

marantz®

Model DV6600 User Guide

Super Audio CD/DVD Player

CLASS 1
LASER PRODUCT

HDMI™
HIGH DEFINITION MULTIMEDIA INTERFACE

DVD
AUDIO™

COMPACT
disc
DIGITAL VIDEO

DVD
VIDEO™

COMPACT
disc
DIGITAL AUDIO


SUPER AUDIO CD

RW
COMPATIBLE

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



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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 product.

CAUTION:
 TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

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 tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

LASER SAFETY

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

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

CAUTION VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO BEAM (WARNING LOCATION: INSIDE ON LASER COVERSIELD)

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

Operating Environment

Operating environment temperature and humidity:
 +5°C to +35°C (+41°F to +95°F); less than 85%RH (cooling vents not blocked) Do not install in the following locations

- Location exposed to direct sunlight or strong artificial light
- Location exposed to high humidity, or poorly ventilated location

NOTE:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION:

This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

This product is for general household purposes. Any failure due to use for other than household purposes (such as long - term use for business purposes in a restaurant or use in a car or ship) and which requires repair will be changed for even during the warranty period.

Do not remove the cover from the equipment.
 Do not insert anything into the equipment through the ventilation holes.
 Do not handle the mains lead with wet hands.
 Make a space of about 0.1 meter around the unit.

IMPORTANT NOTICE

[For U.S. model]

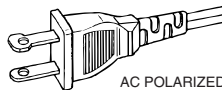
The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

IMPORTANT SAFETY INSTRUCTIONS

READ BEFORE OPERATING EQUIPMENT

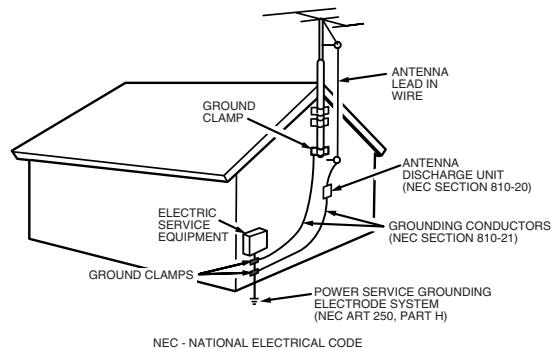
This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. **Read Instructions** – All the safety and operating instructions should be read before the product is operated.
2. **Retain Instructions** – The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** – All warnings on the product and in the operating instructions should be adhered to.
4. **Follow Instructions** – All operating and use instructions should be followed.
5. **Cleaning** – Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. **Attachments** – Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. **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.
8. **Accessories** – 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.
9. **CART** – 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.
10. **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, and 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.
11. **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 to 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.
12. **Grounding or Polarization** – This product may be 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.
13. **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.
14. **Protective Attachment Plug** – The product is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
15. **Outdoor Antenna Grounding** – If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 1.
16. **Lightning** – For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.



17. **Power Lines** – An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
18. **Overloading** – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
19. **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.
20. **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.
21. **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, and
 - f. When the product exhibits a distinct change in performance – this indicates a need for service.
22. **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.
23. **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.
24. **Wall or Ceiling Mounting** – The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
25. **Heat** – The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

FIGURE 1
EXAMPLE OF ANTENNA GROUNDING AS PER
NATIONAL ELECTRICAL CODE, ANSI/NFPA 70



A NOTE ABOUT RECYCLING:

This product's packaging materials are recyclable and can be reused.
Please dispose of any materials in accordance with your local recycling regulations.
When discarding the unit, comply with your local rules or regulations.
Batteries should never be thrown away or incinerated but disposed of in accordance with your local regulations concerning chemical wastes.



Make your contribution to the environment!!!

- Used up batteries do not belong in the dust bin.
- You can dispose of them at a collection point for used up batteries or special waste. Contact your council for details.

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INTRODUCTION

The serial number of this product may be found on the back of the DVD player. No others have the same serial number as yours. You should record the number and other vital information here and retain this book as a permanent record of your purchase to aid identification in case of theft. Serial numbers are not kept on file.

Date of Purchase	
Dealer Purchase from	
Dealer Address	
Dealer Phone No.	
Model No.	
Serial No.	

About Copyright

Unauthorized copying, broadcasting, public performance and lending of discs are prohibited. This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorised by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorised by Macrovision. Reverse engineering or disassembly is prohibited.

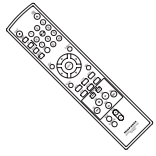
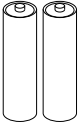
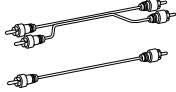


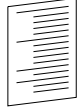
Apparatus Claims of U. S. Patent Nos, 4,631,603, 4,577,216, 4,819,098, and 4,907,093 licensed for limited viewing uses only.

Notice for the Progressive Scan Outputs

Consumers should note that not all high definition television sets are fully compatible with this product and may cause artifacts to be displayed in the picture. In case of picture problems with 525 progressive scan output, it is recommended that the user switch the connection to the 'standard definition' output. If there are questions regarding your TV set compatibility with this 525p DVD player, please contact our customer service center.

Supplied Accessories

Please check to make sure the following items are included with the main unit in the carton.


Remote control..... 1 	"AA" (R6P) batteries 2 	Audio (Red and White) cable..... 1 Video (Yellow) cable..... 1 	Remote control bus cable (Orange) 1 	User Guide 1 	Warranty card for USA..... 1 Warranty card for Canada... 1 
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Symbols Used in this Manual


The following symbols appear below in some headings and notes in this manual, with the following meanings.


- | | | | |
|-------------------------|--|-----------------|---|
| DVD-V : | Description refers to playback of DVD-Video discs. | MP3 : | Description refers to playback of discs formatted with MP3. |
| DVD-A : | Description refers to playback of DVD-Audio discs. | JPEG : | Description refers to viewing of JPEG discs. |
| VCD : | Description refers to playback of Video CDs. | WMA : | Description refers to playback of discs formatted with WMA. |
| Super Audio CD : | Description refers to playback of Super Audio CDs. | DivX® : | Description refers to playback of discs formatted with DivX®. |
| CD : | Description refers to playback of Audio CDs. | DVD-RW : | Description refers to playback of the VR mode (Video Recording format). |

 is a trademark of DVD Format/Logo Licensing Corporation.

 is trademark of Eastman Kodak Company.

 This label indicates playback compatibility with DVD-RW discs recorded in VR mode (Video Recording format).

 Plays Windows Media™
Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

 DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.

ABOUT THE DISCS

Playable Discs

Playable discs	Mark (logo)	Region code	Recorded signals	Disc size	Disc types
DVD-Audio * 2, 3, 5		—	Digital audio + Digital video	12 cm or 8 cm	Example: Group 1 (Track 1, Track 2, Track 3, Track 4) Group 2 (Track 1, Track 2)
DVD-Video * 1, 2, 3, 5		—	Digital video	12 cm or 8 cm	Example: Title 1 (Chapter 1, Chapter 2, Chapter 3, Chapter 4) Title 2 (Chapter 1, Chapter 2)
DVD-RW DVD-R * 1, 3, 4, 5, 6, 7, 8	 	or	Digital video DivX®	12 cm or 8 cm	
Video CD * 1, 3, 5, 9		—	Sound and Pictures	12 cm or 8 cm	Video CD, Super Audio CD, Audio CD Example: Track 1 Track 2 Track 3 Track 4 Track 5 Track 6
Super Audio CD	Stereo Multi-ch	—	Digital audio		
Audio CD * 4, 5		—	Digital audio		
CD-RW CD-R * 4, 5, 7, 8, 9	 	—	Digital audio MP3 WMA*10 Digital picture (JPEG) DivX®	12 cm	Example: Group 1 (Track 1, Track 2, Track 3, Track 4) Group 2 (Track 5, Track 6)
Picture CD		—	JPEG		

If you cannot play back a disc which bears one of the marks above, check the following notes.

- *1: This player conforms to the NTSC color system. Also you can play discs recorded with the PAL system via a PAL system TV set.
- *2: Certain DVD-Video discs do not operate as described in this manual due to the intentions of the disc's producers.
- *3: Scratched or stained discs may not be played back.
- *4: Some discs cannot be played back because of incompatible recording conditions, characteristics of the recorder or special properties of discs.
- *5: You can play back discs which bear the marks above. If you use nonstandardized discs, this unit may not play them back. Even if they are played back, the sound or video quality will be compromised.
- *6: Only the discs recorded in the video format or Video Recording format, and finalized can be played back. Unfinalized discs cannot be played back. Depending on the recording status of a disc, the disc may not be played back at all or normally (the picture or sound may be distorted, etc.).
- *7: If there is too much recordable space left on a disc (the used portion is less than 55mm across), it may not play back properly.
- *8: Do not glue paper or put stickers on to the disc. These may damage the disc, and the unit may not read it correctly.
- *9: This unit conforms to ver.1.1 and ver.2.0 of Video CD standard with PBC function.
Ver. 1.1 (without PBC function): You can enjoy playback picture as well as music CD.
Ver. 2.0 (with PBC function): While using a Video CD with PBC function, "Pbc" appears on the screen and the display.
NOTE: When playing Video CDs with PBC function, some operations (e.g., track search and repeat tracks) cannot be performed. Cancel PBC function temporarily to perform those operations (refer to page 17).

What is PBC? "PBC" stands for Playback Control.

You can play interactive software using menu screens. Refer to instructions in the Video CD.

*10: This player cannot play the disc contents protected by Windows Media Digital Rights Management (DRM).

NOTE: This player cannot play the DVD-RW discs that supports CPRM (Content Protection for Recordable Media). This player cannot play the DVD-R discs recorded in VR mode (Video Recording format).

- **NEVER play back the following discs. Otherwise, malfunction may result!**
 DVD-RAM / CD-I / Photo CD / DVD with region codes other than 1 or ALL / DVD-ROM for personal computers / CD-ROM for personal computers
- Any other discs without compatibility indications

CAUTION:

- Use caution not to pinch your finger in the disc slot.
- Be sure to remove a disc and unplug the AC power cord from the outlet before carrying the DVD player.

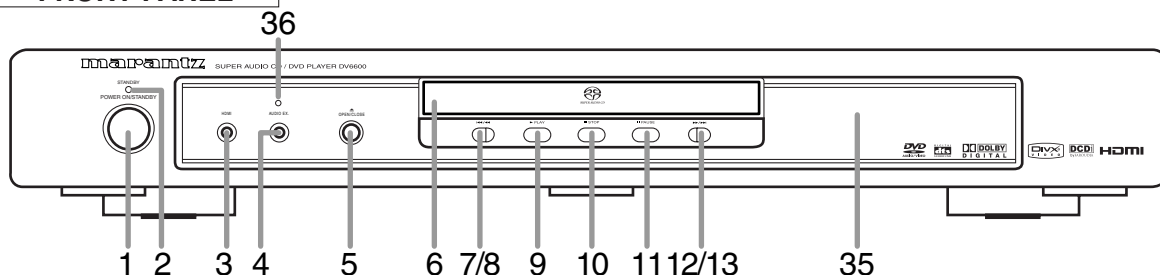
- **Progressive Scan system**
Unlike conventional interlace scanning, the progressive scan system provides less flickering and images in higher resolution than that of traditional 525i television signals.
- **Analog 5.1-channel Dolby and DTS surround output**
This player is equipped with analog 5.1-channel Dolby and DTS surround audio out jacks for playback.
- **Dolby Digital Sound**
By hooking this player up to a Multi - Channel Dolby Digital decoder, you can enjoy high-quality Dolby Digital 5.1 channel surround sound as heard in the movie theaters.
- **HDMI (High-Definition Multimedia Interface)**
You can enjoy clearer video output when connecting this player to a display equipment with an HDMI terminal.
- **Still/Fast/Slow/Step Playback**
Various playback modes are available including still pictures, fast forward/reverse, slow motion and step frames.
- **Random Playback for DVD-Audio, Super Audio CD, Audio CD, MP3, JPEG, and WMA**
This player can shuffle the order of tracks to play them in random order.
- **Program Playback for DVD-Audio, Super Audio CD, Audio CD, MP3, JPEG, and WMA**
You can program the order of tracks to play them in any desired order.
- **DVD menus in a desired language**
You can display DVD menus in a desired language if the language is available on the DVD.
- **Auto Power Off**
The power turns off automatically if there is no activity at the player or its remote control for more than 30 minutes. (Refer to page 31.)
- **Subtitles in a desired language**
You can select a desired language for subtitles if the language is available on the disc.
- **Selecting a camera angle**
You can select a desired camera angle if a disc contains sequences recorded from different angles.
- **Choices for audio language and sound mode**
You can select a desired audio language and sound mode if different languages and modes are available on the disc.
- **Parental Lock**
You can set the control level to limit playback of discs which may not be suitable for children.
- **Super Audio CD multi-channel playback compatibility**
In addition to playing DVD-Video and DVD-Audio discs, this player can play multi-channel Super Audio CDs with a playback frequency range covering 100kHz and a dynamic range of 120dB or greater within the audible frequency range, and a maximum of 5.1 channels can be output.
- **Automatic detection of discs**
This player automatically detects if a loaded disc is DVD-Video, DVD-Audio, Video CD, Super Audio CD, Audio CD, MP3, JPEG, WMA, or DivX®.
- **Playing an MP3 disc**
You can enjoy MP3 files which are recorded on CD-R/RW.
- **Direct Search**
You can search a desired title, chapter, and track with the numeric buttons during playback or in stop mode.
- **On-screen display**
Information about the current operation can be displayed on the TV screen, allowing you to confirm the currently active functions (such as program playback).
- **Search**
Chapter search: Search for a desired chapter.
Title search: Search for a desired title.
Group search: Search for a desired group.
Page search: Search for a desired page.
Track search: Search for a desired track.
Time search: Search for a desired time point of a title or track.
- **Repeat**
Chapter: Repeated playback of a chapter of the disc.
Title: Repeated playback of a title of the disc.
Track: Repeated playback of a track of the disc.
All: Repeated playback of the entire disc. (exclude DVD-Video)
A-B: Repeated playback of a part between two points.
Group: Repeated playback of a folder of the DVD-Audio/Super Audio CD/MP3/JPEG/WMA/DivX® disc.
- **Zoom**
2-time or 4-time magnified screen can be displayed.
- **Marker**
The part designated by user can be called back.
- **Resume Play**
You can resume playback from the point at which the play has been stopped even if the power is turned off.
- **Component Video Out Jacks**
Jacks located on the back of the DVD player which are used to send high-quality video to a TV via Component Video In Jacks.
- **Bit rate indication**
- **DRC (Dynamic Range Control)**
You can compress the range of sound volume.
- **Displaying JPEG files**
Kodak Picture CDs can be played. Still images stored in JPEG format on CD-R/RW can also be played.
- **Reproducing WMA files**
You can enjoy WMA files which are recorded on CD-R/RW.
- **Reproducing DivX® files**
You can enjoy DivX® files which are recorded on DVD-R/RW or CD-R/RW.
 - Official DivX Certified™ product
 - Plays DivX®5, DivX®4, DivX®3, and DivX® VOD video content (in compliance with DivX Certified™ technical requirements).
 - This player supports Quarter Pixel.
 - This player does not support GMC.
- **AUDIO EX**
The sound quality of analog audio output is improved by turning off analog video signal output and the front panel display.
- **PAL disc playback**
You can play discs recorded with the PAL system via a PAL system TV set.

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

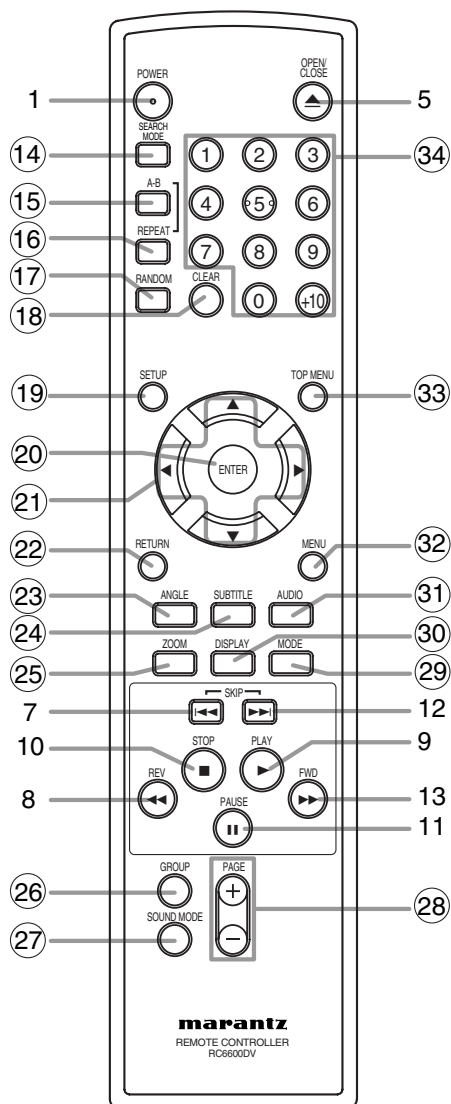
"WMA" (Windows Media Audio) is a new audio codec developed by Microsoft® in the United States of America.

