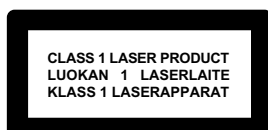


PROFESSIONAL

Model PMD930 User Guide

DVD Player

marantz®



IMPORTANT NOTE

DK

Advarsel:

Laserrudstråling ved åbning når sikkerhesafbrydere er ude af funktion. Undgå u tsættelse for stråling.

Bemærk:

Netafbryderen POWER er sekundært indkoblet og afbryder ikke strømmen fra nettet. Den indbyggede netdel er derfor tilsluttet til lysnettet så længe netstikket sidder i stikkontakten.

N

Observer:

Nettbryteren POWER er sekundært innkoplet. Den innebygdenetdelen er derfor ikke frakoplet nettet så lenge apparatet er tilsluttet nettkontakten.

S

Klass 1 laserapparat

Varning!

Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kann användaren utsättas för laserstråling, som överskrider gränsen för läserklass 1.

Observera!

Strömbrytaren POWER är sekundärt kopplad och inte bryter strömmen från nätet. Den inbyggda nätdelen är därför ansluten till elnätet så länge stickproppen sitter i v ägguttaget.

SF

Luokan 1 laserlaite + Klass 1 laserapparat

Varoitus!

Laitteen käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle lasersäteilille.

Huom.

Toiminnanvalitsin POWER on kytketty toisiopuo-

lelle, eikä se kytke laitetta irti sähköverkosta. Sisäärakennettu verkko-osa on kytkettynä sähköverkkoon aina silloin, kun pistoke on pistorasiassa.

IMPORTANT NOTE FOR USERS IN THE UK

Mains plug

This apparatus is fitted with an approved 13 Amp plug. To change a fuse in this type of plug proceed as follows:

- 1 Remove fuse cover and fuse.
- 2 Fix new fuse which should be a BS1362 5 Amp, A.S.T.A. or BSI approved type.
- 3 Refit the fuse cover.

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place. If the main plug contains a fuse, this should have a value of 5 Amp. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5 Amp.

NOTE:

The severed plug must be disposed of to avoid a possible shock hazard should it be inserted into a 13 Amp socket elsewhere.

How to connect a plug

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

blue = neutral (N), brown = live (L).

As these colours may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:

- 1 Connect the blue wire to the terminal marked N or coloured black.
- 2 Connect the brown wire to the terminal marked L or coloured red.
- 3 Do not connect either wire to the earth terminal in the plug, marked E (or e) or coloured green (or green and yellow).

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead - not simply over the two wires.

Copyright in the U.K.

Recording and playback of material may require consent. See Copyright Act 1956 and The Performer's Protection Acts 1958 to 1972.

LASER SAFETY

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

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

LASER

Type: Semiconductor laser GaAlAs
Wave length: 650 nm (DVD)
780 nm (VCD/CD)
Output Power: 7 mW (DVD)
10 mW (VCD/CD)
Beam divergence: 60 degree

CLASS 1
LASER PRODUCT

CAUTION:

Visible and invisible laser radiation when open avoid exposure to beam.

ADVARSEL:

Synlig og usynlig laserstråling ved åbning undgå udsættelse for stråling.

WARNING:

Synlig och osynlig laserstrålning när denna del är öppnad betrakta ej strålen.

VARO!

Avattaessa olet alttiina näkyvälle ja näkymättömälle laser säteilylle. Älä katso säteeseen.

VORSICHT:

Sichtbare und unsichtbare Laserstrahlung wenn Abdeckung geöffnet, nicht dem strahl aussetzen.



ATTENTION:

Rayonnement laser visible et invisible en cas d'ouverture exposition dangereuse au faisceau.

SAFETY PRECAUTIONS

USA

C

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



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



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

WARNING

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

CONSIGNES DE SÉCURITÉ

USA

C

	AVERTISSEMENT RISQUE DE CHOC ÉLECTRIQUE NE PAS OUVRIR	
<p>AVERTISSEMENT: POUR RÉDUIRE LE RISQUE DE CHOC ÉLECTRIQUE, NE RETIREZ PAS LE CAPOT (OU LE CARTER ARRIÈRE). IL NE SE TROUVE À L'INTÉRIEUR AUCUNE PIÈCE POUVANT ÊTRE RÉPARÉE PAR L'UTILISATEUR. POUR L'ENTRETIEN, VEUILLEZ FAIRE APPEL AU PERSONNEL QUALIFIÉ DU SERVICE APRÈS-VENTE.</p>		



L'éclair avec le symbole en flèche à l'intérieur d'un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur la présence de 'tension dangereuse' non isolée dans le boîtier de l'appareil et susceptible d'être suffisamment grande pour constituer un risque de choc électrique pour les personnes.



Le point d'exclamation à l'intérieur d'un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur la présence, dans la documentation accompagnant l'appareil, d'instructions importantes relatives au fonctionnement et à la maintenance (entretien).

ATTENTION
POUR RÉDUIRE LE RISQUE
D'INCENDIE OU DE DÉCHARGE
ÉLECTRIQUE N'EXPOSEZ PAS
L'APPAREIL À LA PLUIE OU À
L'HUMIDITÉ

IMPORTANT SAFETY INSTRUCTIONS

1. Read instructions - All the safety and operating instructions should be read before the appliance is operated.

2. Retain instructions - The safety and operating instructions should be retained for future reference.

3. Heed warnings - All warnings and use instructions should be followed.

4. Follow instructions - All operating and use instructions should be followed.

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



Exception: A product that is meant for uninterrupted service and that for some specific reason, such as the possibility of the loss of an authorization code for a CATV converter, is not intended to be unplugged by the user for cleaning or any other purpose, may exclude the reference to unplugging the appliance in the cleaning description otherwise required in item 5.

6. Attachments - Do not use attachments not recommended by the video product manufacturer as they may cause hazards.

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

8. Accessories - Do not place this video product on an unstable cart, stand, tripod, bracket or table. The video product may fall, causing serious injury to a child or adult and serious damage to

the appliance. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the video product. Any mounting of the appliance should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.

8A. An appliance and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.

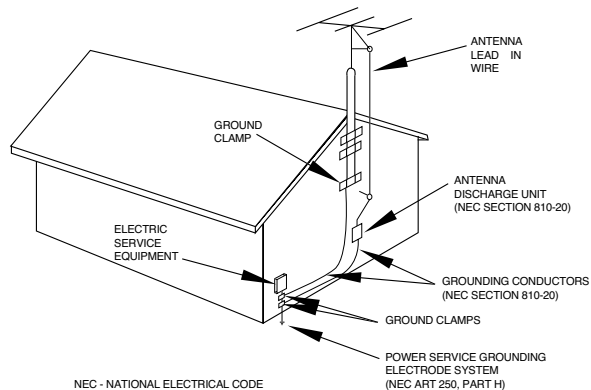
9. Ventilation - Slots and openings in the cabinet are provided for ventilation to ensure reliable operation to the video product and to protect it from overheating. These openings should never be blocked by placing the video product on a bed, sofa, rug or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

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

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

12. Outdoor antenna grounding - If an outside antenna or cable system is connected to the video product, be sure the antenna or cable system is

grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regards to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Fig. A.



13. Lightning - For added protection for this product during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power surges.

14. Power lines - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

15. Overloading - Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

16. Object and liquid entry - Never push objects of any kind into this product through open-

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

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

18. Damage requiring service - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

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

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

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

21. Carts and stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.

22. Heat - The product should be situated away from heat sources such as radiators, heat registers, stoves or other products that produce heat.

23. Grounding-type plug - This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

Since it is usual for DVD movies to be released at different times in different regions of the world, all players have region codes and discs can have an optional region code. If you load a disc of a different region code to your player, you will see the region code notice on the screen. The disc will not playback and should be unloaded.

