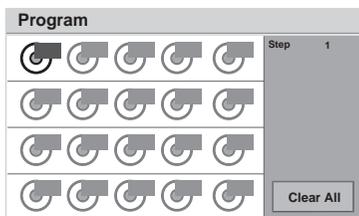


## CD

You can select up to 20 tracks out of 5 discs, and play them in programmed order.

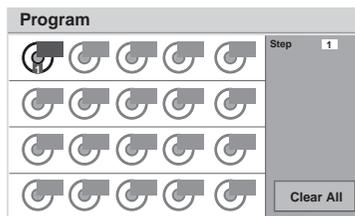
### 1 Press PROGRAM in stop mode.

The program menu screen appears on the TV screen and the PROG. indicator appears in the display window.



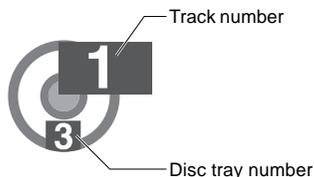
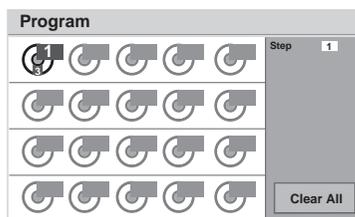
- To turn off the menu screen, press **PROGRAM** again.

### 2 Press the number button (1 - 5) to select the disc tray number.



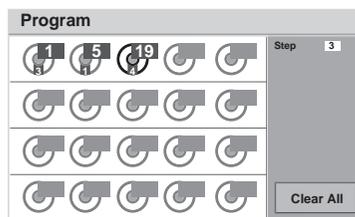
### 3 Press SELECT/ENTER.

### 4 Press the number buttons to select the desired track number.



### 5 Press SELECT/ENTER.

### 6 Repeat steps 2 through 5.



## 7 Press ► to start playback.

The selected tracks are memorized and playback begins in the programmed order.

If a disc does not exist in the disc tray you programmed, the programmed playback of the disc is canceled, and playback skips to the next program.

### To repeat the programmed playback

Press **REPEAT** repeatedly. Each time you press the button, repeat mode changes (see page 35).

When you select "ALL", the tracks are played repeatedly in the programmed order.

### To skip tracks

Press **◀◀** or **▶▶** repeatedly. Playback skips to the previous or succeeding tracks within the program setting.

### To delete a track from the program setting

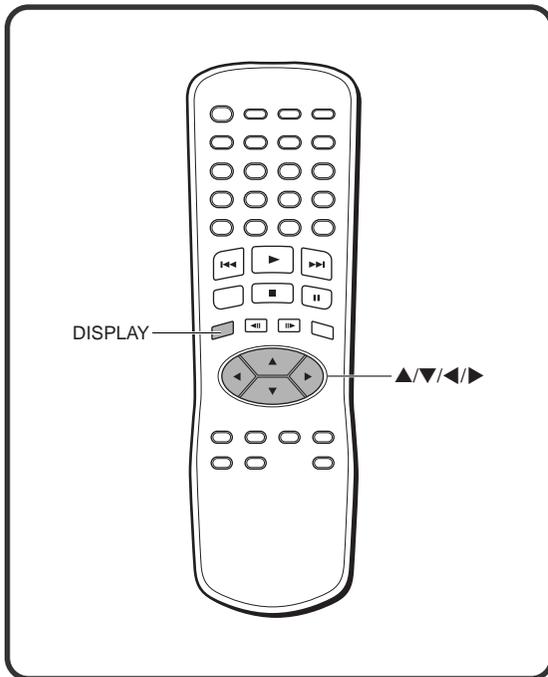
Press **▲/▼/◀/▶** in step 2 or 4 on the previous page to select an unwanted track and press **CLEAR**.

### To clear all the programs settings

Press **▲/▼/◀/▶** in step 2 or 4 on the previous page to select "Clear All" and press **SELECT/ENTER**.

The program's settings are also cleared when the disc is removed.

# Creating a 3D Surround Effect



## DVD CD

The unit can produce a 3D surround effect, which simulates multi-channel audio playback with two conventional stereo speakers, instead of five or more speakers usually required to listen to multi-channel audio of a home theater system.

## NOTES

- Turn off other surround effects of the TV and connected audio equipment when using the unit's 3D surround effect.
- Turn off the 3D surround effect when recording the audio source output from this unit.

**1** Press **DISPLAY** during playback.

**2** Press **▲/▼** to select the sound icon.



**3** Press **◀/▶** to select "3D SUR".



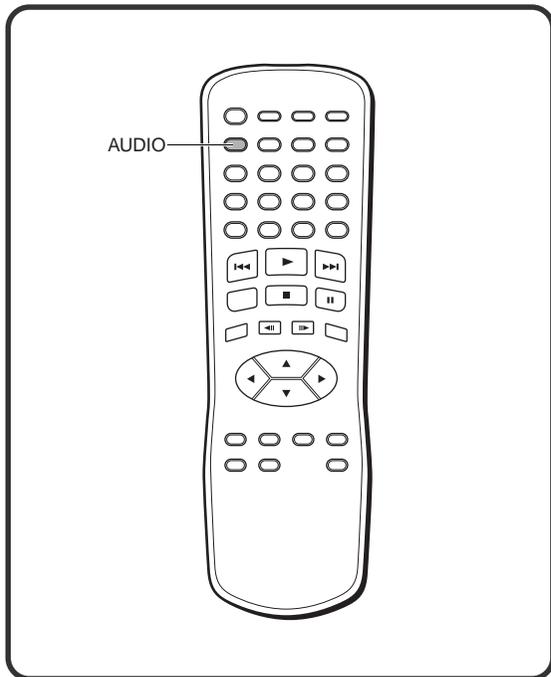
## NOTES

- If no button is pressed for 10 seconds, the OSD menu disappears.
- The 3D surround effect may not function with some DVDs.

### To turn off the 3D surround effect

Select "NORM." in step 3.

# Changing the Audio Track/Channel



## DVD CD

Some discs have more than one audio track, such as soundtracks with different languages. While playing such a disc, the audio track can be changed to play the different soundtracks.

Although the following is the simpler procedure, you can also change the soundtrack by operating the OSD menu (see page 28).

## DVD

### 1 Press AUDIO during playback.

The soundtrack language currently selected is displayed.



