

# marantz®

## Model DV6400 User Guide

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Super Audio CD/DVD Player



## ENGLISH

### WARRANTY

For warranty information, contact your local Marantz distributor.

### RETAIN YOUR PURCHASE RECEIPT

Your purchase receipt is your permanent record of a valuable purchase. It should be kept in a safe place to be referred to as necessary for insurance purposes or when corresponding with Marantz.

### IMPORTANT

When seeking warranty service, it is the responsibility of the consumer to establish proof and date of purchase. Your purchase receipt or invoice is adequate for such proof.

### FOR U.K. ONLY

This undertaking is in addition to a consumer's statutory rights and does not affect those rights in any way.

## FRANÇAIS

### GARANTIE

Pour des informations sur la garantie, contacter le distributeur local Marantz.

### CONSERVER L'ATTESTATION D'ACHAT

L'attestation d'achat est la preuve permanente d'un achat de valeur. La conserver en lieu sûr pour s'y reporter aux fins d'obtention d'une couverture d'assurance ou dans le cadre de correspondances avec Marantz.

### IMPORTANT

Pour l'obtention d'un service couvert par la garantie, il incombe au client d'établir la preuve de l'achat et d'en corroborer la date. Le reçu ou la facture constituent des preuves suffisantes.

## DEUTSCH

### GARANTIE

Bei Garantiefragen wenden Sie sich bitte an Ihren Marantz-Händler.

### HEBEN SIE IHRE QUITTING GUT AUF

Die Quittung dient Ihnen als bleibende Unterlage für Ihren wertvollen Einkauf. Das Aufbewahren der Quittung ist wichtig, da die darin enthaltenen Angaben für Versicherungswecke oder bei Korrespondenz mit Marantz angeführt werden müssen.

### WICHTIG!

Bei Garantiefragen muß der Kunde eine Kaufunterlage mit Kaufdatum vorlegen. Ihren Quittung oder Rechnung ist als Unterlage ausreichend.

## NEDERLANDS

### GARANTIE

Voor inlichtingen omtrent garantie dient u zich tot uw plaatselijke Marantz.

### UW KWITANTIE, KASSABON E.D. BEWAREN

Uw kwitantie, kassabon e.d. vormen uw bewijs van aankoop van een waardevol artikel en dienen op een veilige plaats bewaard te worden voor evt. verwijzing bijv. in verband met verzekering of bij correspondentie met Marantz.

### BELANGRIJK

Bij een evt. beroep op de garantie is het de verantwoordelijkheid van de consument een gedateerd bewijs van aankoop te tonen. Uw kassabon of factuur zijn voldoende bewijs.

## ESPAÑOL

### GARANTIA

Para obtener información acerca de la garantía póngase en contacto con su distribuidor Marantz.

### GUARDE SU RECIBO DE COMPRA

Su recibo de compra es su prueba permanente de haber adquirido un aparato de valor. Este recibo deberá guardarlo en un lugar seguro y utilizarlo como referencia cuando tenga que hacer uso del seguro o se ponga en contacto con Marantz.

## IMPORTANTE

Cuando solicite el servicio otorgado por la garantía el usuario tiene la responsabilidad de demostrar cuándo efectuó la compra. En este caso, su recibo de compra será la prueba apropiada.

## ITALIANO

### GARANZIA

L'apparecchio è coperto da una garanzia di buon funzionamento della durata di un anno, o del periodo previsto dalla legge, a partire dalla data di acquisto comprovata da un documento attestante il nominativo del Rivenditore e la data di vendita. La garanzia sarà prestata con la sostituzione o la riparazione gratuita delle parti difettose.

Non sono coperti da garanzia difetti derivanti da uso improprio, errata installazione, manutenzione effettuata da personale non autorizzato o, comunque, da circostanze che non possano riferirsi a difetti di funzionamento dell'apparecchio. Sono inoltre esclusi dalla garanzia gli interventi inerenti l'installazione e l'allacciamento agli impianti di alimentazione.

Gli apparecchi verranno riparati presso i nostri Centri di Assistenza Autorizzati.

Le spese ed i rischi di trasporto sono a carico del cliente.

La casa costruttrice declina ogni responsabilità per danni diretti o indiretti provocati dalla inosservanza delle prescrizioni di installazione, uso e manutenzione dettagliate nel presente manuale o per guasti dovuti ad uso continuato a fini professionali.

## PORTUGUÊS

### GARANTIA

Para informações sobre a garantia, contactar o distribuidor Marantz local.

### GUARDAR O RECIBO DE COMPRA

O recibo é o registo permanente da compra que fez. Deve ser guardado num local seguro, para ser apresentado em questões relacionadas com o seguro ou para quando tiver de contactar a Marantz.

### IMPORTANTE

Quando procurar assistência técnica ao abrigo da garantia, é da responsabilidade do consumidor estabelecer a prova e data de compra. O recibo é prova adequada.

## SVENSKA

### GARANTI

För information om garantin, kontakta Marantz lokalagent.

### SPAR KVITTOT

Kvittot är ett inköpsbevis på en värdefull vara. Det skall förvaras säkert och hänvisas till vid försäkringsfall eller vidkorrespondens med Marantz.

### VIKTIGT

Fö att garantin skall gälla är det kundens sak att framställa bevis och datum om köpet. Kvitto eller faktura är tillräckligt bevis för detta.

## DANSK

### GARANTI

Henvend dem til Deres MARANTZ-forhandler angående information om garantien.

### GEM DERES KVITTERING

Deres købskvittering er Deres varige bevis på et dyrt køb. Den bør gemmes godt og anvendes som bevis, hvis De vil tegne en forsikring, eller hvis De kommunikerer med Marantz.

### VIGTIGT

Det påhviler forbrugeren at skaffe bevis for købet og købsdatoen, hvis han eller hun ønsker garantiservice. Deres købskvittering eller faktura er et fulgyldigt bevis herpå.

## CE MARKING

### English

The DV6400 is in conformity with the EMC directive and low-voltage directive.

### Français

Le DV6400 est conforme à la directive EMC et à la directive sur les basses tensions.

### Deutsch

Das Modell DV6400 entspricht den EMC-Richtlinien und den Richtlinien für Niederspannungsgeräte.

### Nederlands

De DV6400 voldoet aan de EMC eisen en de vereisten voor laag-voltage.

### Español

El DV6400 está de acuerdo con las normas EMC y las relacionadas con baja tensión.

### Italiano

Il DV6400 è conforme alle direttive CEE ed a quelle per i bassi voltaggi.

### Português

O DV6400 conforma com as diretrizes EMC e de baixa voltagem.

### Svenska

DV6400 är tillverkad i enlighet med EMC direktiven och direktiven för lågvoltsutrustning.

### Dansk

Model DV6400 er i overensstemmelse med EMC-direktivet og direktivet om lavspænding.

## English

### WARNINGS

- Do not expose the equipment to rain or moisture.
- 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.
- Do not cover the ventilation with any items such as tablecloths, newspapers, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the equipment.
- When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area.
- Do not place anything about 1 meter above the top panel.
- Make a space of about 0.2 meter around the unit.
- Never spill liquid of any kind on this unit. If liquid is spilled into the unit, consult qualified service engineer.

## Français

### AVERTISSEMENTS

- Ne pas exposer l'appareil à la pluie ni à l'humidité.
- Ne pas essayer de retirer le boîtier de l'appareil.
- Ne rien insérer dans l'appareil par les orifices de ventilation.
- Ne pas manipuler le cordon d'alimentation avec les mains mouillées.
- Ne pas recouvrir les ouïes de ventilation avec un objet quelconque comme une nappe, un journal, un rideau, etc.
- Ne placer aucune source de flamme nue, comme une bougie allumée, sur l'appareil.
- Pour mettre au rebut les piles usées, respecter les lois gouvernementales ou les règlements officiels concernant l'environnement qui s'appliquent à votre pays ou région.
- Ne placer aucun objet à moins d'un mètre environ du panneau supérieur
- Veiller à ce qu'aucun objet ne soit à moins de 0,2 mètre des côtés de l'appareil.
- Ne renverser aucun liquide sur cet appareil. Si du liquide se répand dans l'appareil, consulter un ingénieur de service qualifié.

## Deutsch

### WARNHINWEISE

- Das Gerät nicht Regen oder Feuchtigkeit aussetzen.
- Die Abdeckung nicht vom Gerät abnehmen.
- Keine Gegenstände durch die Belüftungsschlitze stecken.
- Das Netzkabel nicht mit feuchten oder nassen Händen anfassen.
- Decken Sie die Lüftungsöffnungen nicht mit einem Tischtuch, einer Zeitung, einem Vorhang usw. ab.
- Es dürfen keine Gegenstände mit offener Flamme, wie etwa brennende Kerzen, auf dem Gerät aufgestellt werden.
- Beachten Sie bei der Entsorgung der verbrauchten Batterien alle geltenden lokalen und überregionalen Regelungen.
- Darauf achten, daß über dem Gerät ein Freiraum von mindestens 1 meter vorhanden ist.
- Auf allen Geräteseiten muß ein Zwischenraum von ungefähr 0,2 meter vorhanden sein.
- Niemals irgendwelche Flüssigkeiten auf dem Gerät verschütten. Falls dennoch Flüssigkeit in das Gerät eindringen sollte, suchen Sie bitte einen qualifizierten Kundendiensttechniker auf.

## Nederlands

### WAARSCHUWINGEN

- Stel het apparaat niet bloot aan regen of vocht.
- Verwijder de afdekplaat van het apparaat niet.
- Duw niets door de ventilatieopeningen in het apparaat.
- Raak het netsnoer niet met natte handen aan.
- Bedek de ventilatieopeningen niet met enige voorwerpen, zoals tafelkleden, kranten, gordijnen, enz.
- Plaats geen brandende voorwerpen, zoals kaarsen, op het apparaat.
- Volg bij het weggooien van verbruikte batterijen de overheidswetgeving of milieuvoorschriften op die van kracht zijn in het land of de regio waarin u zich bevindt.
- Zorg dat er tenminste 1 meter vrije ruimte boven het toestel is.
- Zorg dat er 0,2 meter vrije ruimte rond het toestel is.
- Mors nooit vloeistoffen over dit apparaat. Laat het apparaat nakijken door een gekwalificeerd servicemonteur wanneer er vloeistof in het apparaat is gemorst

## Español

### ADVERTENCIAS

- No exponga el equipo a la lluvia ni a la humedad.
- No extraiga la tapa del equipo.
- No introduzca nada en el interior del equipo a través de los orificios de ventilación.
- No maneje el cable de alimentación con las manos mojadas.
- No cubra la ventilación con objetos como manteles, periódicos, cortinas, etc.
- No deben colocarse sobre el equipo elementos con fuego, por ejemplo velas encendidas.

- Cuando se eliminen baterías usadas, deben cumplirse las reglamentaciones oficiales o las normas de protección medioambiental aplicables en su país o en su zona.
- No ponga nada a menos de 1 metro por encima del panel superior.
- Deje un espacio de unos 0,2 metro alrededor de la unidad.
- No derrame nunca líquidos de ninguna clase en este aparato. Si se derrama algún líquido en el interior del aparato, consulte a un ingeniero de servicio cualificado.

## Italiano

### AVVERTENZE

- Non esporre l'apparecchio alla pioggia o all'umidità.
- Non rimuovere il coperchio dell'apparecchio.
- Non introdurre oggetti all'interno dell'apparecchio attraverso i fori di ventilazione.
- Non toccare il cavo di alimentazione con le mani bagnate.
- Non coprire le fessure di ventilazione con tovaglie, giornali, tende od oggetti analoghi.
- Non posare sull'apparecchio sorgenti di fiamme scoperte quali candele accese.
- Smaltire le pile usate in conformità alle norme governative o disposizioni ambientali vigenti nel proprio paese o zona.
- Non posare nulla per circa un metro sopra il pannello superiore.
- Lasciare 0,2 metro liberi tutto intorno l'unità.
- Non spruzzare mai liquidi di qualsiasi tipo su quest'unità. In caso di penetrazione di liquido nell'unità, rivolgersi ad un tecnico qualificato.

## Português

### ADVERTÊNCIAS

- Não exponha o equipamento à chuva nem à humidade.
- Não retire a tampa do equipamento.
- Não atire nada para dentro do equipamento através dos orifícios de ventilação.
- Não manuseie o cabo de alimentação com as mãos molhadas.
- Não cobrir os orifícios de ventilação com objectos tais como toalhas de mesa, jornais, cortinas, etc.
- Não colocar chamas abertas tais como velas acesas, sobre o aparelho.
- Ao deitar foras as pilhas usadas, favor observar os regulamentos governamentais ou as regras com respeito ao meio ambiente que se aplicam no seu país ou área de residência.
- Deixar um espaço completamente livre de cerca de 1 metro acima do painel superior.
- Deixar um espaço de cerca de 0,2 metro ao redor do aparelho.
- Nunca derramar líquidos nesta unidade. Se derramar-se líquido e o mesmo penetrar na unidade, consultar o pessoal de atendimento técnico qualificado.