FUNCTIONAL OVERVIEW

FRONT PANEL



REMOTE CONTROL



NOTE:













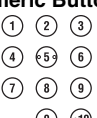
- The buttons with circled numbers can only be operated with the remote control.

- POWER (ON/STANDBY) Button [page 17]**
- STANDBY Indicator**
This indicator lights when the DVD player turns off.
- HDMI Button [page 17]**
Press to set the HDMI output mode.
- AUDIO EX. Button [page 17]**
Press to activate AUDIO EX function to reduce noise level.
- OPEN/CLOSE Button [page 17]**
- Disc loading tray**
- ◀◀(SKIP) Button [page 19]**
Plays back from the beginning of the current chapter or track.
- ◀◀(REV) Button [page 19]**
Press more than 2 seconds when you use the front panel button for this function.
- ▶▶(PLAY) Button [page 17]**
- ▶▶(STOP) Button [page 17]**
- ▶▶(PAUSE) Button [page 18]**
- ▶▶(SKIP) Button [page 19]**
Plays back from the beginning of the next chapter or track.
- ▶▶(FWD) Button [page 19]**
Press more than 2 seconds when you use the front panel button for this function.
- SEARCH MODE Button [page 19]**
- A-B REPEAT Button [page 21]**
- REPEAT Button [page 20]**
- RANDOM Button [page 21]**
- CLEAR Button [page 20]**
- SETUP Button [page 27]**
- ENTER Button [page 17]**
- Cursor Buttons [page 17]**
Use when making settings while watching the display on a TV screen.
- RETURN Button [page 18]**
- ANGLE Button [page 26]**
Press to change the camera angle to see the sequence being played back from a different angle.
- SUBTITLE Button [page 26]**
Press to select a desired subtitle language.
- ZOOM Button [page 19]**
- GROUP Button [page 18]**
- SOUND MODE Button [page 26]**
- PAGE Button [page 18]**
- MODE Button [page 18]**
- DISPLAY Button [page 24]**
- AUDIO Button [page 25]**
Press to select a desired audio language or sound mode.
- MENU Button [page 17]**
- TOP MENU Button [page 17]**
- Numeric Buttons [page 17]**
- Panel Display, Remote Sensor Window**
- AUDIO EX. Indicator**
This indicator lights when the **AUDIO EX.** button is ON.




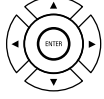










Tour of the Remote Control

Buttons on remote control work in different ways for DVD-Video, DVD-Audio, Video CD, Super Audio CD, Audio CD, MP3, JPEG, WMA and DivX®.

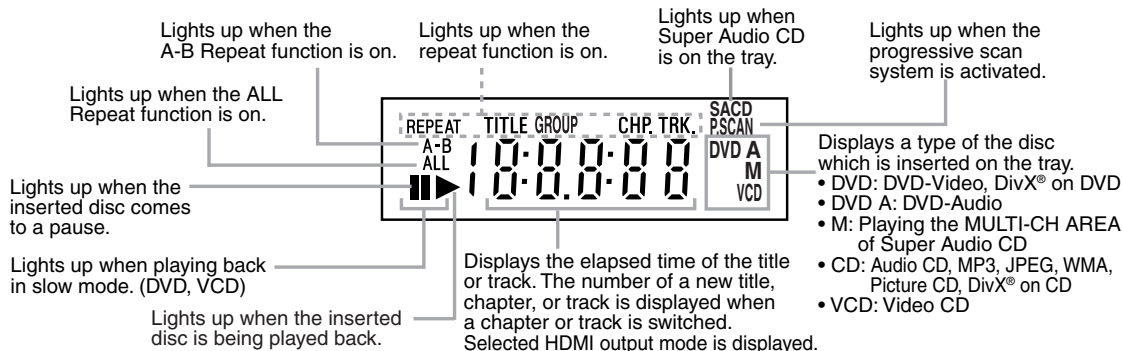
Refer to the following table for correct use.

	DVD-Video, DVD-Audio	VCD	Super Audio CD, CD, MP3, JPEG, WMA	DivX®
POWER Button <small>POWER</small> 	<ul style="list-style-type: none"> To turn on or to standby the unit. 	<ul style="list-style-type: none"> To turn on or to standby the unit. 	<ul style="list-style-type: none"> To turn on or to standby the unit. 	<ul style="list-style-type: none"> To turn on or to standby the unit.
A-B REPEAT Button <small>A-B</small> 	<ul style="list-style-type: none"> To mark a segment between A and B for repeated playback. 	<ul style="list-style-type: none"> To mark a segment between A and B for repeated playback. 	<ul style="list-style-type: none"> To mark a segment between A and B for repeated playback. (Super Audio CD, CD) 	<ul style="list-style-type: none"> To mark a segment between A and B for repeated playback.
REPEAT Button <small>REPEAT</small> 	<ul style="list-style-type: none"> To repeat playback of a title, chapter, group or track. 	<ul style="list-style-type: none"> To repeat playback of a track or disc. 	<ul style="list-style-type: none"> To repeat playback of a track or disc. (Super Audio CD, CD) To repeat playback of a track, group, or disc. (MP3, JPEG, WMA) 	<ul style="list-style-type: none"> To repeat playback of a track, group or disc.
RANDOM Button <small>RANDOM</small> 	<ul style="list-style-type: none"> To shuffle the playing order of groups and tracks. (DVD-Audio) 	—	<ul style="list-style-type: none"> To play back tracks in random order. 	—
MODE Button <small>MODE</small> 	<ul style="list-style-type: none"> To activate the 3D sound (Virtual Surround system). To set the Black Level Setting. To program a specific playback order. (DVD-Audio) To play all groups. (DVD-Audio) 	<ul style="list-style-type: none"> To activate the 3D sound (Virtual Surround system). To set the Black Level Setting. 	<ul style="list-style-type: none"> To program a specific playback order. To activate the 3D sound (Virtual Surround system). (CD, MP3, WMA) To activate the Slide Show Mode. (JPEG) 	—
ZOOM Button <small>ZOOM</small> 	<ul style="list-style-type: none"> To magnify part of the picture (x2/x4). 	<ul style="list-style-type: none"> To magnify part of the picture (x2). 	<ul style="list-style-type: none"> To magnify part of the picture (x2). (JPEG) 	<ul style="list-style-type: none"> To magnify part of the picture (x2).
ANGLE Button <small>ANGLE</small> 	<ul style="list-style-type: none"> To access various camera angles on the disc. 	—	—	—
SUBTITLE Button <small>SUBTITLE</small> 	<ul style="list-style-type: none"> To select a subtitle language on the disc. 	—	—	<ul style="list-style-type: none"> To select a subtitle language on the disc.
AUDIO Button <small>AUDIO</small> 	<ul style="list-style-type: none"> To access various audio functions on the disc. 	<ul style="list-style-type: none"> To select STEREO, L-ch or R-ch. 	<ul style="list-style-type: none"> To select STEREO, L-ch or R-ch. (CD) 	<ul style="list-style-type: none"> To access various audio functions on the disc.
DISPLAY Button <small>DISPLAY</small> 	<ul style="list-style-type: none"> To display the current disc or HDMI mode. 	<ul style="list-style-type: none"> To display the current disc or HDMI mode. 	<ul style="list-style-type: none"> To display the current disc or HDMI mode. 	<ul style="list-style-type: none"> To display the current disc or HDMI mode.
SEARCH MODE Button <small>SEARCH MODE</small> 	<ul style="list-style-type: none"> To search for a chapter, title, track, time or marker. 	<ul style="list-style-type: none"> To search for a track, time or marker. 	<ul style="list-style-type: none"> To search for a track. To search for time or a marker. (Super Audio CD, CD) 	<ul style="list-style-type: none"> To search for a track or time.
OPEN/CLOSE Button <small>OPEN / CLOSE</small> 	<ul style="list-style-type: none"> To open or close the disc tray. 	<ul style="list-style-type: none"> To open or close the disc tray. 	<ul style="list-style-type: none"> To open or close the disc tray. 	<ul style="list-style-type: none"> To open or close the disc tray.
Numeric Buttons 	<ul style="list-style-type: none"> To select a chapter, title, track or group directly. 	<ul style="list-style-type: none"> To select a track directly. 	<ul style="list-style-type: none"> To select a track directly. 	<ul style="list-style-type: none"> To select a track directly.

Tour of the Remote Control

	DVD-Video, DVD-Audio	VCD	Super Audio CD, CD, MP3, JPEG, WMA	DivX®
CLEAR Button 	<ul style="list-style-type: none"> To clear the markers. To clear the numbers entered incorrectly. To cancel the A point for A-B Repeat. 	<ul style="list-style-type: none"> To clear the markers. To clear the numbers entered incorrectly. To cancel the A point for A-B Repeat. 	<ul style="list-style-type: none"> To clear the markers. (Super Audio CD, CD) To clear the numbers entered incorrectly. To cancel the A point for A-B Repeat. (Super Audio CD, CD) 	<ul style="list-style-type: none"> To clear the numbers entered incorrectly. To cancel the A point for A-B Repeat.
MENU Button 	<ul style="list-style-type: none"> To call up the menu on a disc. 	—	<ul style="list-style-type: none"> To call up the FILE LIST. (MP3, JPEG, WMA) 	<ul style="list-style-type: none"> To call up the FILE LIST.
TOP MENU Button 	<ul style="list-style-type: none"> To call up the top menu on a disc. 	—	<ul style="list-style-type: none"> To return to the first item in the highest hierarchy of the FILE LIST. (MP3, JPEG, WMA) 	<ul style="list-style-type: none"> To return to the top file in the highest hierarchy of the FILE LIST.
ENTER, Cursor Buttons 	<ul style="list-style-type: none"> To move the cursor and determine its position. 	<ul style="list-style-type: none"> To move the cursor and determine its position. 	<ul style="list-style-type: none"> To move the cursor and determine its position. 	<ul style="list-style-type: none"> To move the cursor and determine its position.
RETURN Button 	<ul style="list-style-type: none"> To return to the previous operation in the setup menu. 	<ul style="list-style-type: none"> To return to the previous operation in the setup menu. 	<ul style="list-style-type: none"> To return to the previous operation in the setup menu. 	<ul style="list-style-type: none"> To return to the previous operation in the setup menu.
SETUP Button 	<ul style="list-style-type: none"> To call up the setup menu. 	<ul style="list-style-type: none"> To call up the setup menu. 	<ul style="list-style-type: none"> To call up the setup menu. 	<ul style="list-style-type: none"> To call up the setup menu.
SKIP Buttons 	<ul style="list-style-type: none"> To skip chapters/titles/tracks. 	<ul style="list-style-type: none"> To skip tracks. 	<ul style="list-style-type: none"> To skip tracks. 	<ul style="list-style-type: none"> To skip tracks.
REV / FWD Buttons 	<ul style="list-style-type: none"> To search forward/backward through a disc. To begin slow forward/slow reverse. (DVD-Video) 	<ul style="list-style-type: none"> To search forward/backward through a disc. To begin slow forward. 	<ul style="list-style-type: none"> To begin fast forward/reverse search. (except JPEG) 	<ul style="list-style-type: none"> To search forward/backward through a disc. To begin slow forward.
STOP Button 	<ul style="list-style-type: none"> To stop playback. 	<ul style="list-style-type: none"> To stop playback. 	<ul style="list-style-type: none"> To stop playback. 	<ul style="list-style-type: none"> To stop playback.
PLAY Button 	<ul style="list-style-type: none"> To begin playback. 	<ul style="list-style-type: none"> To begin playback. 	<ul style="list-style-type: none"> To begin playback. 	<ul style="list-style-type: none"> To begin playback.
PAUSE Button 	<ul style="list-style-type: none"> To pause playback. To advance playback frame by frame. 	<ul style="list-style-type: none"> To pause playback. To advance playback frame by frame. 	<ul style="list-style-type: none"> To pause playback. 	<ul style="list-style-type: none"> To pause playback. To advance playback frame by frame.
GROUP Button 	<ul style="list-style-type: none"> To begin playback from a desired group. (DVD-Audio) 	—	—	—
SOUND MODE Button 	—	—	<ul style="list-style-type: none"> To select the Super Audio CD setup. (Super Audio CD) 	—
PAGE Buttons 	<ul style="list-style-type: none"> To select a desired background display image for playback. (DVD-Audio) 	—	—	—

Panel Display



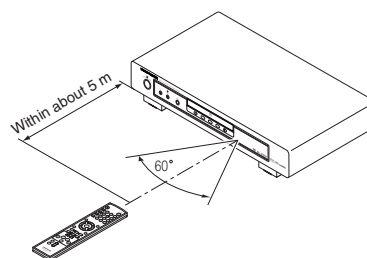
Displays during Operation

	Power on
	No disc inserted or cannot read
	Tray open
	Tray closed
	Loading the Disc
	Lights up when the playback control is activated (VCD)
	Power off
	HDMI output mode is selected. 480p is displayed when playing back a NTSC disc, while 576p is displayed for PAL disc playback.
	HDMI output mode (720p) is selected
	HDMI output mode (1080i) is selected
	HDMI output mode (hdOFF) is selected

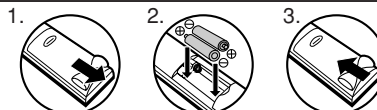
Using the Remote Control

Keep in mind the following when using the remote control:

- Make sure that there is no obstacle between the remote control and the remote sensor on the unit.
- Use within the operating range and angle, as shown.



Loading the Batteries

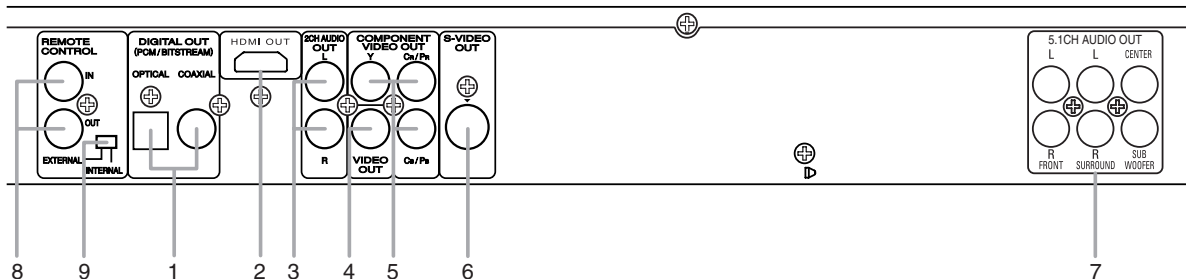


1. Open the battery compartment cover.
2. Insert two "AA" (R6P) batteries, with each one oriented correctly.
3. Close the cover.

Cautions On Batteries

- Use "AA" (R6P) batteries in this remote control unit.
- Replace the batteries with new ones approximately once a year, though this depends on the frequency with which the remote control unit is used.
- If the remote control unit does not operate close to the main unit, replace the batteries with new ones, even if less than a year has passed.
- The included batteries are only for verifying operation. Replace them with new batteries as soon as possible.
- When inserting the batteries, be careful to do so in the proper direction, following the ⊕ and ⊖ marks in the remote control unit's battery compartment.
- To prevent damage or battery fluid leakage:
 - Do not use a new battery with an old one.
 - Do not use two different types of batteries such as alkaline and manganese.
 - Do not short-circuit, disassemble, heat or dispose of batteries in flames.
- Remove the batteries when not planning to use the remote control unit for a long period of time.
- If the batteries should leak, carefully wipe off the fluid from the inside of the battery compartment, then insert new batteries.

Description - Rear Panel



1. DIGITAL OUT Jacks

Use either an optical or coaxial digital cable to connect to an AV amplifier.

2. HDMI OUT Terminal

Use an HDMI connection cable (commercially available) to connect to a display with an HDMI terminal.

3. 2CH AUDIO OUT Jacks

Connect to the Audio input jacks of your TV or Stereo system.

4. VIDEO OUT Jack

Use a video cable to connect the jack to the Video input jack of your TV or Stereo system.

5. COMPONENT VIDEO OUT Jacks

Use these jacks if you have a TV with Component Video input jacks. These jacks provide C_R/P_R, C_B/P_B and Y video. Component Video provides the best picture quality.

6. S-VIDEO OUT Terminal

Use the S-Video cable to connect this terminal to the S-Video input terminal of your TV for higher picture quality.

7. 5.1CH AUDIO OUT Jacks

Use Audio cables to connect these jacks to the 5.1 ch Audio input jacks of your AV amplifier with 5.1-channel input jacks.