### 2 Press AUDIO repeatedly until the desired language is selected.



## CD

### Press AUDIO repeatedly until the desired audio channel is selected.

Each time you press the button, the display changes as follows:



- When playing a DVD with soundtracks in multiple languages, the audio will automatically be played in the designated language set in the setup menu (page 47). If that language is not on the disc, the original language for the disc is selected.
- The audio track can only be changed with discs which contain multiple audio tracks.
- The number of audio tracks available differs from disc to disc.

### Tip

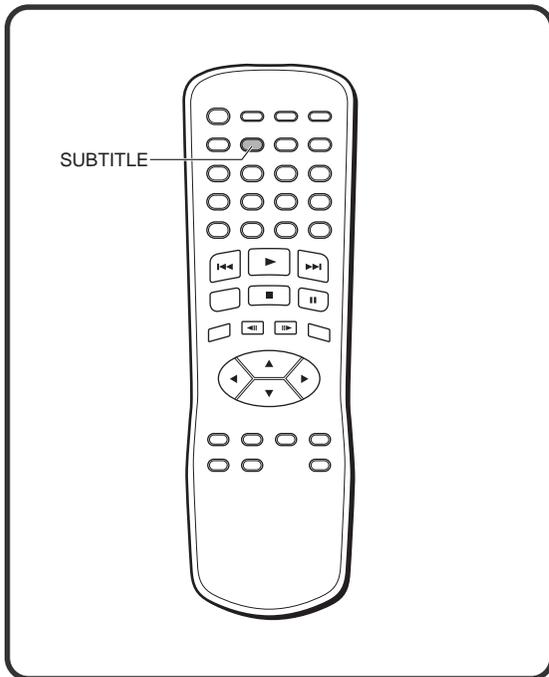
The total number of soundtracks on a DVD usually appears on its case within the following symbol.



### NOTE

This unit does not apply to the multiple karaoke function. When playing back karaoke DVDs, this unit cannot turn on and off the sound of the vocal part.

# Displaying and Changing Subtitles



- The subtitle is displayed in the designated language set in the setup menu (page 48). If that language is not available on the disc, the original language for the disc is selected.
- Subtitles can only be changed with discs which contain more than one set of subtitles.
- The number of subtitle languages differs depending on the disc.

## Tip

The total number of subtitle languages on a DVD usually appears on its case within the following symbol.



## DVD

When playing DVDs which contain subtitles, you can turn on and off the subtitle display on the TV screen or change the language of the subtitles.

Although the following is the simpler procedure, you can also change the subtitle language and turn on/off the subtitle display by operating the OSD menu (see page 28).

## 1 Press SUBTITLE during playback.

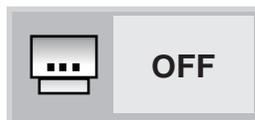


## 2 Press SUBTITLE repeatedly until the desired language is selected.



## To turn off the subtitle display

Press **SUBTITLE** repeatedly to select "OFF".



## NOTES

- When playing a disc supporting closed captions, the subtitles and the closed captions may overlap each other on the TV screen. In this case, turn the subtitle display off.
- With some discs, it may take a few moments to display new subtitles after you press **SUBTITLE**.

# Playing an MP3 Disc **MP3**

The unit can play MP3 audio recorded on CD-ROM, CD-R or CD-RW discs.

Before playing an MP3 disc, read the following notes.

## Notes on MP3 discs

An MP3 file stores audio data compressed using MPEG 1, the audio layer-3 file-coding scheme.

In this manual, we refer to what, in PC terminology, are called "folders" and "files" as "albums" and "tracks", respectively.

### Notes on playing MP3

- The unit can play MP3 discs containing audio data compressed using MPEG 1, the audio layer-3 file-coding scheme and complying with ISO 9660. Note however, that the unit may not play tracks in the order they were recorded.
- The maximum allowable number of tracks and/or albums in a disc is 200, including the root albums (directories).
- The maximum allowable depth of a nested album is 50, including tracks.
- If a disc contains audio tracks and MP3 tracks, the unit cannot play it.
- As for multi-session discs, the unit plays only the first session.
- The unit can play only MP3 tracks which were converted with a sampling frequency of 44.1 kHz and a fixed bit rate of 128 kbps.
- The unit may not play MP3 tracks recorded using a packet writing utility.
- The unit can play only MP3 tracks having a file extension ".mp3".
- It may take 30 seconds or more before the unit can start playing MP3 tracks, depending on the number of recorded tracks and the complexity of the album tree.
- If you play a non-MP3 track that has the ".mp3" file extension, you may hear some noise.
- Digital audio signals cannot be output from the DIGITAL OUT (OPTICAL/COAXIAL) of this unit, when playing MP3 discs. In this case, connect AUDIO OUT 1 or 2 L/R jacks to the analog audio input jacks of the audio equipment (see page 19).

### Notes on display indications during playback

- Up to 8 characters are displayed for the name of a track.
- Characters other than uppercase letters ("A" to "Z"), numerals ("0" to "9") and underscore ("\_") may not be displayed, or may be displayed in different characters.
- The elapsed play time may not be displayed correctly for MP3 tracks.
- Depending on the condition of the recording equipment or the CD-R/RW disc itself, a false track which cannot be played on the unit may be displayed.

### Notes on creating MP3 discs

- When converting audio data to MP3  
Create MP3 files with a sampling frequency of 44.1 kHz and a fixed bit rate of 128 kbps.
- When creating MP3 discs  
Do not store more than 200 albums and/or tracks in a disc.
- To play tracks in the order they were recorded
  1. Use a writing software capable of recording MP3 tracks (files) in numerical and alphabetical order. For details on using the software, refer to the operating instructions supplied with the software.
  2. Use only one album. (Do not create a sub-album within an album.)
  3. Include a two or three-digit number at the beginning of each album or track name so that the albums and tracks are played in order.  
<Example of recommended name structure>  
01XXXXX.mp3  
02XXXXX.mp3  
03XXXXX.mp3  
04XXXXX.mp3  
05XXXXX.mp3  
<Avoid using the following structure>  
1XXXXX.mp3  
5XXXXX.mp3  
10XXXXX.mp3  
15XXXXX.mp3  
20XXXXX.mp3  
(The beginning numbers determine the order, therefore the tracks shown above will be played in the wrong order, i.e., "1", "10", "15", "20", and "5".)

## Glossary

### File extension:

A 3-character string added to a file name under the Windows or DOS environment is called a "file extension". A file extension is used mainly to identify types of files. The file extension for MP3 files is ".mp3".

