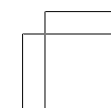
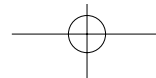
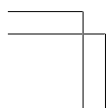
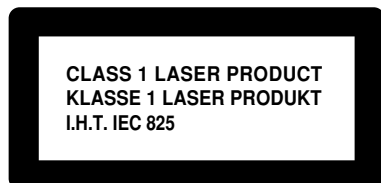
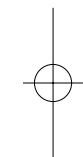
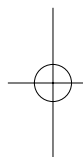


# marantz®

## Model DV2400 User Guide

### 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 verbend 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 cuando 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 lokalt.

### 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.

## CE MARKING

- English**  
The DV2400 is in conformity with the EMC directive and low-voltage directive.
- Français**  
Le DV2400 est conforme à la directive EMC et à la directive sur les basses tensions.
- Deutsch**  
Das Modell DV2400 entspricht den EMC-Richtlinien und den Richtlinien für Niederspannungsgeräte.
- Nederlands**  
De DV2400 voldoet aan de EMC eisen en de vereisten voor laag-voltage.
- Español**  
El DV2400 está de acuerdo con las normas EMC y las relacionadas con baja tensión.
- Italiano**  
Il DV2400 è conforme alle direttive CEE ed a quelle per i bassi voltaggi.
- Português**  
O DV2400 conforma com as diretrizes EMC e de baixa voltagem.
- Svenska**  
DV2400 är tillverkad i enlighet med EMC direktiven och direktiven för lågvoltsutrustning.
- Dansk**  
Model DV2400 er i overensstemmelse med EMC-direktivet og direktivet om lavspænding.

ENGLISH:

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

FINNISH:

VAROITUS! Laitteen käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

SWEDISH:

VARNING! Om apparaten används på annat sätt än vad som beskrivs i denna bruksanvisning kan användaren utsättas för osynlig laserstrålning som överskrider gränsen för laserklass 1 .

### 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.**

**VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINANAKYMATTÖMÄALLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.**

**VARNING! : OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRALEN.**

### 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.

### 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.

### Deutsch

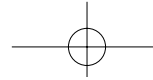
#### WARNHINWEISE

- 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.

### 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.



### 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.

### 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.

### 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 objetos 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.

### Svenska

#### VARNINGAR

- Utsätt inte utrustningen för regn eller fukt.
- Ta inte bort utrustningens hölje.
- För inte in föremål i utrustningen genom ventilationshålen.
- Hantera inte nätsladden 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.

### 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.

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.

#### Dolby Digital

The maximum 5.1 channels of audio used in the surround system (Surround Digital) for movie theaters is digital data compressed by the third generation algorithm encoder.



In order to enjoy Dolby Digital discs, this unit's digital output jack (either coaxial or optical) must be connected to the digital input jack of an AV amplifier or Dolby Digital decoder to enjoy the sound of Dolby Digital soundtracks.

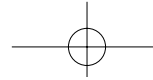
#### DTS

DTS stands for Digital Theater System. DTS is a surround system different from Dolby Digital that has become a popular surround sound format for movies. In order to enjoy the benefits of DTS encoded discs, the digital output jack (either coaxial or optical) of this player needs to be connected to an AV amplifier or receiver or to a DTS decoder to be able to enjoy the surround sound of DTS audio. DTS audio is not output from the analog audio outputs.



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

"DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.



## TABLE OF CONTENTS

<b>FOREWORD</b> .....	<b>1</b>	<b>VARIOUS PLAYING FUNCTIONS ...</b>	<b>10</b>
EQUIPMENT MAINS WORKING SETTING ...	1	SLOW PLAY .....	10
COPYRIGHT .....	1	STEP PLAY .....	10
<b>FEATURES</b> .....	<b>1</b>	REPEAT PLAY .....	10
<b>ABOUT DISCS</b> .....	<b>2</b>	A-B REPEAT PLAY .....	11
PLAYABLE DISCS .....	2	RANDOM PLAY .....	12
NOT PLAYABLE DISCS .....	2	PROGRAM PLAY .....	12
VIDEO FORMAT .....	2	CHANGING ANGLES .....	13
ABOUT DVD DISCS .....	2	ZOOM FUNCTION .....	13
ABOUT VIDEO CDS .....	2	CHANGING AUDIO TRACKS .....	13
ABOUT AUDIO CD .....	2	SWITCHING AUDIO CHANNELS .....	13
ABOUT MP3/WMA .....	3	CHANGING SUBTITLE LANGUAGES .....	13
<b>ADDITIONAL INFORMATION</b> .....	<b>3</b>	<b>SETUP MENU OPERATION</b> .....	<b>14</b>
<b>CONTROLS ON THE MAIN UNIT</b> .....	<b>3</b>	CONTENTS OF SETUP MENU .....	14
<b>CONTROL BUTTON ON THE</b>		VIDEO SETUP .....	14
<b>REMOTE CONTROL UNIT</b> .....	<b>4</b>	AUDIO SETUP .....	16
OPERATION OF REMOTE CONTROL UNIT ...	5	DISC SETUP .....	17
<b>CONNECTIONS</b> .....	<b>6</b>	SYSTEM SETUP .....	18
PRECAUTIONS CONCERNING CONNECTIONS ...	6	IF YOU HAVE FORGOTTEN THE PASSWORD, ..	19
COMPONENT VIDEO OUT CONNECTION		<b>TROUBLE SHOOTING</b> .....	<b>19</b>
(480i/480P) .....	7	<b>MAINTENANCE</b> .....	<b>19</b>
AV EUROCONNECTOR CONNECTION .....	7		
<b>BASIC OPERATIONS</b> .....	<b>8</b>		
PREPARATION .....	8		
PLAYING A DISC .....	8		
TO PAUSE PLAYING .....	8		
TO STOP PLAYING .....	8		
DIRECT SEARCH .....	9		
SKIP PLAY .....	9		
SEARCH PLAYING .....	9		
DVD MENU .....	9		
PLAYING VCD DISCS WITH PBC FUNCTION ...	9		
PLAYING MP3/WMA .....	9		
VIEWING JPEG .....	10		

## FOREWORD

This section must be read before any connection is made to the mains supply.

### EQUIPMENT MAINS WORKING SETTING

Your Marantz product has been prepared to comply with the household power and safety requirements that exist in your area. DV2400 can be powered by 230V AC only.

### COPYRIGHT

Recording and playback of any material may require consent. For further information refer to the following:

- Copyright Act 1956
- Dramatic and Musical Performers Act 1958
- Performers Protection Acts 1963 and 1972
- any subsequent statutory enactments and orders

## FEATURES

- DVD Player
- Play back DVD/VCD/CDDA/CD-R/CD-RW/MP3/WMA/S-VCD/DVD-R/DVD-RW(video mode)/JPEG photo data
- 10-bit/27 MHz Video DAC
- 24-bit/192 KHz Audio DAC

ENGLISH

# ABOUT DISCS

ENGLISH

## PLAYABLE DISCS

	<b>DVD</b>
 	<b>DVD-R/DVD-RW</b> Finalized DVD disc recorded in the DVD video format.
	<b>Video CD (VCD) / Super Video CD(SVCD)</b>
	<b>Audio CD (CD-DA)</b>
 	<b>CD-R/CD-RW</b> Finalized CD-R and CD-RW discs recorded in the CD-DA format, MP3 format (p3 "ABOUT MP3/WMA") or Video-CD format can be played with the unit.

- \* Finalize is the process to make a DVD-R/DVD-RW or CD-R/CD-RW playable for players (not recorders)
- \* Some discs may not be able to be played depending on condition of the discs.

## NOT PLAYABLE DISCS

- DVD discs whose region number is not "2" nor "ALL".
- DVD-ROM
- DVD-RAM
- DVD-Audio
- CD-ROM
- CDV
- CD-G
- CVD
- Super Audio CD
- CD Photo, etc.

### Caution

Some copy-controlled CDs may not conform to official CD standards. They are special discs and may not play on the DV2400.

## VIDEO FORMAT

This player can handle with MULTI, NTSC or PAL format.

### Caution

This player cannot handle with NTSC4.43 and SECAM formats.

## Setting picture format

1. Every time the **PAL/NTSC** button is pressed, picture format changes in the following order.



### Caution

- If wrong color or disordered picture appears in the MULTI mode, switch the mode to NTSC or PAL.
- If a disc recorded in PAL(NTSC) is played in the NTSC(PAL) mode, picture may be disordered.
- This player does not support the progressive video output.

## ABOUT DVD DISCS

### Marks on packages

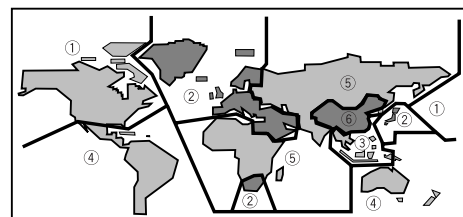
The marks listed below indicate contents in a disc.

	Indicates the number of recorded audio tracks.
	Indicates the number of recorded subtitle languages.
	Indicates the number of recorded angles.
	Indicates the selectable aspect ratios.
	Indicates the region number of the disc.

### Regional restriction codes (region number)

Regional restriction codes are built in to DV2400 player and DVD discs for each sales region. If the regional code of the DV2400 player does not match one of the regional codes of the DVD disc, playback is not possible.

The region number can be found on the rear panel of the DV2400 player. The illustration below shows the regions and corresponding region numbers.



### Structure of DVD discs

Depending on the material on the disc (a movie, video clips, a drama series, etc.), these discs may have one or more Titles, and each Title may have one or more Chapters. To make access easy and convenient, your player lets you move between Titles and between Chapters.



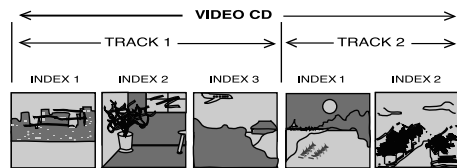
## ABOUT VIDEO CDS

### Variations of Video CD

- Video-CD Version 2.0  
The Video-CD with PBC (Play Back Control : Menu playback function) function. You can choose or search a section to play with a menu displayed on the TV screen. Also still pictures can be displayed in higher quality.
- Video-CD Version 1.1  
The video-CD without PBC function. It can play video and audio by operation much like to the ordinal audio-CD.

### Structure of Video-CD discs

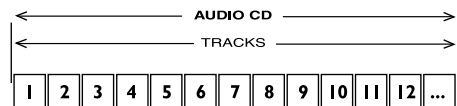
Depending on the material on the disc (a movie, video clips, a drama series, etc.), these discs may have one or more tracks, and tracks may have one or more indexes, as indicated on the disc case. To make access easy and convenient, your player lets you move between tracks and between indexes.



## ABOUT AUDIO CD

### Structure of Audio CD

Audio CDs contain music tracks only. You can play them in conventional style through a stereo system, using the keys on the remote control and/or front panel.