8. REMOTE CONTROL IN/OUT Jacks

By connecting this DVD player to another Marantz audio component using a supplied Remote control bus cable, you can remotely operate the components as a signal system.

9. REMOTE CONTROL EXTERNAL / INTERNAL Switch

Set this switch to "INTERNAL" when using this DVD player independently. If you use this DVD player in a system with a Marantz receiver equipped with a remote sensor, set the switch to "EXTERNAL".

NOTES:

- When there is video output from the HDMI OUT terminal, no progressive signal is output from the COMPONENT VIDEO OUT jacks.
- When connecting to a component with a remote sensor, be sure to connect the REMOTE CONTROL IN jack of this DVD player to the REMOTE CONTROL OUT jack of the component.
- When connecting to a component which is not equipped with a remote sensor, be sure to connect the component to the REMOTE CONTROL OUT jack of this DVD player.

Selecting Progressive Scan (525p/480p or Interlaced 525i/480i) Playback

- If your TV is compatible with progressive scanning (525p/480p), connect the TV to the COMPONENT VIDEO OUT jacks of the DVD player and set "PROGRESSIVE" to "ON" in the display setting. Next, set your TV to the progressive scan mode. Refer to page 28 for instructions on changing the display setting.
- If your TV is not compatible with progressive scanning, set "PROGRESSIVE" to "OFF".
- Use a commercially available adaptor if the video input jacks of your TVs or monitors are the BNC type.

What is Progressive Scanning?

- Unlike conventional interlace scanning, the progressive scan system provides less flickering and images in higher resolution than that of traditional (525i/480i) television signals.

The DCDi (Directional Correlational Deinterlacing) system of this DVD player produces smooth and natural video images, even if really dynamic, by eliminating the jagged edges.
 **"DCDi" is a trademark of Faroudja, a division of Genesis Microchip Inc.

CONNECTIONS

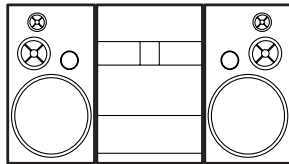
The following show examples of connections commonly used to connect the DVD player to the TV and other components.
If using this DVD player to play back a DVD in a Dolby Digital 5.1 channel surround or DTS surround format, the DVD player outputs a Dolby Digital or DTS data stream from its OPTICAL or COAXIAL DIGITAL OUT jacks. By hooking the player up to a Dolby Digital or DTS decoder, you can enjoy a more convincing, realistic ambience with powerful and high-quality surround sound of a professional standard, which can be heard in movie theaters. Use an audio coaxial digital or optical cable (commercially available) for the audio connections.

NOTES:

- Be sure to turn off the power of all components in the system before connecting another component.
- Refer to the instruction manuals for your TV, Stereo system and any other components to be connected to the DVD player.

Connection to an Audio System

Method 1



Stereo system

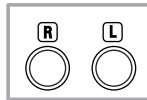
Method 2



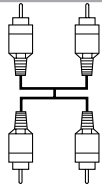
Dolby Digital decoder
or DTS decoder

AUDIO

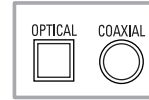
Audio Input
Jacks



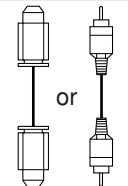
Audio Cable
(supplied)



Digital Audio
Input Jacks



Optical Cable
(commercially
available)



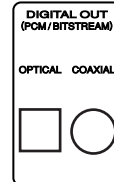
Audio Coaxial
Digital Cable
(commercially
available)

DVD

AUDIO OUT
(Analog)



DIGITAL OUT



- **Method 1** DVD Player + Stereo system
- **Method 2** DVD Player + Dolby Digital decoder or DTS decoder

NOTES (for method 2 only):

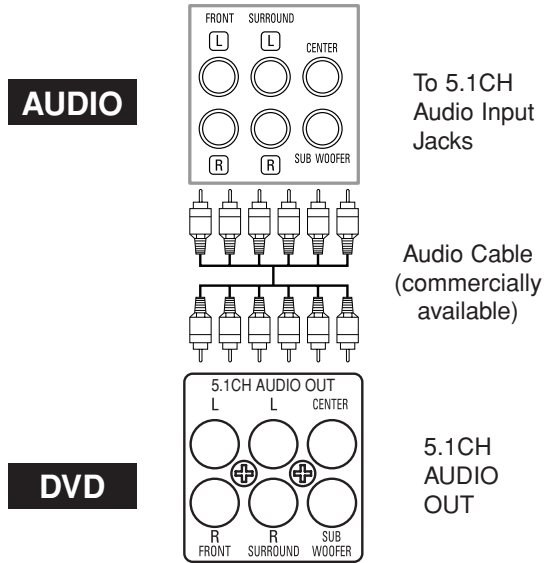
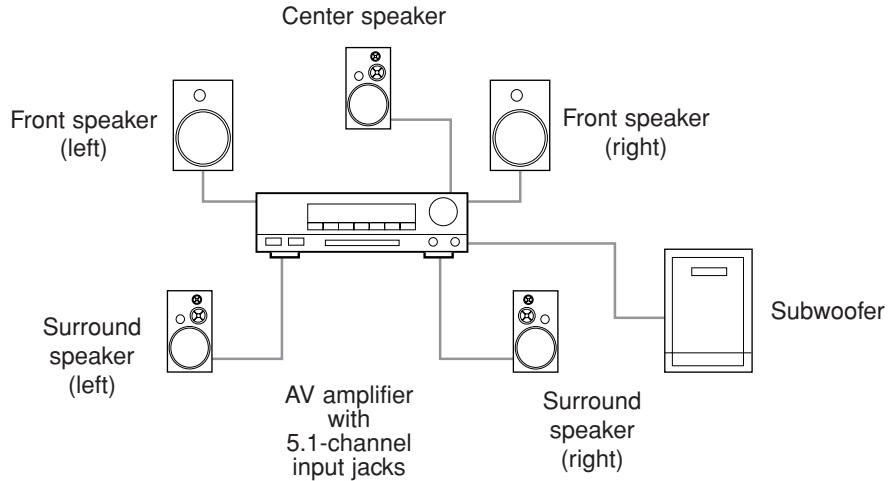
- When using an AV amplifier with a built-in decoder (Dolby Digital or DTS decoder) as shown in the Method 2, set "DOLBY DIGITAL" or "DTS" to "BITSTREAM" accordingly for audio output in the setup menu (refer to pages 28-29). Set it to "PCM" for the decoder that is not used currently. Playing a DVD using incorrect settings may generate noise distortion, and may also damage the speakers.
- The audio source on a disc in a Dolby Digital 5.1 channel surround format cannot be recorded as digital sound by an MD deck or DAT deck.
- Set "DOLBY DIGITAL" and "DTS" to "PCM" for audio output in the setup menu for connecting to an MD deck or DAT deck (refer to pages 28-29).
- Harsh noise that could harm your ears or the speakers is generated when a DVD recorded in DTS is played while using a decoder, etc., that is not DTS-compatible.
- When playing back a copyright-protected over 96kHz (88.2kHz) PCM DVD, the digital sound will be down-sampled at 48kHz (44.1kHz), even if you set "DOWN SAMPLING" to "OFF" (refer to page 28).
- Super Audio CD sound is not output from the DIGITAL OUT.

Optical cable (not supplied)

- Optical cable (not supplied) may be damaged when bent at sharp angles. Ensure cables are coiled in loops with a diameter of 6 inches (15cm) or more when storing them.
- Use a cable which is 9.8 feet (3m) or shorter.
- Insert cable plugs firmly into the connectors when making connections.
- If a plug has dust or is dirty, clean it with a soft cloth before inserting it into a connector.

Connection to 5.1-channel Surround Sound System

Analog 5.1-channel audio signals can be output from the DVD player. The multichannel audio signals recorded in packed PCM can be played back when an AV amplifier equipped with analog 5.1-channel audio inputs is connected.

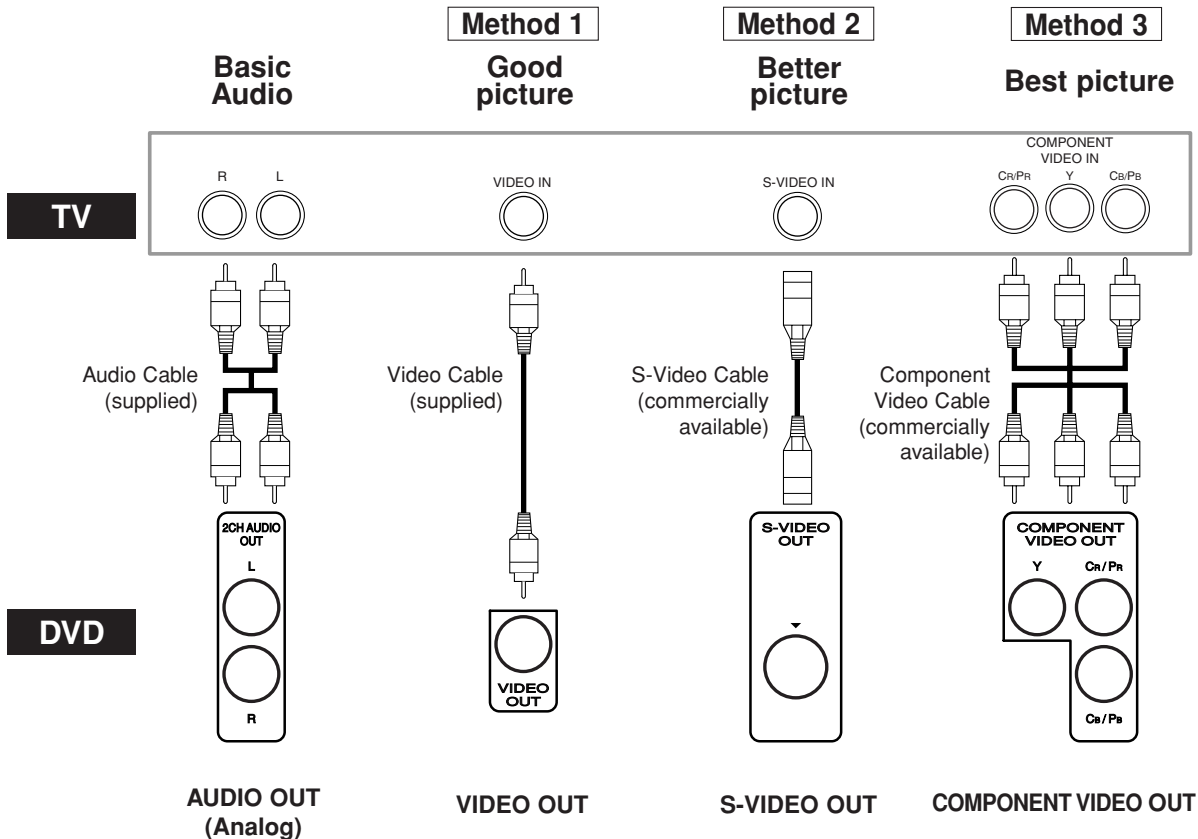


NOTES:

- For 5.1-channel connections, set “ANALOG AUDIO” to “5.1CH” in the setup mode and adjust “SPEAKER SIZE”, “DELAY TIME” and “BALANCE” settings (refer to pages 29-30).
- You can enjoy high-quality analog sound by cutting off analog video signals. Press the **AUDIO EX.** button on the front panel.
- When using the HDMI connection, signals from the 5.1CH AUDIO OUT jacks can be limited in some cases. If it occurs, set “HDMI AUDIO” to “OFF” to output the signals (refer to pages 28-29).

“DTS” and “DTS Digital Surround” are registered trademarks of Digital Theater Systems, Inc.

Connection to a TV (for Video)



- **Method 1** DVD Player + TV with Video input jack
- **Method 2** DVD Player + TV with S-Video input terminal
- **Method 3** DVD Player + TV with Component Video input jacks

NOTES:

- Connect the DVD player directly to a TV. If the Audio/Video cables are connected to a VCR, pictures may be distorted due to the copy protection system.
- S-Video output terminal
The video signals are divided into color (C) and brightness (Y) signals, achieving a clearer picture.
If the TV is equipped with an S-Video input terminal, we recommend connecting it to this unit's S-Video output terminal using a commercially available S-Video connection cord.

HOW TO CONNECT TO A TV WITHOUT AUDIO/VIDEO INPUT JACKS

If your TV does not have RCA type audio and video input jacks it is still possible to connect this DVD player to your TV's 75-ohm coaxial antenna terminal using an optional Stereo Audio/Video RF Modulator (not included). Connect the audio and video outputs of the DVD player to the audio and video inputs on the RF Modulator, and then connect the coaxial output of the RF Modulator (usually marked "TO TV") to the 75 ohm coaxial antenna terminal on your TV. Follow the instruction supplied with the RF Modulator for more details.
If your TV's 75 ohm coaxial antenna terminal is already occupied by an antenna or cable box connection, remove that cable from your TV's antenna terminal and reconnect it to the coaxial antenna input terminal of the RF Modulator (usually marked "ANT IN"), then connect the RF modulator to your TV's antenna terminal as described above.

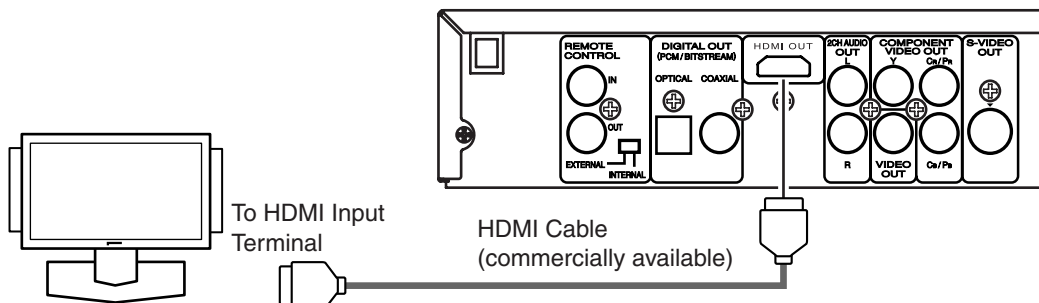
NOTE:

- The picture quality from DVD discs will not be as good if the DVD player is connected to the TV's antenna terminal through an RF Modulator.

CONNECTIONS

Connection to a TV with an HDMI Terminal

A simple 1-cable connection (using a commercially available cable) with a device having an HDMI (High-Definition Multimedia Interface) terminal allows digital transfer of the digital images of DVD-Video and other sources, DVD-Video, and the multi-channel sound of DVD-Audio.



A display equipment with an HDMI terminal

Actual output modes by media (when the connected equipment is compatible with Dolby Digital, DTS, and Multi PCM)

		HDMI AUDIO Setting			
Audio Recording Format		AUTO	MULTI PCM	2CH PCM	OFF
DVD-Video/ DVD-RW	Dolby Digital	Dolby Digital*3	Multi PCM*5	2channel PCM	×
	DTS	DTS*4	Multi PCM*5	2channel PCM	×
	LPCM	Multi PCM*5	Multi PCM*5	2channel PCM	×
DVD-Audio	LPCM or PPCM (with CPPM) *1	Multi PCM*5	Multi PCM*5	2channel PCM	×
	LPCM or PPCM (without CPPM)	Multi PCM*5	Multi PCM*5	2channel PCM	×
Audio CD/Video CD		2channel PCM	2channel PCM	2channel PCM	×
MP3/WMA/DivX®		2channel PCM	2channel PCM	2channel PCM	×
Super Audio CD	MULTI-CH AREA *2	×	×	×	×
	2CH AREA *2	×	×	×	×
	CD AREA	2channel PCM	2channel PCM	2channel PCM	×

*1 If the connected equipment is compatible with HDMI ver. 1.0, audio signals are not output. Even if the connected equipment is compatible with HDMI ver. 1.1, audio signals are not output if the equipment is not compatible with CPPM.

*2 Sounds recorded on the MULTI-CH/2CH AREA of Super Audio CDs are not output.

*3 If the connected equipment is not compatible with Dolby Digital, audio signals are output as Multi PCM or 2 channel PCM.

*4 If the connected equipment is not compatible with DTS, audio signals are output as Multi PCM or 2 channel PCM.

*5 If the connected equipment is not compatible with Multi PCM, audio signals are output as 2 channel PCM.

Copyright protection system

To play back the digital video images of a DVD via an HDMI connection, it is necessary that both the player and the display equipment (or an AV amplifier) support a copyright protection system called HDCP (High-bandwidth Digital Content Protection). HDCP is copy protection technology that comprises data encryption and authentication of the connected AV equipment.

This player supports HDCP. Please read the operating instructions of your display equipment (or AV amplifier) for more information.