### ISO 9660:

ISO stands for the "International Organization for Standardization". ISO 9660 determines the file structure for the CD-ROMs. This unit can play MP3 files recorded in the format compliant with ISO 9660.

### Nesting of folders (albums):

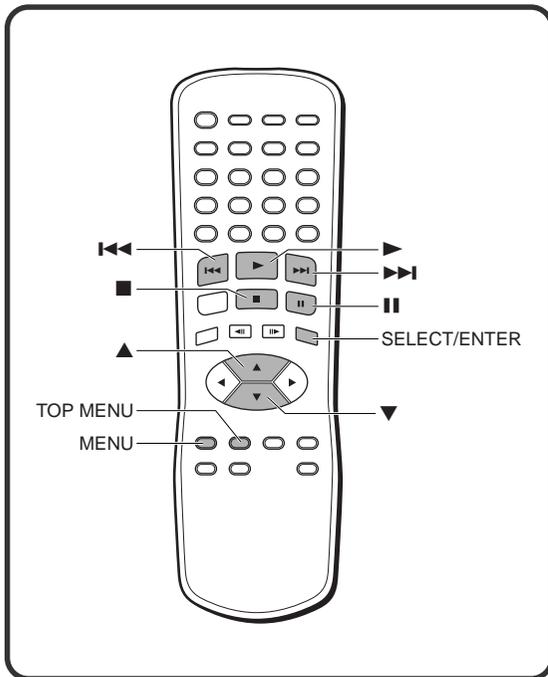
To organize data files stored in a PC, you can store related files in a folder. A folder can contain other folders as well as files. For example, folder A can contain folder B, and folder B can contain folder C; this is called "nesting of folders".

### Session:

A session is one uninterrupted section of written data on a disc.

A multi-session disc is a disc which has more than two sessions.

## Playing an MP3 Disc (continued)



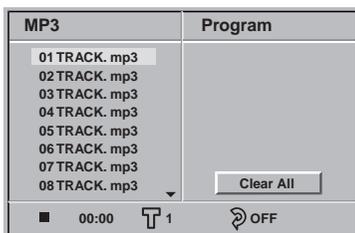
*Unlike audio CD operations*, the following functions and play modes are not available when playing an MP3 disc.

- Fast forward, fast reverse, random and A-B repeat playback
- 3D surround and audio track selection

### Basic operations of MP3 playback

#### 1 Load an MP3 disc.

The OSD menu for the MP3 disc is displayed.



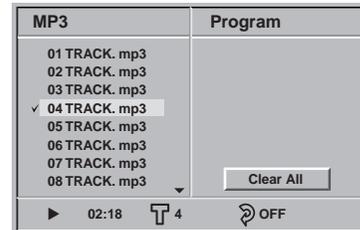
#### NOTE

It may take over 30 seconds to read the MP3 tracks depending on the number of recorded tracks and complexity of the album tree.

#### 2 Press ▲/▼ to select a track.

Press **TOP MENU** to move to the next page or **MENU** to move to the previous page of the track list.

#### 3 Press ► or SELECT/ENTER to start playback.



#### To stop playback

Press ■.

#### To skip to another track during playback

Press (►►/) ►► to skip to the next track.

Press (◀◀/) (◀◀) to skip back to the beginning of the current track. Press (◀◀/) (◀◀) twice in rapid succession to skip back to the previous track.

Alternatively, press ▲/▼ to select a track, then press ► or **SELECT/ENTER** to start playback.

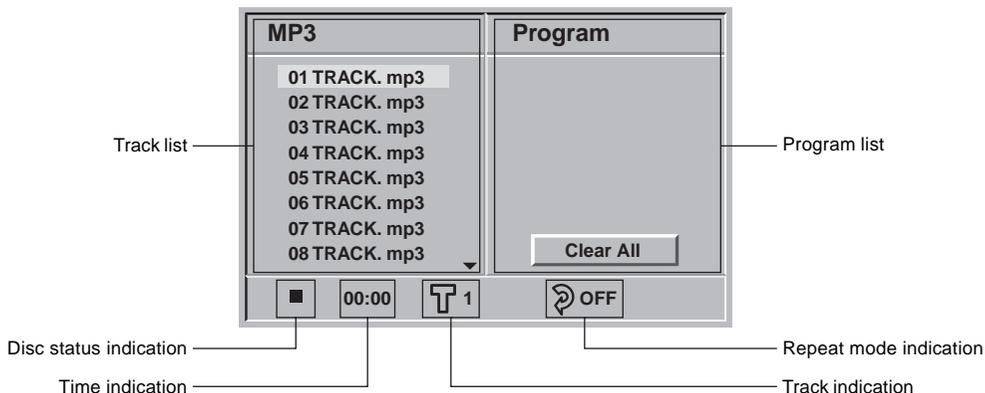
#### To pause playback

Press ||.

To resume playback, press ► or ||.

## OSD (On-Screen Display) menu for the MP3 disc

The OSD menu for the MP3 disc is displayed when an MP3 disc is loaded. It enables you to check the general playback status, select tracks and perform programmed playback.



Menu item	Current status/setting	Function
Track list	Tracks on the MP3 disc	Select the desired track.
Program list	Programmed tracks	Edit program and start programmed playback.
Disc status indication	Play ►/pause   /stop with resume on   ■/stop with resume off ■	—
Time indication	Elapsed play time of the track	—
Track indication	Selected track number	—
Repeat mode indication	Repeat play mode	—

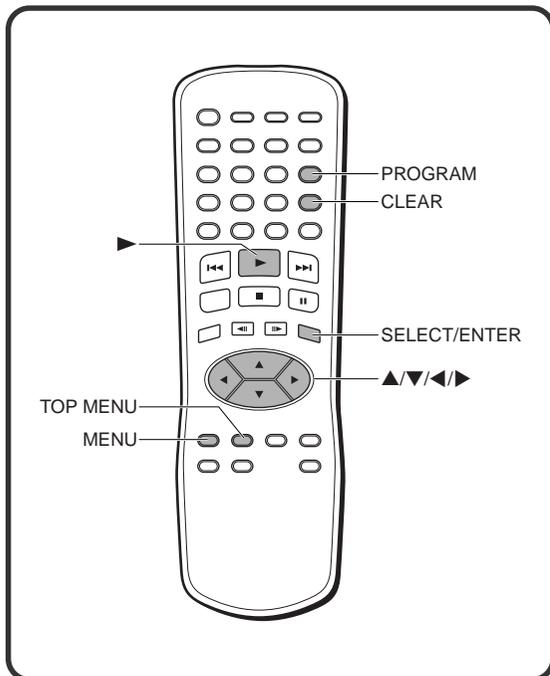
## Repeat playback

You can play a track or all the tracks on the MP3 disc repeatedly.