## ABOUT MP3/WMA

MP3 is the compressed music file in MPEG1, Audio Layer 3 format.

An WMA(Windows Media Audio) file is a Microsoft audio compression technology. WMA offers double the audio compression of the MP3 format.

Microsoft, Windows Media, and the Windows Logo are trademarks or registered trademarks of Microsoft Corporation in both the United States and other countries.



## ADDITIONAL INFORMATION

The glossy side shining like a rainbow is the front side of the disc, and the side on which the label is printed is the back.

Unlike conventional turntables for playing analog discs, the DV2400 reads the information recorded on the disc from underneath without contacting it using a beam of laser light. Therefore, the performance of a compact disc will not degrade like conventional analog records.

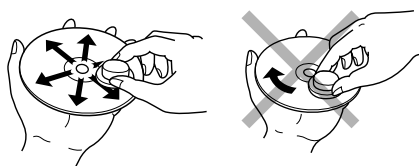
**Handle discs carefully so as not to damage or scratch the front side.**

**To protect the disc, avoid placing it in the following locations:**

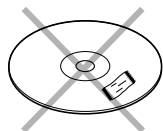
- In direct sunlight or near a source of heat like a heater.
- In a place which is damp or dirty.
- In a place which could be exposed to rain, such as near a window.

**Always keep the disc surface clean.**

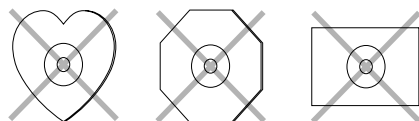
Up to six billion data units are recorded on the front side of the disc. When cleaning the disc surface, always be sure to use a special compact disc cleaner and wipe as shown below.



- Do not use conventional record cleaner for analog records, as this will adversely affect the disc surface. Store discs properly by placing them in their disc cases.
- Do not attach a piece of paper or sticker on the label side of disc. When a disc has a piece of plastic tape or rental DVD/CD label with paste protruded from the edge or when a disc has a trace of such a sticky object, do not attempt to play the disc. If such a disc is played on the DVD player, impossibility of taking out the disc or other malfunction may result.

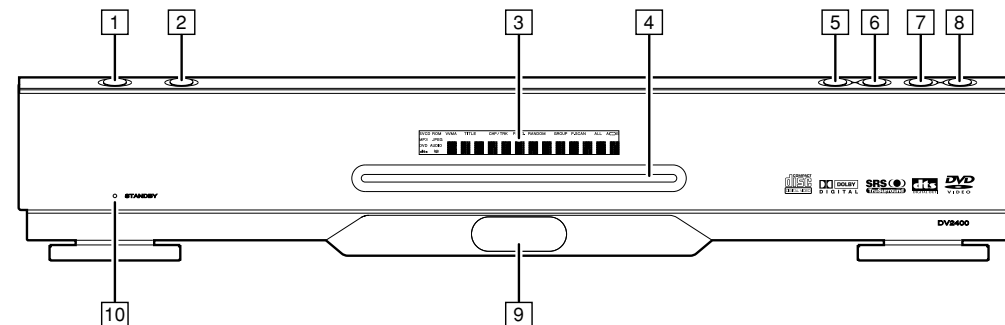


- Do not use a disc with a special shape. Do not attempt to play a disc with a special shape such as a heart-shaped disc or octagonal disc. Otherwise the equipment malfunction may result.



## CONTROLS ON THE MAIN UNIT

### Front panel



#### 1 POWER ON/STANDBY button

- Press to switch the power ON, and press again to switch to STANDBY mode.
- When the power is left on, the DV2400 automatically turns off if no operations are performed for seven minutes. The power does not turn off, however, when connected to the SR2400 in a system configuration.

#### 2 EJECT button

- Press to eject for the disc.

#### 3 Display panel

- This panel displays the operating modes and statuses.



**SVCD:** when disc is SVCD display SVCD, when disc is VCD display VCD, when disc is CD display CD

**MP3:** MP3 Disc

**JPEG:** JPEG Disc

**DVD:** DVD Disc

**dts:** DTS Audio output

**Angle Disc:** Angle Disc

**WMA:** WMA Disc

**TITLE:** DVD Title No.

**CHP/TRK:** Chapter and Track

**PROG.:** Program Play

**RANDOM:** Random Play

**P.SCAN:** Progressive Scan ON

**↻:** CD track repeat

**A↔B:** A-B repeat CD and DVD

**ALL and ↻:** CD ALL Repeat

**TITLE (flush) and ↻:** DVD Title repeat

**CHP/TRK (flush) and ↻:** DVD Chapter repeat

#### 4 Disc slot

- Loading or un-loading for the disc.

#### 5 PLAY/PAUSE button

- Press to start for play or temporarily stop for play.

#### 6 STOP button

- Press to stop playback.

#### 7 ⏮ / ⏪ (previous track/ search backward) button

- Fast rewind the disc while playing when press this button is held down.
- Press this button to skip to previous chapter (DVD) or track (video-CD/CD).

#### 8 ⏭ / ⏩ (search forward/ next track) button

- Fast forward the disc while playing when press this button is held down.
- Press this button to skip to next chapter (DVD) or track (video-CD/CD).

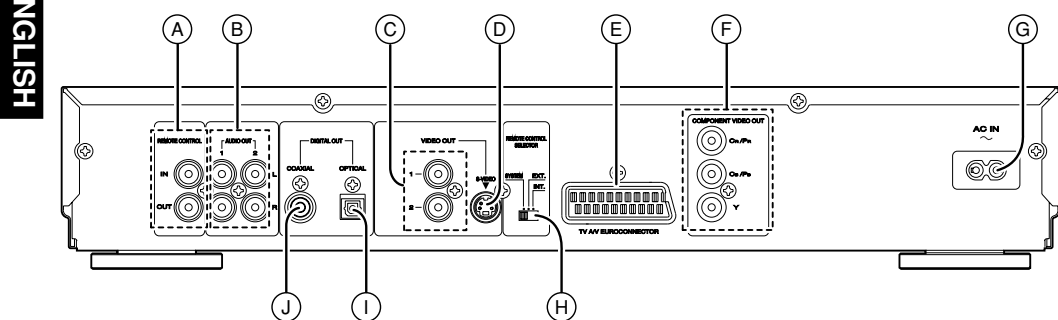
#### 9 Infrared sensor

- This sensor is for receiving signals transmitted from the remote control unit.

#### 10 STANDBY indicator

- The indicator lights GREEN when power is ON and lights RED when in STANDBY mode.

**Rear panel**



**A Remote control jacks**

- Connect to a component equipped with remote control jacks.

**B Analog output jacks (1, 2)**

- Connect to the audio input jacks of an AV amplifier.

**C Video output (CVBS) jacks (1, 2)**

- Connect to the video input terminals of an AV amplifier, TV.

**D S-Video output jack**

- Connect to the S-video input terminals of an AV amplifier or TV.

**E Euroconnector (Scart connector)**

- Euroconnector for connection to a TV with euroconnector.

**F Component Video output jack**

- Connect to the component video input terminals of TV.

**G AC IN**

- Connect to supplied an AC cable, and connect to an AC power outlet. DV2400 has to be powered by 230V AC only.

**H Remote control selector switch**

- This switch selects the system operation mode.
- Set to SYSTEM position when DV2400 is being used in combination with a AV amplifier (SR2400).
- If your component is not capable of system connection, set this switch to INT position.
- If connect to other Marantz equipment (AV receiver), set this switch to EXT position.

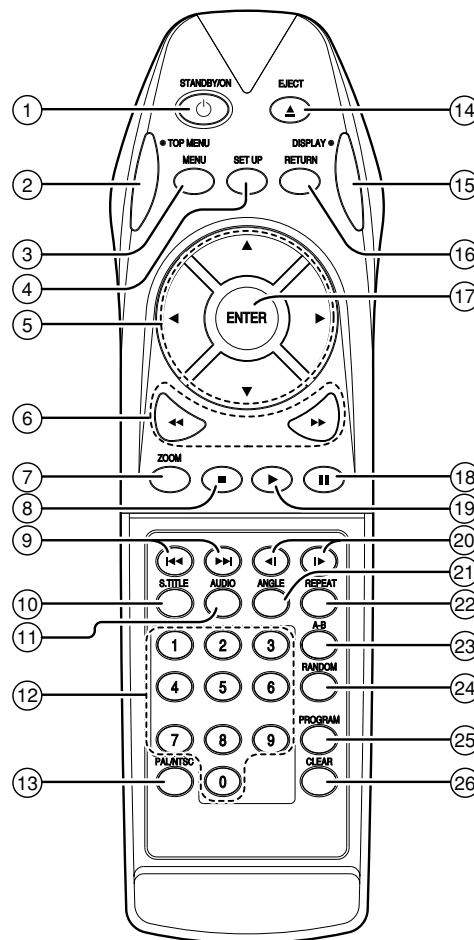
**I Digital output jack (Optical)**

- The DVD, CD signals during playback are output digitally from this optical jack.

**J Digital output jack (Coaxial)**

- The DVD, CD signals during playback are output digitally from this coaxial jack.

**CONTROL BUTTON ON THE REMOTE CONTROL UNIT**



**1 STANDBY/ON button**

- Press to switch the power ON, and press again to switch it OFF.
- If the SR2400 is connected to the REMOTE CONTROL jacks on the rear panel and its power is ON, the unit will not be set to the standby mode even when this button is pressed.

**2 TOP MENU button**

- Press this button to display the title screen in a DVD disc.
- This button is to show the title menu screen of DVD discs that contain multiple titles.
- For VCD discs that contain a disc menu, press to change the PBC function ON/OFF.

**3 MENU button**

- Press this button to display the menu in a DVD disc.

**4 SETUP button**

- Press this button to display the setup menu.

**5 Cursor (▲, ▼, ◀, ▶) buttons**

- Press this button to select an item on the menu or title screen.

**6 ◀◀ / ▶▶ button**

- Press this button for fast forward/rewind playback of the currently playing chapter (DVD) or track (Video-CD/CD).

**7 ZOOM button**

- Press this button to enlarge picture. (This function may be disabled depending on discs.)

**8 ■ (Stop) button**

- Press to stop playback.

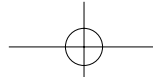
**9 ◀◀◀ / ▶▶▶ button**

- Press this button to skip to next/previous chapter (DVD) or track (Video-CD/CD).

**10 S.TITLE button**

- Press this button to select another subtitle language.
- The function of this button changes depending on the loaded disc.





### 11 AUDIO button

- Press this button to switch audio track (language) to another track (language) in the DVD mode.
- The function of this button changes depending on the loaded disc.
- This button cannot be used with MP3/WMA/JPEG discs.