## Svenska

### VARNINGAR

- Utsätt inte utrustningen för regn eller fukt.
- Ta inte bort utrustningens hölje.
- För inte in föremål i utrustningen genom ventilationshålen.
- Hantera inte nåtsladden med våta händer.
- Täck inte för ventilationsöppningarna med några föremål som till exempel bordsdukar, dagstidningar, gardiner e.d.
- Inga föremål med öppen låga, som till exempel tända stearinljus, bör placeras på utrustningen.
- Följ de lagar och miljöskyddsråd som gäller i det land eller område där du bor när du gör dig av med batterier.
- Placera inte någonting närmare än 1 meter ovanför apparaten eller enheten.
- Se till att det finns omkring 0,2 meter fri plats runt omkring enheten.
- Spill aldrig vätskor på DVD-spelaren. Om du skulle spilla vätska inuti den, måste du vända dig till en kvalificerad servicetekniker.

## Dansk

### ADVARSLER

- Udsæt ikke udstyret for regn eller fugt.
- Fjern ikke dækslet fra udstyret.
- Stik ikke noget ind i udstyret gennem ventilationshullerne.
- Rør ikke ved netledningen med våde hænder.
- Tildæk ikke ventilationsåbningerne med ting som duge, aviser, gardiner og lignende.
- Kilder til åben ild, som for eksempel tændte stearinlys, må ikke anbringes på apparatet.
- Når du skiller dig af med gamle batterier, bedes du gøre dette i overensstemmelse med de love, regler og miljømæssige forskrifter, som er gældende i dit land eller område.
- Anbring ikke noget nærmere end 1 m over apparatets overside.
- Sørg for, at der er et frit område på omkring 0,2 m omkring apparatet.
- Spild aldrig væske på denne enhed. Hvis der spildes væske, som trænger ind i enheden, kontakt da kvalificeret servicereparatør.

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

## WARNINGS FOR LASER RADIATION

CAUTION : INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.

DANGER : INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.

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**INTRODUCTION**

**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. Batteries should never be thrown away or incinerated but disposed of in accordance with your local regulations concerning chemical wastes.

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.	


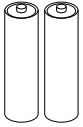


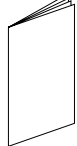
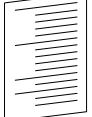
**About Copyright**

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

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.

**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 cable..... 1 	Video cable..... 1 	Operating Instruction..... 1 	Product Registration Card..... 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-A** : Description refers to playback of DVD-Audio discs.
- DVD-V** : Description refers to playback of DVD-Video discs.
- CD** : Description refers to playback of Audio CDs.
- SUPER AUDIO CD** : Description refers to playback of Super Audio CDs.
- MP3** : Description refers to playback of discs formatted with MP3.
- VCD** : Description refers to playback of Video CDs.
- JPEG** : Description refers to viewing of JPEG discs.
- WMA** : Description refers to playback of discs formatted with WMA.
- QUICK** : Description refers to the items to be set in the QUICK mode.

**Playable Discs**

The following discs can be played back on this DVD player.

Usable discs	Mark (logo)	Recorded signals	Disc Size
DVD-Audio			12 cm
DVD-Video (NOTE 1)		Digital video (MPEG2)	12 cm
DVD-R DVD-RW (NOTE 2)			
CD CD-R CD-RW (NOTE 3)		Digital audio MP3 WMA (NOTE 4) Digital picture (JPEG)	12 cm 8 cm
Super Audio CD		Digital audio	12 cm
Video CD		Sound and Pictures	12 cm
			8 cm (Singles)
Picture CD		JPEG	12 cm

- NOTE 1: Some DVD-Video discs do not operate as described in this manual due to the intentions of the discs' producers.
- NOTE 2: Playing DVD-R and DVD-RW discs  
DVD-R and DVD-RW discs on a DVD recorder can be played. Discs that have not been finalized cannot be played. Depending on the disc's recording status, the disc may not be accepted or may not be played normally (the picture or sound may be not be smooth, etc.).
- NOTE 3: Some of CD-R/CD-RW discs may be incompatible because of "scratch and stain of disc", "Recording condition", and "Characteristic of Recorder".
- NOTE 4: Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

This player conforms to the PAL colour system. Also you can play discs recorded with the NTSC system via a PAL system TV set.

- Some discs include region codes as shown below.



- The number inside the symbol refers to a region of the world, and a disc encoded in a specific region format can only be played back on DVD players with the same region code.

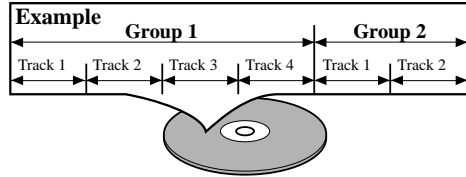
The following discs cannot be played back on this DVD player.

- DVD with region codes other than 2 or ALL.
  - DVD-ROM
  - DVD-RAM (Never play back, otherwise malfunction may result.)
  - CD-ROM
  - VSD
  - CDV (Only plays back the audio part.)
  - CD-G (Only plays back the sound.)
  - CD-R/CD-RW (Only plays back the discs which audio CD/MP3/JPEG/WMA is recorded.)
  - CD-I (Never play back, otherwise malfunction may result.)
  - Photo CD (Never play back, otherwise malfunction may result.)
- Any other discs without compatibility indications.

**Disc Types**

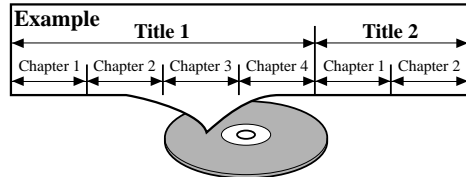
**[DVD-Audio]**

DVD-Audios are divided into several large sections called "groups" and smaller sections called "tracks." Numbers are allotted to these sections. These numbers are called "group numbers" and "track numbers."



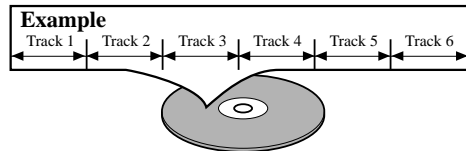
**[DVD-Video]**

Data on a DVD is divided into sections called "titles," and then into subsections called "chapters," each of which is given a title or chapter number. Playback conditions are preset on some DVD-Video discs, and these playback conditions take priority over user operations on this player. If a function you selected does not run as desired, refer to the manual accompanying the disc.



**[Audio CD, Video CD, Super Audio CD]**

Data on an Audio CD, a Super Audio CD, or a Video CD is divided into sections called "tracks," each of which is given a track number.



**ABOUT THE PBC FUNCTION OF VIDEO CD**

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.

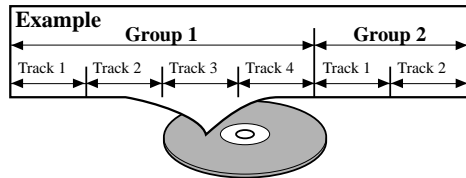
**What is PBC?** "PBC" stands for the Playback Control. You can play interactive software using menu screens. Refer to instructions in the Video CD.

**NOTE:**

When playing Video CDs with PBC function, some operations (e.g., select and repeat tracks) cannot be performed unless the function is cancelled temporarily (refer to page 16).

**[MP3, JPEG, WMA]**

Data on a MP3 is divided into sections called "groups," and then into subsections called "tracks," each of which is given an album or track number.



**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.

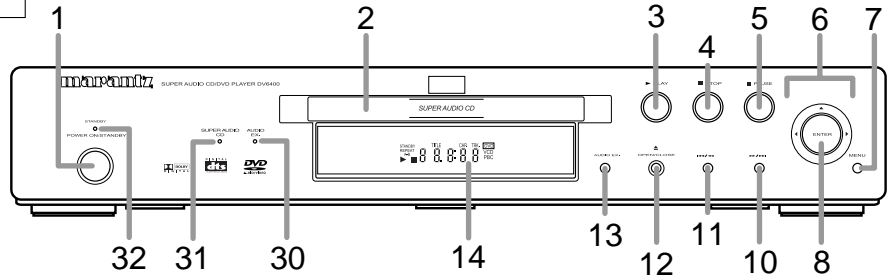
- **Analog 5.1-channel Dolby and DTS surround output**  
This player is equipped with analog 5.1-channel Dolby and DTS surround audio out jacks for playback.
- **Still/fast/slow/step playback**  
Various playback modes are available including still pictures, fast forward/reverse, slow motion and step frames.
- **Random playback for Audio CD, MP3, Super Audio CD, JPEG, DVD-Audio, and WMA**  
This player can shuffle the order of tracks to play them in random order.
- **Program playback for Audio CD, MP3, Super Audio CD, JPEG, DVD-Audio, 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 available on a DVD.
- **Auto standby**  
When the screen saver program is activated for 35 minutes, the power is automatically turned off.
- **Subtitles in a desired language**  
You can select a desired language for the display subtitles, if that language is available on a disc.
- **Selecting a camera angle**  
You can select the desired camera angle, if a disc contains sequences recorded from different angles.
- **Choices for audio language and sound mode**  
You can select the desired audio language and sound mode, if different languages and modes are available on a disc.
- **Parental lock**  
You can set the control level to limit playback of discs which may not be suitable for children.
- **Automatic detection of discs**  
This player automatically detects if a loaded disc is DVD-Video, DVD-Audio, Super Audio CD, Audio CD, MP3, JPEG, or WMA.
- **Playing an MP3 disc**  
You can enjoy MP3 files which are recorded on CD-R/RW.
- **Direct Search**  
You can search the desired title, chapter, and track with numeric button during playback or in stop mode.
- **On-screen display**  
Information about the current operation can be displayed on a TV screen, allowing you to confirm the currently active functions (such as program playback), on the TV screen using the remote control.
- **AUDIO-EX Mode**  
You can enjoy higher quality audio by stopping the video signal and display.
- **Search**  
Group search: Search for the group designated by user is possible.  
Page search: Search for the page designated by user is possible.  
Chapter search: Search for the chapter designated by user is possible.  
Title search: Search for the title designated by user is possible.  
Track search: Search for the track designated by user is possible.  
Time search: Search for the time designated by user is possible.
- **Repeat**  
Chapter: Repeated playback of the chapter of the disc being played is possible.  
Title: Repeated playback of the title of the disc being played is possible.  
Track: Repeated playback of the track of the disc being played is possible.  
ALL: Repeated playback is possible. (exclude DVD-Video)  
A-B: The part between A and B designated by user is possible.  
Group: Repeated playback of the folder of the MP3/JPEG/WMA/DVD-Audio disc being played is possible.
- **Zoom**  
2-time or 4-time magnified screen can be displayed.
- **Marker**  
The part designated by user can be called back.
- **Resume Play**  
User can resume to playback from the part at which the play was stopped even if the power turn 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 control the range of sound volume.
- **MPEG sound**  
This player can handle a disc that supports MPEG audio and the DVD player is connected to a MPEG decoder.
- **Displaying a JPEG picture**  
Kodak Picture CDs can be played. Still images stored in JPEG format on CD-R/RW can also be played.
- **Reproducing WMA data**  
You can enjoy WMA files which are recorded on CD-R/RW.

“Kodak Picture CD COMPATIBLE” is trademark of Eastman Kodak Company.

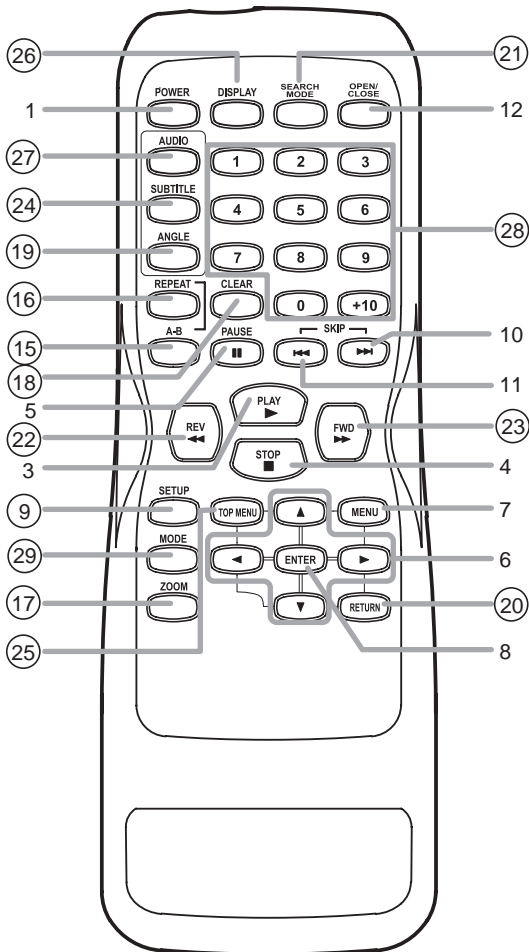
“WMA” (Windows Media Audio) is a new audio codec developed by Microsoft® in the United States of America.