The procedure is the same as that for the audio CD. Refer to "Repeat playback" on page 35.

Note, however, that the "TRACK" repeat, "ALL" repeat and "OFF" only can be selected for an MP3 disc.

## Playing an MP3 Disc (continued)

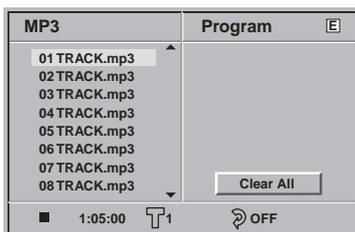


### Programmed playback

You can select up to 60 tracks and play them in the programmed order.

- 1 Press PROGRAM during playback or in stop mode to enter program edit mode.**

The "E" mark appears on the upper right of the program list and the PROG. indicator appears in the display window.

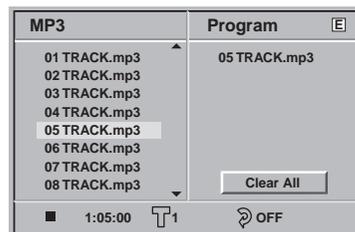


- 2 Press ▲/▼ to select a track.**

To move to the next page, press **TOP MENU**.  
To move to the previous page, press **MENU**.

- 3 Press SELECT/ENTER.**

The selected track is entered on the program list.



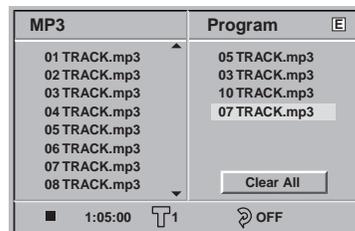
- 4 Repeat steps 2 and 3 to enter additional tracks on the program list.**

- 5 Press PROGRAM to exit the program edit mode.**

The "E" mark disappears from the OSD menu.

- 6 Press the ► right cursor button.**

The last entered track on the program list is highlighted.



- 7 Press ▲/▼ to select a track to start playback on the program list.**

To move to the next page, press **TOP MENU**.  
To move to the previous page, press **MENU**.

- 8 Press ► or SELECT/ENTER.**

Playback starts from the selected track in the programmed order.

Playback stops after the last programmed track on the program list has been played.

### To return to normal playback

Press and hold **PROGRAM** for about 3 seconds.

Alternatively, press the ◀ left cursor button and ▲/▼ to select a track, then press ▶ or **SELECT/ENTER**.

The PROG. indicator disappears from the display window.

### To delete a track from the program list

1 Press **PROGRAM** to enter program edit mode.

2 Press the ▶ right cursor button to move to the program list.

3 Press ▲/▼ to select the track you want to delete, then press **CLEAR**.

The selected track is deleted from the program list.

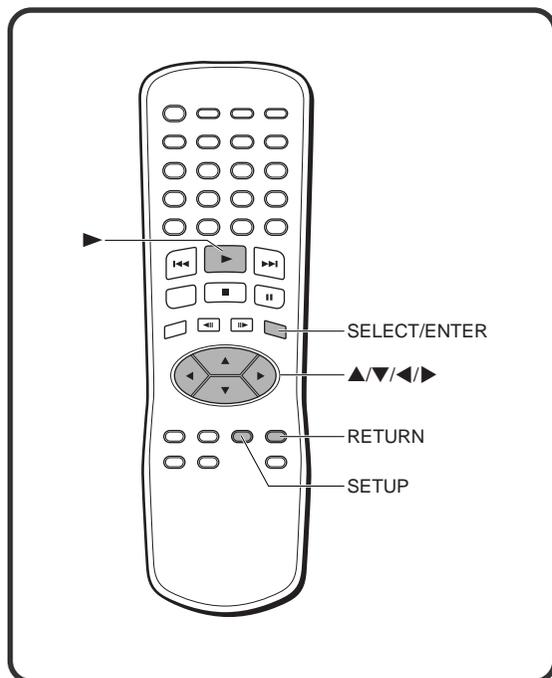
### To clear the entire program

1 Follow steps 1 and 2 of "To delete a track from the program list" above.

2 Press ▲/▼ repeatedly or press the ▶ right cursor button to select "Clear All", then press **SELECT/ENTER**.

The program is also cleared when you open the disc compartment.

# Changing Setup Values



**All the basic settings of the unit are properly preset at the factory.**

Check that "TV Aspect", "Progressive Scan" and "Digital Audio Output" in the setup menu are correctly set according to the type of equipment connected to the unit. For details on the setting, refer to the "Connections" section on pages 13 to 22.

Change any other settings according to your personal preferences.

## Basic operations

### 1 Press SETUP.

The setup menu is displayed.

Disc Audio	√ Original
Disc Subtitle	English
Disc Menu	French
Rating	German
Country Code	Spanish
TV Aspect	Italian
Menu Language	Chinese
Progressive Scan	Polish
Digital Audio Output	Hungarian
	Russian
Others	Other - - - -

### 2 Press ▲/▼ to select the item to be changed, then press the ► right cursor button.

#### Disc Audio\* (page 47)

Sets the audio soundtrack language.

#### Disc Subtitle\* (page 48)

Sets the subtitle language.

#### Disc Menu\* (page 48)

Sets the language used in the DVD menu screen.

\* If the selected language does not exist on the disc, the original language for the disc is selected.

#### Rating\*\* (page 49)

When playing discs with preset restriction level encoding, the unit cuts scenes of excessive violence, etc. by this setting.

#### Country Code\*\* (page 50)

Adjust the set restriction level to the cinema rating system of the country where the DVD disc was produced.

\*\* The setting is protected by a password.

#### TV Aspect (page 50)

Sets the aspect ratio of the TV connected to the unit.

#### Menu Language (page 51)

Sets the language used in the setup menu.

#### Progressive Scan (page 52)

Turns on and off the progressive scan signal output.

#### Digital Audio Output (page 52)

Sets the digital audio to be output from the unit according to the type of audio equipment connected to the unit.