### 12 Numeric (ten keypad) buttons

- For DVD disc, you can select a title number directly by pressing a **numeric** button in the stop mode.
- Pressing the **DISPLAY** button during DVD playback displays direct playback information (title, chapter and time) on the display. You can then directly playback a specific point of the disk by selecting either the title, chapter or time and pressing the corresponding **numeric** buttons.
- For VCD or CD discs, press to specify track number directly in the play or stop mode.

### 13 PAL/NTSC buttons

- Press this button to select for the picture format PAL/NTSC.

### 14 EJECT buttons

- This button is used to eject the disc.

### 15 DISPLAY button

- This button is used to display the disc information.

### 16 RETURN button

- This button is used to exit the menu of the setup menu of DVD player.
- This button is used to return the menu screen while playing VCD disc with PBC ON.

### 17 ENTER button

- Press this button to decide an item selected with the cursor.

### 18 II (Pause) button

- Press to stop for play temporarily.

### 19 ► (Play) button

- Press to start playback.

### 20 ◀ / ▶ (Slow) buttons

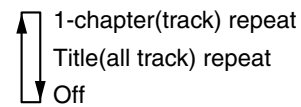
- Press this button for slow forward/backward playback chapter.

### 21 ANGLE button

- If the playing DVD disc contains multi-angle video, press this button to select another angle.

### 22 REPEAT button

- Press for repeat play. Each time the button is pressed, the mode changes in the following sequence:



### 23 A-B Repeat button

- Used to set the starting and stopping points of a passage for repeated playback.

### 24 RANDOM button

- Press for random play to play the tracks in a random sequence. (VCD/CD/MP3/WMA/JPEG)

### 25 PROGRAM button

- Press this button to program tracks for program play. (VCD/CD)

### 26 CLEAR button

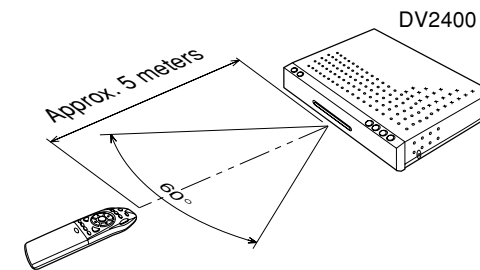
- Press this button to cancel a programmed track. (VCD/CD)

## OPERATION OF REMOTE CONTROL UNIT

### 1. Remote control

The distance between the transmitter of the remote control unit and the IR SENSOR of the DV2400 should be less than about 5 meters. If the transmitter is pointed to a direction other than the IR SENSOR or if there is an obstacle between them, remote control may not be possible.

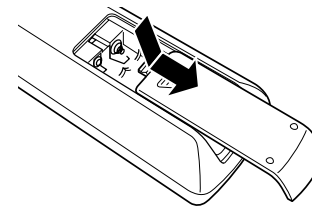
#### Remote-controllable range



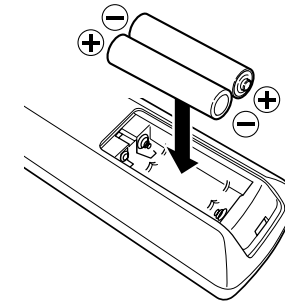
### 2. Loading batteries

The life of the batteries used with the remote control unit is about 4 months with normal use. Also be sure to replace batteries earlier when you notice that they are getting weak.

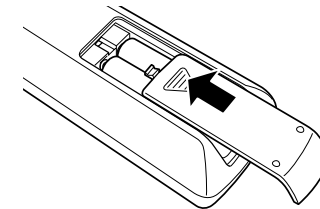
1. Remove the back cover.



2. Insert the new batteries (AAA type) with correct (+) and (-) polarity.



3. Close until it clicks.



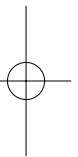
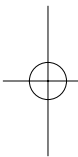
#### Note:

Incorrect use of batteries can result in hazards such as leakage and bursting. Please observe the following:

- Don't mix new and old batteries together.
- Don't use different kinds of battery together—although they may look similar, different batteries may have different voltages.
- Make sure that the plus and minus ends of each battery match the indications in the battery compartment.
- Remove batteries from equipment that isn't going to be used for a month or more.

When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area.

ENGLISH



# CONNECTIONS

First of all, read through the instructions before connecting other equipment. Make sure that this unit and other equipment to be connected are set to the standby mode or off, and disconnect the AC mains before starting connection. In order for air to circulate freely, please do not block ventilation holes of any of the equipment. Select the appropriate screen size at the initial setting according to your TV set, conventional 4:3 or wide screen 16:9.

### — Relation of video output and the setup menu —

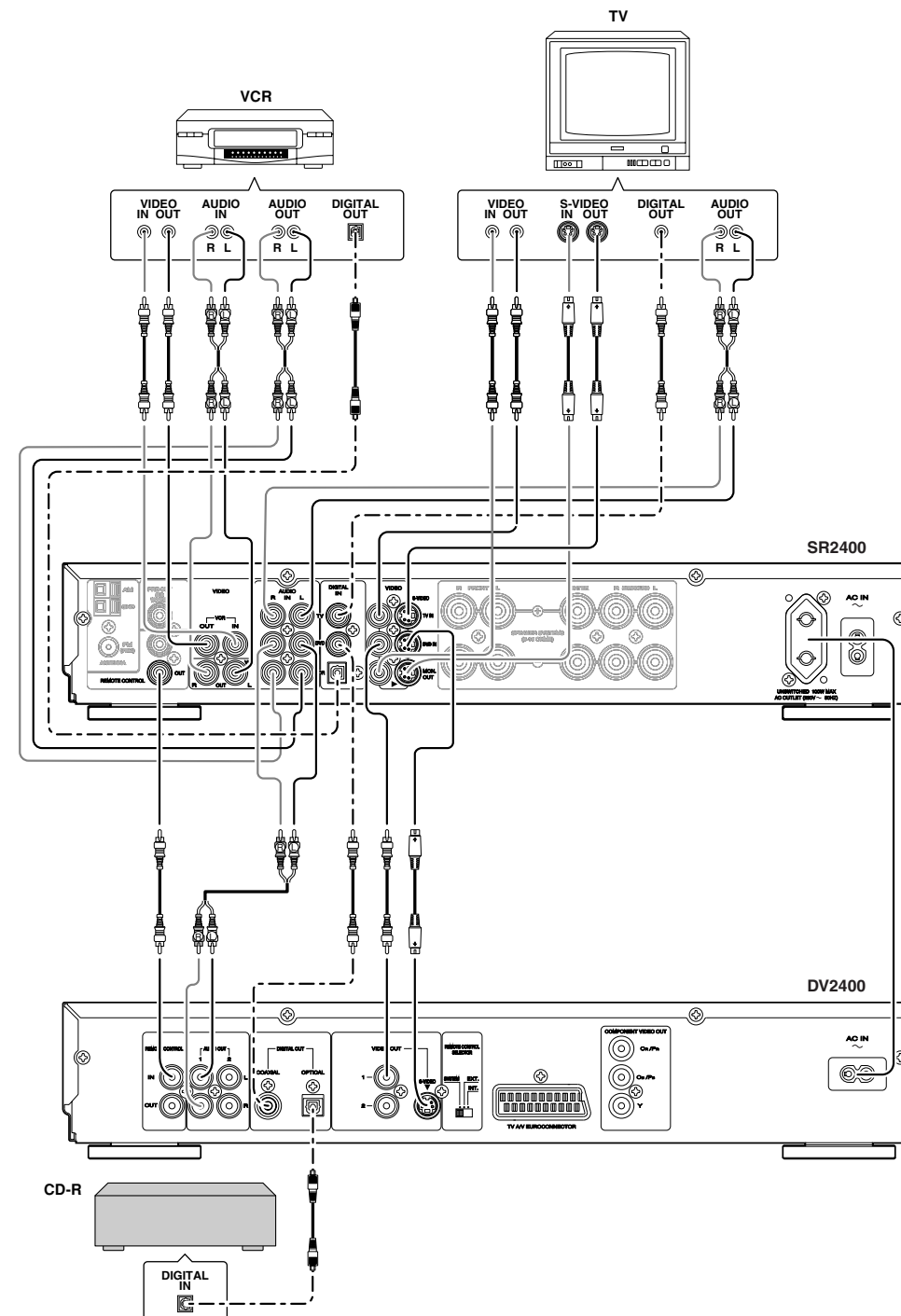
Setup Menu / Video		Video Output				RGB SW
Progressive	Video Output	Video Jack	S-Video Jack	Component Jack	AV EUROCONNECTOR Jack	
OFF	Component	Composite	—	Interlace mode (480i)	Composite	—
ON	Component	—	—	Progressive mode (480p)	—	—
OFF	S-Video	Composite	S-Video	—	Composite	—
OFF	RGB	Composite	—	—	Composite / RGB	Active

**Note:**

- If you select "RGB" in Setup menu, your TV can be selected RGB input automatically.
- Do not connect your DVD-player via your VCR, because the video quality could be distorted by the copy protected system.

### PRECAUTIONS CONCERNING CONNECTIONS

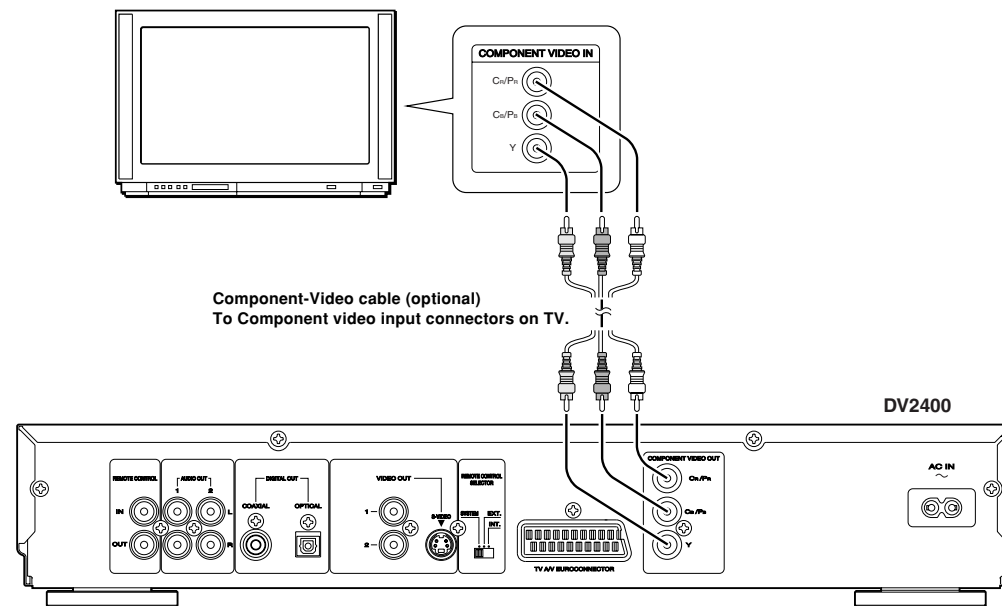
- Use only a 230V AC power source. Using any other power source could cause a fire or electric shock.
- Always grasp the power plug when unplugging or plugging in the power cord.
- Complete all connections before plugging in the power cord.
- Be sure to make a distinction between the left (white) and right (red) audio cable plugs when connecting them.
- When connecting this unit to other audio equipment, read the operation manual for that equipment carefully for details on how to make the correct connections.