## FUNCTIONAL OVERVIEW

### FRONT PANEL



### REMOTE CONTROL














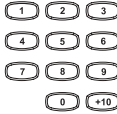

The buttons with circled numbers can only be operated with the remote control.

1. **POWER Button** [page 16]
2. **Disc loading tray**
3. **PLAY Button** [page 16]
4. **STOP Button** [page 16]
5. **PAUSE Button** [page 16]
6. **Cursor Buttons** [page 16]  
Use when making settings while watching the display on a TV screen.
7. **MENU Button** [page 16]
8. **ENTER Button** [page 16]
9. **SETUP Button** [page 25]
10. **▶▶(SKIP UP/FWD) Button** [page 18]  
Plays back from the beginning of the next chapter or track. Hold down to fast forward playback.
11. **◀◀(SKIP DOWN/REV) Button** [page 18]  
Plays back from the beginning of the current chapter or track. Hold down to fast reverse playback.
12. **OPEN/CLOSE Button** [page 16]
13. **AUDIO EX. Button** [page 16]
14. **Display, Remote Sensor Window**
15. **A-B REPEAT Button** [page 19]
16. **REPEAT Button** [page 19]
17. **ZOOM Button** [page 17]
18. **CLEAR Button** [page 18]
19. **ANGLE Button** [page 23]  
Press to change the camera angle to see the sequence being played back from a different angle.
20. **RETURN Button** [page 16]
21. **SEARCH MODE Button** [page 18]
22. **◀◀(FR SEARCH) Button** [page 17]
23. **▶▶(FF SEARCH) Button** [page 17]
24. **SUBTITLE Button** [page 23]  
Press to select a desired subtitle language.
25. **TOP MENU Button** [page 16]
26. **DISPLAY Button** [page 21]
27. **AUDIO Button** [page 22]  
Press to select a desired audio language or sound mode.
28. **Numeric Buttons** [page 18]
29. **MODE Button** [page 19]
30. **AUDIO EX. Indicator**  
This indicator lights when the AUDIO EX. button is ON.
31. **SUPER AUDIO CD Indicator**  
This indicator lights when playing a Super Audio CD.
32. **STANDBY Indicator**  
This indicator lights when the DVD player turns off.



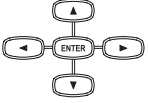









**Tour of the remote control**

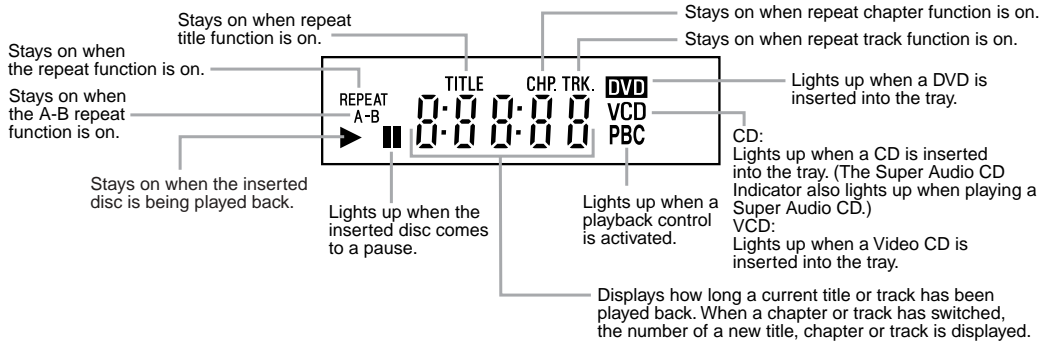
Buttons on remote control work in different ways for DVD, VCD, and CD :  
Refer to the following table for correct use.

	DVD	VCD	CD
<b>POWER</b> 	<ul style="list-style-type: none"> <li>Press this to switch the power between on and standby.</li> </ul>	<ul style="list-style-type: none"> <li>Press this to switch the power between on and standby.</li> </ul>	<ul style="list-style-type: none"> <li>Press this to switch the power between on and standby.</li> </ul>
<b>A-B REPEAT Button</b> 	<ul style="list-style-type: none"> <li>Marks a segment to repeat between A and B.</li> </ul>	<ul style="list-style-type: none"> <li>Marks a segment to repeat between A and B.</li> </ul>	<ul style="list-style-type: none"> <li>Marks a segment to repeat between A and B.</li> </ul>
<b>REPEAT Button</b> 	<ul style="list-style-type: none"> <li>Allows you to repeat play a Group (For DVD Audio), Title, or Chapter.</li> </ul>	<ul style="list-style-type: none"> <li>Allows you to repeat play a Track or Disc.</li> </ul>	<ul style="list-style-type: none"> <li>Allows you to repeat play a Track or Disc.</li> </ul>
<b>MODE Button</b> 	<ul style="list-style-type: none"> <li>To activate the 3D sound (Virtual surround system).</li> </ul>	<ul style="list-style-type: none"> <li>To activate the 3D sound (Virtual surround system).</li> </ul>	<ul style="list-style-type: none"> <li>Allows you to program a specific order or random playback.</li> <li>To activate the 3D sound (virtual surround system).</li> </ul>
<b>ZOOM Button</b> 	<ul style="list-style-type: none"> <li>To magnify part of picture (x2/x4).</li> </ul>	<ul style="list-style-type: none"> <li>To magnify part of picture (x2).</li> </ul>	—
<b>ANGLE Button</b> 	<ul style="list-style-type: none"> <li>Accesses various camera angles on a disc.</li> </ul>	—	—
<b>SUBTITLE Button</b> 	<ul style="list-style-type: none"> <li>Accesses various subtitles on a disc.</li> </ul>	—	—
<b>AUDIO Button</b> 	<ul style="list-style-type: none"> <li>Accesses various audio functions on a disc.</li> </ul>	<ul style="list-style-type: none"> <li>To select STEREO, L-CH or R-CH.</li> </ul>	<ul style="list-style-type: none"> <li>To select STEREO, L-CH or R-CH.</li> </ul>
<b>DISPLAY Button</b> 	<ul style="list-style-type: none"> <li>Displays the current disc mode.</li> </ul>	<ul style="list-style-type: none"> <li>Displays the current disc mode.</li> </ul>	<ul style="list-style-type: none"> <li>Displays the current disc mode.</li> </ul>
<b>SEARCH MODE Button</b> 	<ul style="list-style-type: none"> <li>To search chapter, title, or time.</li> <li>To rapidly return to a location of disc.</li> </ul>	<ul style="list-style-type: none"> <li>To search track or time.</li> <li>To rapidly return to a location of disc.</li> </ul>	<ul style="list-style-type: none"> <li>To search track or time.</li> <li>To rapidly return to a location of disc.</li> </ul>
<b>OPEN/CLOSE Button</b> 	<ul style="list-style-type: none"> <li>To open or close the disc tray.</li> </ul>	<ul style="list-style-type: none"> <li>To open or close the disc tray.</li> </ul>	<ul style="list-style-type: none"> <li>To open or close the disc tray.</li> </ul>
<b>NUMERIC Buttons</b> 	<ul style="list-style-type: none"> <li>To select chapter directly.</li> </ul>	<ul style="list-style-type: none"> <li>To select track directly.</li> </ul>	<ul style="list-style-type: none"> <li>To select track directly.</li> </ul>
<b>CLEAR Button</b> 	<ul style="list-style-type: none"> <li>Clear the markers.</li> </ul>	<ul style="list-style-type: none"> <li>Clear the markers.</li> </ul>	<ul style="list-style-type: none"> <li>Clear the markers.</li> <li>Removes status No. in program input.</li> </ul>

Tour of the remote control

	DVD	VCD	CD
<b>MENU Button</b> 	<ul style="list-style-type: none"> <li>• Brings up the Menu on a disc.</li> </ul>	—	—
<b>TOP MENU Button</b> 	<ul style="list-style-type: none"> <li>• Brings up the Top Menu on a disc.</li> </ul>	—	—
<b>ENTER, CURSOR Buttons</b> 	<ul style="list-style-type: none"> <li>• Moves the cursor and determines its position.</li> </ul>	<ul style="list-style-type: none"> <li>• Moves the cursor and determines its position.</li> </ul>	<ul style="list-style-type: none"> <li>• Moves the cursor and determines its position.</li> </ul>
<b>RETURN Button</b> 	<ul style="list-style-type: none"> <li>• Returns to a previous menu.</li> </ul>	<ul style="list-style-type: none"> <li>• Returns to a previous menu.</li> </ul>	—
<b>SETUP Button</b> 	<ul style="list-style-type: none"> <li>• Brings up the DVD player's Setup menu.</li> </ul>	<ul style="list-style-type: none"> <li>• Brings up the DVD player's Setup menu.</li> </ul>	<ul style="list-style-type: none"> <li>• Brings up the DVD player's Setup menu.</li> </ul>
<b>SKIP Buttons</b> 	<ul style="list-style-type: none"> <li>• To skip Chapters</li> <li>• To skip Tracks (For DVD-Audio).</li> </ul>	<ul style="list-style-type: none"> <li>• To skip Tracks.</li> </ul>	<ul style="list-style-type: none"> <li>• To skip Tracks.</li> </ul>
<b>SEARCH Buttons</b> 	<ul style="list-style-type: none"> <li>• Allows you to search forward/backward through a disc (x2. x8. x50. x100).</li> </ul>	<ul style="list-style-type: none"> <li>• Allows you to search forward/backward through a disc (x2. x8. x30).</li> </ul>	<ul style="list-style-type: none"> <li>• Allows you to search forward/backward through a disc (x16).</li> </ul>
<b>STOP Button</b> 	<ul style="list-style-type: none"> <li>• To stop playback.</li> </ul>	<ul style="list-style-type: none"> <li>• To stop playback.</li> </ul>	<ul style="list-style-type: none"> <li>• To stop playback.</li> </ul>
<b>PLAY Button</b> 	<ul style="list-style-type: none"> <li>• Begin disc play.</li> </ul>	<ul style="list-style-type: none"> <li>• Begin disc play.</li> </ul>	<ul style="list-style-type: none"> <li>• Begin disc play.</li> </ul>
<b>PAUSE Button</b> 	<ul style="list-style-type: none"> <li>• Pause disc play.</li> <li>• Advances playback one frame at a time.</li> </ul>	<ul style="list-style-type: none"> <li>• Pause disc play.</li> <li>• Advances playback one frame at a time.</li> </ul>	<ul style="list-style-type: none"> <li>• Pause disc play.</li> </ul>

Display



Displays During Operation

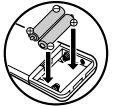
	Power on
	No disc inserted
	Tray open
	Tray closed
	Loading the Disc
	Power off

Loading the Batteries

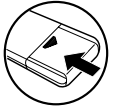
1. Open the battery compartment cover.



2. Insert two "AA" (R6P) batteries, with each one oriented correctly.



3. Close the cover.



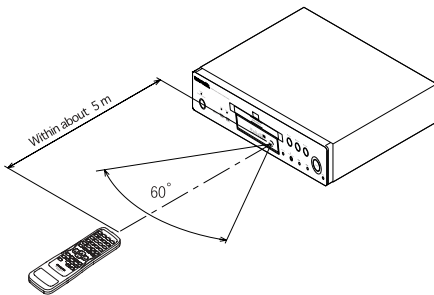
NOTES

- Do not mix alkaline and manganese batteries.
- Do not mix old and new batteries.