NOTES:

- When using an HDCP-incompatible display equipment, the image will not be viewed properly.
- Some devices that support HDMI can control other devices via the HDMI terminal; however, this player cannot be controlled by another device via the HDMI terminal.
- The audio signals from the HDMI terminal (including the sampling frequency, the number of channels and bit length) may be limited depending on the disc or the connected equipment.
- When playing a Super Audio CD with an HDMI connection, audio signals cannot be transferred beyond the CD AREA. Make an analog connection for this.
- The HDMI AUDIO setting cannot be changed when the connected device is not compatible with HDMI audio, or no device compatible with HDMI audio is connected to this player.
- Even when the connected device is compatible with HDMI audio, the HDMI AUDIO setting is not possible if the power of the device is turned off or the HDMI output mode is set to "hdOFF".

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

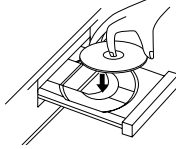
PLAYING A DISC

Basic Playback



Getting started

- Turn on the power of the TV, amplifier and any other components which are connected to the DVD player.
- Make sure the TV and audio receiver (commercially available) are set to the correct channel.



- 1 Press the **POWER** button.
 - "P-ON" will appear briefly on the display panel.
- 2 Press the **OPEN/CLOSE** button to open disc loading tray.
- 3 Place the disc in the tray, with the label facing up.
- 4 Press the **PLAY** button.
 - The tray will close automatically, and playback will start from the first chapter or track of the disc. If the playback does not start automatically, press the **PLAY** button.
 - When you play back the DVD with a title menu, it may appear on the screen. In this case, refer to "Title Menu".
- 5 Press the **STOP** button to stop playback.

NOTES:

- A "prohibited icon" may appear at the top-right on the TV screen during operation, warning that a prohibited operation has been done to the DVD player or the disc.
- With DVDs that use some titles for playback program signals, playback may start from the second title, or it may skip these titles.
- During the playback of two layered disc, pictures may stop for a moment. This happens when the 1st layer switches to the 2nd layer. This is not a malfunction.
- The operation may vary when you playback DVDs with disc menu or Video CDs with PBC. Refer to the manual accompanying the disc for details.
- A DVD-RW disc recorded in the VR mode may freeze momentarily during playback depending on how the playlist was made and edited (deleted titles, repeated recording).



CANCELLING AND CALLING BACK THE PBC FUNCTION

VCD

- 1 Insert a Video CD.
- 2 Press the **STOP** button.
- 3 Press the **Numeric** buttons to enter the desired track number.
 - The PBC function is now cancelled and the playback of the Video CD will start.
- 4 To call back the PBC function, press the **STOP** button twice, and then press the **PLAY** button.
 - Title menu will appear on the display.

HDMI Setup

- 1 Press the **HDMI** button on the front panel to select the HDMI output mode. The output mode changes as follows every time the **HDMI** button is pressed.



- Press the **HDMI** button once to display the current HDMI output mode.
- Press the **HDMI** button appropriate times to display the desired mode.
- Leave the display showing the desired resolution for 3 seconds, and the current HDMI output mode will be changed to the selected one.

480P/576P (Default)

: Video output from the HDMI OUT terminal at 480p or 576p.

720P : Video output from the HDMI OUT terminal at 720p.

1080i : Video output from the HDMI OUT terminal at 1080i.

hdOFF: No video output from the HDMI OUT terminal.

NOTES:

- Video and audio signals may be distorted temporarily when switching to/from the HDMI output mode.
- Use a display equipment with an HDMI terminal.
- Progressive video signal will not be output from the COMPONENT VIDEO OUT during the HDMI output mode.
- You cannot set a resolution which is not compatible on the connected display equipment.
- You can check the HDMI connection status by pressing the **DISPLAY** button during playback with the HDMI output mode. (Refer to pages 24-25.)
- The **HDMI** button is inoperative when no HDMI connection is made or the connected HDMI equipment is turned off.

AUDIO EX Mode

You can enjoy higher quality audio by stopping the analog video signals and display.

- 1 Press the **AUDIO EX.** button on the front panel to output audio and HDMI signals only (no analog video signals will be output, and the display will be turned off).
 - You can press the **AUDIO EX.** button either during playback or in stop mode.
 - The AUDIO EX. indicator will light up.
 - The higher quality sound will be achieved.

NOTES:

- In setup menu, the **AUDIO EX.** button is not available.
- The AUDIO EX mode will be released when you press the buttons listed below.
 - OPEN/CLOSE** button (on both the remote control and the front panel), **SETUP**, **POWER** or **DISPLAY** button (on the remote control), **POWER ON/STANDBY** or **AUDIO EX.** button (on the front panel).

General Features

DVD-V DVD-A

DVD may contain menus to navigate the disc and access special features. Press the appropriate **Numeric** buttons or use the **Cursor** buttons (▼/▲/▶/◀) to highlight your selection in the DVD main menu and press the **ENTER** button to confirm.

NOTE:

- Unless stated, all operations described are based on remote control use. Some operations can be carried out using the menu bar on the TV screen.

Disc Menus

DVD-V

- 1 Press the **MENU** button.
 - The DVD main menu will appear.
- 2 If the feature is not available, symbol may appear on the TV screen.
- 3 If disc menu is available on the disc, audio language, subtitle options, chapters for the title and other options will appear for selection.
- 4 Press the **Cursor** buttons (▼/▲/▶/◀) to select an item, and the **ENTER** button to confirm selection.

Title Menu

DVD-V DVD-A

- 1 Press the **TOP MENU** button.
 - The title menu will appear.
- 2 If the feature is not available, symbol may appear on the TV screen.
- 3 Press the **Cursor** buttons (▼/▲/▶/◀) to select an item, and the **ENTER** button to confirm selection.
 - Playback will begin at the selected title.

VCD

- 1 When playing a Video CD with PBC function, the title menu will appear automatically.

PLAYING A DISC

- Press the **Numeric** buttons to select the desired title.
 - Playback will begin at the selected title.
- Press the **RETURN** button to go back to the Title Menu.

CALLING UP A MENU SCREEN DURING PLAYBACK

DVD-V DVD-A

- Press the **MENU** button to call up the DVD main menu (DVD-V).
- Press the **TOP MENU** button to call up the title menu.

NOTE:

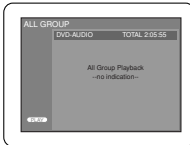
- Contents of menus and corresponding menu operations may vary between discs. Refer to the manual accompanying the disc for details.

DVD Audio Playback

DVD-A

PLAYBACK OF ALL GROUPS

- In stop mode, press the **MODE** button.
 - The ALL GROUP screen appears.
- Press the **PLAY** button to begin playback.



PLAYBACK FROM A DESIRED GROUP

- During playback or in stop mode, press the **GROUP** button.
- Press the **Numeric** buttons to select a group.
 - The group will be located and playback will start.



PAGE SELECTION

Some DVD-Audio discs that include still images feature a selection of images you can choose from.

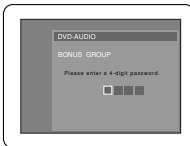
- During playback, press the **PAGE** + or - button to select a desired page number to be displayed.



PLAYBACK OF THE BONUS GROUP

Some discs are recorded with the Bonus Group that can be played back by entering a password. Refer to the disc jackets.

- In stop mode, press the **GROUP** button to open the group search screen.
- Press the **Numeric** buttons to select a bonus group number.
 - The password popup window appears.
- Press the **Numeric** buttons to enter the 4-digit password.
 - When the correct password is entered, playback starts from the top of the bonus group.



NOTES:

- In some cases the password window is displayed on the menu screen. Follow the instructions on the screen.
- Once the password is entered, playback will be repeated until the disc is removed from the disc tray.

Still / Pause

DVD-V DVD-A DVD-RW VCD Super Audio CD
CD MP3 JPEG WMA DivX®

- During playback, press the **PAUSE** button.

- Playback will pause and sound will be muted.



- To continue playback, press the **PLAY** button.

NOTE:

- On DVDs, set "STILL MODE" to "FIELD" on the display menu if pictures in the pause mode are blurred. (Refer to page 28.)

Step by Step Playback

DVD-V DVD-A DVD-RW VCD DivX®
Only Moving Picture

- During playback, press the **PAUSE** button.

- Playback will pause and sound will be muted.



- The disc advances by one frame each time the **PAUSE** button is pressed.

- To exit Step by Step Playback, press the **PLAY** button.

NOTE:

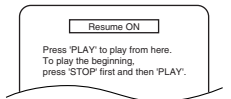
- On DVDs, set "STILL MODE" to "FIELD" on the display menu if pictures in the pause mode are blurred. (Refer to page 28.)

Resume

DVD-V DVD-A DVD-RW VCD Super Audio CD
CD MP3 JPEG WMA DivX®

- During playback, press the **STOP** button.

- Resume message will appear on the TV screen.



- Press the **PLAY** button, playback will resume from the point at which playback was stopped.

- To cancel Resume, press the **STOP** button twice.

NOTES:

- Some Video CDs with the PBC function resume playback from the beginning of the track.
- The resume information will be saved even when the power is switched off.
- For MP3, JPEG or WMA, playback will resume from the beginning of the current track.

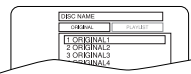
Playing the Disc Recorded in VR Mode (Video Recording Format)

DVD-RW

DVDs recorded in VR mode can have a PLAYLIST assigned to alter the order or content to be played. If a PLAYLIST has been created, you can choose the ORIGINAL or PLAYLIST option.

- Press the **MENU** button in stop mode.

- The current setting screen will appear.
- Pressing the **MENU** button during playback is not valid.



- Press the **Cursor** buttons (◀ or ▶) to select ORIGINAL or PLAYLIST.

- PLAYLIST will not be displayed when it has not been made.
- Resume playback will not be possible if you change the setting.

PLAYING A DISC

- 3** Press the **Cursor** buttons (▲ or ▼) to select a title, then press the **ENTER** button.
- Playback will start.

NOTE:

- **ORIGINAL:** A list of titles which are recorded with a DVD recorder.
- **PLAYLIST:** A list of titles which is made based on the ORIGINAL edited list.

Fast Forward / Reverse Search

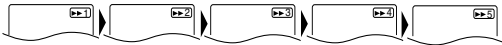


- 1** During playback, press the **FWD** ►► or **REV** ◄◄ button repeatedly to select the required forward or reverse speed.
- For DVDs, Fast Forward or Reverse Search speed is different depending on the disc. The approximate speed is 1 (x2), 2(x8), 3 (x20), 4 (x50) and 5 (x100).

REV ◄◄ Button



FWD ►► Button



- For Video CDs, Super Audio CDs, Audio CDs, MP3, WMA and DivX®, Fast Forward or Reverse Search speed is different depending on the disc. The approximate speed is 1 (x2), 2(x8) or 3(x30).

- 2** To return to normal playback, press the **PLAY** button.

NOTES:

- Picture quality of DivX® files in fast reverse is lower than that in fast forward.
- For some DivX® files, Fast Forward/Reverse Search may not function.

Slow Forward / Slow Reverse



Only Moving Picture

- 1** During playback, press the **PAUSE** button.
- 2** Press the **FWD** ►► or **REV** ◄◄ button.

- Slow motion playback will begin and sound will be muted.

- 3** Press the **FWD** ►► or **REV** ◄◄ button repeatedly to select the required speed.

- Slow Forward or Reverse speed is different depending on the disc. Approximate speed is 1 (1/16), 2 (1/8), and 3 (1/2).

- 4** To return to normal playback, press the **PLAY** button.

NOTES:

- On DVDs, set "STILL MODE" to "FIELD" on the display menu if pictures in the pause mode are blurred. (Refer to page 28.)
- Only Slow Forward is available when playing Video CD and discs with DivX® files.

Zoom

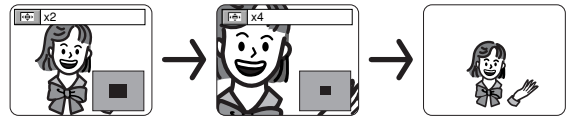


Only Moving Picture

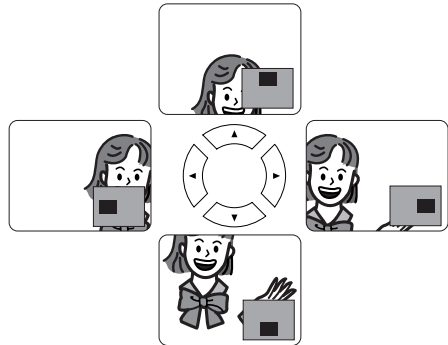
The Zoom function allows you to enlarge the video image and to pan through the enlarged image.

- 1** Press the **ZOOM** button during playback.
- Playback will continue.

- 2** Press the **ZOOM** button repeatedly to select the required zoom factor: x2, x4 or off.
- Only x2 zoom is available on Video CDs, JPEG and DivX®.



- 3** Use the **Cursor** buttons (▼ / ▲ / ► / ◀) to move the zoomed picture across the screen.



- 4** To exit Zoom mode, press the **ZOOM** button.

NOTES:

- Zooming function does not work while disc menu is shown.
- x4 zoom is not available on some discs.
- Playback will pause in the zoom mode on JPEG.
- Navigation screen is not available on JPEG.
- You cannot move the zoomed picture on some JPEG files.

Title / Chapter Search



BY USING THE SEARCH MODE BUTTON

- 1** Press the **SEARCH MODE** button repeatedly until the Chapter Search, or the Title Search appears during playback.
- 2** Enter the desired chapter/title number with the **Numeric** buttons.



BY USING THE SKIP BUTTONS ◄◄►►

During playback, press the **SKIP** ►► button to move to the next chapter. Press it repeatedly to skip subsequent chapters. Press the **SKIP** ◄◄ button to go back to the beginning of the current chapter. Press it repeatedly to go to the previous chapter.

- Chapter number will appear briefly on the front panel display.
- If the **SKIP** ◄◄ or ►► button is pressed while the playback is paused, the playback after skipping to the next chapter will be also paused.

NOTES:

- Depending on the disc being played, the **Numeric** buttons can be used to search for a desired chapter by entering the chapter number directly. Refer to the manual accompanying the disc.
- The **SKIP** ◄◄ and ►► buttons are not available when playback is stopped.
- A disc that does not contain chapters within titles, the **SKIP** ◄◄ and ►► buttons change the titles.

PLAYING A DISC

Track Search



There are three ways to begin playback on a disc at a specific track.

BY USING THE SEARCH MODE BUTTON

- Press the **SEARCH MODE** button.
 - The Track Search display appears.
- Within 30 seconds, select a desired track number using the **Numeric** buttons.
 - For the disc with less than 10 tracks, press the track number directly.
 - For discs with 10 or more but less than 100 tracks, to play a single-digit track, press **0** first, then the track number (e.g. for track 3, press **0, 3**). To play a double-digit track, press the track number.
 - For discs with 100 or more tracks, to play a single- or a double-digit track, press **0** first, then the track number (e.g. for track 3, press **0, 0, 3**, and for track 26, press **0, 2, 6**). To play a triple-digit track, press the track number.
 - Press the **CLEAR** button to erase the incorrect input.



NOTE:

- The **+10** button can also bring up the Track Search display except for the disc with less than 10 tracks. For such a disc, Track Search can be done by just pressing the track number.

BY USING THE SKIP BUTTONS ◀◀▶▶

During playback, press the **SKIP ▶▶** button to move to the next track. Press it repeatedly to skip subsequent tracks. Press the **SKIP ◀◀** button to go back to the beginning of the current track. Press it repeatedly to go to the previous tracks.

- Track number will appear briefly on the panel display.
- If the **SKIP ◀◀** or **▶▶** button is pressed while the playback is paused, the playback will be also paused after skipping to the next track.

NOTE:

- The **SKIP ◀◀** and **▶▶** buttons are not available when playback is stopped.

Time Search



- During playback, press the **SEARCH MODE** button until the Time Search screen appears on the TV screen.

- Within 30 seconds, enter a desired disc time with the **Numeric** buttons.
 - Playback will start at the specified time.



- For Time Search, "0" appears automatically when there is no need to enter a number. For example, "0:0 : _ _" appears in the Time Search screen if the total time of the disc is less than 10 minutes.
- Press the **CLEAR** button to erase the incorrect input.

NOTE:

- For some DivX® files, Time Search may not function.

Repeat

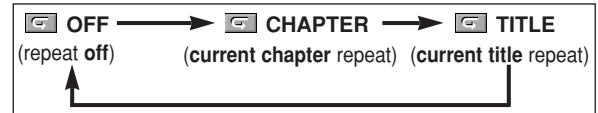
- The **REPEAT** button is available only during playback.

REPEAT TITLE / CHAPTER

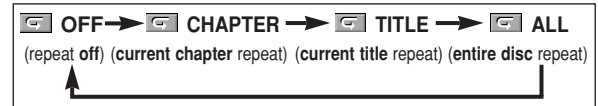
DVD-V

To activate the Repeat function, press the **REPEAT** button during playback.