## COMPONENT VIDEO OUT CONNECTION (480I/480P)

### Note:

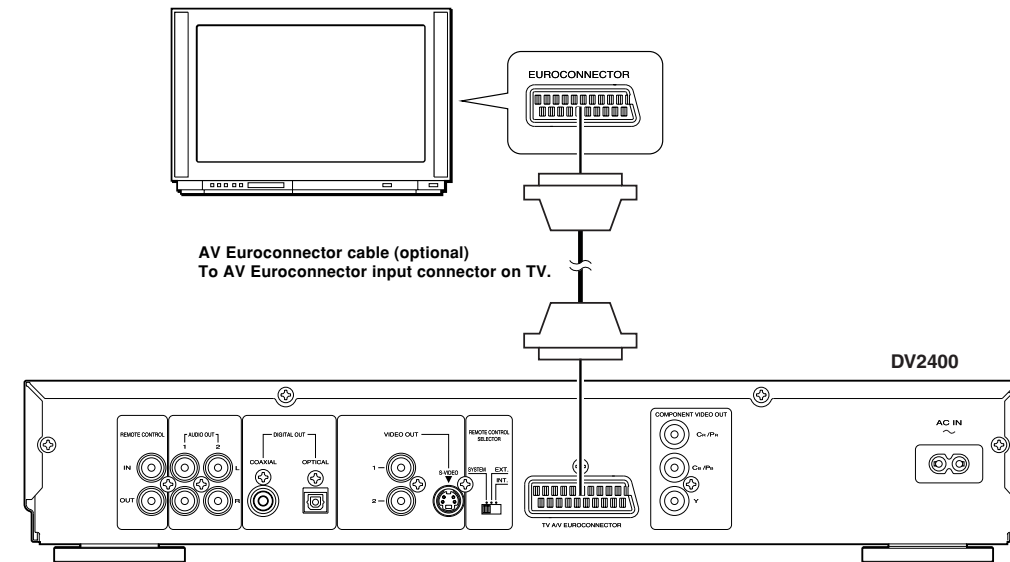
- If your TV has progressive (480p) video input, from the SETUP menu display, set the video output mode to component and press DISPLAY button to set the progressive mode to ON.
- If your TV has interlace (480i) video input, from the SETUP menu display, set the video output mode to component and press DISPLAY button to set the progressive mode to OFF.
- All HD TV are compatible with this player but some TV may cause artifacts in the picture.
- If you set progressive mode to ON [progressive scan mode], you can't see the picture with your Analog TV or some digital TV. In this case, press DISPLAY button of your remote controller then you can see the picture on the interlace mode with your TV.



## AV EUROCONNECTOR CONNECTION

### Note:

- From the SETUP menu display, set the Output mode to RGB, if your TV has RGB video input.
- If you have connected the DVD-player to the TV with a AV EUROCONNECTOR cable, select the appropriate mode for your TV ( Please refer to your TV's operator manual).



## BASIC OPERATIONS

For operations for specific disc types, the disc type marks ( **DVD** **VCD** **SVCD** **CD** **MP3** **WMA** **JPEG** ) are shown beside the operations.

If no mark is shown, the operation is for all disc types. The menu screen that appears on the TV can be shown in any of the languages available under **SYSTEM setup – OSD LANGUAGE** (English, French, Spanish, German, Italian or Dutch). English is used in this explanation.

### PREPARATION **DVD** **VCD** **SVCD** **MP3** **WMA** **JPEG**

1. Turn on power of TV.
2. Set the input source of the TV to the player.

### PLAYING A DISC

1. Press the **POWER ON/STANDBY** button on the main unit or the **STANDBY/ON** button on the remote to turn the power ON.
  - The display will be like below.

LOADING

NO DISC

2. Insert a disc in the disc slot of the front panel, label side up.

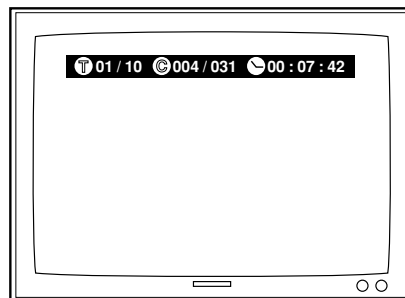
NO DISC

LOADING

- DVD** For DVD, once a disc is loaded, it is played automatically. In stop mode, press **▶** (PLAY) button to start the play. FL Display will be like below. If DVD menu is displayed on the TV screen, see "DVD menu" page (p9).

DVD TITLE CHP/TRK  
1 1 0:00:01

Pressing the **DISPLAY** button during DVD playback displays direct playback information (title, chapter and time) on the display.



Using the cursor buttons, select a direct playback item. Then, directly select a title, chapter or time position to play back with the numeric buttons.

- VCD** For VCD, when a disc is loaded, PBC function is ON at first.

PBC ON

3. Press the **▶** (PLAY) button to start the play.

- VCD** For VCD playback, FL Display will be like below. For details on VCD playback and setting the PBC function, see "Playing VCD disc with PBC function" (p9).

VCD CHP/TRK  
03 01:02

- SVCD** For SVCD playback, FL Display will be like below.

SVCD CHP/TRK  
03 02:04

- CD** For Audio CD playback, FL Display will be like below.

CD CHP/TRK  
03 02:05

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

With MP3, WMA or JPEG discs, playback does not start when the **▶** (PLAY) button is pressed.

For the procedure for playing back MP3 and WMA discs, see "Playing MP3/WMA" (p9). For the procedure for playing back JPEG discs, see "Viewing JPEG" (p10).

### TO PAUSE PLAYING

1. Press the **⏸** (PAUSE) button. To resume playing, press the **▶** (PLAY) button.

DVD TITLE CHP/TRK  
1 3 0:08:46

### TO STOP PLAYING

1. Press the **■** (STOP) button.

### **DVD**

#### Resume Function

The player can memorize the position where the playback is stopped for DVD disc. With this function, playback can be started from the position where the playback was stopped.

- When **■** (STOP) button is pressed, FL Display will be like below.

RESUME

- When **▶** (PLAY) button is pressed, playback is resumed at the stopped position.

#### Note:

You can change the DVD disc while the player is waiting to resume playback with the current disc. This resume function can memorize the resume position for a maximum 5 discs. When a disc that had been stopped halfway through and unloaded from the player is reloaded into the player, the message below appears on the front display.

LAST SCN

If the **▶** (PLAY) button is pressed while "LAST SCN" appears on the display, playback resumes from the point where it left off the last time.

### Deactivate Resume Function

- After stopping playback (Resume status displayed), press **■** (STOP) button again to deactivate the resume function.

STOP

- Press **▶** (PLAY) button to start playback from the beginning.

- VCD** When PBC function is ON, FL Display is like below in stop mode.

PBC ON

When PBC function is OFF, FL Display is like below in stop mode.

VCD CHP/TRK  
12 49:08

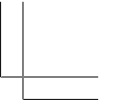
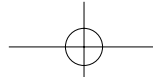
- CD** For Audio CD discs, FL Display is like below in stop mode.

CD CHP/TRK  
12 49:08

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

For Audio MP3/WMA/JPEG discs, FL Display is like below in stop mode.

STOP



### DIRECT SEARCH

In stop mode, you can choose a chapter(track) directly by pressing a numeric button on the remote.

1. In DVD mode, after pressing the **DISPLAY** button, you can select a chapter number directly by pressing a **numeric** buttons (0 to 9) on the remote control.

In the VCD, SVCD, CD or MP3 mode, specify the track number using the **numeric** buttons (0 to 9) on the remote control .

Chapter 3 : Press numeric button "3".

Track 12 : Press numeric button "1" and then numeric button "2" within two seconds.

2. After selecting a chapter(track), press the **ENTER** button on the remote to play the chapter(track).

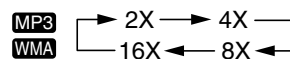
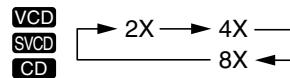
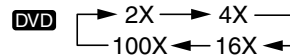
### SKIP PLAY

1. While playing, press **◀◀** button or **▶▶** button to skip to the previous or next chapter (track).
  - Every time **▶▶** button is pressed, the player skips to the next chapter (track).
  - If **◀◀** button is pressed once, the player skips to the beginning of the current chapter(track). If the button is pressed more than 2 times, the player skips to the previous chapter(track) every time the button is pressed.

### SEARCH PLAYING

#### Caution

- This function cannot be used for JPEG files.
1. While playing, press **◀◀** button or **▶▶** button on the remote for fast rewind or fast forward play.
    - Every time **◀◀** button or **▶▶** button on the remote is pressed, playing speed changes as shown below.



2. Press **▶** (PLAY) button to return to normal play.

### DVD MENU DVD

Most of DVD discs have their own menu screen (DVD menu). In this menu, you can choose a chapter, audio language, subtitle, etc.

1. Insert a DVD disc. The menu will be displayed on TV. If menu is not displayed, press **MENU** button on the remote.
2. Press **Cursor** button to select a chapter (menu item).
3. Press **ENTER** button to confirm the item.
  - If a chapter is selected, the chapter is played automatically.
  - If an audio language or subtitle is selected, press **▶** (PLAY) button to start playback from the beginning.
  - Press **MENU** button to return to the previous menu.

### PLAYING VCD DISCS WITH PBC FUNCTION VCD

When a disc is loaded, PBC function is ON at first.



#### Setting PBC function

You can select PBC function On or Off.

When PBC function is Off, you can play VCD discs without displaying menu, like an Audio CD.

When PBC function is On, you can play VCD discs with displaying menu.

1. Press **TOP MENU** button on the remote to select PBC function On or Off while in play or stop mode.

#### For VCD playback in PBC ON

1. Press the **▶** (PLAY) button to start the play.
  - The menu is displayed automatically at first.
  - While playing, press **RETURN** button to display menu screen.
  - To playback a specific track, select it with the **numeric** buttons and press the **ENTER** button.