Using the remote control

Keep in mind the following when using the remote control:

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

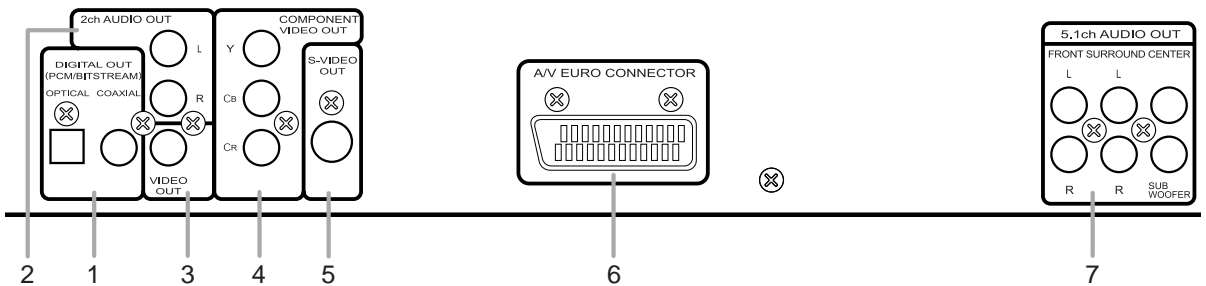


Cautions On Batteries

- 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 from close to the main unit, replace the batteries with new ones, even if less than a year has passed.
- The included battery is only for verifying operation. Replace it with a new battery 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.
  - 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.

## CONNECTIONS

### Description - rear panel



#### 1. DIGITAL OUT JACKS

Use either an optical or coaxial digital cable to connect to an AV amplifier with a built-in decoder (AV control center).

#### 2. 2ch AUDIO OUT JACKS

Connect to the Audio input jacks of A/V-compatible TV or wide screen TV, Stereo system.  
(The sound of Super Audio CD discs is not output.)

#### 3. VIDEO OUT JACK

Use a video cable to connect one of the jack to Video input on your A/V-compatible TV or wide screen TV, Stereo system.

#### 4. COMPONENT VIDEO OUT JACKS

Use these jacks if you have a TV with Component Video in jacks. These jacks provide C<sub>B</sub>, C<sub>R</sub> and Y video. Along with S-Video, Component Video provides the best picture quality.

#### 5. S-VIDEO OUT JACK

Use the S-Video cable to connect this jack to the S-Video jack on your A/V-compatible TV or wide screen TV for a higher quality picture.

#### 6. A/V EURO CONNECTOR

Connect to the 21-pin scart jack of a TV.  
(The sound of Super Audio CD discs is not output.)

#### 7. 5.1ch AUDIO OUT JACKS

Use the speaker cables to connect these jacks to the 5.1ch AUDIO IN jacks on your AV amplifier with 5.1-channel input terminals.

### NOTES

- Be sure not to use both the A/V EURO CONNECTOR jack and component Video jacks for video output at the same time.
- When changing the VIDEO OUT setting (SCART or COMPONENT), connect to a VIDEO jack or an S-VIDEO jack on the TV. If the setting is changed, for example, to COMPONENT while the A/V EURO CONNECTOR jack is connected to the TV, a distorted video signal may be output.

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

Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942, 5,956,674, 5,974,380, 5,978,762 and other world-wide patents issued and pending. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc. Copyright 1996, 2000 Digital Theater Systems, Inc. All Rights Reserved.

## CONNECTIONS

The following show examples of connections commonly used to connect the DVD player either TV and other components.

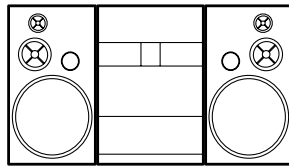
If using this DVD player to playback a DVD in a 5.1 channel Dolby Digital surround or DTS surround format, the DVD player outputs a Dolby Digital or DTS data stream from its OPTICAL or COAXIAL DIGITAL AUDIO OUT jacks. 5.1 channel Dolby Digital Surround sound and DTS sound can also be output from the 5.1 CH OUTPUT 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 or optical digital cable (not included) for the audio connections. Use audio cables (commercially available ) for the 5.1 CH audio connection.

### Notes

- Be sure to turn off the power to 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.

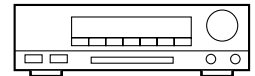
### Connection to an audio system

#### Method 1



Stereo system

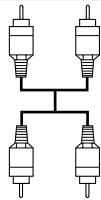
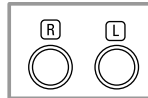
#### Method 2



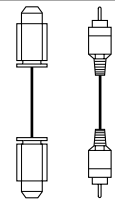
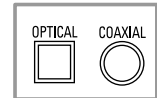
Dolby Digital decoder,  
DTS decoder  
or  
MPEG decoder

### AUDIO

Audio Input Jacks

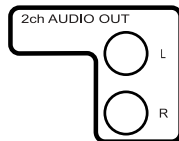


Digital Audio Input  
Jacks

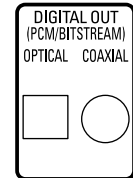


### DVD

Analog Audio Out



Digital Audio Out



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

### NOTES

- If output Dolby Digital audio, connect to a Dolby Digital decoder, and set Dolby Digital to on for audio output in the setup mode. (See page 26)
- If output DTS audio, connect to a DTS decoder, and set DTS to "DTS" for audio output in the setup mode. (See page 26)
- If output MPEG audio, connect to a MPEG decoder and set MPEG to "MPEG" for audio output in the setup mode. (See page 26)
- Unless connected to a Dolby Digital decoder, or a DTS decoder, set Dolby Digital to "OFF", or DTS to "PCM" for audio output in the setup mode. Playing a DVD using incorrect settings may generate noise distortion, and may also damage the speakers. (See page 26)
- The audio source on a disc in a 5.1 channel Dolby Digital surround format cannot be recorded as digital sound by an MD or DAT deck.
- Set Dolby Digital to "OFF" and DTS to "PCM" for audio output in the setup mode for method 1 only. Playing a DVD using incorrect settings may generate noise distortion, and may also damage the speakers. (Refer to page 26 to set Dolby Digital to "ON" and to set DTS to "DTS")
- Super Audio CD sound is not output from the 2ch AUDIO OUT jacks and A/V EURO CONNECTOR.
- Super Audio CD sound is not output as digital sound.

### Optical cable (not supplied)

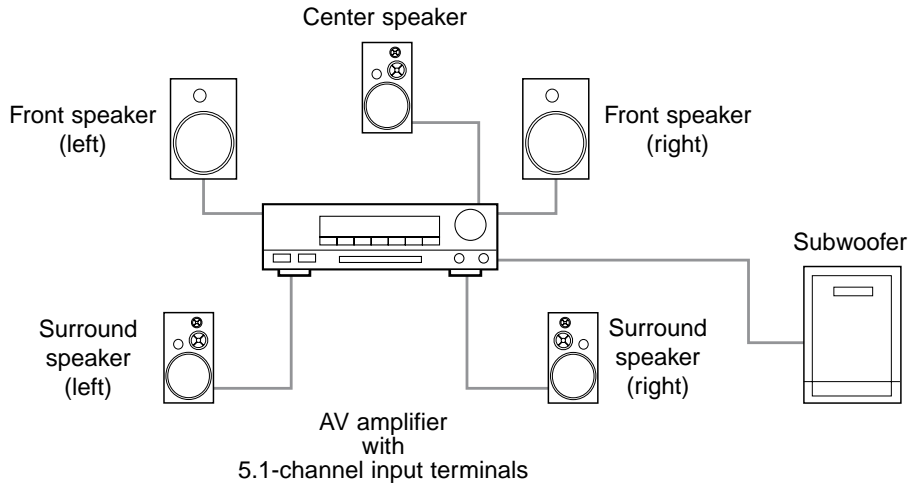
- Optical cable (not supplied) may be damaged when bent at sharp angles. Ensure cables are coiled in loops with a diameter of 15 cm or more when storing them.
- Use a cable which is 3m or shorter.
- Insert cable plugs firmly into the connectors when making connections.
- If a plug has minor scratches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

## CONNECTIONS

### Connection to 5.1-channel Surround Sound system

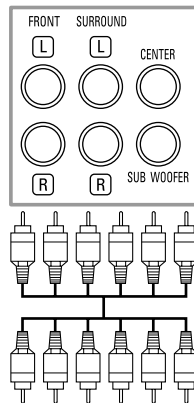
Analog 5.1-channel audio signals can be output from the DVD player. The multichannel audio signals recorded in packed PCM can be played when an AV amplifier equipped with analog 5.1-channel audio inputs is connected.

#### Method 1



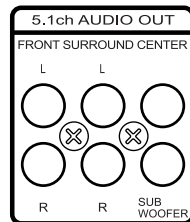
#### AUDIO

To 5.1ch Audio IN Jacks

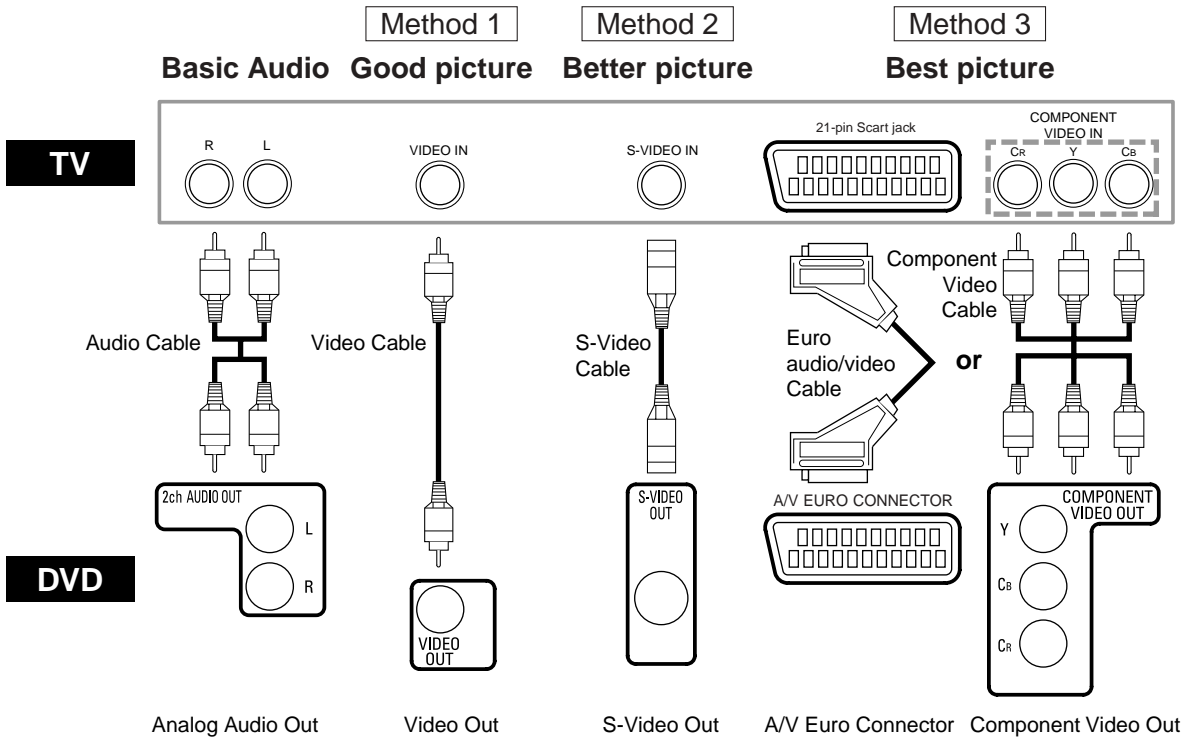


#### DVD

5.1ch Audio OUT



Connection to a TV (for video)



- **Method 1** DVD Player + TV with Video Input Jack
- **Method 2** DVD Player + TV with S-Video Input Jack
- **Method 3** DVD Player + TV with AV1 Jack or DVD Player + TV with Component Video Jacks

NOTES

- Connect the DVD player directly to a TV. If the A/V cables are connected to a VCR, pictures may be distorted due to the copy protection system.
- S-Video output connector  
The video signals are divided into color (C) and brightness (Y) signals, achieving a clearer picture.  
If the TV is equipped with a S-Video input connector, we recommend connecting it to the this product's S-Video output connector using a commercially available S-Video connection cord.
- Super Audio CD sound is not output from the 2ch AUDIO OUT jacks and A/V EURO CONNECTOR.

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.

## PLAYING A DISC

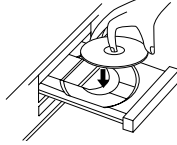
### Basic Playback

DVD-A DVD-V VCD CD SUPER AUDIO CD

#### Getting started

- Turn on the power of the TV, amplifier and any other components which are connected to the DVD.
- 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 then start from the first chapter or track of the disc. If the playback does not start automatically, press the **PLAY** button.
  - When you playback 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 encountered by 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.



#### NOTES:

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

### Pause


DVD-A DVD-V VCD CD  
SUPER AUDIO CD MP3 WMA

- 1 During playback, press the **PAUSE** button.
  - Playback will pause and sound will be muted.
- 2 To continue playback, press the **PLAY** button.