NOTE:

Pictures shown may be different between countries.

CAUTION:

Never make or change connections with the power switched on.

CAUTION:

Warning location: on the rear plate of set.

The DVD Video player is in conformity with the EMC directive and low-voltage directive.



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TruSurround™
by **SRS** (●)®

Note to CATV system Installers:

This reminder is provided to call the CATV (Cable TV) system installer's attention to Article 82040 of the NEC (National Electrical Code) that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

WARNING:

This device complies with Part 15 of the FCC (U.S.A.) Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation! This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

IMPORTANT:

This product was FCC verified under test conditions that included use of shielded cables and connectors between system components. It is important that you use shielded cables to reduce the possibility of causing interference to radios, television sets, and other electronic devices. If you have any problems, contact your supplier. Any change or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the user's authority to operate such equipment.

THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS AS SET OUT IN THE RADIO INTERFERENCE REGULATIONS OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

CET APPAREIL NUMÉRIQUE N'ÉMET PAS DE BRUITS RADIOÉLECTRIQUES DÉPASSANT LES LIMITES APPLICABLES DANS LA RÈGLEMENT SUR LE BROUILLAGE RADIOÉLECTRIQUES ÉDICTÉ PAR LE MINISTÈRE DES COMMUNICATIONS DU CANADA.

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.

FOR CUSTOMER USE:

Read carefully the information located at the rear side of your DVD Video player and enter below the Serial N°. Retain this information for future reference.

Model N°. PMD930

Serial N°. _____

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DVD VIDEO

DVD VIDEO: THE MEDIUM OF CHOICE FOR PROFESSIONAL CUSTOMERS

The professional DVD player provides all the advantages of DVD Video and more. Additional control devices such as touch screens or wired controls can easily be connected. The Professional player features NVRAM memory to store and retrieve results or settings. This player is the ideal medium for kiosk, training or business presentation applications.

In addition to DVD Video discs, you will be able to playback all DVD Recordables (DVD+RW; DVD-RW), Video CDs, SVCDs and Audio CDs. Perfect digital, studio-quality pictures with truly 3-dimensional digital multi-channel audio. Story sequences viewed on screen from your own choice of camera angle. Language barriers are broken down thanks to sound tracks in as many as eight languages, plus subtitling - if available on disc - in as many as 32 languages. And whether you watch DVD Video on wide-screen or regular TV, you always see the picture the way it was meant to be seen.

DIGITAL VIDEO

DVD Video uses state-of-the-art MPEG 2 data compression technology to register an entire movie on a single 5-inch disc. DVD's variable bit-rate compression, running at up to 9.8 Mbits/second, captures even the most complex pictures in their original quality.

The crystal-clear digital pictures have a horizontal resolution of over 500 lines NTSC, over 600 lines PAL, with 720 pixels (picture elements) to each line. This resolution is more than double that of VHS, superior to Laser Disc, and entirely com-

parable to the digital masters made in recording studios. DVD Video discs conform to either the PAL or NTSC video standard. This dual-standard player can play both types and present them on your multi-standard TV screen in the best possible manner. As the universal video system of the future, DVD Video offers optimum viewing on any TV screen.



DVD Video

You will recognize DVD Video discs by the logo shown. Depending on the material on the disc (a movie, video clips, a drama series, etc.) the disc may have one or more Titles.



Video CD

You will recognize Video CDs by the logo.

Super Video CD (SVCD)

SVCDs are based on the Super VCD IO Standard, referring to the Standard of Electronics Industry of the People's Republic of China.



Audio CD

Audio CDs contain music tracks only. You will recognize Audio CDs by their logo.

MP3 (MPEG Audio Layer-3)

This player supports the MP3 format which contains compressed music tracks.

NOTE:

Only the first session of multisession discs is supported.

UNPACKING

Your system consists of materials which can be recycled and reused if disassembled by a specialized company. Please observe the local regulations regarding the disposal of packaging materials, exhausted batteries and old equipment.

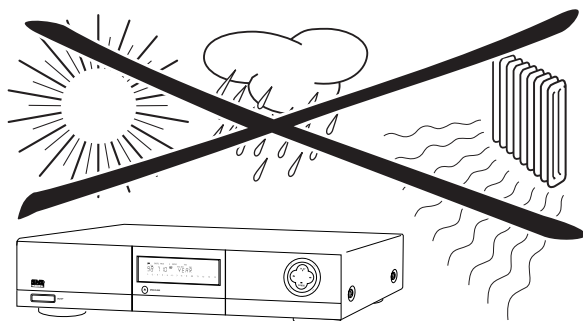
First check and identify the contents of your DVD Video player package, as listed below:

- DVD Video player
- Remote Control with separately packed batteries
- 3-core power cord
- A/V Euroconnector (SCART) cable (Europe)
- S-Video (USA)
- Video (CVBS) and SCART-BNC (YUV) cable
- Audio cable
- User Manual on CD-ROM
- 19" Rack Mounting brackets

If any item is damaged or missing, please inform your supplier. Keep the packaging materials; you need them to transport your player in the future.

PLACEMENT

- Place the player on a sturdy, flat surface.
- Keep away from domestic heating equipment and avoid direct sunlight.



- In a cabinet, allow about 1 inch/ 2,5 centimeters of free space all around the player for adequate ventilation.

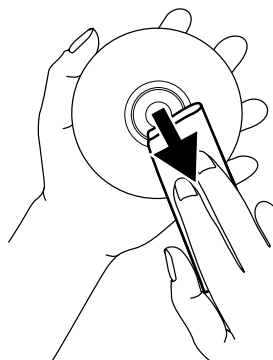
- If your DVD Video player fails to read discs correctly, use a commonly-available cleaning CD/DVD to clean the lens before taking the DVD Video player for repair. Avoid other cleaning methods, because these may damage the lens. Always keep the tray closed to avoid getting dust on the lens.
- The lens may cloud over when the DVD Video player is suddenly moved from cold to warm surroundings, in which case it will not be possible to play a CD/DVD. Leave the DVD Video player in the warm environment until the moisture evaporates.

OPTIONAL PRODUCTS/ ACCESSORIES

- 17" Touch screen
- 21" Touch screen
- Wired pointing device
- Technical manuals (downloadable)
- Communication unit
- Bar-code reader box

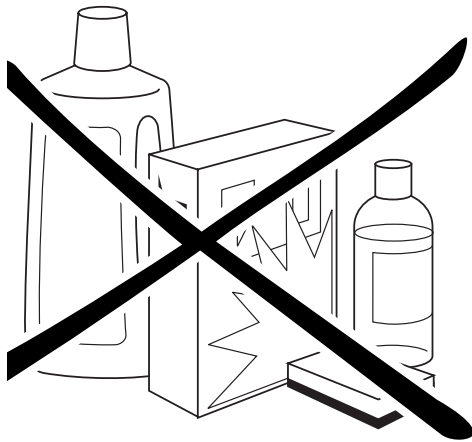
CLEANING DISCS

- When a disc becomes soiled, clean it with a clean and lint free, soft, dry cloth. Wipe the disc from the center out in a straight line.
- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for analogue discs.