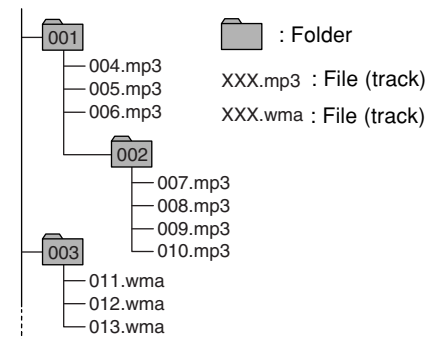
#### For VCD playback in PBC OFF

1. Press the **▶** (PLAY) button to start the play.
  - Press a **numeric** buttons (0 to 9) on the remote to select a track. The track will be played.

### PLAYING MP3/WMA MP3 WMA

If discs in MP3/WMA format is loaded, menu screen is displayed on TV automatically. This menu shows folder and file (track) names that are given with a PC, etc.

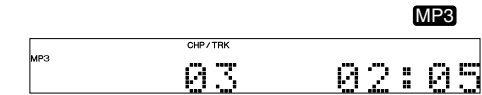
- Folder and file names are shown up to 10 characters. ID3 tag information is not shown.
- Characters except "A-Z", "0-9", "\_ " are not displayed correctly.
- Do not use special letters such as "/ : \* ? " < > " etc.
- The order shown in the menu may not be the same to the order shown in a PC.



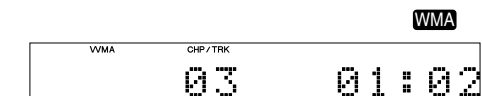
- This player can play MP3/WMA discs recorded in ISO9660 format.
- The player plays the files with ".mp3/.WMA" extension only.
- The maximum file number in a disc is 999. (Including the number of folders.)
- The maximum folder layer number is 8.
- When playing a MP3/WMA disc, it may take more than 30 seconds depending on the number of files and folder layer structure.

1. When a disc is loaded, menu screen is displayed on TV. If menu is not displayed, press **TOP MENU** button on the remote.
2. Choose a track by pressing a **Cursor** button.
3. Press **ENTER** button to confirm the selected track.

4. Press the **▶** (PLAY) button to start the play.
  - To select a track while playing MP3/WMA, press **◀◀** or **▶▶** button on the remote.



PLAY MODE:	FOLDER	
ROOT	--	0
MP3	MP3-A	1
WMA	MP3-B	2
JPEG	MP3-C	3
TEST	MP3-D	4
	MP3-E	5
	MP3-F	6
	MP3-G	7

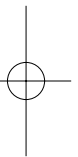
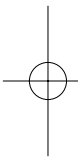


PLAY MODE:	FOLDER	
ROOT	--	0
MP3	01 A	1
WMA	02 B	2
JPEG	03 C	3
TEST	04 D	4
	05 E	5
	06 F	6
	08 G	7

ARTIST : ABC  
TITLE : abc

- When a WMA disc with a recorded artist or title is played back, the artist's name or title is displayed at the bottom of the menu screen. (Max. 32 characters) However, the information is displayed only when English is the selected on-screen display language. The area remains blank when other languages are selected.

ENGLISH



**Cautions on Discs in MP3/WMA Format.**

- This player can handle with the multi-session. If there are many sessions, it may take much time to start playing. To record MP3/WMA discs, make the number of sessions as few as possible.
- A single session disc requires MP3/WMA files in the first track. If there is no MP3/WMA file in the 1st track, it cannot playback MP3/WMA files. If you wish to playback MP3/WMA files, format all the data in the disc or use a new one.
- Sampling frequency:
  - 32, 44.1, 48 kHz (MP3)
  - 44, 48 kHz (WMA)
- Bit rate:
  - 56-256 kbps (MP3)
  - 64-192 kbps (WMA)
- Total number of files on the disc should be less than 650.
- Customers should also note that permission is required in order to download MP3/WMA files and music from the Internet. Our company has no right to grant such permission. Permission should always be sought from the copyright owner.
- If you record a disc using a personal computer, even if it is recorded in a compatible format, there are cases in which it may not play because of the settings of the application software used to create the disc. (Check with the software publisher for more detailed information.)
- Some CD-R/RW discs cannot be played back on this player.

**VIEWING JPEG **

This player can play discs with JPEG(picture) files. JPEG images can be displayed up to a max. 2048 x 1636 pixel.

1. When a disc is loaded, menu screen is displayed on TV. If menu is not displayed, press **TOP MENU** button on the remote.
2. Choose a file by pressing a **Cursor** button.

PLAY MODE:	FOLDER
ROOT	- 0
MP3	A 1
WMA	B 2
JPEG	C 3
TEST	D 4
	E 5
	F 6
	G 7

3. Press the **▶** (PLAY) button to view the file.
  - To select a file while playing JPEG, press **◀◀** or **▶▶** button on the remote.



**To flip the picture**

1. Press **Cursor(▲ / ▼)** buttons on the remote during showing a picture to flip the picture horizontally or a vertically.

**To rotate the picture**

1. Press **Cursor(◀ / ▶)** buttons on the remote during showing a picture to rotate the picture clockwise or counter clockwise.

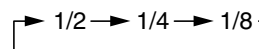
**Cautions on JPEG recordings.**

- Total number of files and folders on the disc should be less than 650.
- If the files have “.jpe” or “.jpeg” extensions, please rename them as “.jpg” files.
- File names without “.jpg” extension will not be able to be read by this player. Even though the files are shown as JPEG image files in windows explorer.

**VARIOUS PLAYING FUNCTIONS**

**SLOW PLAY **

1. While playing, Press **◀** button or **▶** button on the remote for slow backward play or slow forward play.
  - Press **▶** button for slow forward.
  - Press **◀** button for slow backward.
  - Every time **◀** / **▶** button is pressed, slow speed changes in 4 steps.



**Caution**

- In slow play, there is no audio
2. To return to normal play, press **▶** (PLAY) button.

**STEP PLAY **

1. While playing, press **||** (PAUSE) button to still the picture.
2. Press **||** (PAUSE) button to step the frame forward.

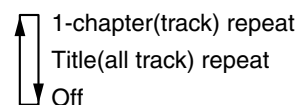
**Caution**

- In frame-by-frame play, there is no audio
3. To return to normal play, press **▶** (PLAY) button.

**REPEAT PLAY**

**   **

Each time **REPEAT** button on the remote is pressed, repeat mode is changed in the following order.



**Caution**

For repeat play on VCD discs with PBC function, disable PBC function first.

1. Play the title or chapter(track) you want to repeat.

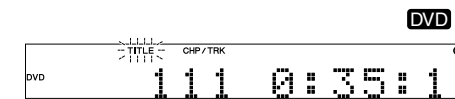
2. Press **REPEAT** button on the remote once.
  - For DVD discs, currently played chapter is repeated.



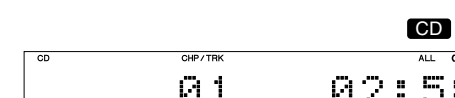
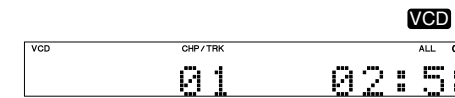
- For VCD, SVCD and Audio CD discs, currently played track is repeated.



3. Press **REPEAT** button on the remote once again.
  - For DVD discs, currently played title is repeated.



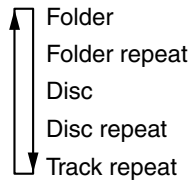
- For VCD, SVCD and Audio CD discs, the entire disc is repeated.



4. Press **REPEAT** button on the remote again to clear the repeat.

**MP3 WMA JPEG**

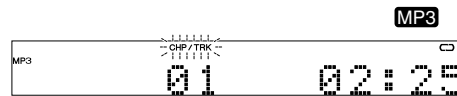
Each time **REPEAT** button on the remote is pressed, play mode on TV is changed in the following order.



1. Select the track (file) you want to repeat.
2. Press **REPEAT** button on the remote to select the track repeat mode.

PLAY MODE:		TRACK REPEAT
ROOT	--	0
MP3	MP301-A	1
WMA	MP302-B	2
JPEG	MP303-C	3
TEST	MP304-D	4
	MP305-E	5
	MP306-F	6
	MP307-G	7

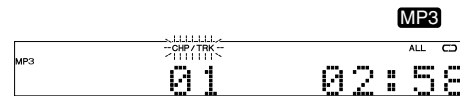
3. Press **▶** (PLAY) button to repeat play.
  - Currently played track is repeated.



4. Press **REPEAT** button on the remote to select the folder repeat mode.

PLAY MODE:		FOLDER REPEAT
ROOT	--	0
MP3	MP301-A	1
WMA	MP302-B	2
JPEG	MP303-C	3
TEST	MP304-D	4
	MP305-E	5
	MP306-F	6
	MP307-G	7

5. Press **▶** (PLAY) button to repeat play.
  - The folder is repeated.



6. Select the folder you want to repeat.
7. Press **REPEAT** button on the remote to select the disc repeat mode.

PLAY MODE:		DISC REPEAT
ROOT	--	0
MP3	MP301-A	1
WMA	MP302-B	2
JPEG	MP303-C	3
TEST	MP304-D	4
	MP305-E	5
	MP306-F	6
	MP307-G	7

8. Press **▶** (PLAY) button to repeat play.
  - The entire disc is repeated.



### A-B REPEAT PLAY DVD VCD SVCD CD

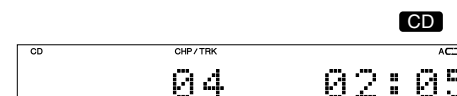
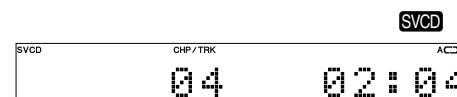
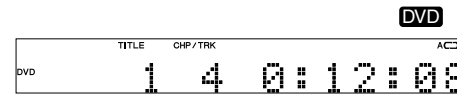
You can play a specific part (between A and B) in a chapter(track) repeatedly.

#### Caution

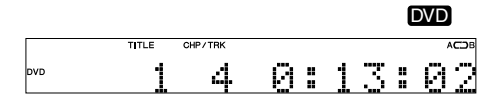
- This function cannot be used for MP3/WMA/JPEG discs.

1. At the beginning of the desired passage, press **A-B repeat** button on the remote control.

- "ACD" indicator lights up.



2. At the end of the desired passage, press this button again, then "B" indicator lights up and the desired passage is played repeatedly.



3. Press **A-B repeat** button to cancel the A-B repeat play.

ENGLISH

## RANDOM PLAY

VCD SVCD CD MP3 WMA JPEG

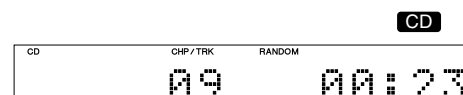
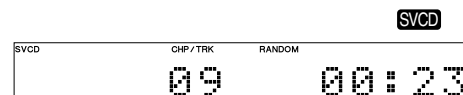
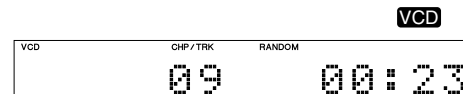
All tracks will be played in random sequence.