### 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-A DVD-V

- 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.
- 2 Press the **numeric buttons** to select the desired title.
  - Playback will begin at the selected title.
- 3 Press the **RETURN** button to go back to the title menu.

### CALLING UP A MENU SCREEN DURING PLAYBACK

DVD-V

- Press the **MENU** button to call up the DVD main menu.
- 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.

### CANCELLING AND CALLING BACK PBC FUNCTION

VCD

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

### General Features

DVD may contain menus to navigate the disc and access special features. Press the appropriate numerical key 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.

### AUDIO-EX Mode

- 1 Press the **AUDIO EX.** button on the front panel to output analog audio signals only (No video signal will be output, and the display will be turned off.).
  - The AUDIO EX. indicator will light up.
  - The higher quality sound will be achieved.



Step by Step Playback



- During playback, press the **PAUSE** button.
  - Playback will pause and sound will be muted.

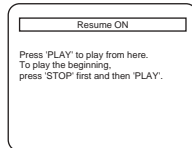


- The disc advances by one frame each time the **PAUSE** button is pressed.
- To exit step by step playback, press the **PLAY** button.

Resume



- During playback, press the **STOP** button.
  - Resume message will appear on the TV screen.

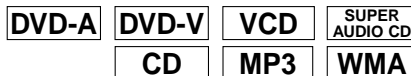


- Press the **PLAY** button, playback will resume from the point at which playback was stopped.
  - To cancel resume, press the **STOP** button twice.

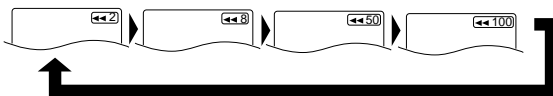
NOTES:

- The resume playback takes a little longer to take place compared to the normal playback.
- Some Video CDs with PBC function resume playback from the beginning of the track.
- The resume information stays on even when the power is switched off.

Fast Forward / Reverse Search



- During playback, press the **FF** or **REW** button repeatedly to select the required forward or reverse speed: x2, x8, x50, x100.
  - If you are using **FF** or **REW** on the front panel, press and hold it for more than 1.5 sec (the longer you hold it, the faster the speed will be). When you reach the desired speed, release the button.

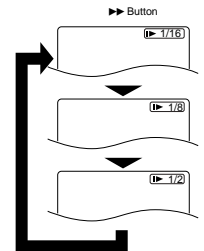


- For Video CDs, the playback speed is x2, x8 or x30.
  - For Audio CDs, the speed is fixed at x16.
  - For Super Audio CDs, the speed is fixed at x16.
  - For MP3 and WMA the speed is fixed at x8.
- To return to normal playback, press the **PLAY** button.

Slow Forward / Slow Reverse



- During playback, press the **PAUSE** button.
- Press the **SLF** or **SLR** button.
  - Slow motion playback will begin and sound will be muted.
- Press the **SLF** or **SLR** button repeatedly to select the required speed: 1/16, 1/8, 1/2 of the normal playback.
  - If you are using **SLF** or **SLR** on the front panel, press and hold it for more than 1.5 sec (the longer you hold it, the faster the speed will be). When you reach the desired speed, release the button.



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

NOTE:

- Only Slow Forward is available when playing Video CD. Forward speed can be selected from 1/16, 1/8, or 1/2.

Zoom

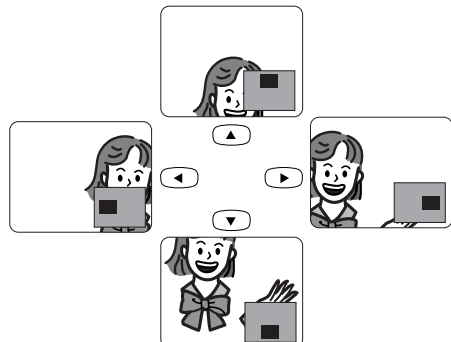


The Zoom function allows you to enlarge the video image and to pan through the enlarged image.

- Press the **ZOOM** button during playback.
  - Playback will continue.
- Press the **ZOOM** button repeatedly to select the required zoom factor: x2, x4 or OFF.
  - Only x2 zoom is available on Video CDs.



- Use the **cursor buttons** ( **▲** / **▼** / **▶** / **◀** ) to move the zoomed picture across the screen.



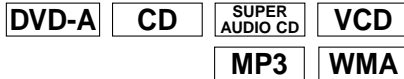
- To exit zoom mode, press the **ZOOM** button to OFF.

NOTES:

- Zooming function does not work while disc menu is shown.
- x4 zoom is not available on some discs.

## PLAYING A DISC

### Track



There are three ways to begin playback on a DVD-Audio, Audio CD, Super Audio CD, Video CD, MP3 or WMA disc at a specific Track.

#### By using the Numeric buttons (Except for DVD-Audio)

- 1 Press the **numeric buttons** to enter the desired Track number.
  - Playback will start at the selected track.
  - For single digit tracks (1-9), press a single number (eg. track 3, press 3).
  - To play track 26, press +10, 2, 6 on the numerical button.

#### By using the SEARCH MODE button (DVD-Audio/Audio CD/Super Audio CD/Video CD)

- 1 Press the **SEARCH MODE** button.
  - The track search display appears.



- 2 Within 30 seconds, select a desired track number using the **numeric buttons**. For single digits press "0" first.
  - Playback will start at the selected track.

#### NOTE:

- Playback must first be stopped (in resume mode) when selecting tracks from DVD-Audio discs.

#### 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 DVD display panel.
- If any **SKIP** button is pressed while the playback is paused, the playback will be paused again after skipping to the next track.

#### NOTE:

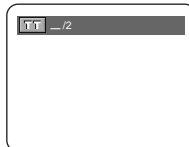
- The **SKIP ◀◀▶▶** buttons are not available when playback is stopped.

### Title / Chapter Search

DVD-V

#### By using the SEARCH MODE buttons

- 1 Press the **SEARCH MODE** button once for the Chapter search, twice for the Title search 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.

### Page Selection

DVD-A

Some DVD Audio discs that include still images are provided with a selection of images you can choose from.

- 1 Press the **MODE** button twice during playback.



- 2 Press the **ENTER** button.
  - It is in the ready state for you to enter the page number.
- 3 Press the **numeric** button to select the image of your choice.

#### NOTE:

- Press the **MODE** button once when 5.1CH is selected as the audio channel in the audio setting of the setup menu.

### Playing From a Desired Group

DVD-A

- 1 During playback or in stop mode, press the **SEARCH MODE** button twice.
- 2 Press the **numeric buttons** to select a group.
  - The Group will be located and playback will start.

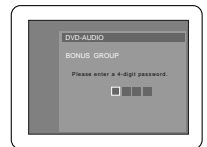


### Playback of the Bonus Group

DVD-A

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

- 1 In stop mode, press the **SEARCH MODE** button to open the group search screen.
- 2 Press the **numeric buttons** to select a bonus group number.
  - The password popup window appears.
- 3 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.



#### NOTE:

- In some cases the password window is displayed on the menu screen. Follow the instructions given on the screen.
- Once the password is entered, it can be played back repeatedly until the disc is removed from the disc tray.

### Time Search



- 1 During playback, press the **SEARCH MODE** button three times (CD, Super Audio CD, VCD: twice) to display the Time Search on the TV screen.
- 2 Within 30 seconds, enter a desired disc time with the **numeric buttons**.
  - Playback will start at the specified time.



- 3 Press the **CLEAR** button to erase the incorrect input.

**Repeat**

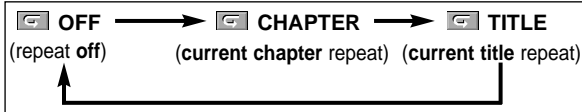
- The **REPEAT** button is available only during playback.

**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.



**NOTES:**

- Repeat Title/Chapter is not available with some scenes.
- The REPEAT setting will be cleared when moving to other title or chapter.

**REPEAT TRACK**

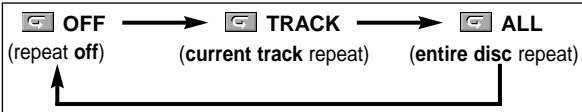
**CD**

**SUPER AUDIO CD**

**VCD**

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:**

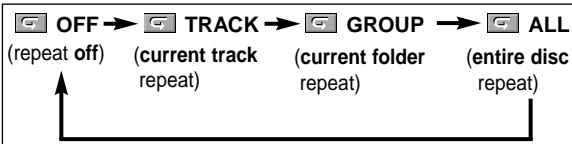
- The REPEAT setting will be cleared when moving to other track.
- Repeat playback does not function during A-B repeat playback.
- Repeat playback is not available when playing the Video CD with PBC function.

**DVD-A**

**MP3**

**JPEG**

**WMA**



**A-B REPEAT**

**DVD-A**

**DVD-V**

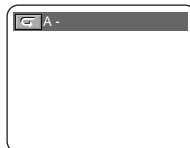
**CD**

**SUPER AUDIO CD**

**VCD**

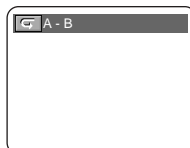
- 1 Press the **A-B REPEAT** button at your chosen starting point.

- **A-** appears briefly on the TV screen.

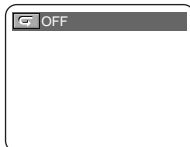


- 2 Press the **A-B REPEAT** button again at your chosen end point.

- **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 DVDs), or current track (for Audio CDs).
- 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.

**Program**

**CD**

**SUPER AUDIO CD**

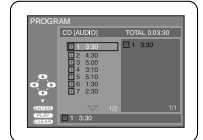
You may determine the order in which tracks will play.

- 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 program.



- 3 Press the **PLAY** button to play the programmed tracks.

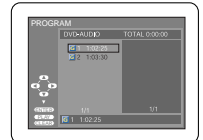
**NOTES:**

- 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 track in the usual way. (Program cleared)
- Up to 99 programs can be entered.
- 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 22 for program playback of MP3, WMA, and JPEG.

**DVD-A**

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

- The group selection screen will appear.



- 2 Press the **cursor buttons** (▲ or ▼) to select a group, then press the **ENTER** button.

- The track selection screen will be displayed.
- It takes approximately five seconds until the track selection screen appears.

- 3 Press the **cursor buttons** (▲ or ▼) to select a track, then press the **ENTER** button.

- Press ◀ to go back to the group selection screen from the track selection screen.

- 4 Press the **PLAY** button to play the programmed tracks.

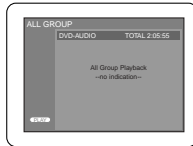
**NOTES:**

- It may take time for all the respective track times to be displayed.
- The programmed content is retained until the power is turned off or the disc tray is opened.
- If eight or more tracks have been set in a program, the user can switch the right part of the screen with the **SKIP** button ◀◀ or ▶▶.

**Playback of All Groups**

DVD-A

- In stop mode, press the **MODE** button.
  - ALL GROUP screen appears.



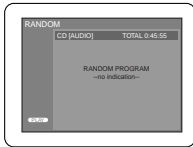
- Press the **PLAY** button to play.

**Random Playback**

CD SUPER AUDIO CD

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

- In stop mode, press the **MODE** button twice.
  - RANDOM screen appears.



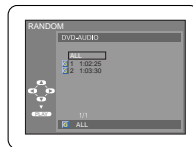
- Press the **PLAY** button to start random playback.

**NOTES:**

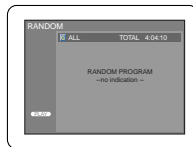
- If you wish to repeat the current track in the random selection, press the **REPEAT** button repeatedly until **TRACK** appears during playback. If you wish to repeat the entire random selection press the **REPEAT** button repeatedly until **ALL** appears during playback.
- Refer to page 22 for random playback of MP3, WMA, and JPEG.

DVD-A

- In stop mode, press the **MODE** button three times.
  - The group selection screen will appear.



- Press the **cursor buttons** (▲ or ▼) to select the desired group to playback randomly, then press the **ENTER** button.
  - RANDOM screen will appear.



- Press the **PLAY** button
  - Random playback will start.

**MP3 / JPEG / WMA Playback**

MP3 JPEG WMA

This DVD player can reproduce images and sounds from data recorded in MP3, JPEG and WMA formats on CD-R and CD-RW discs.

The DVD player can also run JPEG files stored on Kodak picture CD.

The user can enjoy picture images on the television set by reproducing picture CDs.

\* Picture CD is a service to convert a photograph taken by conventional film camera into digital data and write the data on a CD.