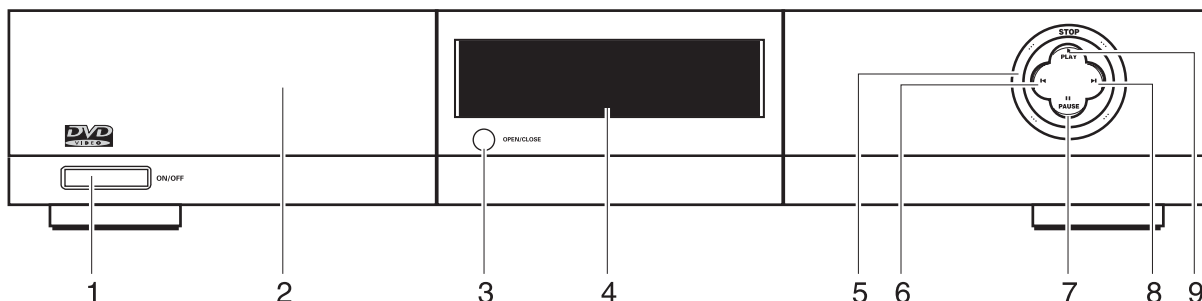


SAFETY INFORMATION

- Do not expose the system to excessive moisture, rain, sand or heat sources.
- Place the player on a firm, flat surface.
- Keep the player away from domestic heating equipment and out of direct sunlight.
- In a cabinet, allow about 2.5 centimeters (1 inch) of free space all around the player for adequate ventilation.
- If your DVD Video player fails to read discs correctly, use a commonly-available cleaning CD/DVD to clean the lens before taking the DVD Video player for repair. Avoid other cleaning methods, because these may damage the lens. Always keep the tray closed to avoid getting dust on the lens.
- Only qualified service personnel should remove the cover or attempt to service this appliance.

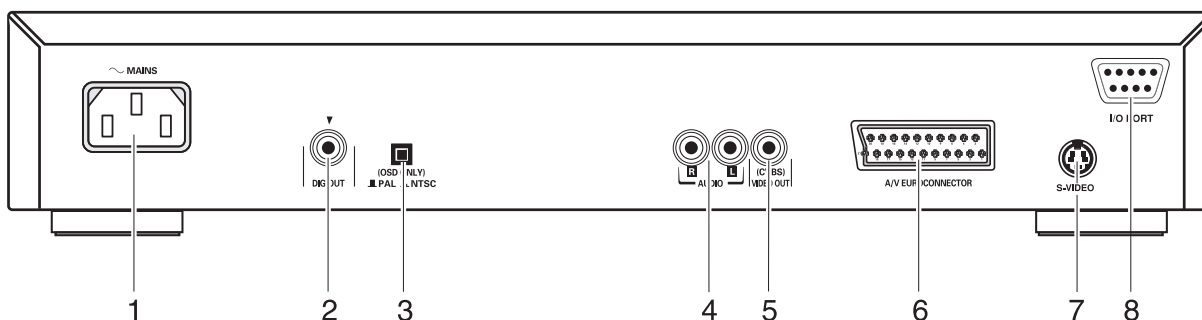


FUNCTIONAL OVERVIEW



FRONT OF PLAYER

- 1 ON/OFF
- 2 Disc tray (behind door)
- 3 Tray OPEN/CLOSE key
- 4 Display
- 5 ■ STOP
- 6 ◀ Previous title/chapter/track
- 7 || PAUSE/Still/Step
- 8 ▶ Next title/chapter/track
- 9 ▶ PLAY



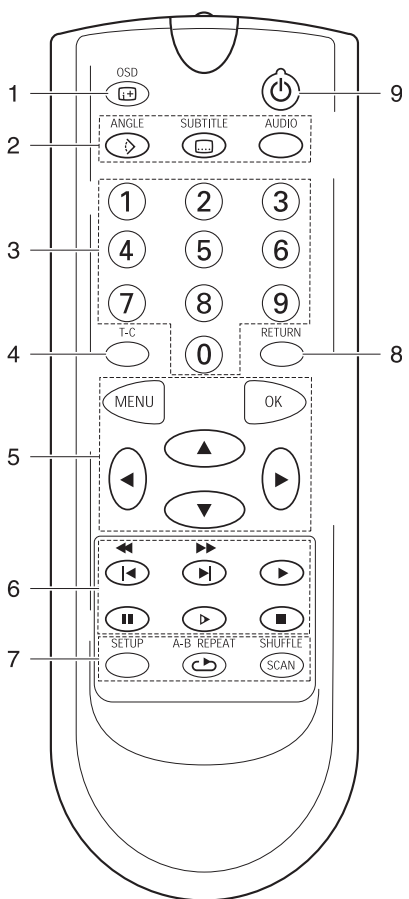
REAR OF PLAYER

- 1 Mains (AC power)
- 2 Coaxial (Digital audio output)
- 3 Optical (Digital audio output)
- 4 Audio output R; Audio output L
- 5 Video (CVBS) output
- 6 A/V Euroconnector (SCART)
- 7 S-Video output (Y/C)
- 8 I/O Port (RS 232)

CAUTION:

Do not touch the inner pins in the rear-panel connectors. Electrostatic discharge may cause permanent damage to the unit.

REMOTE CONTROL

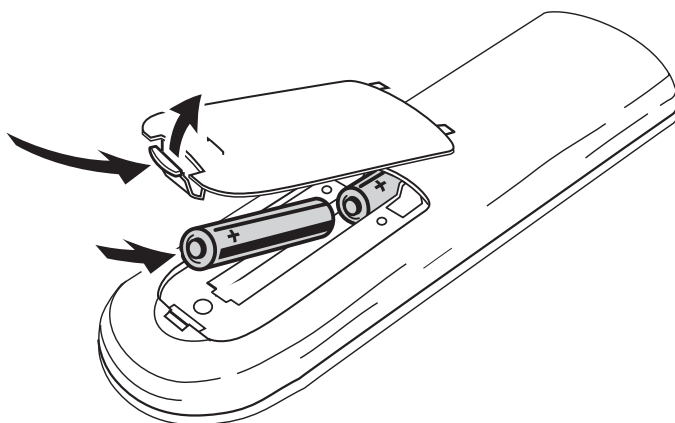


- | | | |
|---|--------------------|--|
| 1 | OSD | (On-Screen Display) on/off |
| 2 | ANGLE | select DVD camera angle |
| | SUBTITLE | language selector or subtitling on/off |
| | AUDIO | spoken language selector |
| 3 | 0-9 | numeric key pad |
| 4 | T-C | title/chapter mode selector |
| 5 | MENU | select DVD-defined menu |
| | OK | acknowledge menu selection. |
| | | up/down/left/right cursor movement |
| 6 | | previous chapter or track/search back |
| | | next chapter or track/search forward |
| | | play |
| | | pause or still frame/step frame |
| | | slow motion (1/2, 1/4, 1/8 speed) |
| | | stop |
| 7 | SETUP | select player settings menu (in stopmode only) |
| | A-B REPEAT/REPEAT* | chapter, track, title, disc |
| | SHUFFLE/SCAN* | shuffle or scan on/off |
| 8 | RETURN | go back to previous menu step |
| 9 | | standby/Power ON |

* Press key for about 2 seconds

NOTE:

Specifications of the remote control can vary. Please consult the website for details: www.marantz.com



Remote Control Battery Installation

Insert batteries as indicated inside the battery compartment.

Caution:

Do not mix old and new batteries. Never mix different types of batteries (standards, alkaline, rechargeable etc.)

CONNECTING THE POWER SUPPLY

- 1 Plug the feed end of the power cord supplied into the Power connector on the rear of the player.
- 2 Plug the supply end of the cord into an AC outlet.

NOTE:

- The player automatically adjusts to the local AC voltage.
- When the player is in the 'OFF' position, it still consumes some power. If you wish to disconnect your player from the power supply, completely pull the plug from the AC Outlet.

CAUTION:

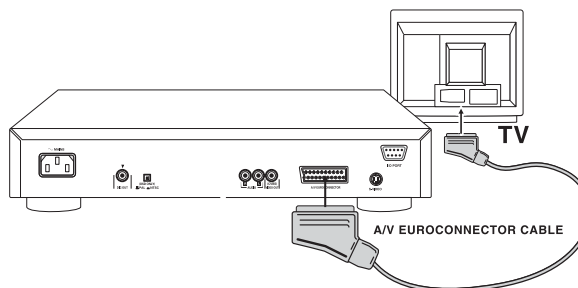
- Only qualified service personnel should remove the cover or attempt to service this appliance.