### Caution

- This function cannot be used for DVD discs.

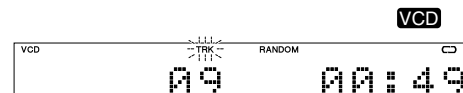
VCD SVCD CD

- In stop mode, press the **RANDOM** button then press the **▶** (PLAY) button.
  - All tracks in the disc is played in random sequence.
  - IF the **RANDOM** button is pressed while playing, random play begins after completing the current track play.



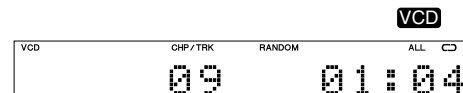
- If **REPEAT** button is pressed once in random play, currently played track is played repeatedly.

For VCD discs, FL Display will be like below.



- If **REPEAT** button is pressed twice in random play, all tracks in the disc is played repeatedly in random sequence.

For VCD discs, FL Display will be like below.

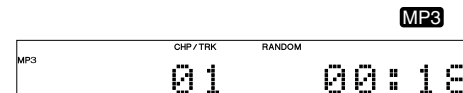


MP3 WMA JPEG

- In stop mode, select the track (file) you want to play.
- When the **RANDOM** button on the remote control is pressed, the play mode on TV is changed random mode.

PLAY MODE:	RANDOM
ROOT	-- 0
MP3	MP3 01-A 1
WMA	MP3 02-B 2
JPEG	MP3 03-C 3
TEST	MP3 04-D 4
	MP3 05-E 5
	MP3 06-F 6
	MP3 07-G 7

- Press **▶** (PLAY) button to random play.
  - All files in a folder is played in random sequence.



- If **REPEAT** button is pressed in random mode, all tracks in the folder is played repeatedly in random sequence.



- Press **■** (STOP) button to stop random play.

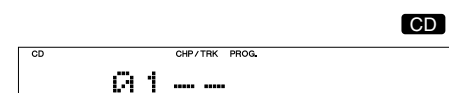
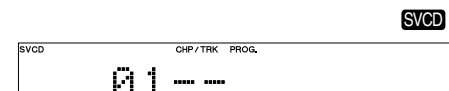
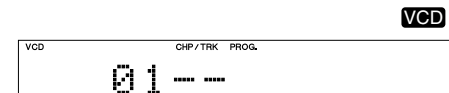
PROGRAM PLAY VCD SVCD CD

VCD SVCD CD

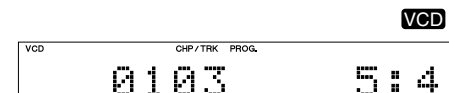
You can program up to 32 tracks to play tracks in any order you want.

Program play is not available for DVD discs.

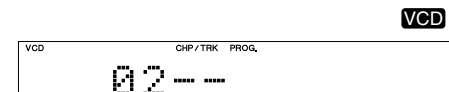
- When the **PROGRAM** button on the remote control is pressed in the stop mode, the "PROG." indicator lights up, and the program mode is established.



- Select the tracks to be programmed using the **numeric** buttons on the remote control unit.
  - To input a 2-digit track number to select a track using the **numeric** buttons, first input the 10's digit and, within 2 seconds, input the 1's digit.
  - When track 3 has been selected



- Press **ENTER** button.
  - Pressing the **ENTER** button enables you to select the next program track.
  - For VCD discs, FL Display will be like below.



- Repeat step 2 for programming next track. And then press **■** (STOP) button to confirm completion of all the programming.
  - If the number of programmed tracks exceeds 32, the display below will be shown.



- Upon completion of all the programming, press the **▶** (PLAY) button. The selected tracks are now played in the programmed order.
- Press **■** (STOP) button to stop program play.

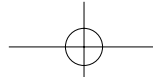
### To clear the entire program

- While the unit is stopped and in program mode, press the **CLEAR** button on the remote control.

### To clear a specified programmed track

- While the unit is stopped and in program mode, press the **Cursor** (▲ / ▼) buttons on the remote control to select a track you want to clear.
- Press the **CLEAR** button on the remote control.
  - A specified track will be deleted.



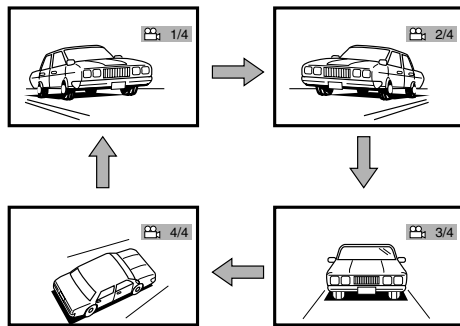
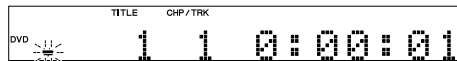


### CHANGING ANGLES DVD

You can switch angles to play for DVD discs which contain multiple angles.

For multi-angle DVD discs, mark is printed on the packages. Also, if multi-angle is available on a scene, appears on TV screen.

1. When appears during playback, press **ANGLE** button on the remote.
  - Each time **ANGLE** button is pressed, angle changes.



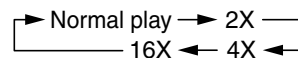
### ZOOM FUNCTION DVD

When playing a wide aspect picture in letter box format on a normal aspect (4:3) TV, the center part of the picture can be enlarged. With switching to this zoomed display, picture display can be fit into the TV screen. Nonetheless, both side ends of the picture can not be displayed.

#### Caution

Some DVD discs cannot be zoomed.

1. Press **ZOOM** button on the remote while playing or pausing.
  - Each time **ZOOM** button is pressed, picture is zoomed in the following magnification ratio.



### CHANGING AUDIO TRACKS DVD

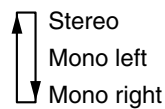
The audio language to be played can be changed for DVD discs that contain multiple audio languages.

1. If **AUDIO** button on the remote is pressed once while playing, the currently played language is displayed.
2. Press **AUDIO** button again to change audio language.
  - Each time **AUDIO** button is pressed, audio language changes.

### SWITCHING AUDIO CHANNELS VCD CD

Some VCD and CD discs are recorded left and right channels separately. These audio channels can be switched.

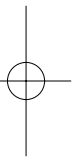
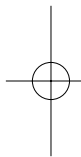
1. Press **AUDIO** button to change audio channel.
  - Each time **AUDIO** button is pressed, audio channel changes.



### CHANGING SUBTITLE LANGUAGES DVD

The subtitle language can be changed for DVD discs that contain multiple subtitle languages.

1. If **S.TITLE** button on the remote is pressed once while playing, the language of the currently displayed subtitle is displayed.
2. Press **S.TITLE** button again to change subtitle language.
  - Each time **S.TITLE** button is pressed, subtitle language changes. If it is set to off, no subtitle is displayed.



# SETUP MENU OPERATION

You can set up settings for the player and for TV monitor by your preference form. The SETUP MENU that appears on the TV can be shown in any of the languages available under SYSTEM setup – OSD LANGUAGE (English, French, Spanish, German, Italian or Dutch). English is used in this explanation.

## CONTENTS OF SETUP MENU

VIDEO	AUDIO	DISC	SYSTEM
TV DISPLAY			16:9 WIDE
TV TYPE			NTSC
VIDEO OUTPUT			S-VIDEO
PICTURE MODE			AUTO
<b>SET TV DISPLAY MODE</b>			

### VIDEO setup (p14)

#### TV DISPLAY:

To set the aspect ratio of the picture to fit into your TV.

#### TV TYPE:

To set the TV format.

#### VIDEO OUTPUT:

To set the video output.

#### \* PICTURE MODE:

To set the picture quality.

### AUDIO setup (p16)

#### DIGITAL OUT:

To set the Dolby Digital signal output status for your digital equipment connected with the player.

#### 96K LPCM OUT:

To set the 96kHz linear PCM signal output status for your digital equipment connected with the player.

#### \* DOWNMIX:

To set high quality surround sound for your speaker system.

#### \* AUDIO DRC:

To set whether to compress audio dynamic range or not. If it is set On, small sound can be heard easier.

Dynamic range: The range between the smallest and the biggest sound.

### DISC setup (p17)

#### AUDIO:

To set the audio language.

#### SUBTITLE:

To set the subtitle language.

#### DISC MENU:

To set the menu language in DVD discs.

#### \* ANGLE MARK:

To set whether to display angle mark or not.

#### \* CAPTIONS:

To set whether to display closed caption or not.

### SYSTEM setup (p18)

#### OSD LANGUAGE:

To set the language for setup menu.

#### PARENTAL RATING:

To set the level for parental lock.

#### PASSWORD:

To set password for restricted discs.

#### DEFAULTS:

To reset to the default setup.

#### SETUP MENU MODE:

To select either basic mode or expert mode.

#### Caution

The SETUP MENU can be viewed and operated in either the basic mode or expert mode.

\* : That shown here is for the expert mode.

## VIDEO SETUP

### Set picture aspect ratio.

This menu is to set picture aspect ratio to fit into your TV.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "VIDEO".

VIDEO	AUDIO	DISC	SYSTEM
TV DISPLAY			16:9 WIDE
TV TYPE			NTSC
VIDEO OUTPUT			S-VIDEO
PICTURE MODE			AUTO
<b>SET TV DISPLAY MODE</b>			

3. With **Cursor**(▲ / ▼) buttons, select "TV DISPLAY".

4. Press **ENTER** button, select the aspect ratio of your TV.

- You can select from 4:3 PS, 4:3 LB, 16:9 WIDE.

4:3 PS(Pan-Scan): Displays wide picture on aspect 4:3 TV in Pan & Scan format.

4:3 LB(Letter Box): Displays wide picture on aspect 4:3 TV in Letter Box format.

16:9 WIDE: Set here when your TV has wide screen.


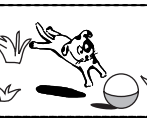


#### Caution

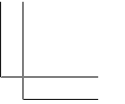
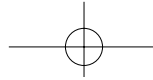
When setting the aspect ratio, see the following section "How it is displayed".

5. Press **SETUP** button to confirm it and to exit from the setup menu.

## How it is displayed

- When your TV is 4:3 screen.

Picture in 16:9 aspect ratio	
Player's setting	How it looks
<b>4:3 Letter Box</b> Black bars appear on top and bottom of the screen. Picture is displayed in right aspect ratio.	
<b>4:3 Pan &amp; Scan</b> Both sides of picture are cropped but picture is displayed in right aspect ratio.	
<b>16:9 Wide</b> Picture is squeezed horizontally and is not displayed in right aspect ratio. Change the setting to 4:3 Letter Box or 4:3 Pan & Scan.	
Picture in 4:3 aspect ratio	
Player's setting	How it looks
<b>One of 4:3 Letter Box, 4:3 Pan &amp; Scan or 16:9 Wide</b> Picture is displayed in right aspect ratio in any setting.	