#### Others (page 53)

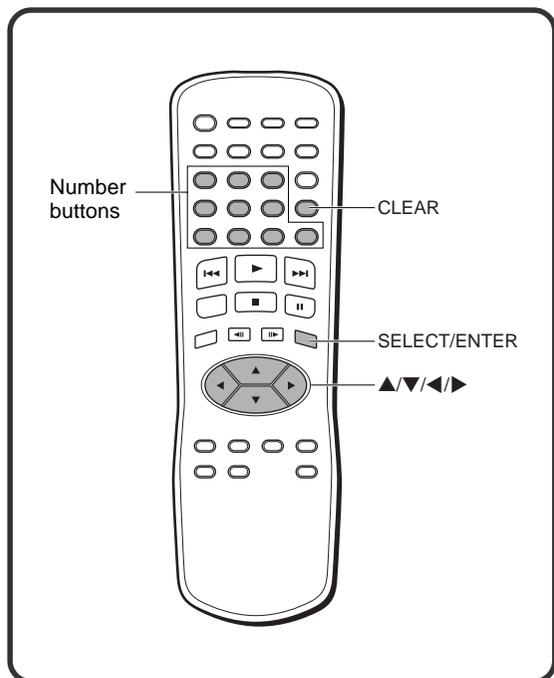
Turns on and off the DRC (Dynamic Range Control).

### 3 Press ▲/▼ to select the desired setting and press SELECT/ENTER.

Some items require additional steps. For details of the setting options for each item, see the procedure of each setting on the following pages.

#### To exit setup menu

Press SETUP, RETURN or ►.



## Disc Audio

The soundtrack language on a DVD can be changed. If the selected language is not available on the disc, the original language for the disc is selected.

**1** Press ▲/▼ to select "Disc Audio" in the setup menu and press the ▶ right cursor button.



**2** Press ▲/▼ to select the desired language.

### Original:

The original language set for the disc is selected.

### English/French/German/Spanish/Italian/Chinese/Polish/Hungarian/Russian

### Other:

To select another language, use the number buttons to enter its 4-digit language code referring to the language code list on page 56.

If you enter a wrong number, press **CLEAR** and re-enter the correct number.



**3** Press SELECT/ENTER.

## Changing Setup Values (continued)

### Disc Subtitle

The subtitle language on a DVD can be changed. If the selected language is not available on the disc, the original language for the disc is selected.

- 1 Press ▲/▼ to select "Disc Subtitle" in the setup menu and press the ► right cursor button.



- 2 Press ▲/▼ to select the desired language.

**Original:**

The original language set for the disc is selected.

**English/French/German/Spanish/Italian/Chinese/Polish/Hungarian/Russian**

**Other:**

To select another language, use the number buttons to enter its 4-digit language code referring to the language code list on page 56.

If you enter a wrong number, press **CLEAR** and re-enter the correct number.

- 3 Press **SELECT/ENTER**.

### Disc Menu

The language used in the DVD menu can be changed. If the selected language is not available on the disc, the original language for the disc is selected.

- 1 Press ▲/▼ to select "Disc Menu" in the setup menu and press the ► right cursor button.



- 2 Press ▲/▼ to select the desired language.

**Original:**

The original language set for the disc is selected.

**English/French/German/Spanish/Italian/Chinese/Polish/Hungarian/Russian**

**Other:**

To select another language, use the number buttons to enter its 4-digit language code referring to the language code list on page 56.

If you enter a wrong number, press **CLEAR** and re-enter the correct number.

- 3 Press **SELECT/ENTER**.

## Rating

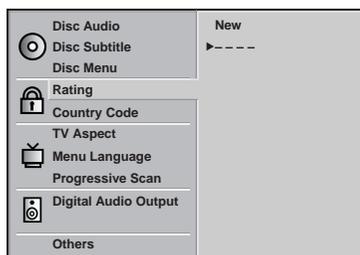
Some DVDs contain parental control information that applies to the complete disc or certain scenes on the disc. By using the parental control feature of the unit, you can specify the restriction level to prevent the unit from playing scenes not suitable for children (for example, scenes of excessive violence).

The unit is also equipped with a password-locking mechanism designed to prevent children from changing the restriction level.

### NOTES

- Parental control does not function with DVDs which do not contain parental control information.
- Parental control does not function if the parental control information on the DVD does not match the country code setting (page 50).

## 1 Press ▲/▼ to select "Rating" in the setup menu and press the ► right cursor button.



## 2 Enter a 4-digit password using the number buttons.

### When you have not entered a password yet

Enter a 4-digit password and press **SELECT/ENTER**. Then, enter the password again and press **SELECT/ENTER** to confirm it.

Example: To enter password "1234", press the number buttons 1, 2, 3 and then 4.

### When you have already entered a password

Enter the password and press **SELECT/ENTER**.

### If you entered a wrong number

Press **CLEAR** and re-enter the correct password, then press **SELECT/ENTER**.

## 3 Press ▲/▼ to select the desired restriction level and press SELECT/ENTER.

Disc Audio	8 Blocked
Disc Subtitle	7 Blocked
Disc Menu	√6
Rating	5
Country Code	4
TV Aspect	3
Menu Language	2
Progressive Scan	1
Digital Audio Output	Unlock Change
Others	

You cannot play DVDs rated higher than the level you have selected unless you cancel the parental control. For example, selecting level 1 makes it impossible to play any disc with a rating of 2 to 8.

In the next "Country Code" section, adjust the restriction level you have set here to the cinema rating system of the country where the DVD disc was produced.

### To cancel the parental control

Select "Unlock" in step 3.

### To change the password

- 1 In step 3 above, press ▲/▼ to select "Change" and press **SELECT/ENTER**.
- 2 Enter a new 4-digit password and press **SELECT/ENTER**.
- 3 Enter the password again and press **SELECT/ENTER** to confirm it.

### If you forget the password

Carry out the following procedure to clear the current password.

- 1 Press **SETUP** to display the setup menu. If the setup menu has been displayed, first exit the setup menu.
- 2 Use the number buttons to enter the 6-digit number "210499". "P CLR" appears in the display window and the current password is cleared.

## Changing Setup Values (continued)

### Country Code

After specifying the restriction level in the previous "Rating" section, set the country code so that the set restriction level is adjusted to the cinema rating system of the country where the DVD disc was produced.