AUDIO/VIDEO CONNECTION

Depending on your TV and other equipment, there are various ways in which the DVD Video player can be connected. These are shown below. Please refer to your TV, VCR, Stereo System and any other User Manual(s) as necessary to determine the optimum configuration.

CAUTION:

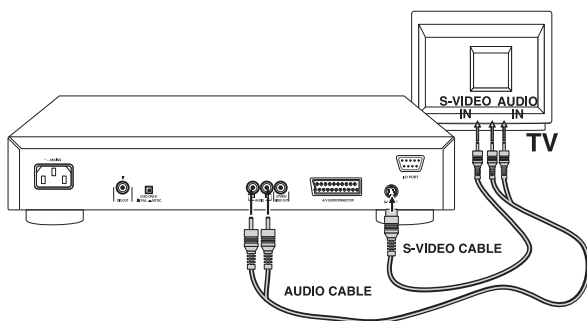
- Make sure the DVD player is connected directly to the TV. Set the TV to the correct video input channel.
- Do not connect the player's audio out jack to the phono in jack of your audio system.
- Do not connect your DVD-player via your VCR. The video quality could be distorted by the copy protection system.



HIGHEST QUALITY A/V CONNECTION (EUROPE)

Connection to a TV with an A/V Euroconnector (SCART) jack.

- 1 Connect the A/V Euroconnector on the rear of the player to the corresponding connector on the TV using the cable supplied.
- 2 You can also opt to connect the audio Left and Right channel jacks on the rear of the player to the corresponding jacks on your stereo system.



Alternatively, you can use the same cable to connect the audio Left and Right jacks on the rear of the player to the corresponding jacks on your stereo system.

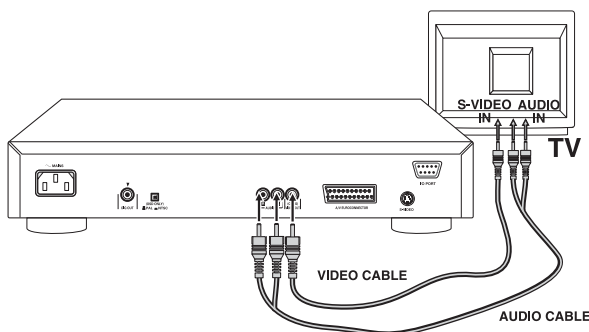
CAUTION:

Do not connect the player's audio output to the phono input of your stereo system.

HIGHEST QUALITY A/V CONNECTION (USA)

Connection to a TV with an S-Video (Y/C) jack.

- 1 Connect the S-Video on the rear of the player to the corresponding connector jack on the TV using the cable supplied.
- 2 Connect the audio Left and Right channel jacks on the rear of the player to the corresponding jacks on the TV using the cable supplied. Alternatively, you can use the same cable to connect the audio Left and Right jacks on the rear of the player to the corresponding jacks on your stereo system.



STANDARD A/V CONNECTION

Connection to a TV with a video (CVBS) jack.

- 1 Connect the Video jack on the rear of the player to the corresponding jack on the TV using the cable supplied.
- 2 Connect the audio Left and Right channel jacks on the rear of the player to the corresponding jacks on the TV using the cable supplied.

DIGITAL MULTI-CHANNEL SOUND

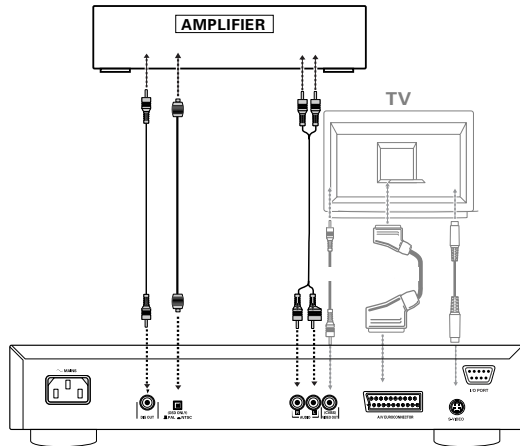
For multi-channel sound, your player provides both digital and analogue audio outputs.

Digital multi-channel connection provides the best sound quality. Therefore you need a multi-channel A/V receiver that supports one or more of the audio formats supported by your DVD player (MPEG 2, Dolby Digital(™) and DTS). Check the receiver manual and the logos on the front of the receiver.

- 1 Connect the digital audio output on the rear of the player to a suitable input on the receiver using a digital audio cable. In this case, do not use the player's audio Left and Right outputs.
- 2 You will need to activate the digital output of the player.
- 3 The audio format of the digital output is dependent on the audio format of the selected audio channel. Make sure that the selected audio channel matches the capabilities of the receiver connected to the digital output.

NOTE:

- If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
- Six Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.
- To see the selected audio format of the current DVD in the Status Window, press **SETUP**.



ANALOGUE (DOLBY PRO LOGIC) MULTI-CHANNEL SOUND

For multi-channel sound, your player provides both digital and analogue audio outputs.

- 1 If your TV set has a Dolby Pro Logic decoder, simply hook up the player to the TV using the A/V Euroconnector, S-Video and audio or Video (CVBS) and audio connections.
- 2 If not, make the A/V Euroconnector, S-Video or Video (CVBS) connection to the TV, and connect the player's audio Left and Right outputs to suitable inputs on a Dolby Pro Logic Audio/Video receiver, using the cable supplied.
- 3 For speaker connections, follow the instructions given in the TV set or A/V receiver User Manual.

NOTE:

- You cannot use a RF modulator.
- If the audio format of the digital output does not match the capabilities of your receiver, the sound will be muted.

DIGITAL AUDIO (STEREO) SOUND CONNECTION

For this connection, giving the best possible stereo sound quality, you need an audio amplifier with digital input, and the digital output of the player must be activated. Connect the player's

digital audio output to the corresponding input on the amplifier. In this case, do not use the player's audio Left and Right outputs.

CAUTION:

Before connecting the player's digital audio output to your audio system, make sure that the disc doesn't contain digital control data for non-audio devices (i.e. controller).

Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an A/V receiver equipped with a multi-channel decoder (Dolby Digital(tm), MPEG 2 and DTS).

- 1 Connect the player's digital audio out jack to the corresponding in jack on your amplifier. Use an optional digital audio cable.
- 2 You will need to activate the player's digital output (see 'Personal Preferences').

NOTE:

You cannot use the MP3 function with the digital out connectors.

ANALOGUE AUDIO (STEREO) SOUND CONNECTION

Connecting to an amplifier equipped with two channel analogue stereo or Dolby Surround. Connect the Left and Right outputs of the DVD player to the audio Left and Right in jacks on your amplifier, receiver or stereo system, using the supplied audio cable.

NTSC/PAL SETTINGS

You can switch the NTSC/PAL setting of the DVD player to match the video signal of your TV. This setting only affects the television's on-screen display that shows the stop and setup modes. You may select either NTSC or PAL. To change the DVD player setting to PAL or NTSC, follow the steps below:

- 1 Unplug the DVD player from the mains.
- 2 Press and hold ■ and ►►, on the front of the DVD player.
While holding ■ and ►►, plug the mains back in.
- 3 After PAL or NTSC appears on the display of the DVD player, release ■ and ►► at the same time. The PAL or NTSC indicator that appears on the display indicates the current setting.
- 4 To change the setting, press ►► within three seconds. The new setting (PAL or NTSC) will appear on the display.