- When your TV is 16:9 screen.

Picture in 16:9 aspect ratio	
Player's setting	How it looks
<p><b>16:9 Wide</b> Picture is displayed in right aspect ratio.</p>	
Picture in 4:3 aspect ratio	
Player's setting	How it looks
<p><b>16:9 Wide</b> Black bars appear on both side of picture but picture is displayed in right aspect ratio.</p>	
<p><b>16:9 Wide</b> If picture is displayed vertically squeezed like shown at right, check settings of your TV and set it to normal. See the instruction manual of your TV for details.</p>	

**Note:**

Some disc will not allow you to change the aspect ratio.

**TV TYPE**

Set up TV type according to type supported by your TV or monitor. When you select MULTI, the output video type is dependent on the disc loaded. If the recorded video type is PAL then it outputs PAL. If NTSC then NTSC.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "VIDEO".
3. With **Cursor**(▲ / ▼) buttons, select "TV TYPE".
4. Press **ENTER** button, select the picture format.
  - You can select from MULTI, NTSC, PAL.

Disc Format	Position of TV Type		
	MULTI	NTSC	PAL
NTSC	NTSC	NTSC	PAL
PAL	PAL	NTSC	PAL

5. Press **SETUP** button to confirm it and to exit from the setup menu.

**VIDEO OUTPUT**

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "VIDEO".
3. With **Cursor**(▲ / ▼) buttons, select "VIDEO OUTPUT".
4. Press **ENTER** button, select how video signal is output.
  - You can select from S-VIDEO, COMPONENT, RGB.
  - If you want to see the picture in S-VIDEO, choose S-VIDEO and connect to the TV set using S-VIDEO cable. Set to COMPONENT to view in component video via Y, Cb/Pb, Cr/Pr connect. When using AV Euroconnector RGB signal, set the VIDEO OUTPUT to RGB. Refer to the table of page 6 to confirm the relation of video output and the setup menu.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

**PICTURE MODE**

To set how still-picture is displayed while pausing.

- With certain DVD disc, the playback picture is flickering or Dot Crawl is shown on straight lines. That means Vertical interpolation or De-interlace is not perfectly matched with DVD disc. In that case, the picture quality can be improved with changing picture mode.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "VIDEO".
3. With **Cursor**(▲ / ▼) buttons, select "PICTURE MODE".
4. Press **ENTER** button, select how still-picture is displayed.
  - You can select from AUTO, FILM, VIDEO, SMART, SSMART.

**AUTO:** The player automatically identifies whether you are using a film source or video source and switches image processing accordingly.

**FILM:** Provides image processing suited for film sources.

**VIDEO:** Provides image processing suited for video sources.

**SMART:** The player automatically identifies sources other than film sources and video sources, and processes the image so that it comes out the best possible.

**SSMART:** Adds motion compensation to the SMART mode.

5. Press **SETUP** button to confirm it and to exit from the setup menu.

**Note:**

This function works only when Progressive is ON.

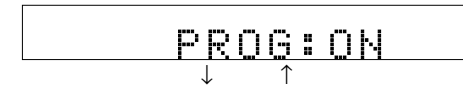
**Progressive ON/OFF**

When you connected the COMPONENT VIDEO OUT to a progressive scan TV, you can turn Progressive ON/OFF. Before turning it ON/OFF, display the SETUP MENU and check that VIDEO OUTPUT is set to "COMPONENT".

**Note:**

- Do not turn Progressive ON if the TV connected to the player does not support Progressive input.

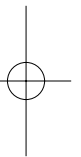
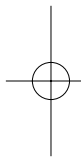
1. Press **SETUP** button to display the main menu.
2. Press the **DISPLAY** button to turn the progressive on or off.



**Note:**

- If you connect TV or monitor, that is not compatible with progressive scan signal and choose "ON" of the progressive scan setting, you will not be able to see any picture at all.
- If you want to see the picture in S-VIDEO, choose S-VIDEO and connect to the TV set using S-VIDEO cable. Set to COMPONENT to view in component video via Y, Cb/Pb, Cr/Pr connect. When using AV Euroconnector RGB signal, set the VIDEO OUTPUT to RGB. Refer to the table of page 6 to confirm the relation of video output and the progressive mode.

**ENGLISH**



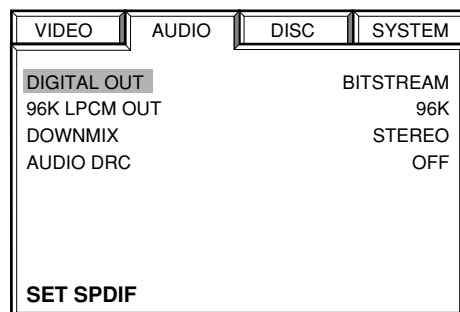
## AUDIO SETUP

ENGLISH

### Setting Digital signal output.

To set how Digital signal (digital audio) is output depending on your digital equipment.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "AUDIO".



3. With **Cursor**(▲ / ▼) buttons, select "DIGITAL OUT".
4. Press **ENTER** button, select how digital signal is output.
  - You can select from BITSTREAM, PCM, OFF.
  - BITSTREAM: Set here if your digital equipment can handle with Dolby Digital signal.
  - PCM: Set here if your digital equipment cannot handle with Dolby Digital signal. Dolby Digital signal is converted to linear PCM signal then it is output.
  - OFF: Set here when player is not connected to digital equipment.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

### Setting 96kHz LPCM signal output.

To set how 96kHz linear PCM signal is output depending on your digital equipment.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "AUDIO".
3. With **Cursor**(▲ / ▼) buttons, select "96K LPCM OUT".
4. Press **ENTER** button, select how 96kHz linear PCM signal is output.
  - You can select 96K or 96K>48K.
  - 96K: 96kHz linear PCM signal is output.
  - 96K>48K: 96kHz linear PCM signal is converted to 48kHz linear PCM signal then it is output.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

### Downmix setup

This is setup menu which gives the setup system to reproduce high quality surround sound for your speaker system.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "AUDIO".
3. With **Cursor**(▲ / ▼) buttons, select "DOWNMIX".
4. Press **ENTER** button, select the downmix mode.
  - You can select from STEREO, SRS, LT/RT.
  - STEREO: This mode will help to downmix the signal of Dolby Digital and DTS into stereo signals directly outputting from L/R port.
  - SRS: This mode creates a virtualized surround sound experience from a 2-speaker(front L and R) playback system playing any multi-channel audio source, including Dolby Digital, Dolby Prologic or DTS.
  - LT/RT: This mode will be used only if player is connected with Dolby Prologic decoder. Meanwhile, player can output Dolby Prologic signals.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

### Dynamic range compression setup

For discs recorded in Dolby Digital format, audio dynamic range (the range between the smallest and the biggest sound) compression ratio can be changed depending on volume level.

If the compression is set On, you can hear small sound much clearer.

#### Caution

For discs not recorded in Dolby Digital format, this function has no effect.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "AUDIO".
3. With **Cursor**(▲ / ▼) buttons, select "AUDIO DRC".
4. Press **ENTER** button, select either dynamic range compression on(1-8) or off.
  - You can select ON(1-8) or OFF.
  - OFF: Dynamic range compression ratio is set normal.
  - ON(1-8): Dynamic range compression ratio is set maximum. You can hear small sound much clearer.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

## DISC SETUP

### Audio language setup

To set the audio language to play.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "DISC".

VIDEO	AUDIO	DISC	SYSTEM
	<b>AUDIO</b>		ENGLISH
	SUBTITLE		ENGLISH
	DISC MENU		ENGLISH
	ANGLE MARK		ON
	CAPTIONS		OFF

**PREFERRED AUDIO LANGUAGE**

3. With **Cursor**(▲ / ▼) buttons, select "AUDIO".
4. Press **ENTER** button, select your preferred language.
  - You can select from English, French, Spanish, German, Italian and Netherlands.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

### Subtitle language setup

To set the subtitle language to display.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "DISC".
3. With **Cursor**(▲ / ▼) buttons, select "SUBTITLE".
4. Press **ENTER** button, select your preferred language.
  - You can select from English, French, Spanish, German, Italian and Netherlands.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

### DVD menu language setup

Most of DVD discs have their own menu screen. This is to set the DVD menu language to display.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "DISC".
3. With **Cursor**(▲ / ▼) buttons, select "DISC MENU".
4. Press **ENTER** button, select your preferred language.
  - You can select from English, French, Spanish, German, Italian and Netherlands.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

### Angle mark setup

This menu is to set whether to display angle mark or not.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "DISC".
3. With **Cursor**(▲ / ▼) buttons, select "ANGLE MARK".
4. Press **ENTER** button, select either angle mark on or off.
  - You can select ON or OFF.

ON: Angle mark is displayed on TV screen.  
OFF: Angle mark is not displayed on TV screen.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

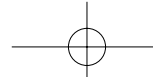
### Captions setup

Closed caption was invented for hearing impaired person. But it is very useful when learning foreign languages. If your TV supports closed caption, select ON. If not, closed caption won't be displayed.

#### Note:

- This setup is available as following conditions.
  - DVD disc has a closed caption.
  - The connected TV has a closed caption function.
1. Press **SETUP** button to display the main menu.
  2. With **Cursor** buttons, select "DISC".
  3. With **Cursor**(▲ / ▼) buttons, select "CAPTIONS".
  4. Press **ENTER** button, select either closed caption on or off.
    - You can select ON or OFF.

ON: Closed caption is displayed on TV screen.  
OFF: Closed captions is not displayed on TV screen.
  5. Press **SETUP** button to confirm it and to exit from the setup menu.

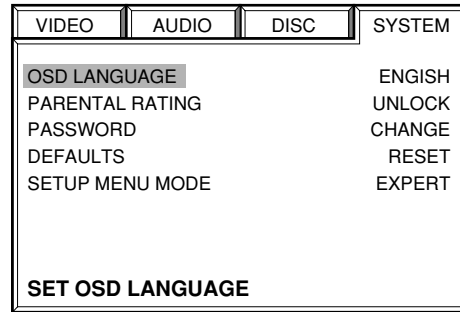


## SYSTEM SETUP

### Setup menu language setup

To set the setup menu language to display.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "SYSTEM".



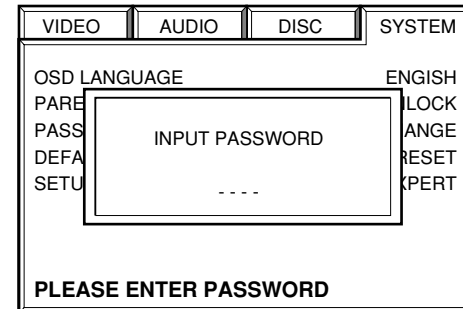
3. With **Cursor**(▲ / ▼) buttons, select "OSD LANGUAGE".
4. Press **ENTER** button, select your preferred language.
  - You can select from English, French, Spanish, German, Italian and Netherlands.
5. Press **SETUP** button to confirm it and to exit from the setup menu.