- The Repeat mode changes as described below every time you press the button.



DVD-RW



NOTES:

- The Repeat Title/Chapter setting will be cleared when moving to other title or chapter.
- Repeat playback does not function during A-B Repeat playback.
- Repeat Title/Chapter is not available with some scenes.
- "ALL" is not displayed when playing the DVD-RW discs recorded in Video mode.

REPEAT TRACK / GROUP / ALL



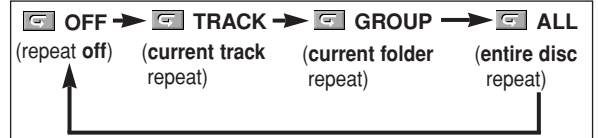
To activate the Repeat function, press the **REPEAT** button during playback.

- The Repeat mode changes as described below every time you press the button.



NOTES:

- The Repeat Track setting will be cleared when moving to other track.
- Repeat playback does not function during A-B Repeat playback.
- Repeat playback is not available when playing the Video CD with PBC function.



NOTES:

- The Repeat Track / Group setting will be cleared when moving to other track or group.
- For DVD-Audio, ALL repeat is effective only when all groups are being played back.

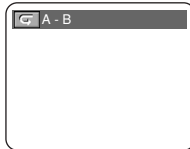
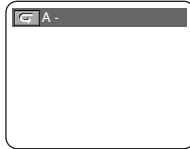
A-B REPEAT



- 1 Press the **A-B REPEAT** button at your chosen starting point.
 - **A-** appears briefly on the TV screen.
- 2 Press the **A-B REPEAT** button again at your chosen end point.
 - **A-B** appears briefly on the TV screen, and the repeat sequence begins.
- 3 To exit the sequence, press the **A-B REPEAT** button.

NOTES:

- The A-B Repeat section can only be set within the current title (for DVD-Video), or current track (for DVD-Audio, Video CD, Super Audio CD, Audio CD and disc with DivX® files).
- A-B Repeat is not available with some scenes in DVD.
- To cancel the A point which was set, press the **CLEAR** button.
- A-B Repeat playback does not function during title, chapter, track or all repeat playback.
- For some DivX® files, A-B Repeat playback may not function.

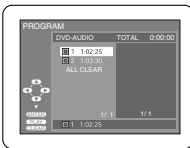


Program Playback

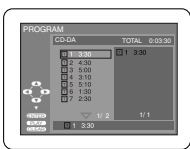
This function allows you to program a playback order in a desired sequence.

- 1 In stop mode, press the **MODE** button repeatedly until the **PROGRAM** screen appears.
 - The group selection screen appears.
- 2 Press the **Cursor** buttons (**▲** or **▼**) to select a group, then press the **Cursor** button (**▶**) or **ENTER** button.
 - The track selection screen will be displayed.
 - It takes approximately 5 seconds until the track selection screen appears.
- 3 Press the **Cursor** buttons (**▲** or **▼**) to select a track, then press the **ENTER** button.
 - Press the **CLEAR** button to erase the most recently entered track.
 - Press the **Cursor** button (**◀**) button to go back to the group selection screen from the track selection screen.
- 4 Press the **PLAY** button to start programmed playback.

DVD-A



Super Audio CD CD



- 1 In stop mode, press the **MODE** button.
 - The **PROGRAM** screen will appear.
- 2 Press the **Cursor** buttons (**▲** or **▼**) to select a track, then press the **ENTER** button.
 - Press the **CLEAR** button to erase the most recently entered track.
- 3 Press the **PLAY** button to start programmed playback.

NOTES:

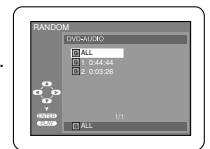
- While the program is being played back, the **STOP** button works as follows.
- Press the **STOP** button once and then the **PLAY** button again. Playback will restart from the point where the **STOP** button was pressed. (Program continued.)
- Press the **STOP** button twice and then the **PLAY** button again. Playback will restart from the first track in the usual way. Your programs will be stored unless either the disc tray is opened or power is turned off.
- Up to 99 tracks can be entered.
- To erase all tracks in the program at once, select **ALL CLEAR** at the bottom of the list at step 2.
- If you wish to repeat the current track in the program, press the **REPEAT** button repeatedly until **TRACK** appears during playback. If you wish to repeat the entire program, press the **REPEAT** button repeatedly until **ALL** appears during playback.
- Refer to page 25 for Program Playback of MP3, WMA, and JPEG.
- If eight or more tracks have been set in a program, the user can switch the right part of the screen with the **SKIP** **◀** or **▶** button.

Random Playback

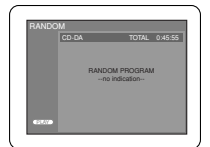
This shuffles the playing order instead of playback in the original sequence.

- 1 In stop mode, press the **RANDOM** button.
 - The **RANDOM** screen will appear.
- 2 Press the **Cursor** buttons (**▲** or **▼**) to select the desired group to playback randomly, then press the **ENTER** or **PLAY** button.
 - Random playback will start.

DVD-A



Super Audio CD CD



- 1 In stop mode, press the **RANDOM** button.
 - The **RANDOM** screen will appear.
- 2 Press the **PLAY** button to start Random Playback.

NOTES:

- If you wish to repeat the current track in the random selection, press the **REPEAT** button repeatedly until **TRACK** appears during playback. If you wish to repeat the entire random selection press the **REPEAT** button repeatedly until **ALL** appears during playback.
- You cannot go back to the previous track during Random Playback.
- Refer to page 25 for Random Playback of MP3, WMA, and JPEG.

MP3 / JPEG / WMA Playback

MP3 JPEG WMA

When a CD-R or CD-RW disc with MP3, JPEG or WMA files is inserted in the DVD player and the **MENU** button is pressed, the **FILE LIST** will appear on the display. The number of tracks is also displayed on the front panel.





- 1 Press the **Cursor** buttons (**▲** or **▼**) to select the desired group (folder) or track.
 - If a group (folder) is selected, press the **Cursor** button (**▶**) or **ENTER** button to go on to the track selection screen. Press the **Cursor** buttons (**▲** or **▼**) to choose a track, then press the **PLAY** or **ENTER** button.
 - To return to the previous screen, press the **Cursor** button (**◀**).

PLAYING A DISC

- If a track is selected, press the **PLAY** or **ENTER** button. The selected track and the subsequent tracks will be played back.
- When selecting the folders:
 - Press the **Cursor** button (▶) when you want to go to the next hierarchy.
 - Press the **Cursor** button (◀) button when you want to go back to the previous hierarchy (except for the top hierarchy).
- Press the **TOP MENU** button to return to the first item.

2 Press the **STOP** button to stop playback.

NOTES:

- Folders are known as groups; files are known as tracks.
- A symbol of  is shown on the top of the group name.
- A symbol of  is shown on the top of MP3 files.
- A symbol of  is shown on the top of JPEG files.
- A symbol of  is shown on the top of WMA files.
- Maximum of 255 folders can be recognized.
- If the track extends beyond the scope of screen, a down arrow “▼” appears, indicating that the user can view another part on the previous page. The current page number and the number of total pages are shown on the right of the down arrow “▼”. Use the **SKIP** ◀◀ or ▶▶ button to view the previous or next page.
- Maximum of 999 files can be recognized.
- Up to 8 hierarchies can be recognized.
- If no MP3, JPEG or WMA files are found in the group, the group is not displayed.
- The DVD player can reproduce data recorded as per ISO 9660 Level 1, Level 2 or Joliet on the disc.
- It can also run a disc on which data is recorded in a multi-session.
- For more details of recording systems, refer to the instruction manual for the CD-R / CD-RW drive or the writing software.
- For MP3 and WMA file recorded in Variable Bit Rate (VBR), the unit may not display the actual elapsed time.

This player recommends the use of files recorded at the below specifications:

Applicable MP3 file		Remarks
Sampling frequency	44.1kHz 48kHz	• It is prohibited to record MP3 sound on a digital device when connection is made digitally.
Type	MPEG1 audio layer 3	• MP3 files recorded at fixed bit rate of 32 kbps to 320 kbps are recommended.
Applicable JPEG file		Remarks
Size of image	Upper limit: 6300x5100 dots Lower limit: 32x32 dots	• A JPEG image that extends beyond the screen is reduced so that it will be displayed within the screen.
Applicable WMA file		Remarks
Sampling frequency	44.1kHz 48kHz	• Those frequencies are applicable to WMA version 9.
Bit rate	48–192kbps	• Ensure that the copyright function is set to off when preparing a WMA disc.
Type	WMA version 9	• A prohibition symbol will appear if the user attempts to run a non-reproducible file such as copyright-protected. • Recorded in 5.1 channel format cannot be played back.

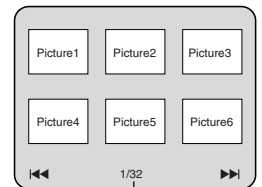
Information on MP3, JPEG and WMA discs

- This DVD player can play back images and sounds from data recorded in MP3, JPEG and WMA formats on CD-R and CD-RW discs.
 - A file with an extension of “.mp3 (MP3)” is called an “MP3 file”.
 - A file with an extension of “.jpg (JPG)” or “.jpeg (JPEG)” is called a “JPEG file”.
- The DVD player can run an image file conforming to the Exif specification. Exif is a file format, Exchangeable Image File format established by Japanese Electronic Industry Development Association (JEIDA).
- A file with an extension of “.wma (WMA)” is called a “WMA file”.
 - Files whose extension is other than “.mp3 (MP3)”, “.jpg (JPG)” and “.jpeg (JPEG)” or “.wma (WMA)” will not be listed in the MP3, JPEG or WMA menu.
 - If the file is not recorded in MP3, JPEG or WMA format, noise may be produced even if the file extension is either “.mp3 (MP3)”, “.jpg (JPG)”, “.jpeg (JPEG)” or “.wma (WMA)”.
 - The name of group and track can be displayed in up to 25 characters. Unrecognizable characters will be replaced with asterisks. The ninth and deeper hierarchies cannot be displayed.
 - Unplayable groups or tracks may be displayed depending on the recording conditions.
 - If the **TOP MENU** button is pressed when FILE LIST is displayed, the first item will be highlighted.

Kodak Picture CD

The DVD player can also run JPEG files stored on Kodak Picture CDs. The Picture CD is a service to convert photographs taken by a conventional film camera into digital data and write the data on a CD. The user can enjoy picture images on the television set by playing back the Picture CDs. For details of Kodak Picture CD, contact a shop that deals with developing service of Kodak Inc.

- 1** Press the **MENU** button. Kodak Picture CD menu appears.



- If all menu items cannot be displayed in the screen scope, “▶▶1” appears at the right bottom of the screen, indicating that the user can view remaining items on the next page. “◀◀” appears, it indicates that the user can view other items on the previous page. The track number of the currently highlighted item and the total tracks are shown at the center bottom of the screen.
 - If “▶▶1” is shown at the right bottom, use the **SKIP** ▶▶ button to view the next page. If “◀◀” is shown at the left bottom, use the **SKIP** ◀◀ button to view the previous page.
 - Press the **TOP MENU** button to get back to the first page.
 - It may take some time until all menu items are displayed on the menu screen.
- 2** Press the **Cursor** buttons (▼ / ▲ / ▶ / ◀), select a desired track to be played, then press the **PLAY** or **ENTER** button.
- If a Kodak Picture CD file is selected, an image will be played back from the selected track and go to the next one in turn.
- 3** Press the **STOP** button, to stop playback.

PLAYING A DISC

Notes on JPEG and Kodak Picture CD:

- A track is displayed for 5 or 10 seconds and then the next track is displayed. Refer to page 31 for SLIDE SHOW.
- Every press on the **Cursor** button (▶) will turn the image clockwise by 90 degrees when an image is displayed. A press on the **Cursor** button (◀) will turn the image counterclockwise by 90 degrees.
- To change the size of the playback image, press the **MODE** button twice. The size change mode appears on top of the TV screen during playback. Then press the **Cursor** buttons (◀ or ▶) or **ENTER** button to switch between **NORMAL** (100%) and **SMALL** (95%).
- Progressive JPEGs (JPEG files saved in the progressive format) will not be played back on this DVD player.
- High resolution JPEG files take longer to be displayed.
- The size change mode may have no effect on some files (e.g. files with a small picture size).

Notes on WMA:

- The DVD player can reproduce data recorded as ISO 9660 level 2 with 31 characters file name included punctuation marks. The name of a file can be displayed in up to 25 characters.
- Maximum of 8 subfolders can be recognized.
- It can also display tag information of WMA 64 characters at maximum.
- A file with an extension of Joliet as Unicode format in up to 64 characters can be recognized.
- This unit cannot play back copyright protected WMA files.

DivX® Playback**DivX®**


This DVD player can play back DVD-R/RW and CD-R/RW discs recorded in DivX® Format. When a DVD-R/RW or CD-R/RW with DivX® files is inserted in the DVD player and the **MENU** button is pressed, the FILE LIST will appear. The number of tracks will be also displayed on the front panel.

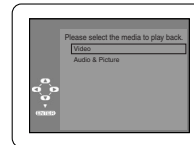
- 1 Press the **Cursor** buttons (▲ or ▼) to select the desired group (folder) or track.
 - To return to the previous screen, press the **Cursor** button (◀).
 - If a group (folder) is selected, press the **Cursor** button (▶) or **ENTER** button to go on to the track selection screen. Press the **Cursor** buttons (▲ or ▼) to choose a track, then press the **PLAY** or **ENTER** button.
 - If a track is selected, press the **PLAY** or **ENTER** button. The selected track and the subsequent tracks will be played back.
 - When selecting the folders:
 - Press the **Cursor** button (▶) when you want to go to the next hierarchy.
 - Press the **Cursor** button (◀) when you want to go back to the previous hierarchy (except for the top hierarchy).
 - Press the **TOP MENU** button to return to the first item.

- 2 Press the **STOP** button to stop playback.

NOTES:

- DivX® is a codec (compression/decompression) that can compress images to a very small amount of data. The software can compress video data from almost any sources to the size that can be sent on the Internet without compromising visual quality of the images.
- A file with an extension of ".avi" or ".divx" is called a DivX® file. All files with the ".avi" extension are recognized as MPEG 4.
- Files with the extension other than ".avi" and ".divx" will not be listed on the DivX® menu. However, unplayable groups or tracks may be displayed, depending on the recording conditions.
- Even if the file has an extension of either ".avi" or ".divx", this player cannot play it back if it is recorded in the format other than DivX®.

- Folders are known as groups; files are known as tracks.
- A symbol of  is shown on the top of the group name.
- Maximum of 255 folders can be recognized.
- Maximum of 999 files can be recognized.
- If the track extends beyond the scope of screen, a down arrow "▼" appears, indicating that the user can view another part on the previous page. The current page number and the number of total pages are shown on the left of the down arrow "▼".
- The name of a group and track can be displayed up to 25 characters. Unrecognizable characters will be replaced with asterisks. The ninth and deeper hierarchies cannot be displayed.
- You can play back the disc recorded in multi-session.
- Playback will be paused if the FILE LIST is displayed during the playback.
- It may take a while for audio and images to be output after you inserted a disc and pressed the **PLAY** button.
- When playing back the files recorded in high bit rates, the images can be interrupted on some occasions.
- Although DivX® logo has been obtained for this player, it may not be able to play back some data, depending on the disc characteristics, bit rates, or audio format settings, etc.
- Use the software recognized by DivX®, Inc. when you make DivX® files.
- When using tools or utilities to make up DivX® files, read their instruction manual beforehand.
- A DivX® file whose file size exceeds 2GB cannot be played back.
- If a large-sized DivX® file is selected, it may take a while to start the playback (over 20 seconds sometimes).
- If DivX® files wrote on CD discs cannot be played back, rewrite them on a DVD disc and try to play back.
- For more information for DivX®, please visit <http://www.divx.com>.
- If you insert a CD-R/RW with DivX® files that are mixed with MP3, JPEG, or WMA files, the Playback Media Selection screen will be displayed. Please select Video and proceed to Step 1.



- Press the **TOP MENU** button to call up the Playback Media Selection screen in stop mode.
- If you select Audio & Picture, instead of Video on the Playback Media Selection screen, the DVD player can play back MP3/JPEG/WMA files. Refer to page 21 for details.

This player recommends the use of files recorded at the following specifications:

Applicable DivX® file	Remarks
Playable Codec of AVI files	DivX®3.1.1, DivX®4.x, DivX®5.1.1
Maximum size of image	720 x 480 @30 fps 720 x 576 @25fps
Sampling frequency of audio	8 kHz - 48kHz
Audio type	MPEG1 audio layer 3 (MP3) MPEG1 audio layer 2

- They are recognized as MPEG4.
- It is prohibited to record MP3 sound on a digital device when the connection is made digitally.
- MP3 files recorded at fixed bit rate of 32 kbps to 320 kbps are recommended.