NTSC/PAL CONVERSION

This player is equipped with a NTSC/PAL conversion feature to convert the video output of the disc to match your TV system. The conversions supported are as below:

Disc		Output format		
Type	Format	Selected mode		
		NTSC	PAL	AUTO
DVD	NTSC	NTSC	PAL	NTSC
	PAL	not supported	PAL	PAL
VCD	NTSC	NTSC	PAL	NTSC
	PAL	NTSC	PAL	PAL

- 1 In the Preference Menu, select TV System.
- 2 Press ■ or ►► to select PAL, NTSC or AUTO.

NOTE:

- *AUTO can only be selected when using a TV that has both the NTSC and PAL systems.*
- *This is applicable for CVBS output on cinch and SCART only*
- *Slight picture distortions may occur due to this conversion. This is normal. Thus, the AUTO format is most suitable for the best picture quality*

GENERAL EXPLANATION

ABOUT THIS MANUAL

This manual gives the basic instructions for operating the DVD player. Some DVDs require specific operation or allow only limited operation during playback which may not respond to all operating commands. When this occurs, the symbol ✕ appears on the TV screen, indicating that the operation is not permitted by the player or the disc.

REMOTE CONTROL OPERATION

Unless stated, all operations can be carried out with the remote control. Always point the remote control directly at the player, making sure there are no obstructions in the path of the infrared beam. Corresponding keys on the front panel of the player can also be used.

MENU BAR OPERATION

- A number of operations can be carried out via the menu bar on the screen. The menu bar can be accessed by pressing the cursor keys on the remote control.
- Pressing SETUP while the menu bar is displayed will clear the menu bar from the screen.
- The selected item will be highlighted and the appropriate cursor keys to operate will be displayed below the icon.
- The symbols < or > indicate more items are available at the left/right of the menu bar. Press ◀ or ▶ to select these items.

INITIAL SETUP (VIRGIN MODE)

The Initial Set-up mode allows you to set up the language of the Menu/Audio/Subtitle of your player, as well as the TV shape and your Country. The Initial Set-up screen will only disappear when the setting for the last item has been confirmed. You must complete the set-up sequence prior to playing any disc. Not doing so will result in no playback of any disc.

OPERATION

After switching on the player for the very first time, the 'Initial Setup Screen' will appear. The menu for the first item to be set is displayed and the first option is highlighted.

- 1 Use the ▼▲ keys to go through the options in the menu.
→ The icon of the selected option will be highlighted.
- 2 Use OK to confirm your selection and to go to the next menu.

NOTE:

- Preferences have to be set in the order of which the item menus will appear on the screen.
- If any keys other than ▼▲ or OK are pressed, ✕ will appear on the screen.
- If the player is switched off while setting personal preferences, all preferences have to be set again after switching the player on again.

The following items may have to be set in Initial Setup:

Menu language

You can choose from different languages. The On Screen Menus will be displayed in the language available on the player.

Audio language

You can choose from different languages. If available on the disc, the player will play the audio in the selected language. If the selected language is not available, speech will revert to the first spoken language on the disc.

Subtitle language

You can choose from different subtitle languages. If available on the disc, subtitles will be in the language chosen. If the selected language is not available, subtitles will revert to the first subtitle language on the disc.

TV Shape

If you have a wide screen (16:9) TV, select 16:9.

If you have a regular (4:3) TV, select 4:3.

If you have a 4:3 TV, you can also select between: Letterbox for a 'wide-screen' picture with black bars top and bottom, or Pan Scan, for a full-height picture with the sides trimmed. If a disc supports the format, the picture will be shown accordingly.

Country

Select your country. This is used as input for the 'Parental Control' feature (see 'Access Control').






NOTE:

- All these items may have to be set during 'Initial Setup'. After that, they can always be changed in the Personal Preferences Menu.






MENU BAR/STATUS WINDOW

As there are multiple menu bars, the items on the menu bar are arranged according to usage, availability of direct access keys. Pressing the MENU key once will toggle through menu bar 1, menu bar 2, menu bar 3 and OFF.





Menu bar 1

-  Personal Preferences
-  Subtitle Language
-  Audio Language
-  Color
-  Sound















Menu bar 2

-  Step
-  Slow motion
-  Fast motion
-  Angle
-  Zoom

Menu bar 3

-  Title
-  Chapter
-  Time Search
-  Favorite Track Selection (FTS)

TEMPORARY FEEDBACK FIELD ICONS

-  Scan
-  Repeat All
-  Repeat Title
-  Repeat Track
-  Repeat Chapter
-  Shuffle
-  Shuffle Repeat
-  Repeat A to end
-  Repeat A-B
-  Angle
-  Child Lock On
-  Child Safe
-  Resume
-  Action prohibited

PERSONAL PREFERENCES

You can set your own personal preferences on the player.

GENERAL OPERATION:

- Press **SETUP** on the remote control.
- Select **Tb** in the menu bar.
- The Personal Preferences menu appears.
- Use the **◀▶▲▼** keys to toggle through the menus, submenus and submenu options.
- When a menu item is selected, the cursor keys (on the remote control) to operate the item are displayed next to the item.
- Press **OK** to confirm and return to the main menu.

The following items can be adapted:

PICTURE

- TV Shape

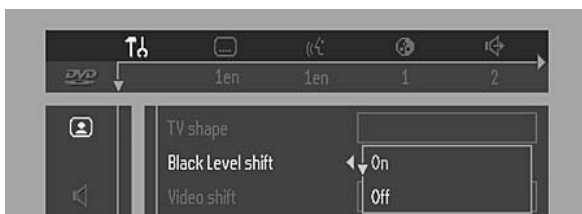
If you have a wide screen (16:9) TV, select 16:9.

If you have a regular (4:3) TV, select 4:3.

If you have a 4:3 TV, you can also select between: Letterbox for a 'wide-screen' picture with black bars top and bottom, or Pan Scan, for a full-height picture with the sides trimmed. If a disc supports the format, the picture will be shown accordingly.

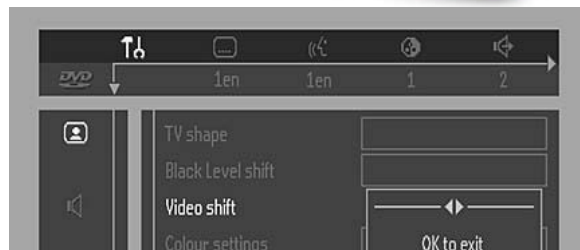
- Black level shift (NTSC only)

Select **ON** for adapting the color dynamics to obtain richer contrasts.



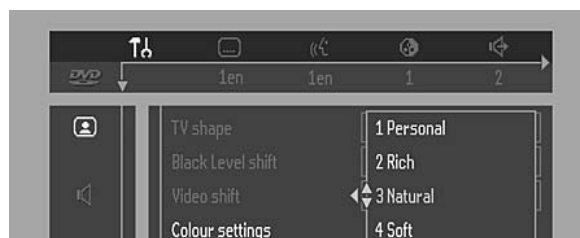
- Video shift

The factory centers the video on your screen. Use this setting to personalize the position of the picture on your TV by scrolling it to the left or right.



- Colour settings

You can select one of five predefined sets of color settings and one set (Personal) which you can define yourself.



- Personal colour

Allows you to fine-tune the selected color settings saturation, brightness and contrast.

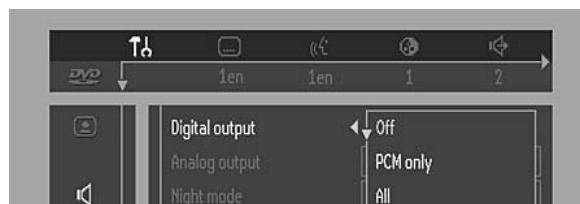
- TV System

Allows you to select between PAL, NTSC and AUTO mode depending on your TV.