### Parental lock level setup

If a disc has parental lock level, the disc is played with restriction based on parental lock level and disc contents. You can set the player not to play what you do not want to show to children. To play restricted disc contents, you need to enter password. This section explains how to set parental lock level.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "SYSTEM".
3. With **Cursor**(▲ / ▼) buttons, select "PARENTAL RATING".

4. Press **ENTER** button, the password input screen is displayed on TV.

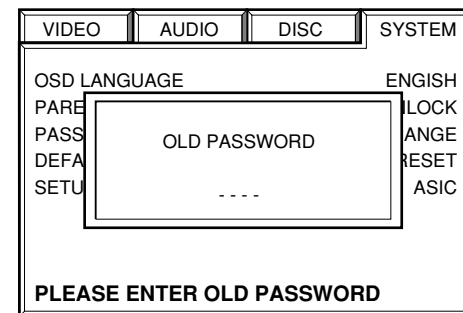


5. With **numeric** buttons, enter your password. Then press **ENTER** button.
  - The default password is "1234".
6. Press **ENTER** button, select parental lock level.
  - You can select from UNLOCK, 1 - 8.
7. Press **SETUP** button to confirm it and to exit from the setup menu.

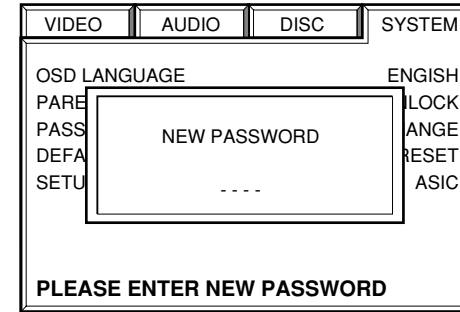
### Set password for parental lock, change password, defaults

You need to enter password to play discs under parental lock or to change parental lock level, to change password, to set default setting. This is to set the password.

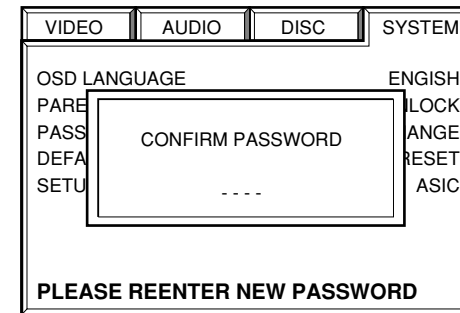
1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "SYSTEM".
3. With **Cursor**(▲ / ▼) buttons, select "PASSWORD".
4. Press **ENTER** button, the old password input screen is displayed on TV.



5. With **numeric** buttons, enter your old password.
  - The default password is "1234". When setting the password first time, enter "1234" for the old password.
  - New password input screen is displayed on TV.



6. With **numeric** buttons, enter your new password.
  - Input screen for confirm new password is displayed on TV.

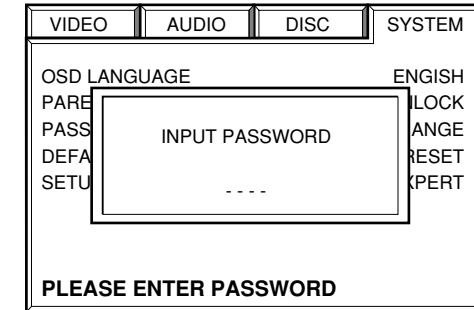


7. With **numeric** buttons, enter your new password.
8. Press **SETUP** button to confirm it and to exit from the setup menu.

### Default setup

If this default setup is set, all the settings made in the setup menu are reset to the default.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "SYSTEM".
3. With **Cursor**(▲ / ▼) buttons, select "DEFAULTS".
4. Press **ENTER** button, the password input screen is displayed on TV.

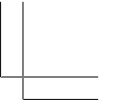
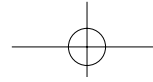


5. With **numeric** buttons, enter your password. Then press **ENTER** button.
  - The default password is "1234".
6. Press **ENTER** button, reset to the default.
  - All the settings are reset.
7. Press **SETUP** button to quit the setup menu.

### SETUP MENU mode setup

This menu is to select either basic mode or expert mode.

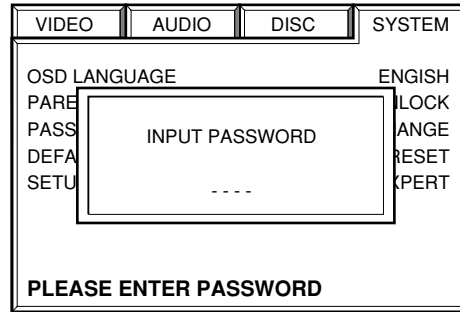
1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "SYSTEM".
3. With **Cursor**(▲ / ▼) buttons, select "SETUP MENU MODE".
4. Press **ENTER** button, select either basic mode or expert mode.
  - You can select BASIC or EXPERT.
  - BASIC: Displays the basic SETUP MENU.
  - EXPERT: Displays a SETUP MENU that is more detailed than that shown in the basic mode.
5. Press **SETUP** button to confirm it and to exit from the setup menu.



### IF YOU HAVE FORGOTTEN THE PASSWORD,

If you have forgotten the password, reset all the settings by taking the following procedures.

1. Press **SETUP** button to display the main menu.
2. With **Cursor** buttons, select "SYSTEM".
3. With **Cursor**(▲ / ▼) buttons, select "DEFAULTS".
4. Press **ENTER** button, the password input screen is displayed on TV.



5. Enter "2580" with the **numeric** buttons on the remote.
6. Press **ENTER** button, reset to the default.
  - All the settings are reset.

## TROUBLE SHOOTING

If you believe that a malfunction has occurred, first check the points listed below. The problem may have been caused by a simple operational error or a connection problem. If the problem is not solved even after carrying out the following checks, consult your dealer or nearest Marantz sales office or service center.

### The power does not come on.

- Plug in the power plug to the socket completely.

### The disc fails to rotate.

- Set the disc the label side up.
- The disc may get dirty or scratched.
- Do not play warped discs.
- This player does not support 8 cm discs.

### No sound is output.

- Check the system connections again.
- Check the settings of the controls on the amp, such as the volume.

### No picture on TV.

- Check the connection with TV.
- Check the aspect ratio setting.
- Check if TV's input source selector is set correctly.

### The remote control is not working.

- Check that the batteries of the remote control unit are not exhausted. If they are, replace them with two new batteries.

### Disc can not be played normally.

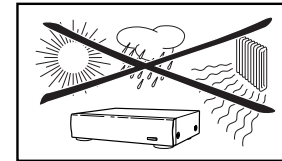
- Check the region code of the disc.
- Check the parental lock level.
- For fast forward and fast rewind play, picture may be disordered. It is normal.
- Do not connect the player and TV through VCR. Copy protection may work and noise may appear on picture.

## MAINTENANCE

Clean the DVD player with a soft, slightly dampened lint-free cloth. Do not use any cleaning agents as they may have a corrosive effect.

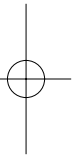
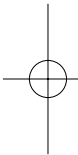


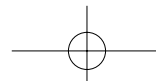
Do not expose the DVD player, batteries or discs to humidity, rain, sand or excessive heat (caused by heating equipment or direct sunlight).



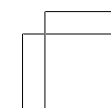
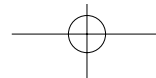
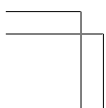
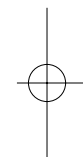
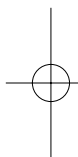
If the DVD player cannot read discs correctly use a commonly available cleaning disc to clean the lens before taking the DVD player to be repaired. Other cleaning methods may destroy the lens. Always keep the tray closed to avoid dust on the lens.

The lenses may cloud over when the DVD player is suddenly moved from cold to warm surroundings. It is not possible to play a disc then. Leave the DVD player in a warm environment until the moisture evaporates.





**ENGLISH**





# SPECIFICATIONS

## AUDIO SECTION

Frequency response (DVD : 96kHz) .....	20-44 kHz
S/N IEC-A .....	105 dB
Dynamic range .....	100 dB
T.H.D. ....	0.005 %
Channel separation 1kHz .....	95 dB
Audio output (1 kHz, 0 dB) .....	2.0 V
Digital output (Coaxial) .....	0.5 Vp-p

## VIDEO SECTION

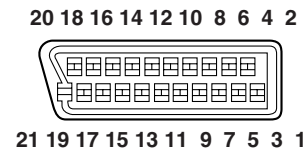
Video output	
Output level .....	1.0 Vp-p (75 Ω)
Jacks .....	RCA Jack
S-Video output	
Output level : Y .....	1.0 Vp-p (75 Ω)
: C .....	0.286 Vp-p (75 Ω)
Jacks .....	S-Video Jack
Component video output	
Output level : Y .....	1.0 Vp-p (75 Ω)
: CB/PB .....	0.7 Vp-p (75 Ω)
: CR/PR .....	0.7 Vp-p (75 Ω)
Jacks .....	RCA Jack
Euro connector (Scart connector)	
Audio output level (1kHz, 0 dB) .....	2.0 V
Video output level : R/G/B .....	0.7 Vp-p (75 Ω)

## GENERAL

Power Requirement .....	AC 230V, 50 Hz
Power Consumption .....	18 W
Maximum external dimensions (W x H x D) .....	420 x 76 x 320 mm
Weight .....	3.6 kg
Operating temperature .....	+5 C° to +35 C°
Operating humidity .....	5 % to 85 % (no condensation)

## 21-PIN CONNECTOR ASSIGNMENT

AV connector output ..... 21-pin connector  
 This connector provides the video and audio signals for connection to a compatible color TV or monitor.

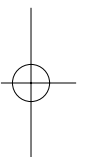
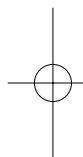
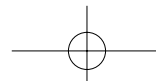
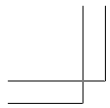


<b>PI N no.</b>		
1. Audio R out	8. Status	17. GND
3. Audio L out	11. G out	19. Video out
4. GND	15. R out	21. GND
7. B out	16. RGB SW	

## ACCESSORIES

Remote control unit (RC2400DV) .....	1
Batteries (AAA type) .....	2
Audio cable (Red/White) .....	1
Video cable (Yellow) .....	1
Coaxial cable (Black) .....	1
Remote cable (Orange) .....	1
AC power cord .....	1
Registration card .....	1
User's guide .....	1

The specifications and external appearance are subject to change without notice.



## **www.marantz.com**

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

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