For details of Picture CD, contact a shop that deals with developing service of Kodak Inc.

**Information on MP3, JPEG and WMA 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.
- \* This 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)”, “.jpeg (JPEG)” and “.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 of “.mp3 (MP3)”, “.jpg (JPG)”, “.jpeg (JPEG)” and “.wma (WMA)”.

When a disc with MP3, JPEG or WMA files is inserted in the DVD player, the track menu will appear on the TV screen, and number of tracks is displayed on the front panel.

- Place the disc in the tray with the label facing up.

**For discs on which MP3, JPEG or WMA tracks are recorded:**

- An MP3, JPEG or WMA track menu screen appears.
- 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.
- If the picture extends beyond the scope of screen, a down arrow “▼” appears, indicating that the user can view another part of the picture on the next page. If an up arrow “▲” appears, it indicates 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 “▼”.
- The system can recognize up to 255 groups (or folders) and up to 256 tracks. (This applies to the case where mixed MP3, JPEG and WMA files are recorded.)
- 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 disk on which data is recorded in a multi-session.
- For more details of recording systems, see the instruction manual for the CD-R / CD-RW drive or the writing software.

Applicable MP3 file		Remarks
Sampling frequency	44.1kHz 48kHz	<ul style="list-style-type: none"> <li>• It is prohibited to record MP3 sound on a digital device when connection is made digitally.</li> <li>• MP3 files recorded at fixed bit rate of 112 kbps or higher are recommended.</li> </ul>
Type	MPEG1 audio layer 3	

Applicable JPEG file		Remarks
Size of image	Upper limit: 6300x5100 dots Lower limit: 32x32 dots	<ul style="list-style-type: none"> <li>• A JPEG image that extends beyond the screen is reduced so that it will be displayed within the screen.</li> </ul>

Applicable WMA file		Remarks
Sampling frequency	44.1kHz 48kHz	• Those frequencies are applicable to WMA version 8 only, not 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 8	• A prohibition “disable” symbol will appear if the user attempts to run a non-reproducible file such as copy-right-protected.

**For discs of JPEG or Kodak picture CD:**

- A JPEG or Kodak Picture CD menu appears.
- If all menu items cannot be displayed in the screen scope, a prompt symbol “▶▶” appears at the right bottom of the screen, indicating that the user can view remaining items on the next page. If another prompt symbol “◀◀” 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 a prompt symbol “▶▶” is shown at the right bottom, use the **SKIP ▶▶** button to view the next page. If another prompt symbol “◀◀” is shown at the left bottom, use the **SKIP ◀◀** button to view the previous page.
- It may take some time until all menu items are displayed on the menu screen.
- 1 For JPEG, press the **cursor buttons (▲/▼)**, or for Kodak Picture CD, press the **cursor buttons (◀/▶/▲/▼)**, select a desired group or track to be played, then press the **PLAY** or **ENTER** button.
- If an MP3 or WMA file is selected, reproduction will start from the selected track and go to the next one in turn.
- If a JPEG or Kodak picture CD file is selected, an image will be reproduced from the selected track and go to the next one in turn.  
A track is displayed for five seconds and then the next track is displayed.  
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.
- If a group is selected, press the **cursor buttons ▲/▼** to select a desired group, then press the **▶**, **PLAY** or **ENTER** button to select a track.  
If you press the **PLAY** or **ENTER** button, reproduction of the picture will start.

**Notes on MP3, JPEG and WMA:**

- Select “FIRST PLAY” and press the **PLAY** button, playback from the top of the disc in the order of tracks and groups.
- The ninth and deeper hierarchies cannot be played.
- The name of group and track can be displayed in up to 25 characters. Unrecognizable characters will be replaced with asterisks.
- Un-reproducible groups or tracks may be displayed depending on the recording conditions.
- If the **TOP MENU** button is pressed when a file list is displayed, “FIRST PLAY” will be highlighted.

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

**Notes on Kodak picture CD:**

- A press on the **STOP** button will highlight the previously displayed track on the menu screen.  
Press the **STOP** button again or press the **TOP MENU** button, and the menu screen displays Tracks 1 to 6, where Track 1 is highlighted.

**Slide Show Mode**

JPEG

You can switch to the slide show mode during playback.

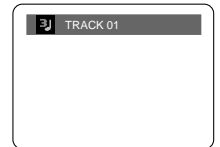
- 1 Press the **MODE** button during playback.
  - The slide show mode screen will appear.
  - The slide show mode cannot be switched when it is stopped, or from the file list screen or the Picture CD menu screen.
- 2 Press the **ENTER** button.
  - The slide show mode will change.
    - 1 The entire image appears in one time.
    - 2 The image appears gradually and then disappears.
- 3 Press the **MODE** button to exit.

**On-Screen Information**

MP3 JPEG WMA

You can check each file during playback.

- 1 Press the **DISPLAY** button.
  - The name of the file currently in play will be displayed.



<Example: MP3>

- 2 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.
  - ◁ will be displayed when the repeat play has been selected.
  - ◁ T - indicates Track repeat
  - ◁ G - indicates Group (folder) repeat
  - ◁ A - indicates Disc repeat



- 3 Press the **DISPLAY** button again to exit.
  - During program or random playback, each playback status will be displayed when you press the **DISPLAY** button. Then press the **DISPLAY** button again to exit.

**Track Selection**

MP3 JPEG WMA

- 1 Press the **SEARCH MODE** button during playback.
  - The **FILE LIST** will appear.
- 2 Select a desired track using the **cursor buttons (▼/▲/▶/◀)**.
  - Press the **▶** button when you want to go to the next hierarchy.
  - Press the **◀** button when you want to go back to the previous hierarchy.
- 3 Press the **PLAY** button to start playing

**NOTES:**

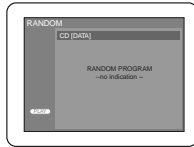
- Press the **SEARCH MODE** button to exit.
- Some selections may require additional time to be recognized.
- During play, a desired track can be directly searched. Just type in the **TRACK** number with the numeric buttons.
- If the typed **TRACK** number is not available, the “disable” symbol appears and the direct search mode is cancelled.
- Playback cannot be started from a desired time count.
- Pressing the **SKIP** button **▶▶** or **◀◀** will play the next or previous file.
- The **SEARCH** button is not effective for Picture CD.

## PLAYING A DISC

### Random Playback

**MP3** **JPEG** **WMA**

- 1 Press the **MODE** button twice while playback is stopped.



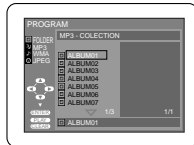
- 2 Press the **PLAY** button to play the tracks in random order.
  - Random play starts.
  - For a disc containing mixed MP3, JPEG and WMA files, random play of those files will be performed.

### Program

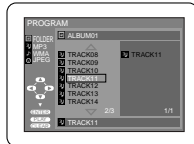
**MP3** **JPEG** **WMA**

This feature allows you to program a MP3 disc to play in a desired sequence.

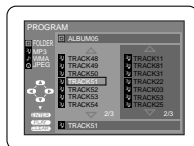
- 1 Press the **MODE** button while playback is stopped.
  - The PROGRAM screen will appear.



- 2 Press the **▲** or **▼** button to select a group, then press the **ENTER** button.
  - A track selection screen appears.



- 3 Press the **▲** or **▼** button to select a track, then press the **ENTER**, button to save it in a program.
  - Press the **CLEAR** button to erase the incorrect input.
  - The programmed track is displayed in the right-hand screen.
  - If the entire program cannot be displayed at once on the screen, "▼" appears to go to the next page.
  - Pressing the **◀** button 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.
  - Programmed play starts.

#### NOTES:

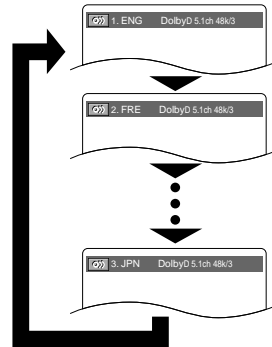
- Press the **CLEAR** button, and the last-programmed entry will be deleted.
- Press the **RETURN** button, and the STOP screen will show up with the program contents in memory.
- Press the **STOP** button once and then press the **PLAY** button, playback will restart from the beginning of the track being played previously.(Program cleared)
- The program setting will be cancelled when the power is turned off or the disc tray is opened.
- Up to 99 tracks can be set in a program.
- If a disc is inserted that contains mixed MP3, JPEG and WMA files, program setting allows 99 tracks for 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** button **◀◀** or **▶▶**.

### Audio Language or Sound Mode

**DVD-V**

The DVD player allows you to select a language during DVD disc (if multi language available) playback.

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



...

#### NOTES:

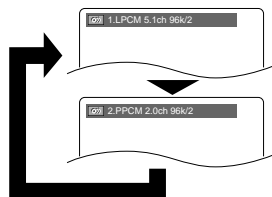
- The sound mode cannot be changed during playback of discs not recorded in double sound.
- Pressing the **AUDIO** button may not work on some DVDs with multiple audio languages (e.g. DVDs which allow audio language setting on the disc menu).
- The sound mode cannot be changed during playback of a Super Audio CD. (It may be possible to switch the sound mode when playing back discs including a CD area.)

**DVD-A**

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

#### NOTE:

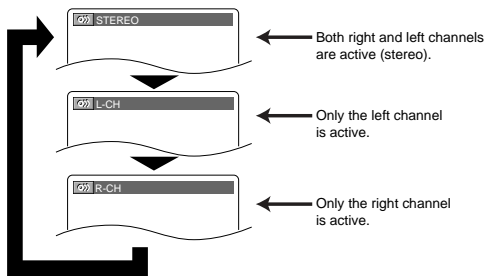
- "2. PPCM 2.0ch 96k/2" can be displayed even if there is no second sound. (The sound number during playback remains as 1.)



### Stereo Sound Mode

**CD** **VCD**

- 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:**

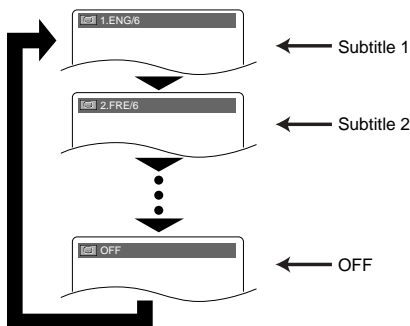
- If the Virtual Surround setting is ON, the sound mode will be fixed to STEREO, and can not be changed.
- Stereo sound mode will not be changed when playing DTS CD.

**Subtitle Language**

DVD-V

The DVD player allows you to select a language for subtitle during DVD disc (if available) playback.

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

**NOTES:**

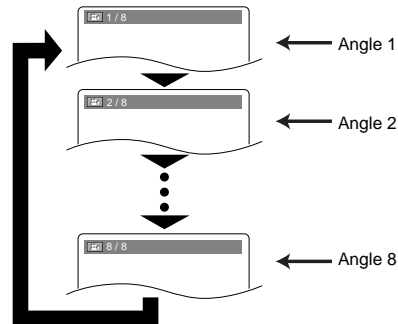
- Some discs allow audio language setting/subtitle language setting on the disc menu. (Operation varies between discs, so refer to the manual accompanying the disc.)
- If the desired language is not shown after pressing the **SUBTITLE** button several times, the disc does not have subtitles in that language.
- 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 28.)

**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.

**Changing the On-Screen Display**

DVD-V

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

- 1 Press the **DISPLAY** button during playback to show current Chapter.
  - The elapsed and remaining playing time of the current chapter will be displayed.
- 2 Press the **DISPLAY** button again to show current Title.
  - The elapsed and remaining playing time of the current title will be displayed.
- 3 Press the **DISPLAY** button the third time.
  - The BIT RATE and the current repeat setting will be displayed.
  - If you are playing a dual layered disc, the layer number will also be displayed ( L0: Layer 0 is playing. L1: Layer 1 is playing).
- 4 Press the **DISPLAY** button the fourth time to remove the display.

CD SUPER AUDIO CD VCD

- 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.
- 3 Press the **DISPLAY** button for the third time to remove the display.

**DVD-A**

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

- 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 for the third time.
  - The BIT RATE and the current repeat setting will be displayed.
  - If you are playing a dual layered disc, the layer number will also be displayed ( L0: Layer 0 is playing. L1: Layer 1 is playing).
- 4** Press the **DISPLAY** button for the fourth time to remove the display.



**Hints for the On-Screen Display**

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

**Marker Setup Screen**



Use markers to memorise your favourite places on a disc.