SOUND

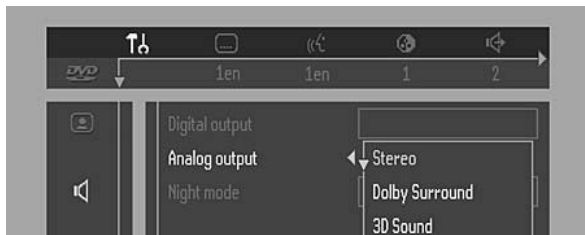
- Digital output

Factory setting: **ALL**. This means that both coaxial and optical outputs are on. If you are not connecting to equipment with a digital input, change the setting to **OFF**. If your equipment doesn't include a digital multi-channel decoder, set the digital output to **PCM** (Pulse Code Modulation).



- Analogue output

Select Stereo, Dolby Surround, 3D Sound (TruSurround) or multi-channel output to match your system's playback capability.



- Night Mode

Optimizes the dynamics of the sound for low volume playback.

- Karaoke vocal

Put this setting to ON only when a multi-channel karaoke DVD is being played. The karaoke channels on the disc will then be mixed into a normal stereo sound.

LANGUAGE

Select the required Menu, Audio and Subtitle language. See 'Initial Setup'.

Audio language and Subtitle language can also be adapted via the Menu bar on the screen.

FEATURES

- Access Control

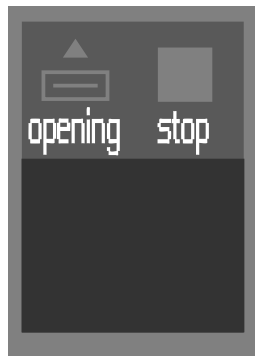
Access Control contains the following features:
Child Lock - When Child Lock is set to ON, a 4-digit code needs to be entered in order to playback discs.

Parental control - Allows the conditional presentation of DVDs containing Parental Control information (see 'Access Control').

- Status Window

Displays the current status of the player and appears with the menu bar. When disc playback is stopped, it is displayed with the 'Temporary

Feedback Field' in the default screen. See 'On-Screen Display' information; Factory setting is ON. Select OFF to suppress display of the Status Window.



- Bit Rate Indicator

When activated, the bit rate for video and audio, as well as the total bit rate is displayed. This is only applicable during playback of DVD and SVCD discs.

vid	aud	tot
0-1	0-10	0-10
mbits/s		

- Help text

When set to ON, help text describes the icons selected. Select OFF if you no longer require the help text.

- Low Power Standby

If this is set to ON, the player will go in low-power standby when the standby button is pressed (remote control).

- PBC (Playback Control)

The Playback Control can be set to ON or OFF.

GETTING STARTED

SWITCHING ON

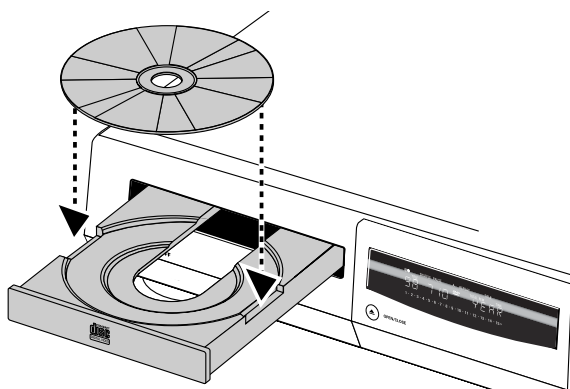
- 1 Switch on the TV and select the video input for your DVD Video player.
- 2 To play sound through a stereo system, turn on the system and select the source input for the DVD Video player, or: To use DVD Video with multi-channel (surround) sound, switch on the Home Theatre system and select the source input for your DVD Video player.
- 3 On the front of the DVD Video player, press ON/OFF. The player display will light up, and the OSD invites you to insert a disc.
- 4 When Autoplay is ON (the factory setting), any disc already inserted in the player will start to play.

NOTE:

- Unless indicated otherwise, all operations can be performed using the remote control. Always point the remote control directly at the player, making sure there are no objects obstructing the path of the infrared beam.
- When there are corresponding keys on the front panel, these can also be used.

INSERTING A DISC

- 1 Press Open/Close on the front of the player. The disc tray will open.



- 2 Put the disc you have selected into the tray, label side up. Make sure it fits properly into the correct recess.

- 3 Press Open/Close, to close the tray.

→READING appears in the status window and on the player display and playback starts automatically.

- When Autoplay is ON (the factory setting), play starts.
- When Autoplay is OFF, the (play) screen for the type of disc inserted will appear on the OSD, and information about the disc's contents and total playing time will appear on the display.

NOTE:

- If 'Child Lock' is set to ON and the disc inserted is not authorized, the 4-digit code must be entered and/or the disc must be authorized (see 'Access Control').
- Because DVD movies are usually released at different times in different parts of the world, all players have region codes, and discs may have an optional region code. If you insert a disc with a different region code into your player, you will see the region code notice on the screen. The disc will not play, and should be removed.

PLAYING A DISC

- When Autoplay is ON, play will start when you close the disc drawer.
- When Autoplay is OFF, press ►.

NOTE:

- Some DVD Video discs are included with their own Autoplay, in which case play always starts automatically.
- The disc may invite you to select an item from a menu. If the selections are numbered, press the appropriate numeric key; if not, use ◀▶ highlight your selection, and press OK.

→As the disc plays, the player display will indicate the current title and chapter and the elapsed playing time.

- Depending on the material on the disc it may have one or more Titles and each Title may have one or more Chapters. Play will stop at the end of a Title, and this may result in returning to the menu. To go on to the next Title, press ►.
- To stop play at any other time, press ■.
- You can resume play from the point at which you stopped. Press ► twice.
- The RESUME feature applies not only to the disc in the player, but also to the last four discs you have played. Simply reload the desired disc, press ► if Autoplay is OFF, and when you see the Resume icon on the screen, press ► again.

NOTE:

- During play, a variety of icons will appear on the TV screen for about 2 seconds to confirm that a function has been selected. You can remove these icons by pressing OSD.
- At any time during play, you can press OSD to view the Play Bar, which indicates which functions are active, for about 2 seconds. To keep the Play Bar on the screen, press OSD for a couple of seconds. To remove the Play Bar, press OSD again.

- List of icons:

	Play
	Pause
	Stop
	A-B repeat
	Search forward
	Search backward
	Slow forward
	Repeat disc
	Repeat title
	Repeat chapter
	Chapter shuffle
	Title indication
	Chapter indication
	Disable function
	Angle
	No alternative angle
	Subtitle language



Audio language
Audio system
Remaining time of title
Elapsed time
Resume
Total time

GENERAL FEATURES

Unless stated, all operations described are based on remote control operation. A number of operations can also be carried out via the menu bar on the screen.

MOVING TO ANOTHER TITLE/CHAPTER

When a disc has more than one title or chapter, you can move to another title/chapter as follows:

- Press T-C, then select or in the menu bar.
- Press ▲ or ▼ to select a title/chapter.

SLOW MOTION

- Press ► to play video at 1/2 normal speed with sound muted.
- Press ► again to play at 1/4 normal speed.
- Press ► again to play at 1/8 normal speed.
- Playing speed is indicated on the screen for 2 seconds each time the button is pressed.
- To exit from the slow motion mode, press , / or as desired.

STILL PICTURE AND FRAME-BY-FRAME PLAYBACK

- Press SETUP.
 - Select (STEP) in the menu bar.
 - Use the ▼ key to enter the step by step menu.
 - Playback will pause.
 - Use the cursor keys to select the previous or next picture frame.
 - To exit step by step playback, press ► or ▲.
- You can also step forward by pressing repeatedly on the remote control.