Slide Show Mode

JPEG

You can switch to the Slide Show Mode during playback.

- 1 Press the **MODE** button during playback.
 - The Slide Show Mode screen will appear.
 - The Slide Show Mode cannot be switched when it is stopped, or from the FILE LIST screen or the Picture CD menu screen.
- 2 Press the **Cursor** buttons (◀ or ▶) or **ENTER** button.
 - The Slide Show Mode will change.
 - CUT IN/OUT: The entire image appears in one time.
 - FADE IN/OUT: The image appears gradually and then disappears.
- 3 Press the **MODE** button twice to exit.

On-Screen Information

You can check information about the current media by pressing the **DISPLAY** button on the remote control.

DVD-V DVD-RW

- 1 Press the **DISPLAY** button during playback to show the current chapter.
 - The elapsed and remaining playing time of the current chapter will be displayed.
- 2 Press the **DISPLAY** button again to show the current title.
 - The elapsed and remaining playing time of the current title will be displayed.
- 3 Press the **DISPLAY** button again to show the bit rate and the current repeat setting.
 - If you are playing a dual layered disc, the layer number will also be displayed (L0: Layer 0 is played. L1: Layer 1 is played).
 - If you are playing a DVD-RW with setting the PLAYLIST, the following will also be displayed.
 - ORG: Playing the ORIGINAL.
 - PL: Playing the PLAYLIST.
- 4 Press the **DISPLAY** button again.
 - Current HDMI status will be displayed during the HDMI output mode.
- 5 Press the **DISPLAY** button again to remove the display.



DVD-A

- 1 Press the **DISPLAY** button during playback to show current track.
 - The elapsed and remaining playing time of the current track will be displayed.
- 2 Press the **DISPLAY** button again to show current group.
 - The elapsed and remaining playing time of the current group will be displayed.
- 3 Press the **DISPLAY** button again to show the bit rate and the current repeat setting.
 - If you are playing a dual layered disc, the layer number will also be displayed (L0: Layer 0 is played. L1: Layer 1 is played).
- 4 Press the **DISPLAY** button again.
 - During all group, Program or Random Playback, each playback status will be displayed when you press the **DISPLAY** button. Then press the **DISPLAY** button again.
 - Current HDMI status will be displayed during the HDMI output mode.
- 5 Press the **DISPLAY** button again to remove the display.

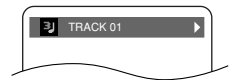


VCD Super Audio CD CD

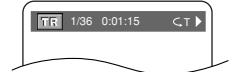
- 1 Press the **DISPLAY** button during playback, the current track will be displayed on the TV screen.
 - The elapsed and remaining playing time of the current track will be displayed.
- 2 Press the **DISPLAY** button again to show the total tracks.
 - The elapsed and remaining playing time of the disc will be displayed.
 - If you are playing Super Audio CD, press the **DISPLAY** button again to show the area currently being played.
- 3 Press the **DISPLAY** button again.
 - During Program or Random Playback, each playback status will be displayed when you press the **DISPLAY** button. Then press the **DISPLAY** button again.
 - Current HDMI status will be displayed during the HDMI output mode.
- 4 Press the **DISPLAY** button again to remove the display.

MP3 JPEG DivX®

- 1 Press the **DISPLAY** button during playback.
 - The name of the file currently played will be displayed.
- 2 Press the **DISPLAY** button again to show the track number, the elapsed time (MP3 and DivX®), the repeat status, and the playback status at the top of the screen.
- 3 Press the **DISPLAY** button again.
 - During Program or Random Playback, each playback status will be displayed when you press the **DISPLAY** button. Then press the **DISPLAY** button again.
 - Current HDMI status will be displayed during the HDMI output mode.
- 4 Press the **DISPLAY** button again to remove the display.

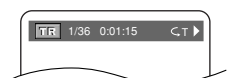


<Example: MP3>



WMA

- 1 Press the **DISPLAY** button during playback.
 - The name of the file currently played will be displayed.
- 2 Press the **DISPLAY** button again.
 - Title name based on tag information currently played will be displayed.
- 3 Press the **DISPLAY** button again.
 - Artist name based on tag information currently played will be displayed.
- 4 Press the **DISPLAY** button again to show the track number, the elapsed time, the repeat status, and the playback status at the top of the screen.
- 5 Press the **DISPLAY** button again.
 - During Program or Random Playback, each playback status will be displayed when you press the **DISPLAY** button. Then press the **DISPLAY** button again.
 - Current HDMI status will be displayed during the HDMI output mode.
- 6 Press the **DISPLAY** button again to remove the display.



NOTE:
• If the file does not contain tag information, "NOT AVAILABLE" will be displayed.

Hints for repeat indications

- $\odot C$ - indicates Chapter repeat
- $\odot T$ - indicates Title or Track repeat
- $\odot G$ - indicates Group (folder) repeat
- $\odot A$ - indicates Disc repeat
- $A \odot B$ - indicates A-B repeat

Hints for HDMI indications

- The displayed HDMI status are as follows:

1. Information for image output/Resolution of image
2. Sound output format
3. Maximum number of audio channels that can be accepted by the connected equipment



Program Playback

MP3 JPEG WMA

This feature allows you to program an MP3, JPEG or WMA disc to play in a desired sequence.

- 1 In stop mode, press the **MODE** button.

- The PROGRAM screen will appear.

- 2 Press the **Cursor** buttons (\blacktriangle or \blacktriangledown) to select a group, then press the **Cursor** button (\blacktriangleright) or **ENTER** button.

- A track selection screen appears.

- 3 Press the **Cursor** buttons (\blacktriangle or \blacktriangledown) to select a track, then press the **ENTER** button to save it in a program.

- Press the **CLEAR** button to erase the most recently entered track.
- The programmed track is displayed in the right-hand screen.
- If the entire program cannot be displayed at once on the screen, " \blacktriangledown " appears to go to the next page.
- Pressing the **Cursor** button (\blacktriangleleft) will show a list of folders that belong to the one-level upper hierarchy than the currently selected folder.

- 4 Press the **PLAY** button to start programmed playback.

NOTES:

- To erase all tracks in the program at once, select ALL CLEAR at the bottom of the list at step 2.
- During the display of the PROGRAM screen, press the **RETURN** button, and the stop screen will show up with the program contents in memory.
- Press the **STOP** button once and then the **PLAY** button again. Playback will restart from the beginning of the track played previously. (Program continued.)
- Press the **STOP** button twice and then the **PLAY** button again. Playback will restart from the first track in the usual way. Your programs will be stored unless either the disc tray is opened or power is turned off.
- Up to 99 tracks can be set in a program.
- If an inserted disc contains mixed MP3, JPEG and WMA files, Program function allows 99 tracks in combination of MP3, JPEG and WMA files.
- If eight or more tracks have been set in a program, the user can switch the right part of the screen with the **SKIP** $\blacktriangleleft\blacktriangleleft$ or $\blacktriangleright\blacktriangleright$ button.

Random Playback

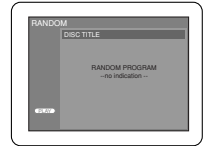
MP3 JPEG WMA

- 1 In stop mode, press the **RANDOM** button.

- The RANDOM screen will appear.

- 2 Press the **PLAY** button to start Random Playback.

- For a disc containing mixed MP3, JPEG and WMA files, Random Playback of those files will be performed.



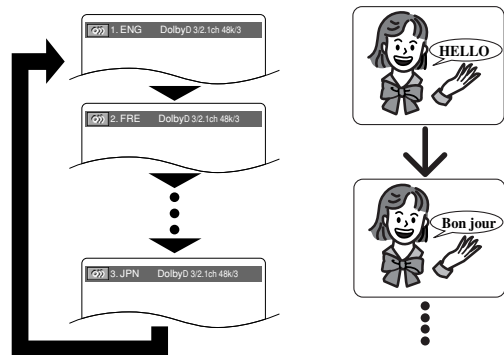
Audio Language

DVD-V DVD-RW DivX®

The DVD player allows you to select a language during DVD disc playback if multiple languages are available.

- 1 Press the **AUDIO** button during playback.

- 2 Press the **AUDIO** button repeatedly to select your desired language.



NOTES:

- The sound mode cannot be changed during playback of discs not recorded in double sound.
- Some discs allow Audio Language setting on the disc menu. (Operation varies between discs. Refer to the manual accompanying the disc.)
- For discs with DivX® files, the screen only displays MP3 audio or MPEG1 audio layer 2. (MPEG1 audio layer 2 will be displayed as "MP2".) Other audio sounds will be displayed as "---".
- Pressing the **AUDIO** button may not work on some DVDs with multiple audio languages (e.g. DVDs which allow Audio Language setting on the disc menu).
- If you choose a language that has a 3-letter language code, the code will be displayed every time you change the Audio Language setting. If you choose any other languages, "---" will be displayed instead. (Refer to page 32.)
- If the disc has no audio language, 'NOT AVAILABLE' will be displayed.
- For DVD-RW (VR mode), pressing the **AUDIO** button cycles the sound mode through MAIN, SUB and MAIN + SUB.
- For DVD-RW (VR mode), discs recorded in double sound (two languages) can be played back in sound mode of MAIN, SUB or MAIN + SUB.
- With the digital connection, the audio language of DVD-RW (VR mode) with double sound will not be affected even though you can change the setting on the display.

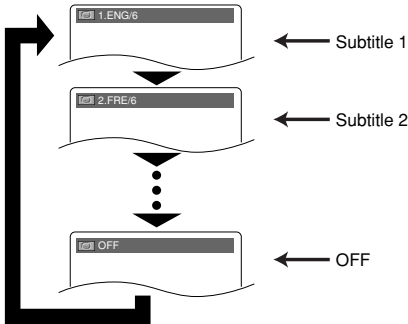
Subtitle Language

VCD CD

DVD-V DivX®

The DVD player allows you to select a language for subtitle during DVD disc playback if multiple languages are available.

- 1 Press the **SUBTITLE** button during playback.
- 2 Press the **SUBTITLE** button repeatedly to select your desired subtitle language.
 - The selected language will be displayed on the display bar at the top of the screen.
 - Press the **Cursor** buttons (◀ or ▶) to turn ON or OFF subtitles during playback.



- 3 To turn off subtitles, press the **SUBTITLE** button repeatedly until OFF appears.

NOTES:

- Some discs allow Subtitle Language setting on the disc menu. (Operation varies between discs. Refer to the manual accompanying the disc.)
- Pressing the **SUBTITLE** button may not work on some DVDs with multiple subtitle languages (e.g. DVDs which allow Subtitle Language setting on the disc menu).
- If the desired language is not shown after pressing the **SUBTITLE** button several times, the disc does not have subtitles in that language.
- If you choose a language that has a 3-letter language code, the code will be displayed every time you change the Subtitle Language setting. If you choose any other languages, '---' will be displayed instead. (Refer to page 32.)
- If the disc has no subtitle language, 'NOT AVAILABLE' will be displayed.
- For discs with DivX® files, the screen only displays the number of subtitle languages.

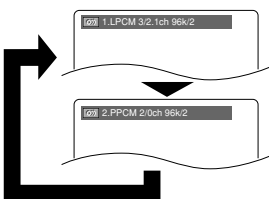
Sound Mode / Stereo Sound Mode

DVD-A

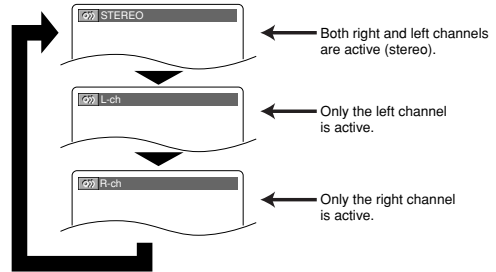
- 1 Press the **AUDIO** button during playback.
- 2 Press the **AUDIO** button repeatedly to select your desired sound.

NOTE:

- When selecting a multi-channel sound, it may not be mixed down in some cases even though the Audio Setting is 2 channel.



- 1 Press the **AUDIO** button repeatedly during playback to select between STEREO, L-ch or R-ch.
 - STEREO - both right and left channels are active (stereo)
 - L-ch - only left channel is active
 - R-ch - only right channel is active

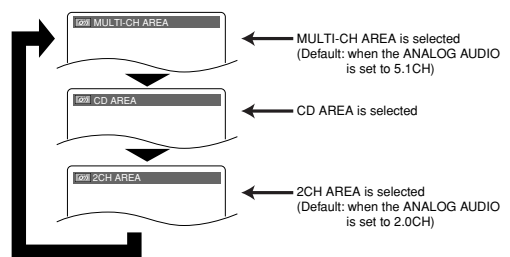


NOTES:

- Stereo sound mode will not be changed when playing DTS CD.
- Stereo sound mode cannot be changed during the playback of Super Audio CD. (It may be possible to switch stereo sound mode when playing back discs including a CD AREA.)

Super Audio CD

- 1 Press the **SOUND MODE** button repeatedly to select MULTI-CH AREA, CD AREA or 2CH AREA.
 - MULTI-CH AREA: Playback in multi channel format. The number of channels depends on the played disc.
 - CD AREA: Playback in the sound quality equivalent to Audio CDs.
 - 2CH AREA: Playback in higher quality than that of Audio CD sound.



NOTES:

- Virtual Surround setting is not available for Super Audio CDs. (If a disc contains the CD AREA, Virtual Surround setting is available only for the CD AREA.)
- Some playback options may not be available. They will be skipped.

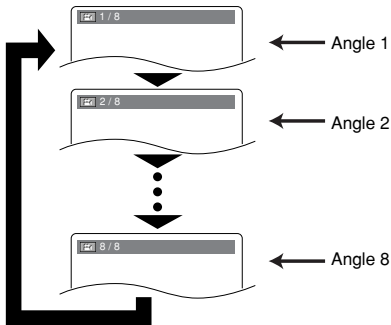
Camera Angle

DVD-V


Some DVD discs contain scenes which have been shot simultaneously from various angles. You can change the Camera Angle when the mark (⏏) appears on the screen.

- 1 Press the **ANGLE** button during playback.
 - The selected angle will be displayed on the display bar at the top of the screen.
- 2 Press the **ANGLE** button repeatedly to select your desired angle.

PLAYING A DISC








NOTE:

- If the "ANGLE ICON" setting is "OFF" in the display menu, the mark () will not appear. (Refer to page 31.)



Marker Setup Screen



Use markers to memorise your favourite places on a disc.

- Press the **SEARCH MODE** button repeatedly until the display screen and markers appear during playback.
- Press the **Cursor** buttons ( or ) to select 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 and ensure that " _ : _ _ : _ _ " appears on the display. 
- When the disc reaches the desired point, press the **ENTER** button.
 - The title or track and elapsed playing time will appear on the TV screen.
- To return to the marker later, press the **SEARCH MODE** button repeatedly during playback and the **Cursor** buttons ( or ) to choose a desired marker, then pressing the **ENTER** button.

NOTES:

- Opening the disc tray, turning off the power or selecting AC at step **2** and pressing the **ENTER** button will erase all markers.
- To clear a marker, use the **Cursor** buttons ( or ), position the cursor on to the marker number to be cleared and press the **CLEAR** button.

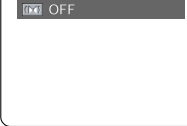
- You can mark up to 10 points.

- Press the **SEARCH MODE** or **RETURN** button to exit.

Virtual Surround



You can enjoy stereophonic virtual space through your existing 2 channel stereo system.

- During playback, press the **MODE** button repeatedly until Virtual Surround setting appears. 
- Press the **ENTER** button to set it 1(Natural effect), 2(Emphasised effect) or OFF.
- Press the **MODE** or **RETURN** button to exit.

NOTES:

- When Virtual Surround is set to 1 or 2, audio signals are output as 2 channel sound.
- Select Virtual Surround OFF or adjust the volume down if the sound is distorted.
- Virtual Surround will not be effective if the sound mode is set to something other than "STEREO". (for Audio CDs or Video CDs playback only)
- The setting will kept OFF when the player is turned off.

Black Level Setting



Adjust the Black Level Setting to make the black parts of the picture as bright as you prefer.

- Press the **MODE** button during playback.
- Press the **ENTER** button to switch ON/OFF.
 - ON : Makes the dark parts brighter.
 - OFF (Default) : Shows the original picture as recorded.

- Press the **RETURN** button to exit.

NOTE:





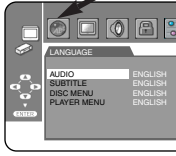


- The setting will be saved even if the player is turned off.