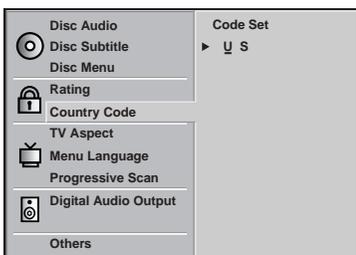
- 1 Press **▲/▼** to select "Country Code" in the setup menu and press the **▶** right cursor button.



- 2 Carry out step 2 of "Rating" on the previous page.

- 3 Press **▲/▼** to select the first character of the country code and press the **▶** right cursor button.

Refer to the country code list on pages 54 and 55.



- 4 Press **▲/▼** to select the second character of the country code and press **SELECT/ENTER**.

#### To change the country code

Follow the above steps again.

### TV Aspect

Select the appropriate display format, depending on whether you are using a conventional (4:3) or wide-screen (16:9) TV.

- 1 Press **▲/▼** to select "TV Aspect" in the setup menu and press the **▶** right cursor button.

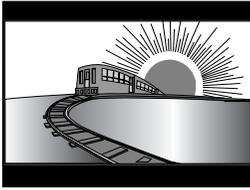


- 2 Press **▲/▼** to select the desired TV aspect and press **SELECT/ENTER**.



### 4:3 Letterbox:

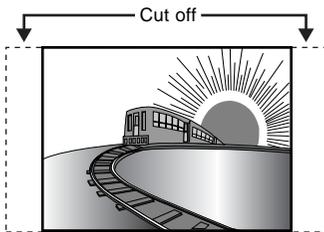
Select this when a conventional TV is connected. Titles recorded in wide-screen (16:9) format will be played in letterbox mode, with black bands at the top and bottom of the screen.



4:3 Letterbox \*

### 4:3 Panscan:

Select this to play titles that include pan-scan encoding on a conventional 4:3 screen TV: the picture of wide-screen titles is displayed at full screen height with the left or right cropped. Other titles will be played in letterbox mode.



4:3 Panscan \*

### 16:9 Wide:

Select this when a wide-screen TV is connected. Titles recorded in wide-screen (16:9) format will be played at full size. (Setting the wide-screen TV to full-size mode is also necessary.)



16:9 Wide \*

\* Each screen above shows an example when playing a title recorded in the wide-screen format. (This setting does not affect the video titles recorded in the 4:3 screen format.)

## Menu Language

The language used in this setup menu can be changed.

**1** Press **▲/▼** to select "Menu Language" in the setup menu and press the **▶** right cursor button.



**2** Press **▲/▼** to select the desired language and press **SELECT/ENTER**.



### English/Spanish/French:

The setup menu is displayed in the selected language.

## Changing Setup Values (continued)

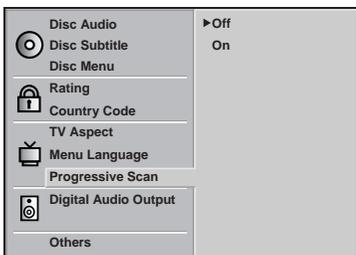
### Progressive Scan

When connecting the unit to a progressive-scan compatible TV, you can take advantage of the unit's progressive scan output enabling high quality video playback with less flickers.

#### CAUTION

DO NOT set the "Progressive Scan" to "On" when connecting to a TV that is not compatible with progressive scan signals. If you set "Progressive Scan" to "On" in error, the picture will appear scrambled. In this case, reset the unit by holding down **■** for more than 5 seconds in stop mode. The original video output will be restored and the picture will become visible again.

- 1 Press **▲/▼** to select "Progressive Scan" in the setup menu and press the **▶** right cursor button.



- 2 Press **▲/▼** to select "On" or "Off" and press **SELECT/ENTER**.

#### On:

You can change the setting to "On" when using the COMPONENT VIDEO OUT/PROGRESSIVE SCAN jacks on the unit for connection to a TV compatible with progressive scan signals.

#### Off:

- Do not change the setting (keep the setting "Off") when using the COMPONENT VIDEO OUT/PROGRESSIVE SCAN jacks on the unit for connection to a TV which is not compatible with progressive scan signals.
- Do not change the setting (keep the setting "Off") when using the VIDEO OUT jack or S-VIDEO OUT jack on the unit for connection to a TV.

#### NOTES

- The Progressive Scan menu item is not displayed when the VIDEO OUTPUT switch is set to "S-VIDEO".
- Composite video signals are not output from the VIDEO OUT jack on the unit if "Progressive Scan" is set to "On".

### Digital Audio Output

Set the audio output of the unit according to the type of audio equipment connected to the unit.

#### CAUTION

DO NOT select "DOLBY DIGITAL/PCM" or "Stream/PCM" for the "Digital Audio Output" when connecting to an AV receiver not equipped with a Dolby Digital decoder or DTS decoder (with an optical or coaxial connecting cord). Merely attempting to play a disc may cause a screeching noise which could be harmful to your ears and damage the speakers. In this case, be sure to select "PCM" for the "Digital Audio Output".

- 1 Press **▲/▼** to select "Digital Audio Output" in the setup menu and press the **▶** right cursor button.



- 2 Press **▲/▼** to select the appropriate setting and press **SELECT/ENTER**.

#### DOLBY DIGITAL/PCM:

Select this when connecting to an AV receiver equipped with a Dolby Digital (AC-3) decoder.

#### Stream/PCM:

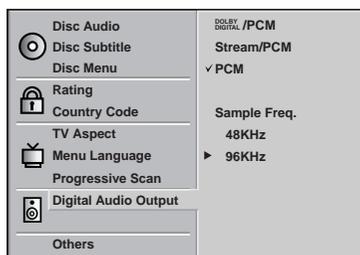
Select this when connecting to an AV receiver equipped with a DTS decoder or an MPEG decoder, or an AV receiver equipped with both Dolby Digital and DTS decoders.

#### PCM:

Select this when connecting to an audio system without a Dolby Digital (AC-3), DTS or other special decoder.

Playback disc	Output		
	Stream/PCM	DOLBY DIGITAL/PCM	PCM
96-kHz linear PCM DVD	PCM	PCM	PCM
DTS DVD	DTS bit stream	Not output	Not output
Dolby Digital DVD	Dolby Digital bit stream	Dolby Digital bit stream	PCM
MPEG DVD	MPEG bit stream	PCM	PCM
Audio CD	PCM	PCM	PCM
DTS audio CD	DTS bit stream	Not output	Not output

**3** Press ▲/▼ to select the sample frequency and press SELECT/ENTER.



#### 96KHz:

Select this if your audio equipment can handle 96-kHz signals.