SCAN

Scanning plays the first 10 seconds of each chapter/track on the disc.

- Press SCAN for about 2 seconds.
- To continue playback at your chosen chapter/track, press SCAN again or press ►.

SHUFFLE

This shuffles the playing order of chapters within a title, if the title has more than one chapter.

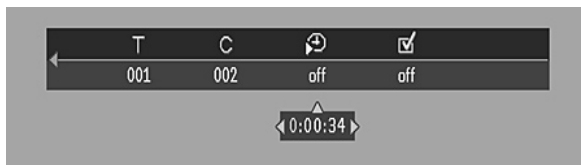
- Press SHUFFLE during playback.
- SHUFFLE appears on the TV screen for about two seconds.
- To return to normal playback, press SHUFFLE again.

FAST MOTION SEARCH

- Press T-C.
- Select ►► (FAST MOTION) in the menu bar.
- Use the ▼ keys to enter the FAST MOTION menu.
- Use the ◀▶ keys to select the required speed: -32, -8 or -4 (backward), or +4, +8, +32 (forward).
- Select 1 to play the disc at normal speed again.
- To exit FAST MOTION mode, press ► or ▲.
- To search forward or backward through different speeds, you can also hold down ◀◀ or ►►.

TIME SEARCH

The Time Search function allows you to start playing at any chosen time on the disc.



- Press T-C.
- Select ◀▶ (TIME SEARCH) in the menu bar.
- Press ▼.
- Playback will pause.
- A time edit box appears on the screen, showing the elapsed playing time of the current disc.
- Use the numeric keys to enter the required start time. Enter hours, minutes and seconds from left to right in the box.

→ Each time an item has been entered, the next item will be highlighted.

- Press OK to confirm the start time.
- The time edit box will disappear and playback starts from the selected time position on the disc.

ZOOM

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



- Press SETUP.
- Select ◀▶ (ZOOM).
- Press ▲/▼ to activate the ZOOM function and select the required zoom factor: 1.33 or 2 or 4.
- Playback will pause.
- The selected zoom factor appears below the Zoom icon in the menu bar and 'Press OK to pan' appears below the menu bar.
- The picture will change accordingly.
- Press OK to confirm the selection.
- The panning icons appear on the screen.
- Use the ◀▶▲▼ keys to pan across the screen.
- When OK is pressed only the zoomed picture will be shown on the screen.
- To exit ZOOM mode: Press ► to resume playback.

REPEAT CHAPTER/TITLE/DISC DVD VIDEO DISCS

- To repeat the current chapter, press REPEAT.
- REPEAT CHPT appears on the player display.
- To repeat the current title, press REPEAT a second time.
- REPEAT TITL appears on the display.
- To repeat the entire disc, press REPEAT a third time.
- REPEAT appears on the display.
- To exit Repeat mode, press REPEAT a fourth time.

REPEAT TRACK/DISC

VIDEO CD DISCS

- To repeat the current track, press REPEAT.
→ REPEAT TRK appears on the player display.
- To repeat the entire disc, press REPEAT a second time.
→ REPEAT appears on the display and the TV screen.
- Press REPEAT a third time to exit the repeat mode.

REPEAT A-B

To repeat a specific portion of a title:

- Press REPEAT A-B at your chosen starting point.
→ A- appears briefly on the screen.
 - Press REPEAT A-B again at your chosen end point.
→ REPEAT A-B appears briefly on the display, and the repeat sequence begins. (REPEAT A-B is displayed on the front panel of the player)
- To cancel the sequence and continue playback, press REPEAT A-B.

FTS-VIDEO

- The FTS-Video function allows you to store your favorite titles and chapters (DVD) and favorite tracks and indexes (VCD) for a particular disc in the player memory.
- FTS program can contain 20 items (titles, chapters etc.).
- A programmed FTS will be placed on top of the list when playback is activated. When the list is full, a new program will replace the last program on the list.
- The program can be selected and played at any time.

STORING A FTS-VIDEO PROGRAM

- In STOP mode, press SETUP
- Select VIDEO FTS ☒ in the menu bar.
- Press ▼ to open the menu.
- The VIDEO FTS menu appears.
- Press ◀ or ▶ to select ON or OFF.



STORING TITLES/TRACKS

- Press ▼ to select TITLES.
- Use ◀ and ▶ to select the required title.
- Press OK if you wish to store the entire title.
→ The title number will be added to the list of selections.

STORING CHAPTERS/INDEXES

- Press ▼ on the selected title number.
→ The title number will be marked and the highlight moves to the first available chapter number for this title.
- Use ◀ and ▶ to select the required chapter number.
- Press OK to confirm the selection.
→ The title/chapter selection will be added to the list of selections.
- Press SETUP to exit the VIDEO FTS ☒ menu. During selection the FTS info switches. After ending selection, the Icon in the menu bar reflects the choice.

ERASING A FTS-VIDEO PROGRAM

- In STOP mode, select VIDEO FTS ☒ in the menu bar.
- Use ▼ to select PROGRAM.
- Use ◀ and ▶ to select the required selection number.
- Press OK to erase the selection.
- Press SETUP to exit.

IF YOU WISH TO ERASE ALL SELECTIONS

- In STOP mode, select VIDEO FTS ☒ in the menu bar.
- Use ▼ to select CLEAR ALL.
- Press OK.
- All selections will now be erased.
- Press MENU to exit.

SPECIAL DVD FEATURES

CHECKING THE CONTENTS OF DVD VIDEO DISCS: MENUS

DVDs may contain menus to navigate the disc and access special features. To use the menu, press the appropriate numerical key or use the ◀▶▲▼ keys to highlight your selection, then press OK.

TITLE/DISC MENU

- Press MENU.
- If the current title has a menu, the menu will appear on the screen otherwise, the disc menu will be displayed.
- The menu can list camera angles, spoken language, subtitle options, and chapters for the title.
- To remove the title menu, press MENU again.

CAMERA ANGLE

If the disc contains sequences recorded from different camera angles, the angle icon appears, showing the number of available angles and the angle currently being shown. You may then change the camera angle if you wish.

- Use the ▲/▼ keys to select the required angle.
- After a brief moment, playback changes to the selected angle. The angle icon remains displayed until multiple angles are no longer available.



CHANGING THE AUDIO LANGUAGE

- Press SET UP.
- Select ⏮ (AUDIO) in the menu bar.
- Press ⏮ or ▲/▼ repeatedly to see the different languages.



SUBTITLES

- Press SET UP.
- Select ⏮ (SUBTITLE) in the menu bar.
- Press ⏮ or ▲/▼ repeatedly to see the different subtitles.



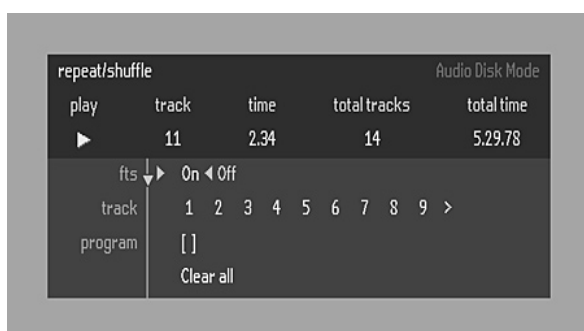
SPECIAL VCD & SVCD FEATURES

PLAYBACK CONTROL (PBC)

- Load a Video CD with PBC and press ►.
- Go through the menu with the keys indicated on the TV screen until your chosen passage starts to playback. If a PBC menu consists of a list of titles, you can select a title directly.
- Enter your choice with the numerical keys (0-9).
- Press RETURN to go back to the previous menu.
- You may also select PBC OFF under Personal Preferences.