- 1** Press the **SEARCH MODE** button four times (CD, Super Audio CD, VCD: three times) during playback.
  - The display screen and Markers will appear on the TV screen.
- 2** Press the ◀ or ▶ button to select 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 and ensure that "- : - : -" appears in the display.
- 3** When reaches the desired point, press the **ENTER** button.
  - The Title or Track and elapsed playing time will appear in the TV screen.
- 4** To return to the Marker later, press the **SEARCH MODE** button four times (CD, Super Audio CD, VCD: three times) during playback and the ◀ or ▶ button to choose the desired marker, then press the **ENTER** button.

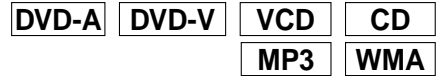


**NOTES:**

- Opening the disc tray or turning off the power or select AC at step **2** and press the **ENTER** button will erase all Markers.
- To clear a marker, using the ◀ or ▶ button, position the cursor on to the marker number to be cleared and press the **CLEAR** button.
- You can mark up to 10 points.

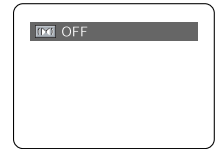
- 5** Press the **SEARCH MODE** or **RETURN** button to exit.

**Virtual Surround**



You can enjoy stereophonic visual space on your existing 2 channel stereo system.

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



- 2** Press the **ENTER** button to set it 1(Natural effect), 2(Emphasized effect) or OFF.
- 3** Press the **RETURN** button to exit.

**NOTES:**

- Select Virtual Surround OFF or adjust the volume down if the sound is distorted.
- When 5.1CH is selected as the audio channel in the audio setting of the setup menu, Virtual Surround does not function. Details are on page 26.
- The Virtual Surround setting is not available for Super Audio CDs. (It may be possible to use the Virtual Surround setting when playing back discs that include a CD area.)



In Setup menu, QUICK mode and CUSTOM mode 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.

### Language Setting

Language options are not available with some discs.

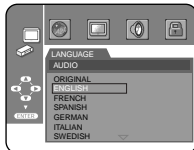
- 1 Press the **SETUP** button in STOP mode.
- 2 Press the **▶** button to select CUSTOM, then press the **ENTER** button.
  - CUSTOM mode will appear.
- 3 Press the **◀** or **▶** button to select LANGUAGE, then the **ENTER** button to confirm.



- 4 Press the **▲** or **▼** button to select the below items, then press the **ENTER** button.

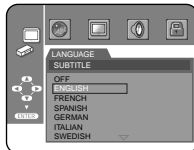
#### AUDIO (Default : ENGLISH)

- 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.



- 5 Press the **▲** or **▼** button to select a setting, then press the **ENTER** button.
  - If OTHERS is selected in the AUDIO, SUBTITLE or DISC MENU screen, press four-digit number to enter the code for the desired language. (Refer to the language code list on page 28).
  - Only the languages supported by the disc can be selected.
- 6 Press the **SETUP** button to exit.

#### NOTE:

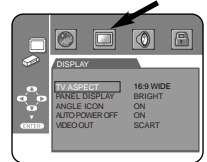
- Language Setting for Dialog and Subtitle is not available with some discs. Then use the **AUDIO** and **SUBTITLE** buttons. Details are on pages 22 and 23.

### Display Setting

You can change certain aspects of the DVD display screens, on-screen messages and the display panel on the front of the DVD player.

- 1 Press the **SETUP** button in STOP mode.
- 2 Press the **▶** button to select CUSTOM, then press the **ENTER** button.
  - CUSTOM mode will appear.

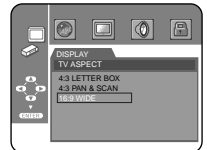
- 3 Press the **◀** or **▶** button to select DISPLAY, then the **ENTER** button to confirm.



- 4 Press the **▲** or **▼** button to select the below items, then press the **ENTER** button.

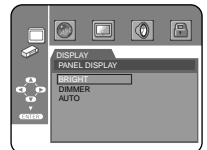
#### TV ASPECT (Default : 16:9 WIDE) **QUICK**

- Press the **▲** or **▼** button for an item selection, then press the **ENTER** button.
- 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 WIDE if a wide-screen TV is connected to the DVD player.



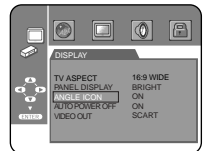
#### PANEL DISPLAY (Default : BRIGHT)

- Press the **▲** or **▼** button for an item select BRIGHT, DIMMER and AUTO, then press the **ENTER** button.
- This adjust the brightness of the display panel with the factory default BRIGHT.
- When AUTO is selected, the display dims only during playback.



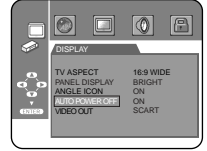
#### ANGLE ICON (Default : ON)

- Press the **ENTER** button repeatedly to turn Angle mark ON or OFF.



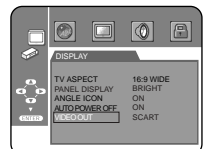
#### AUTO POWER OFF (Default : ON)

- Press the **ENTER** button repeatedly to turn Auto Power ON or OFF.
- It will turn the DVD player to off automatically after 35 minutes of no use.



#### VIDEO OUT (Default : SCART)

- Press the **ENTER** button repeatedly to select SCART or COMPONENT.
- Select SCART for video output from the A/V EURO CONNECTOR jack.
- Select COMPONENT for video output from the COMPONENT VIDEO OUT jacks.



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

#### NOTES:

- Be sure to press the **SETUP** button, or the setting will not work.
- Be sure not to use both the A/V EURO CONNECTOR and Component Video jacks for video output at the same time.
- When changing the VIDEO OUT setting (SCART or COMPONENT), connect to a VIDEO jack or an S-VIDEO jack on the TV. If the setting is changed, for example, to COMPONENT while the A/V EURO CONNECTOR is used to connect to the TV, a distorted video signal may be output.

## Audio Setting

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

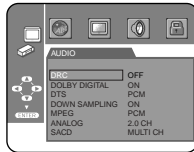
- 1 Press the **SETUP** button in STOP mode.
- 2 Press the **▶** button to select CUSTOM, then press the **ENTER** button.
  - CUSTOM mode will appear.
- 3 Press the **◀** or **▶** button to select AUDIO, then the **ENTER** button to confirm.



- 4 Press the **▲** or **▼** button to select the below items, then press the **ENTER** button.
 

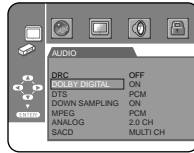
**DRC (Dynamic Range Control) (Default : OFF)**

- To compress the range of sound volume.



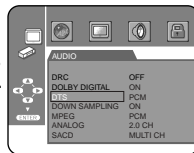
**DOLBY DIGITAL (Default : ON) QUICK**

- Set to ON when the player is connected to Dolby Digital Decoder.
- ON : Output by Dolby Digital  
 OFF: Convert the Dolby Digital to PCM



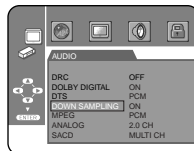
**DTS (Default : PCM)**

- DTS: Output by DTS sound  
 Set to DTS when the unit is connected to DTS Decoder.
- PCM: Convert the Dolby Digital to PCM



**DOWN SAMPLING (Default : ON)**

- Set to ON when outputting in 48kHz.

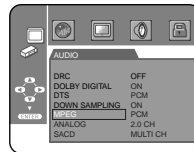


When playing disc with copyright Protection

- Even if you select OFF, copyright protection will be activated and sound will be down sampled at 48kHz.

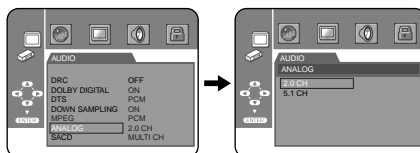
**MPEG (Default: PCM)**

- MPEG: Output MPEG sound Set to ON when the unit is connected to an MPEG Decoder.
- PCM: Convert the MPEG sound to PCM.



**ANALOG (Default : 2.0 CH)**

2.0 CH : Output 2ch sound



5.1 CH : Output Multi channel sound

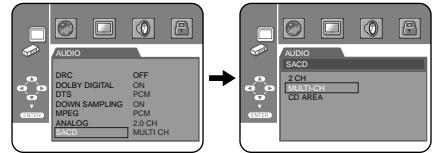
**SACD (Default : MULTI-CH)**

2 CH : Playback a 2ch area.

MULTI-CH : Playback a multi-ch area.

CD AREA : Playback a CD area.

- When choosing MULTI-CH, choose 5.1CH as well as the audio channel in the audio setting of the setup menu.



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

## Speaker Setting

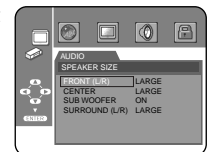
When 5.1CH is selected for analog out, some speaker settings will be required.

- 1 Press the **▲** or **▼** button to select 5.1CH, then press the **ENTER** button.
- 2 Press the **▲** or **▼** button to select the below items, then press the **ENTER** button.



**SPEAKER SIZE**

- Press the **▲** or **▼** button 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.
- When in playback of DVD audio, the sound may not come out as set 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.

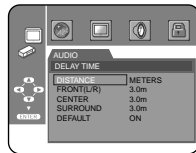
FRONT(L/R): LARGE  
 CENTER: LARGE  
 SUB WOOFER: ON  
 SURROUND(L/R): LARGE

**DELAY TIME**

To enjoy 5.1-channel surround sound, the distance between the listening position and all speakers (excluding the Sub woofers) 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 ▲ or ▼ button to select the setting item, then press the **ENTER** button.

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

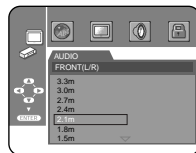
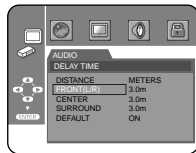


**DISTANCE (Default : METERS)**

**METERS**(when the **ENTER** button is pressed):  
The unit of distance is set to meters ("m").  
**FEET**(when the **ENTER** button is pressed):  
The unit of distance is set to feet ("ft").

**FRONT(L/R), CENTER, SURROUND(L/R) (Default : 3.0m)**

**FRONT(L/R):**  
The distance can be set within the range of 0 to 60 m.  
**CENTER, SURROUND:**  
These are depends on the setting value of FRONT(L/R).



**NOTES:**

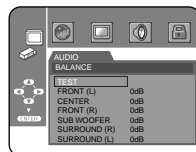
- It is not possible to adjust this item if CENTER and SURROUND have been set to OFF in the SPEAKER SIZE setting.
- When DEFAULT is selected and the **ENTER** button is pressed, all the items are restored to their factory default settings.

**BALANCE**

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

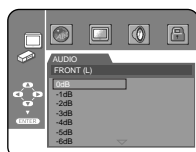
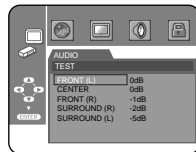
**TEST:**

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



**CHANNEL LEVEL:**

- Press the ▲ or ▼ button to select the speaker to set, then press the **ENTER** button.
- Press the ▲ or ▼ button 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 SUBWOOFER.
- It is not possible to adjust this item for the speaker that has been set to OFF in Speaker Size setting.

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

**Parental Control**

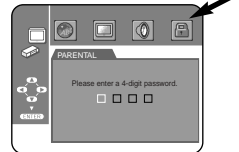
Ratings Control limits playback of discs with unsuitable audience ratings. A four digit code established by the user will unlock the parental lock.

This feature allows you to prevent discs with objectionable scenes from being played by your children.

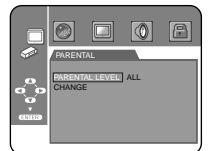
**PARENTAL LEVEL**

Rating 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.

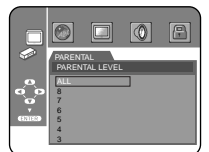
- 1 Press the **SETUP** button in STOP mode.
- 2 Press the ► button to select CUSTOM, then press the **ENTER** button.
- 3 Press the ◀ or ▶ button to select PARENTAL, then press the **ENTER** button.
- 4 Enter your four-digit password then press the **ENTER** button.



- 5 Press the ▲ or ▼ button to select PARENTAL LEVEL, then press the **ENTER** button.



- 6 Press the ▲ or ▼ button to select the desired level, then press the **ENTER** button.



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

**NOTES:**

- When doing this for the first time, enter any 4 digits. (except for 4737) That number will be used as the password from the second time onward.
- To change the password, press the ▲ or ▼ button to select CHANGE at step 5, then press the **ENTER** button. Enter the four-digit password, then press the **ENTER** button.
- With some DVDs, it may be difficult to find if they are compatible with parental lock. Be sure to check if the parental lock function operates in the way that you have set.
- Record the password in case you forget it.