#### 48KHz:

Select this if your audio equipment cannot handle 96-kHz signals.

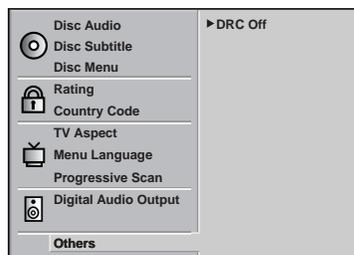
#### NOTE

If you have connected the unit to an AV receiver equipped with both Dolby Digital and DTS decoders, it may be necessary to change the receiver setting manually depending on the disc to be played. For details, refer to the operating instructions of the AV receiver.

## Others

You can turn on and off the DRC (Dynamic Range Control). When the DRC is turned on, the unit compresses the dynamic range of the audio output (i.e. the difference between the loudest and the quietest sounds) so that you can listen to a movie or music at a low volume without losing the clarity of sound.

**1** Press ▲/▼ to select "Others" in the setup menu and press the ► right cursor button.



**2** Press SELECT/ENTER repeatedly to select "On" or "Off".

#### DRC On:

Select this to play a disc at a low volume.

#### DRC Off:

Select this to play a disc without DRC.

#### NOTE

When playing DVDs recorded in Dolby Digital (AC-3) format, the DRC only works for analog audio signals output from the AUDIO OUT L/R jacks of the unit.

## Changing Setup Values (continued)

### Country codes

Code	Country	Code	Country	Code	Country
AD	Andorra	CN	China	GW	Guinea Bissau
AE	United Arab Emirates	CO	Colombia	GY	Guyana
AF	Afghanistan	CR	Costa Rica	HK	Hong Kong
AG	Antigua and Barbuda	CS	Former Czechoslovakia	HK	Heard and McDonald Islands
AI	Anguilla	CU	Cuba	HN	Honduras
AL	Albania	CV	Cape Verde	HR	Croatia
AM	Armenia	CX	Christmas Island	HT	Haiti
AN	Netherlands Antilles	CY	Cyprus	HU	Hungary
AO	Angola	CZ	Czech Republic	ID	Indonesia
AQ	Antarctica	DE	Germany	IE	Ireland
AR	Argentina	DJ	Djibouti	IL	Israel
AS	American Samoa	DK	Denmark	IN	India
AT	Austria	DM	Dominica	IO	British Indian Ocean Territory
AU	Australia	DZ	Algeria	IQ	Iraq
AW	Aruba	EC	Ecuador	IR	Iran
AZ	Azerbaijan	EE	Estonia	IS	Iceland
BA	Bosnia-Herzegovina	EG	Egypt	IT	Italy
BB	Barbados	EH	Western Sahara	JM	Jamaica
BD	Bangladesh	ER	Eritrea	JO	Jordan
BE	Belgium	ES	Spain	JP	Japan
BF	Burkina Faso	ET	Ethiopia	KE	Kenya
BG	Bulgaria	FI	Finland	KG	Kyrgyzstan
BH	Bahrain	FJ	Fiji	KH	Cambodia
BI	Burundi	FK	Falkland Islands	KI	Kiribati
BJ	Benin	FM	Micronesia	KM	Comoros
BM	Bermuda	FO	Feroe Islands	KN	Saint Kitts & Nevis Anguilla
BN	Brunei Darussalam	FR	France	KP	North Korea
BO	Bolivia	FX	France (European Territory)	KR	South Korea
BR	Brazil	GA	Gabon	KW	Kuwait
BS	Bahamas	GB	Great Britain	KY	Cayman Islands
BT	Bhutan	GD	Grenada	KZ	Kazakhstan
BV	Bouvet Island	GE	Georgia	LA	Laos
BW	Botswana	GF	French Guyana	LB	Lebanon
BY	Belarus	GH	Ghana	LC	Saint Lucia
BZ	Belize	GI	Gibraltar	LI	Liechtenstein
CA	Canada	GL	Greenland	LK	Sri Lanka
CC	Cocos (Keeling) Islands	GM	Gambia	LR	Liberia
CF	Central African Republic	GN	Guinea	LS	Lesotho
CG	Congo	GP	Guadeloupe (French)	LT	Lithuania
CH	Switzerland	GQ	Equatorial Guinea	LU	Luxembourg
CI	Ivory Coast	GR	Greece	LV	Latvia
CK	Cook Islands	GS	S. Georgia & S. Sandwich Isles.	LY	Libya
CL	Chile	GT	Guatemala	MA	Morocco
CM	Cameroon	GU	Guam (USA)	MC	Monaco

Code	Country	Code	Country	Code	Country
MD	Moldavia	RE	Reunion (French)	UZ	Uzbekistan
MG	Madagascar	RO	Romania	VA	Vatican City State
MH	Marshall Islands	RU	Russian Federation	VC	Saint Vincent & Grenadines
MK	Macedonia	RW	Rwanda	VE	Venezuela
ML	Mali	SA	Saudi Arabia	VG	Virgin Islands (British)
MM	Myanmar	SB	Solomon Islands	VI	Virgin Islands (USA)
MN	Mongolia	SC	Seychelles	VN	Vietnam
MO	Macau	SD	Sudan	VU	Vanuatu
MP	Northern Mariana Islands	SE	Sweden	WF	Wallis and Futuna Islands
MQ	Martinique (French)	SG	Singapore	WS	Samoa
MR	Mauritania	SH	Saint Helena	YE	Yemen
MS	Montserrat	SI	Slovenia	YT	Mayotte
MT	Malta	SJ	Svalbard and Jan Mayen Islands	YU	Yugoslavia
MU	Mauritius	SK	Slovak Republic	ZA	South Africa
MV	Maldives	SL	Sierra Leone	ZM	Zambia
MW	Malawi	SM	San Marino	ZR	Zaire
MX	Mexico	SN	Senegal	ZW	Zimbabwe
MY	Malaysia	SO	Somalia		
MZ	Mozambique	SR	Suriname		
NA	Namibia	ST	Saint Tome and Principe		
NC	New Caledonia (French)	SU	Former USSR		
NE	Niger	SV	El Salvador		
NF	Norfolk Island	SY	Syria		
NG	Nigeria	SZ	Swaziland		
NI	Nicaragua	TC	Turks and Caicos Islands		
NL	Netherlands	TD	Chad		
NO	Norway	TF	French Southern Territories		
NP	Nepal	TG	Togo		
NR	Nauru	TH	Thailand		
NU	Niue	TJ	Tadjikistan		
NZ	New Zealand	TK	Tokelau		
OM	Oman	TM	Turkmenistan		
PA	Panama	TN	Tunisia		
PE	Peru	TO	Tonga		
PF	Polynesia (French)	TP	East Timor		
PG	Papua New Guinea	TR	Turkey		
PH	Philippines	TT	Trinidad and Tobago		
PK	Pakistan	TV	Tuvalu		
PL	Poland	TW	Taiwan		
PM	Saint Pierre and Miquelon	TZ	Tanzania		
PN	Pitcairn Island	UA	Ukraine		
PR	Puerto Rico	UG	Uganda		
PT	Portugal	UK	United Kingdom		
PW	Palau	UM	USA Minor Outlying Islands		
PY	Paraguay	US	United States		
QA	Qatar	UY	Uruguay		