DVD SETUP

In setup menu, QUICK mode, CUSTOM mode and INITIALIZE mode (refer to pages 27-31) are available. QUICK mode consists of the setting menus often needed, and you can make all settings required in CUSTOM mode. You can make the settings of the items with **QUICK** mark in QUICK mode. When you make some settings, the setup menu will close and the modified settings will be effective if the HDMI cable is connected/disconnected, or the connected equipment is turned on/off.

Language Setting

Language options are not available with some discs.

- Press the **SETUP** button in stop mode.
- Press the **Cursor** buttons ( or ) to select CUSTOM, then press the **ENTER** button.
 - The CUSTOM mode will appear.
- Press the **Cursor** buttons ( or ) to select LANGUAGE, then press the **ENTER** button to confirm. 
- Press the **Cursor** buttons ( or ) to select the below items, then press the **ENTER** button.

AUDIO (Default: ENGLISH)

- Sets the audio language.



SUBTITLE (Default: ENGLISH)

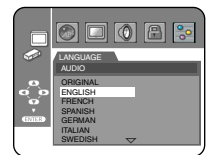
- Sets the subtitle language.

DISC MENU (Default: ENGLISH)

- Sets the language for DVD menu.

PLAYER MENU (Default: ENGLISH) QUICK

- Sets the language for the on-screen display.
- Press the **Cursor** buttons ( or ) to select a setting, then press the **ENTER** button.
 - If OTHER is selected in the AUDIO, SUBTITLE or DISC MENU screen, press 4-digit number to enter the code for the desired language. (Refer to the Language Code List on page 32.)



DVD SETUP

- Only the languages supported by the disc can be selected.

6 Press the **SETUP** button to exit.

NOTE:

- Language Setting for AUDIO and SUBTITLE is not available with some discs. Then use the **AUDIO** and **SUBTITLE** buttons. Details are on pages 25-26.

Display Setting

You can change certain aspects of the DVD display screens, and various display mode settings.

1 Press the **SETUP** button in stop mode.

2 Press the **Cursor** buttons (◀ or ▶) to select **CUSTOM**, then press the **ENTER** button.

- The **CUSTOM** mode will appear.

3 Press the **Cursor** buttons (◀ or ▶) to select **DISPLAY**, then press the **ENTER** button to confirm.

4 Press the **Cursor** buttons (▲ or ▼) to select the below items, then press the **ENTER** button.

TV ASPECT (Default: 16:9 WIDE) QUICK

- Press the **Cursor** buttons (▲ or ▼) for an item selection, then press the **ENTER** button.
- Select 16:9 WIDE if a wide-screen TV is connected to the DVD player.
- Select 4:3 LETTER BOX for a black bars appears on top and bottom of the screen.
- Select 4:3 PAN & SCAN for a full height picture with both sides trimmed.
- Select 16:9 SQUEEZE if a wide-screen TV is connected to the DVD player and you want to maintain the original source aspect of 4:3. However, when playing back discs recorded on 16:9, images will be output as 16:9 WIDE.

STILL MODE (Default: AUTO)

- Press the **Cursor** buttons (▲ or ▼) for an item selection (AUTO, FIELD or FRAME), then press the **ENTER** button.
- This adjusts the resolution of pictures in the still (PAUSE) mode.
- If you select **AUTO**, automatically select the best resolution setting (FRAME or FIELD) based on the data characteristics of the pictures.
- If you select **FIELD**, pictures in the still mode will be stabilized although they will be coarse due to a little amount of data.
- If you select **FRAME**, pictures in the still mode will be highly defined although they will be blurred due to output of two fields at the same time.

NOTE:

- An individual picture on TV screen is called as “frame”, which consists of two separate images called as “field”. Some pictures may be blurred at the **AUTO** setting in the still mode due to their data characteristics.

PROGRESSIVE (Default: OFF) QUICK

- Press the **Cursor** buttons (▲ or ▼) to set **PROGRESSIVE** to ON or OFF, then press the **ENTER** button.
- The setting will be effective when you exit the setup screen by pressing the **SETUP** button.
- When **PROGRESSIVE** is ON, “P.SCAN” appears on the DVD player’s display.
- This setting is fixed to OFF during the HDMI output mode. Set the HDMI mode to **hdOFF** or remove the HDMI cable to change the setting.
- Refer to page 12 for more details.

PROGRESSIVE MODE (Default: AUTO 1)

- Press the **Cursor** buttons (▲ or ▼) to select a mode for the progressive scan output, then press the **ENTER** button.
- **AUTO 1**: mode suitable for images on the film material.
- **AUTO 2**: mode for images on the material of 30-frame film.
- **VIDEO 1**: mode for normal video material.
- **VIDEO 2**: mode for video material with less movements.
- **VIDEO 3**: mode for video material with many movements.

FORMAT (Default: RGB)

- Select an **HDMI** output mode between **YCbCr** and **RGB**.
- To change this setting, connect the player to an equipment compatible with **YCbCr** using an **HDMI** cable, and output video signals from the **HDMI OUT** terminal. The setting is fixed to **RGB** and cannot be changed if the connected equipment is not compatible with **YCbCr**. This setting also cannot be changed when no video signal is output from the **HDMI OUT** terminal.

RGB RANGE (Default: NORMAL)

- Select an **HDMI** picture mode between **NORMAL** and **ENHANCED**.
- Select **ENHANCED** if the black-white contrast is not clear.
- This setting is effective only for the **HDMI RGB** output.
- This setting cannot be changed when no **RGB** signal is output from the **HDMI OUT** terminal.

5 Press the **SETUP** button to exit.

- Be sure to press the **SETUP** button, or the setting will not work.

Audio Setting

Choose the appropriate Audio Setting for your equipment as it only affects during the playback of DVD discs of the DVD player.

1 Press the **SETUP** button in stop mode.

2 Press the **Cursor** buttons (◀ or ▶) to select **CUSTOM**, then press the **ENTER** button.

- The **CUSTOM** mode will appear.

3 Press the **Cursor** buttons (◀ or ▶) to select **AUDIO**, then press the **ENTER** button to confirm.

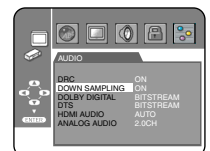
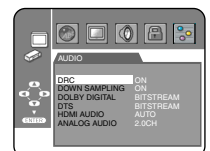
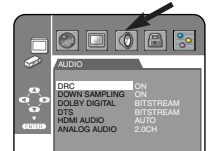
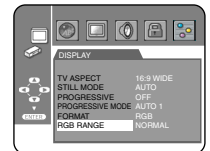
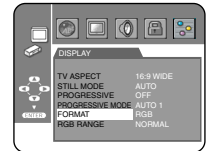
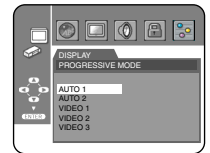
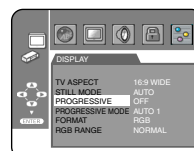
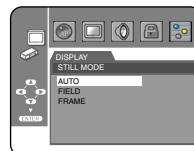
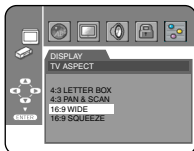
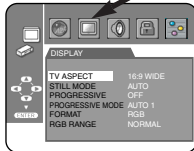
4 Press the **Cursor** buttons (▲ or ▼) to select the below items, then press the **ENTER** button.

DRC (Dynamic Range Control) (Default: ON)

- To compress the range of sound volume.
- **DRC** function is available only on the discs that are recorded in the **Dolby Digital** format.

DOWN SAMPLING (Default: ON)

- Set to **ON** when outputting in 48kHz (or 44.1kHz).
- This function is available only on digital outputting of a disc recorded in over 96kHz (or 88.2kHz).
- This function is not effective for the **HDMI** sound output.



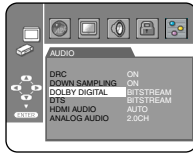
- The sound of DVD-Audio which exceeds 96kHz (or 88.2kHz) will be output as 96kHz (or 88.2kHz) even if DOWN SAMPLING is set to OFF.

When playing disc with copyright protection

- The sound will be down-sampled at 48kHz (or 44.1kHz), even if you set to OFF.

DOLBY DIGITAL (Default: BITSTREAM) QUICK

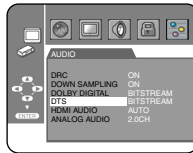
- Set to BITSTREAM when the player is connected to a Dolby Digital decoder.
- This function is effective only for the COAXIAL and OPTICAL connections.
- When HDMI AUDIO is set to AUTO, this setting is fixed and cannot be changed in some cases.



BITSTREAM: Output by Dolby Digital.
PCM: Convert Dolby Digital to PCM.

DTS (Default: BITSTREAM) QUICK

- Set to BITSTREAM when the unit is connected to a DTS decoder.
- This function is effective only for the COAXIAL and OPTICAL connections.
- When HDMI AUDIO is set to AUTO, this setting is fixed and cannot be changed in some cases.



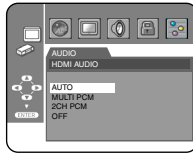
BITSTREAM: Output DTS sound.
PCM: Convert DTS sound to PCM.

NOTE:

- Audio settings for DOLBY DIGITAL and DTS may be automatically changed to BITSTREAM or PCM in some cases when using the HDMI connection.

HDMI AUDIO (Default: AUTO)

- Select the number of channels for the HDMI audio output.
- Refer to the table on page 16 for the actual output settings.
- Connect appropriate external equipment for each setting.
- This setting cannot be changed when no equipment compatible with HDMI audio is connected to the HDMI OUT terminal.
- Even if an equipment compatible with HDMI audio is connected, this setting cannot be changed when the equipment is turned off or the HDMI output mode is set to hdOFF.



AUTO: The output channel number is selected automatically from Bitstream, Multi-channel or 2-channel. Suitable for monitors or amplifiers compatible with HDMI bitstream.

MULTI PCM:

Multi-channel or 2-channel signals are output from the HDMI OUT terminal. Suitable for monitors or amplifiers incompatible with HDMI bitstream.

2CH PCM:

2 channel signals are output from the HDMI OUT terminal. Suitable for monitors or projectors compatible with HDMI 2CH.

OFF: No audio signals are output from the HDMI OUT terminal. To use the 5.1CH AUDIO OUT jacks.

ANALOG AUDIO (Default: 2.0CH)

- This setting may not be changed depending on the HDMI connection. Set HDMI AUDIO to OFF if it occurs.

2.0CH : Output 2ch sound from the 5.1CH AUDIO OUT jacks.

5.1CH : Output multi channel sound from the 5.1CH AUDIO OUT jacks.



5 Press the **SETUP** button to exit.

Speaker Setting for ANALOG AUDIO

When 5.1CH is selected for ANALOG AUDIO, some speaker settings will be required.

- During the HDMI output mode, any of the Speaker Setting is ineffective.

1 Press the **Cursor** buttons (▲ or ▼) to select 5.1CH, then press the **ENTER** button.

2 Press the **Cursor** buttons (▲ or ▼) to select the below items, then press the **ENTER** button.



SPEAKER SIZE

- Press the **Cursor** buttons (▲ or ▼) to select the speaker to set.
- Press **ENTER** until the desired speaker size appears.



FRONT(L/R), CENTER, SURROUND(L/R) (Default: LARGE)

LARGE:Select this when the connected speaker is capable of playing back sounds of 100Hz or less.

SMALL:Select this when the connected speaker is not capable of playing back sounds of 100Hz or less.

OFF: Select this when it is not connected. (It cannot be set OFF on the FRONT speaker.)

SUB WOOFER (Default: ON)

ON: Select this when SUB WOOFER is connected.
OFF: Select this when it is not connected.

NOTES:

- OFF is not available for SUB WOOFER when SMALL is selected for FRONT(L/R).
- SMALL is not available for FRONT(L/R) when OFF is selected for SUB WOOFER.
- During DVD-Audio playback, the sound may not come out as setting due to restrictions in the disc or the player.
- During DVD-Audio playback, the Low Pass Filter (which filters out the sound with the sound wave frequency over 100Hz) of the SUB WOOFER will be turned off with the following speaker setting. Otherwise, the Low Pass Filter will be turned on.

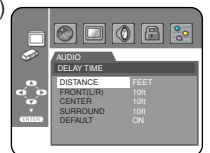
FRONT(L/R): LARGE
 CENTER: LARGE
 SUB WOOFER: ON
 SURROUND(L/R): LARGE

DELAY TIME

To enjoy 5.1-channel surround sound, the distance between the listening position and all speakers (excluding the SUB WOOFER) should ideally be set at a uniform distance on a circle. If the speakers cannot be set at this manner, the ideal listening position can be virtually created with the DELAY TIME setting.

Use the **Cursor** buttons (▲ or ▼) to select the setting item, then press the **ENTER** button.

- Press the **Cursor** buttons (▲ or ▼) to select the speaker to set, then press the **ENTER** button.



DISTANCE (Default: FEET)

FEET (when the **ENTER** button is pressed):

The unit of distance is set to feet ("ft").

METERS (when the **ENTER** button is pressed):

The unit of distance is set to meters ("m").

DVD SETUP

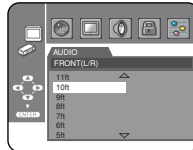
FRONT(L/R), CENTER, SURROUND (Default: 10ft)

FRONT(L/R):

The distance can be set within the range of 0 to 60ft.

CENTER, SURROUND:

These depend on the setting value of FRONT(L/R).



NOTES:

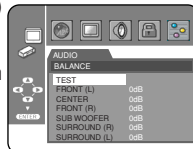
- It is not possible to adjust this item if CENTER and SURROUND have been set to OFF in the SPEAKER SIZE setting.
- When DEFAULT is selected and the ENTER button is pressed, all the items are restored to their factory default settings.

BALANCE

When the channel level differs from each speaker, the adjustment can be made in the unit of dB (-12dB to 0dB).

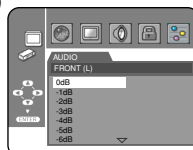
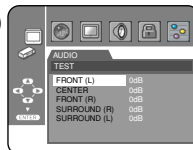
TEST:

- Press the **Cursor** buttons (▲ or ▼) to select TEST, then press the **ENTER** button. The test tone will output from each speaker in turn.



CHANNEL LEVEL:

- Press the **Cursor** buttons (▲ or ▼) to select the speaker to set, then press the **ENTER** button.
- Press the **Cursor** buttons (▲ or ▼) to select the desired level for each speaker, then press the **ENTER** button.



NOTES:

- While the test tone is being output, the channel balance adjustment cannot be made.
- When TEST is selected, no test tone will be output from SUB WOOFER.
- It is not possible to adjust this item for the speaker that has been set to OFF in SPEAKER SIZE setting.

- Press the **SETUP** button to exit.

Parental Control

Parental Control limits playback of discs with unsuitable audio ratings. A 4-digit password established by the user will unlock the Parental Lock.

This feature allows you to prevent your children from playing discs with objectionable scenes.

PARENTAL LEVEL

Parental Level allows you to set the rating level of your DVD discs. Playback will stop if the disc's ratings exceed the level you set.

- Press the **SETUP** button in stop mode.
- Press the **Cursor** buttons (◀ or ▶) to select CUSTOM, then press the **ENTER** button.

- Press the **Cursor** buttons (◀ or ▶) to select PARENTAL, then press the **ENTER** button.

- Press the **Numeric** buttons to enter your 4-digit password.

- When doing this for the first time, enter any 4-digit number by pressing the **Numeric** buttons (except for 4737), then press the **ENTER** button. That number will be used as the password from the second time onward. Record your password in case you forget it.

- Press the **Cursor** buttons (▲ or ▼) to select PARENTAL LEVEL, then press the **ENTER** button.

- Press the **Cursor** buttons (▲ or ▼) to select the desired level, then press the **ENTER** button.

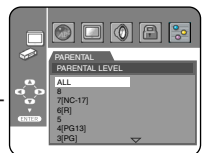
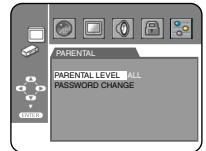
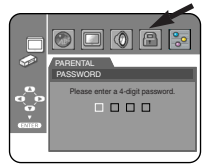
- Press the **SETUP** button to exit.

NOTE:

- This function may not work on some DVDs. Be sure if the ratings operate in the way you have set.

To Change the Password:

- Follow the steps 1 to 4 above.
- Press the **Cursor** buttons (▲ or ▼) to select "PASSWORD CHANGE", then press the **ENTER** button.
- Enter a new 4-digit password, then press the **ENTER** button.
- Press the **SETUP** button to exit.



IF YOU FORGET THE PASSWORD

- Press 4, 7, 3, 7 at step 4.

- The original password will be cleared and the Parental Level will be set to "ALL". Enter a new 4-digit password, then press the **ENTER** button.