**IF YOU FORGET THE PASSWORD**

- 1 Press 4, 7, 3, 7 at step 4.
  - Password will be cleared and rating level will be set to ALL.
- 2 Repeat steps 5-7 to re-establish the parental lock.

**CONTROL LEVELS**

- **ALL**  
Parental lock is cancelled.
- **Level 8**  
DVD software of any grade (adult/general/children) can be played back.
- **Levels 7 to 2**  
Only DVD software intended for general use and children can be played back.
- **Level 1**  
Only DVD software intended for children can be played back, with those intended for adult and general use prohibited.

# DVD SETUP

<u>Language</u>	<u>Code</u>	<u>Language</u>	<u>Code</u>	<u>Language</u>	<u>Code</u>	<u>Language</u>	<u>Code</u>
	<b>A-B</b>	Frisian	5271	Malay	5965	Somali	6561
Abkhazian	4748	Galician	5358	Malayalam	5958	Spanish [SPA]	5165
Afar	4747	Georgian	5747	Maltese	5966	Sundanese	6567
Afrikaans	4752	German [GER]	5051	Maori	5955	Swahili	6569
Albanian	6563	Greek [GRE]	5158	Marathi	5964	Swedish [SWE]	6568
Amharic	4759	Greenlandic	5758	Moldavian	5961	<b>T</b>	
Arabic	4764	Guarani	5360	Mongolian	5960	Tagalog	6658
Armenian	5471	Gujarati	5367	Nauru	6047	Tajik	6653
Assamese	4765	Hausa	5447	Nepali	6051	Tamil	6647
Aymara	4771	Hebrew	5569	Norwegian [NOR]	6061	Tatar	6666
Azerbaijani	4772	Hindi	5455	<b>O-R</b>		Telugu	6651
Bashkir	4847	Hungarian [HUN]	5467	Occitan	6149	Thai	6654
Basque	5167	<b>I-K</b>		Oriya	6164	Tibetan	4861
Bengali;Bangla	4860	Icelandic [ICE]	5565	Oromo(Afan)	6159	Tigrinya	6655
Bhutani	5072	Indonesian	5560	Panjabi	6247	Tonga	6661
Bihari	4854	Interlingua	5547	Pashto;Pushto	6265	Tsonga	6665
Bislama	4855	Interlingue	5551	Persian	5247	Turkish [TUR]	6664
Breton	4864	Inupiak	5557	Polish	6258	Turkmen	6657
Bulgarian	4853	Irish [IRI]	5347	Portuguese [POR]	6266	Twi	6669
Burmese	5971	Italian [ITA]	5566	Quechua	6367	<b>U-Z</b>	
Byelorussian	4851	Japanese [JPN]	5647	Rhaeto-Romance	6459	Ukrainian	6757
<b>C-E</b>		Javanese	5669	Romanian [RUM]	6461	Urdu	6764
Cambodian	5759	Kannada	5760	Russian [RUS]	6467	Uzbek	6772
Catalan	4947	Kashmiri	5765	<b>S</b>		Vietnamese	6855
Chinese [CHI]	7254	Kazakh	5757	Samoan	6559	Volapuk	6861
Corsican	4961	Kinyarwanda	6469	Sangho	6553	Welsh	4971
Croatian	5464	Kirghiz	5771	Sanskrit	6547	Wolof	6961
Czech	4965	Kirundi	6460	Scots Gaelic	5350	Xhosa	7054
Danish [DAN]	5047	Korean [KOR]	5761	Serbian	6564	Yiddish	5655
Dutch [DUT]	6058	Kurdish	5767	Serbo-Croatian	6554	Yoruba	7161
English [ENG]	5160	<b>L-N</b>		Sesotho	6566	Zulu	7267
Esperanto	5161	Laothian	5861	Setswana	6660		
Estonian	5166	Latin	5847	Shona	6560		
<b>F-H</b>		Latvian;Lettish	5868	Sindhi	6550		
Faroese	5261	Lingala	5860	Singhalese	6555		
Fiji	5256	Lithuanian	5866	Siswat	6565		
Finnish [FIN]	5255	Macedonian	5957	Slovak	6557		
French [FRE]	5264	Malagasy	5953	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 22 and 23. If you choose any other languages, '---' will be displayed instead. (3-letter language code is written in bracket.)

**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, adrasive cleaning agents or antistatic spray intended for analogue records.

**Cleaning the disc lens**

- If the player still does not perform properly when it is operated while referring to the relevant sections and to “TROUBLESHOOTING GUIDE” in this Operating Instruction, 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 which have the following logos on them.  
(Optical audio digital discs.)
- Handle the discs 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 the this product. Do not attempt to play such discs, as they may damage the player.



**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.

## TROUBLESHOOTING GUIDE

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

<b>Problem</b>	<b>Solution</b>
<b>No power</b>	<ul style="list-style-type: none"> <li>–Check if the AC power cord is properly connected.</li> <li>–Unplug the outlet once, and wait for 5-10seconds and then plug it in again</li> </ul>
<b>No sound or picture</b>	<ul style="list-style-type: none"> <li>–Check if the TV is switched on.</li> <li>–Check the video connection</li> <li>–Check the VIDEO/AUDIO cable connections to the TV (See Connecting to a TV)</li> <li>–The sound of a Super Audio CD is not output from the 2ch AUDIO OUT jacks. Connect an audio cable to the 5.1ch AUDIO OUT jacks (FRONT L, R).</li> </ul>
<b>Distorted picture</b>	<ul style="list-style-type: none"> <li>–Sometimes a small amount of picture distortion may appear. This is not a malfunction.</li> <li>–Connect the player directly to the TV.</li> </ul>
<b>Completely distorted picture or black/white picture with DVD</b>	<ul style="list-style-type: none"> <li>–Connect DVD player directly to the TV.</li> <li>–Make sure the disc is compatible with the DVD player.</li> </ul>
<b>No sound or distorted sound</b>	<ul style="list-style-type: none"> <li>–Adjust the volume.</li> <li>–Check that the speakers are connected correctly.</li> </ul>
<b>No audio at digital output</b>	<ul style="list-style-type: none"> <li>–Check the digital connections.</li> <li>–Check if the audio format of the selected audio language matches your receiver capabilities.</li> </ul>
<b>Picture freezes momentarily during playback</b>	<ul style="list-style-type: none"> <li>–Check the disc for fingerprints/scratches and clean with a soft cloth wiping from center to edge.</li> <li>–Clean the disc</li> </ul>
<b>Disc can't be played</b>	<ul style="list-style-type: none"> <li>–Clean the disc</li> <li>–Ensure the disc label is facing up.</li> <li>–Check if the disc is defective by trying another disc.</li> <li>–Cancel the parental lock or change the control level.</li> <li>–Insert a correct disc that plays on this player.</li> </ul>
<b>No return to start-up screen when disc is removed</b>	<ul style="list-style-type: none"> <li>–Reset the player by switching the player off, then on again.</li> </ul>
<b>The player does not respond to the remote control</b>	<ul style="list-style-type: none"> <li>–Aim the remote control directly at the sensor on the front of the player.</li> <li>–Reduce the distance to the player.</li> <li>–Replace the batteries in the remote control.</li> <li>–Re-insert the batteries with their polarities (+/– signs) as indicated.</li> </ul>
<b>Buttons do not work or player stops responding</b>	<ul style="list-style-type: none"> <li>–To completely reset the player, unplug the AC cord from the AC outlet for 5-10 seconds.</li> </ul>
<b>Player does not respond to some operating commands during playback</b>	<ul style="list-style-type: none"> <li>–Operations may not be permitted by the disc. Refer to the instructions of the disc.</li> </ul>
<b>DVD player cannot read CDs/DVDs</b>	<ul style="list-style-type: none"> <li>–Use a commonly available cleaning CD/DVD to clean the lens before sending the DVD player for repair.</li> </ul>
<b>Angle does not switch</b>	<ul style="list-style-type: none"> <li>–The angle cannot be switched for DVDs which do not contain multiple angles. In some cases multiple angles are only recorded for specific scenes.</li> </ul>
<b>Playback does not start when the title is selected</b>	<ul style="list-style-type: none"> <li>–Check the “PARENTAL” setting.</li> </ul>
<b>The password for rating level has been forgotten</b>	<ul style="list-style-type: none"> <li>–Enter the default password “4737”, then your forgotten password will be cleared</li> </ul>
<b>No sound of Super Audio CDs is output</b>	<ul style="list-style-type: none"> <li>–Check if an audio cable is connected to the 5.1ch AUDIO OUT jacks (FRONT L,R).</li> </ul>

### NOTES:

Some functions are not available in specific modes, but this is not a malfunction. Read the description in this Operating Instruction for details on correct operations.

- Playback from a desired track and random playback are not available during program playback.

## SPECIFICATIONS

### SIGNAL SYSTEM

PAL color

### APPLICABLE DISCS

- (1) DVD-Audio/DVD-Video 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 (75 $\Omega$ /ohms)  
C output level: 0.30Vp-p  
Output connectors: S connectors, 1 set

### VIDEO OUTPUT

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

### COMPONENT OUTPUT

Y output level: 1Vp-p (75 $\Omega$ /ohms)  
Cb output level: 0.7Vp-p (75 $\Omega$ /ohms)  
Cr output level: 0.7Vp-p (75 $\Omega$ /ohms)  
Output connector: Pin jacks, 1 set

### AUDIO/VIDEO

21-pin scart jack

### AUDIO OUTPUT

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

### AUDIO OUTPUT PROPERTIES

- (1) Frequency response  
1 DVDs (linear PCM) : 4Hz to 22kHz (48 kHz sampling)  
: 4Hz to 44kHz (96 kHz sampling)  
: 4Hz to 88kHz (192 kHz sampling)  
2 CDs : 4Hz to 20kHz  
3 Super Audio CD : 4Hz to 100kHz
- (2) S/N ratio : 115dB
- (3) Total harmonic distortion : 1kHz CD: 0.003%
- (4) Dynamic range : DVD: 100dB  
CD: 98dB

### DIGITAL AUDIO OUTPUT

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

### POWER SUPPLY

AC 230V, 50Hz

### POWER CONSUMPTION

16W (Standby: 1.2W)

### MAXIMUM EXTERNAL DIMENSIONS

440 (width) x 75 (height) x 211 (depth) mm

### MASS

2.2Kg (4.9lbs)

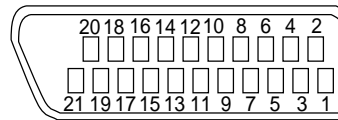
### REMOTE CONTROL UNIT

RC6400DV

Infrared pulse type

Supply: DC 3V, 2 R6P/AA batteries

## PIN CONNECTION(A/V EURO CONNECTOR)



### Contacts, signal levels and impedances

<b>Contact 1</b>	Audio Output (Right):	2.0Vrms/ 1k $\Omega$
<b>Contact 3</b>	Audio Output (Left):	2.0Vrms/ 1k $\Omega$
<b>Contact 4</b>	Audio, Ground	
<b>Contact 5</b>	RGB, Ground (Blue)	
<b>Contact 7</b>	RGB Output (Blue):	0.7Vp-p/75 $\Omega$
<b>Contact 8</b>	Function Select Switching Control	
	L: 0.0~2.0V DC	Power Off
	M: 4.5~7.0V DC	Wide-Screen Mode (16:9)
	H: 9.5~12.0V DC	Normal Mode (4:3)
<b>Contact 9</b>	RGB, Ground (Green)	
<b>Contact 11</b>	RGB Output (Green):	0.7Vp-p/75 $\Omega$
<b>Contact 13</b>	RGB, Ground (Red)	
<b>Contact 14</b>	RGB Switching Control, Ground	
<b>Contact 15</b>	RGB Output (Red):	0.7Vp-p/75 $\Omega$
<b>Contact 16</b>	RGB Switching Control	
	H: 3.3V DC	RGB Mode
<b>Contact 17</b>	Video Output Signal, Ground	
<b>Contact 18</b>	Video Input Signal, Ground	
<b>Contact 19</b>	Video Output (CVBS):	1.0Vp-p/75 $\Omega$
<b>Contact 21</b>	Common Ground (shielding)	

## **www.marantz.com**

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

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JAPAN	Marantz Japan, Inc.	35-1 Sagami Ohno 7-Chome, Sagamihara-shi, kanagawa 228-8505, Japan
U.S.A	Marantz America, Inc.	1100 Maplewood Drive, Itasca, IL 60143, U.S.A.
EUROPE	Marantz Europe B.V.	P.O. Box 8744, 5605 LS Eindhoven, The Netherlands

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