## Changing Setup Values (continued)

### Language codes

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

# Troubleshooting

If something seems to be wrong with your DVD player, first check the items in the table below.

Symptom	Check	See page
<b>The power does not come on.</b>	<ul style="list-style-type: none"> <li>Is the power cord plugged firmly into a live outlet?</li> </ul>	13
<b>The disc does not play. Playback stops almost immediately.</b>	<ul style="list-style-type: none"> <li>Is there condensation inside the unit? Leave the unit idle with the power on for 1 to 2 hours.</li> <li>Are you trying to use a disc not available for the unit, such as a PHOTO CD?</li> <li>Is the disc dirty? Is it loaded properly?</li> <li>Does the disc exceed the specified parental control rating level?</li> </ul>	6 8, 23 49
<b>No picture</b>	<ul style="list-style-type: none"> <li>Is the unit connected correctly?</li> <li>Are the video connections firmly attached?</li> <li>Is the television video mode set correctly?</li> </ul>	13 13 23
<b>The picture quality is poor.</b>	<ul style="list-style-type: none"> <li>Is the unit in a place subject to vibrations?</li> <li>Are the video connections firmly attached?</li> <li>Is the disc dirty?</li> <li>Is the unit connected directly to the TV? Or is it connected through a VCR, a selector switch, or a TV/VCR?               <ul style="list-style-type: none"> <li>The picture may be bad when used with some television sets or projectors, due to the DVD copy protection scheme.</li> <li>The picture quality may also suffer if the unit is connected through a selector switch with other video equipment. Try turning off the power to the other video equipment.</li> <li>The picture quality may be somewhat poor when paused, when doing frame advance, or during fast forward or fast reverse. This is not a malfunction.</li> </ul> </li> </ul>	3 13 8 13
<b>No sound</b>	<ul style="list-style-type: none"> <li>Is the unit connected correctly?</li> <li>Are the audio connections firmly attached?</li> <li>Is the connected audio equipment turned on? Is the volume of the connected equipment set correctly? (Note that there is no audio playback during slow playback, frame advance, and fast forward and fast reverse of a DVD.)</li> </ul>	14 13 23
<b>The remote control does not work at all, or does not work correctly.</b>	<ul style="list-style-type: none"> <li>Are the remote control batteries installed correctly?</li> <li>Is the remote control too far from the main unit? Is there something in the way?</li> <li>Are the remote control batteries getting weak?</li> <li>Is the unit in strong sunlight or strong fluorescent light?</li> </ul>	8 8 8 8

## Each DVD has different capabilities

The DVD's many capabilities differ depending on the disc. The following situations may be caused by information on the disc itself.

- The audio or subtitles are not reproduced in the language specified in the setup menu.
- The audio track or subtitles cannot be changed.
- There are no subtitles.
- No DVD menu. The DVD menu is not displayed in the language you want.
- The viewing angle cannot be changed.
- The rating restriction does not work.
- The resume or mark search function does not work.

# Specifications

Power supply	120 V AC, 60 Hz
Power consumption	16 W
Power consumption in standby mode	1.4 W
Weight	5.7 kg (12.9 lbs)
External dimensions	430 × 118 × 414 mm (17 × 4.7 × 16.3 inches) (w × h × d)
Laser	Semiconductor laser, wavelength: 650/780 nm
Signal format	NTSC
Supported discs	DVD video discs: 12 cm (single-sided single layer, single-sided double layer, double-sided double layer), 8 cm (single-sided single layer, single-sided double layer, double-sided double layer) Compact discs (CD-DA, MP3): 12 cm and 8 cm
Component video output	Y output: 1.0 Vp-p (75 ohms, sync negative) P <sub>R</sub> /C <sub>R</sub> , P <sub>B</sub> /C <sub>B</sub> outputs: 0.7 Vp-p (75 ohms) RCA jacks (C <sub>R</sub> /C <sub>B</sub> /Y) × 1
S-video output	Y output: 1.0 Vp-p (75 ohms, sync negative) C output: 0.3 Vp-p 4-pin mini DIN jack × 1
Composite video output	1.0 Vp-p (75 ohms, sync negative) RCA jack × 1
Audio output	Digital output: 0.5 Vp-p (75 ohms), RCA jack × 1 0.5 Vp-p (75 ohms), Fiber optical connector × 1 Analog output: 2.0 Vrms (1 kHz, 0 dB, 330 ohms), RCA jacks (L/R) × 1
Audio output characteristics	Signal-to-noise ratio: More than 95 dB (EIAJ) Dynamic range: More than 90 dB (EIAJ) Harmonic distortion: 0.008% Frequency response: CD: 4 Hz to 20 kHz DVD: 4 Hz to 22 kHz (48-kHz sampling), 4 Hz to 44 kHz (96-kHz sampling)
Operating temperatures	5°C to 35°C (41°F to 95°F)
Accessories	Video cord (1) Audio cord (1) Remote control (1) Operating instructions

## NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

## CAUTION

Modifications or adjustments to this product, which are not expressly approved by the manufacturer, may void the user's right or authority to operate this product.

- Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories. Confidential unpublished works. ©1992-1999 Dolby Laboratories. All rights reserved.
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As an ENERGY STAR® Partner, AIWA has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

Specifications are subject to change without notice.

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**AIWA CO.,LTD.**

 <http://www.aiwa.co.jp>

For Assistance and Information, **Call Toll Free 1-800-BUY-AIWA** (United States and Puerto Rico)

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