- Repeat steps 5 to 7 to re-establish the Parental Level.

CONTROL LEVELS

- ALL**
Parental Lock is cancelled.
- Level 8**
DVD softwares of any grades (adult/general/children) can be played back.
- Levels 7 to 2**
Only DVD softwares intended for general use and children can be played back.
- Level 1**
Only DVD softwares intended for children can be played back. DVD softwares intended for adult and general use will be prohibited.

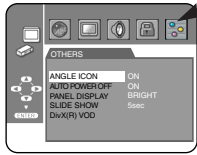
TIPS FOR LEVELS

- 7 [NC-17]: No one under 17 admitted
- 6 [R]: Restricted; under 17 requires accompanying parent or adult guardian
- 4 [PG13]: Unsuitable for children under 13
- 3 [PG]: Parental Guidance suggested
- 1 [G]: General Audience

Others Setting

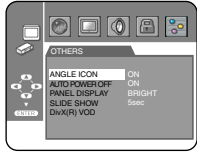
This function allows you to adjust Angle Icon availability, Auto Power Off, brightness of the player's display panel, Slide Show Mode and to obtain DivX® registration code.

- 1 Press the **SETUP** button in stop mode.
- 2 Press the **Cursor** buttons (◀ or ▶) to select **CUSTOM**, then press **ENTER**.
 - The **CUSTOM** mode will appear.
- 3 Press the **Cursor** buttons (◀ or ▶) to select **OTHERS**, then press the **ENTER** button to confirm.
- 4 Press the **Cursor** buttons (▲ or ▼) to select an item, then press **ENTER**.



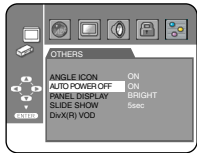
ANGLE ICON (Default : ON)

- Press the **ENTER** button repeatedly to turn ANGLE ICON ON or OFF.



AUTO POWER OFF (Default : ON)

- Press the **ENTER** button repeatedly to turn AUTO POWER OFF ON or OFF.
- It will turn the DVD player off automatically after 30 minutes of no use.



PANEL DISPLAY (Default : BRIGHT)

- Press the **Cursor** buttons (▲ or ▼) to select an item among **BRIGHT**, **DIMMER** and **AUTO**, then press the **ENTER** button.
- When **AUTO** is selected, the display dims only during playback.



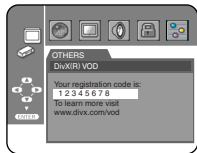
SLIDE SHOW (Default : 5sec)

- This adjusts the playback speed of the JPEG SLIDE SHOW.
- Press the **Cursor** buttons (▲ or ▼) to select between 5 sec and 10 sec, then press the **ENTER** button.



DivX(R) VOD

- This player allows you to use the DivX® Video-On-Demand (VOD) services. You can play back the files purchased or rental from the VOD services. You need to have a registration code to purchase or rental VOD files. Please visit www.divx.com/vod for more details.



NOTES:

- You cannot play back the DivX® VOD files obtained with different registration codes on this player.
- You cannot play back the DivX® VOD files, of which rental period has been expired. In such case, press the **MENU** button and select other files that can be played back.
- Some DivX® VOD files are restricted with the limited playable times (you cannot play them back beyond the limit). If your DivX® VOD file has such limit, the playback confirmation screen will appear. Use the **Cursor** button (◀ or ▶) to select **YES** if you want to play back the file, or to select **NO** if you do not wish to play it back. Then, press the **ENTER** button to confirm the selection.
- Please send your inquiries regarding the VOD files to DivX®, Inc.

- 5 Press the **SETUP** button to exit.

Reset to the Default Settings (except for PARENTAL)

This allows you to return all selections of **SETUP** (except for **PARENTAL**) to their default settings.

- 1 Press the **SETUP** button in stop mode.
- 2 Press the **Cursor** buttons (◀ or ▶) to select **INIT.**, then press the **ENTER** button.
- 3 Press the **Cursor** buttons (▲ or ▼) to select **YES**, then press the **ENTER** button.
- 4 Press the **SETUP** button to exit.

NOTE:

- If you like to cancel initializing, select **NO** at step 3.

Language Code List

Language	Code	Language	Code	Language	Code	Language	Code
A-B							
Abkhazian	4748	Frisian	5271	Malay	5965	Somali	6561
Afar	4747	Galician	5358	Malayalam	5958	Spanish [SPA]	5165
Afrikaans	4752	Georgian	5747	Maltese	5966	Sundanese	6567
Albanian	6563	German [GER]	5051	Maori	5955	Swahili	6569
Amharic	4759	Greek [GRE]	5158	Marathi	5964	Swedish [SWE]	6568
Arabic	4764	Greenlandic	5758	Moldavian	5961	T	
Armenian	5471	Guarani	5360	Mongolian	5960	Tagalog	6658
Assamese	4765	Gujarati	5367	Nauru	6047	Tajik	6653
Aymara	4771	Hausa	5447	Nepali	6051	Tamil	6647
Azerbaijani	4772	Hebrew	5569	Norwegian [NOR]	6061	Tatar	6666
Bashkir	4847	Hindi	5455	O-R		Telugu	6651
Basque	5167	Hungarian [HUN]	5467	Occitan	6149	Thai	6654
I-K							
Bengali;Bangla	4860	Icelandic [ICE]	5565	Oriya	6164	Tibetan	4861
Bhutani	5072	Indonesian	5560	Oromo(Afan)	6159	Tigrinya	6655
Bihari	4854	Interlingua	5547	Panjabi	6247	Tonga	6661
Bislama	4855	Interlingue	5551	Pashto;Pushto	6265	Tsonga	6665
Breton	4864	Irish [IRI]	5347	Persian	5247	Turkish [TUR]	6664
Bulgarian	4853	Italian [ITA]	5566	Polish	6258	Turkmen	6657
Burmese	5971	Japanese [JPN]	5647	Portuguese [POR]	6266	Twi	6669
Byelorussian	4851	Javanese	5669	Quechua	6367	U-Z	
C-E							
Cambodian	5759	Kannada	5760	Rhaeto-Romance	6459	Ukrainian	6757
Catalan	4947	Kashmiri	5765	Romanian [RUM]	6461	Urdu	6764
Chinese [CHI]	7254	Kazakh	5757	Russian [RUS]	6467	Uzbek	6772
Corsican	4961	Kinyarwanda	6469	S		Vietnamese	6855
Croatian	5464	Kirghiz	5771	Samoan	6559	Volapuk	6861
Czech	4965	Kirundi	6460	Sangho	6553	Welsh	4971
Danish [DAN]	5047	Korean [KOR]	5761	Sanskrit	6547	Wolof	6961
Dutch [DUT]	6058	Kurdish	5767	Scots Gaelic	5350	Xhosa	7054
English [ENG]	5160	L-N		Serbian	6564	Yiddish	5655
Esperanto	5161	Laothian	5861	Serbo-Croatian	6554	Yoruba	7161
Estonian	5166	Latin	5847	Sesotho	6566	Zulu	7267
F-H							
Faroese	5261	Latvian;Lettish	5868	Setswana	6660		
Fiji	5256	Lingala	5860	Shona	6560		
Finnish [FIN]	5255	Lithuanian	5866	Sindhi	6550		
French [FRE]	5264	Macedonian	5957	Singhalese	6555		
		Malagasy	5953	Siswat	6565		
				Slovak	6557		
				Slovenian	6558		

If you choose a Language that has a 3-letter language code, the code will be displayed every time you change the Audio or Subtitle Language setting on pages 25-26. If you choose any other languages, '---' will be displayed instead. (3-letter language code is written in bracket.)

MAINTENANCE

Cleaning the Cabinet

- Use a soft cloth slightly moistened with a mild detergent solution. Do not use a solution containing alcohol, spirits, ammonia or abrasives.

Cleaning Discs

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center out. Do not wipe in a circular motion.
- Do not use solvents such as benzine, thinner, commercially available cleaners, detergent, abrasive cleaning agents or antistatic spray intended for analog records.

Cleaning the disc lens

- If the player does not perform properly while referring to the relevant sections and to "TROUBLESHOOTING GUIDE" in this User Guide, the laser optical pickup unit may be dirty. Consult your dealer or an Authorized Service Center for inspection and cleaning of the laser optical pickup unit.

Disc Handling

- Use discs with the following logos on them.
- Handle the discs carefully so that fingerprints and dust do not adhere to the surfaces of the discs.
- Always store the disc in its protective case when it is not used.
- Note that discs with special shapes (heart-shaped discs, octagonal discs, etc.) cannot be played on this player. Do not attempt to play such discs, as they may damage the player.



Stereo Multi-ch



TROUBLESHOOTING GUIDE

If the DVD player does not perform properly when operated as instructed in this User Guide, check the player, consulting the following checklist.

Problem	Solution
No power	<ul style="list-style-type: none"> –Check if the AC power cord is properly connected. –Unplug the AC power cord, and wait for 5-10 seconds and then plug it in again.
No sound or picture	<ul style="list-style-type: none"> –Check if the TV is switched on. –Check the video and HDMI connection. –Check the VIDEO/AUDIO cable connections to the TV. (Refer to page 15 for Connection to a TV (for video).) –When signals are output from the HDMI OUT terminal, progressive signals are not output from the COMPONENT VIDEO OUT jacks. Press the HDMI button on the front panel to set the HDMI output mode to “hdOFF”. –Check if the AUDIO EX is set to “ON”. If it is the case, set it to “OFF”. –Check if the PROGRESSIVE mode is set correctly. See pages 12 and 28.
Distorted picture	<ul style="list-style-type: none"> –Sometimes a small amount of picture distortion may appear. This is not a malfunction. –Connect the player directly to the TV. –Check if the PROGRESSIVE mode is set correctly. See pages 12 and 28.
Completely distorted picture or black/white picture with DVD	<ul style="list-style-type: none"> –Connect the player directly to the TV. –Make sure the disc is compatible with the player.
No sound or distorted sound	<ul style="list-style-type: none"> –Adjust the volume. –Check if the speakers are connected correctly. –HDMI sound is not output when HDMI AUDIO is set to “OFF”.
No audio at digital output	<ul style="list-style-type: none"> –Check the digital connections. –Check the Audio Setting. –Digital signals cannot be output with Super Audio CDs. Use analog connections. –Area of Super Audio CD being played (MULTI-CH/2CH/CD) does not match amplifier connections.
No image from the HDMI connection	<ul style="list-style-type: none"> –Check the HDMI connection. (Check the status of the HDMI related indications.) –Check if the connected monitor equipment or other equipment supports HDCP. (This player will not output a video signal unless the other equipment supports HDCP.) –Connect the player to the display equipment using the Video cable (supplied), and check the HDMI settings. –Check if the output format of this player (HDMI FORMAT) matches the supported input format of other connected equipment.
Picture freezes momentarily during playback	<ul style="list-style-type: none"> –Check the disc for fingerprints/scratches and clean with a soft cloth wiping from center to edge. –Clean the disc.
Disc can't be played	<ul style="list-style-type: none"> –Clean the disc. –Ensure the disc label is facing up. –Check if the disc is defective by trying another disc. –Cancel the Parental Lock or change the control level. –Insert a correct disc that can be played on this player.
No return to start-up screen when disc is removed	<ul style="list-style-type: none"> –Reset the player by switching the player off, then on again.
The player does not respond to the remote control	<ul style="list-style-type: none"> –Aim the remote control directly at the sensor on the front of the player. –Reduce the distance to the player. –Replace the batteries in the remote control. –Re-insert the batteries with their polarities (+/– signs) as indicated.
Buttons do not work or the player stops responding	<ul style="list-style-type: none"> –To completely reset the player, unplug the AC cord from the AC outlet for 5-10 seconds.
The remote control doesn't seem to work	<ul style="list-style-type: none"> –Check if the REMOTE CONTROL IN jack on the rear panel is connected. –Check if the REMOTE CONTROL switch is set to the correct position.

TROUBLESHOOTING GUIDE

Problem	Solution
The player does not respond to some operating commands during playback	–Operations may not be permitted by the disc. Refer to the instructions of the disc.
The player cannot read CDs/DVDs	–Use a commercially available CD/DVD cleaner to clean the lens before sending the player for repair.
Angle does not switch	–The angle cannot be switched for DVDs which do not contain multiple angles. In some cases multiple angles are only recorded for specific scenes.
Playback does not start when the title is selected	–Check the “PARENTAL” setting.
The password for rating level has been forgotten	–Enter the default password “4737”, then your forgotten password will be cleared.
The player does not recognize DivX® files	–Check if the file name, including an extension, consists of more than 136 characters. If that does, the player does not recognize the file.

NOTES:

- Some functions are not available in specific modes, but this is not a malfunction. Read the description in this User Guide for details of correct operations.
- Playback from a desired track and Random Playback are not available during Program Playback.
- Some functions are prohibited on some discs.
- When playing back Video CDs with PBC function, some operations (e.g., select and track repeat) cannot be performed. Cancel PBC function temporarily to perform those operations. See page 17.
- When connecting to an A/V amplifier using an HDMI cable, the audio signals can not be output correctly in some cases if the speaker settings of the A/V amplifier are changed.

SPECIFICATIONS

SIGNAL SYSTEM

NTSC color

APPLICABLE DISCS

- (1) DVD-Video/DVD-Audio Discs
 - 1-layer 12cm single-sided discs, 2-layer 12cm single-sided discs, 2-layer 12cm double-sided discs (1 layer per side)
 - 1-layer 8cm single-sided discs, 2-layer 8cm single-sided discs, 2-layer 8cm double-sided discs (1 layer per side)
- (2) Super Audio CD
- (3) DVD-R/DVD-RW
- (4) Compact discs (Audio CD, Video CD)
 - 12cm discs, 8cm discs
- (5) CD-R/CD-RW

S-VIDEO OUTPUT

Y output level: 1Vp-p (75Ω/ohms)
 C output level: 0.286Vp-p
 Output connectors: S connectors, 1 set

VIDEO OUTPUT

Output level: 1Vp-p (75Ω/ohms)
 Output connector: Pin jacks, 1 set

COMPONENT OUTPUT

Y output level: 1Vp-p (75Ω/ohms)
 CB/PB output level: 0.7Vp-p (75Ω/ohms)
 CR/PR output level: 0.7Vp-p (75Ω/ohms)
 Output connector: Pin jacks, 1 set

HDMI OUTPUT

HDMI terminal, 1 set

AUDIO OUTPUT

Output level: 2Vrms
 2 channel (L, R) output connector: Pin jack, 1 set
 Multi channel (FL, FR, C, SL, SR, SW) output connector:
 Pin jack, 1 set

AUDIO OUTPUT PROPERTIES

- (1) Frequency response
 - 1 DVDs (linear PCM) : 4Hz to 22kHz (48kHz sampling)
 - : 4Hz to 44kHz (96kHz sampling)
 - : 4Hz to 88kHz (192kHz sampling)
 - 2 CDs : 4Hz to 20kHz
 - 3 Super Audio CD : 4Hz to 100kHz
- (2) S/N ratio : 115dB
- (3) Total harmonic distortion : 1kHz CD: 0.0045%
- (4) Dynamic range : DVD: 100dB
 CD: 98dB

DIGITAL AUDIO OUTPUT

Optical digital output: Optical jack, 1 set
 Coaxial digital output: Pin jack, 1 set

POWER SUPPLY

AC 120V, 60Hz

POWER CONSUMPTION

20W

MAXIMUM EXTERNAL DIMENSIONS

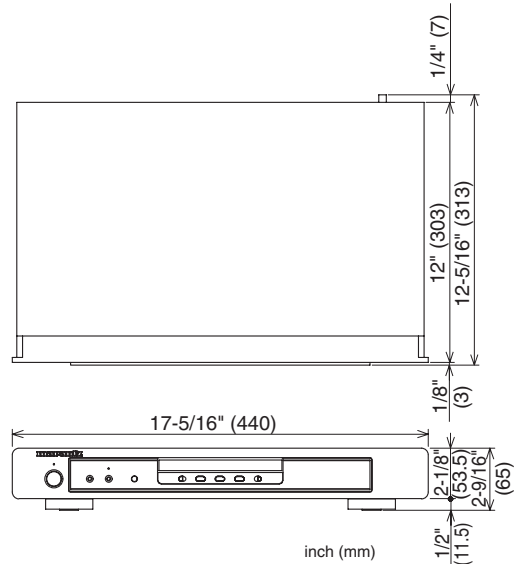
W: 17-5/16" (440mm)
 H: 2-9/16" (65mm)
 D: 12-5/16" (313mm)

MASS

5.5 lbs (2.5 kg)

REMOTE CONTROL UNIT

RC6600DV
 Infrared pulse type
 Supply: DC 3V, 2 R6P/AA batteries



www.marantz.com

You can find your nearest authorized distributor or dealer on our website.

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