PLAYING AN AUDIO CD

- After loading the disc, playback starts automatically.
- If the TV is on, the Audio CD screen appears.
- The number of tracks and the total playing time of the disc will be shown on the TV screen.
- During playback, the current track number and its elapsed playing time will be shown on the TV screen and on the player display.
- Playback will stop at the end of the disc.
- To stop playback at any other time, press ■.



PAUSE

- Press ■ during playback.
- To return to playback, press ►.

SEARCH

- To search forward or backward through the disc at four times the normal speed, hold down ◀◀ or ▶▶ for about one second during playback.
- Search begins and sound is partially muted.
- To step up to eight times the normal speed, press ◀◀ or ▶▶ again.
- Search goes to eight times the speed and the sound is muted.
- To return to four times the normal speed, press ◀◀ or ▶▶ again.
- If the TV is on, search speed and direction are indicated on the screen each time ◀◀ or ▶▶ is pressed.
- To end the search, press ► to resume playback or press ■ to stop playback.

MOVING TO ANOTHER TRACK

- Press ◀◀ or ▶▶ briefly during playback to go to the next track or to return to the beginning of the current track.
- Press ◀◀ twice briefly to step back to the previous track.
- To go directly to any track, enter the track number using the numerical keys (0-9).

SHUFFLE

- Press SHUFFLE during playback.
- The playing order of the tracks is changed.
- To return to normal playback, press SHUFFLE again.

REPEAT TRACK/DISC

- To repeat the current track, press A-B REPEAT.
- REPEAT TRK appears on the display.
- To repeat the entire disc, press REPEAT a second time.
- REPEAT appears on the display.
- To exit Repeat mode, press REPEAT a third time.

REPEAT A-B

To repeat a specific portion of a track:

- Press A-B REPEAT at your chosen starting point.
- A- appears on the player display.
- Press A-B REPEAT again at your chosen end point.
- REPEAT A-B appears on the display, and the sequence begins to play repeatedly.
- To cancel the sequence and continue playback, press A-B REPEAT.

SCAN

Scanning plays the first 10 seconds of each track on the disc.

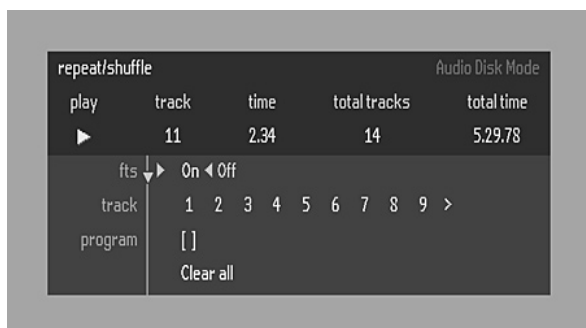
- Press SCAN.
- To continue playback at your chosen track, press SCAN again or press ►.

FTS PROGRAM

- FTS Program allows you to store your favorite tracks for a particular disc in the player memory.
- Each FTS Program can contain 20 tracks.

STORING AN FTS PROGRAM

- 1 Load a disc and stop playback.
- 2 Use ▼ to go to the list of available tracks.
- 3 Use ◀ or ▶ to select tracks from the list.
To go directly to any track, enter the track number using the numerical keys (0-9).
- 4 Store each track by pressing OK.
→ The track numbers will be added to the list.
→ The number of tracks and the playing time of the program will be shown on the TV screen and the player display.



When your FTS Program is complete, press ▶ to start playback or, press ▲ to go back to Stop mode. In either case, the FTS Program will be automatically memorized.

SWITCHING FTS ON/OFF

- Use ▲▼ to move and select desired tracks.
- Use ◀ or ▶ to select either ON or OFF.

ERASING A TRACK FROM AN FTS PROGRAM

- Use ▼ to go to the list of selected tracks.
- Use ◀ and ▶ to select the track number you wish to erase.
- Press OK.
→ The track number will be erased from the list of selected tracks.

ERASING THE COMPLETE PROGRAM

- Use ▼ to select CLEAR ALL, then press OK.
→ The complete FTS Program for the disc will be erased.

MP3 DISC FEATURES

Support following MP3-CD formats (ISO9660 format):

- Max. 30 characters
- Max. nested directory is 8 levels
- The max. ALB number is 32
- Supported VBR bit-rate
- Supported sampling frequencies for MP3 disc are: 32 kHz, 44.1 kHz, 48 kHz
- Supported Bit-rates of MP3 disc are: 32, 64, 96, 128, 192, 256 (kbps)

Following formats can't be supported

- The files like *.WMA, *.AAC, *.DLF, *.M3U, *.PLS
- Chinese filename
- The non-session closed discs
- The discs recorded under UDF format

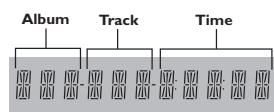
Downloading MP3 files from the Internet or copying songs from your own legal discs is a delicate process.

Sound Quality	Bit Rate	Approximate Reduction Ratio	Approximate total MP3-CD time	Comment
AM radio	32 kbps	40 : 1	40 hrs	Sound quality significantly affected - not recommended.
FM radio	64 kbps	20 : 1	20 hrs	
Near-CD	96 kbps	15 : 1	15 hrs	Balanced sound quality - compression rate
CD-like	128 kbps	10 : 1	10 hrs	
CD*	256 kbps	5 : 1	5 hrs	Compression rate low - suggest to play CDs instead
CD*	320 kbps	3 : 1	3 hrs	

You may experience an occasional "skip" while listening to your MP3 files. This is normal.

Additional note for MP3 disc Playback:

- In compliance with the SDMI, digital-out is muted while playing MP3 discs.
- Due to the recording nature of Digital Audio MP3 (DAM), only Digital Audio music will play.
- The disc reading time may exceed 10 seconds due to the large number of songs compiled into one disc.
- Only the first session of multi-session discs is supported.



ALBUM/TITLE

This feature allows you to view and select the next or previous MP3 disc Album/Title.

- Press ▲/▼ to scroll through the previous or next Album.
- Press ◀/▶ to scroll through the previous or next Track.
- You can also select the desired album/track number directly using the numeric keys on the remote control.



NOTE:

- **In STOP mode:** numbers are used for ALBUM selection.
- **In PLAY mode:** numbers are used for TRACK selection.

Only the following functions are possible for MP3 discs:

- STOP/PLAY/PAUSE
- SKIP NEXT/PREVIOUS
- REPEAT (TRACK/ALBUM/DISC)

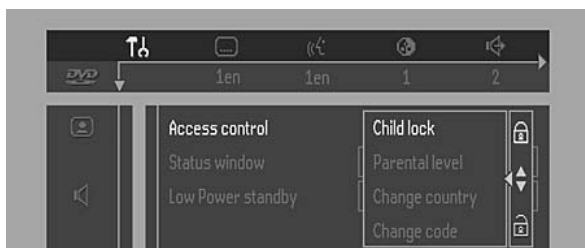
MP3 DISCS - ALBUM/TRACK/DISC

- To repeat a track, press A-B REPEAT.
→ **REPEAT TRK** appears on the display.
- To repeat an album, press A-B REPEAT a second time.
→ **REPEAT ALBM** appears on the player display.
- To repeat the entire disc, press A-B REPEAT a third time.
→ **REPEAT DISC** appears on the player display.

CHILD LOCK (DVD VIDEO AND VIDEO CD)

ACTIVATING/DEACTIVATING THE CHILD LOCK

- 1 When disc playback is stopped, press SETUP key, select ACCESS CONTROL in the features menu using the ▲/▼ keys.
- 2 Enter a 4-digit code of your own choice.
- 3 Enter the code a second time.
- 4 Move to "CHILD LOCK" using the ▲/▼ keys.
- 5 Move to LOCK/UNLOCK using the ► key.
- 6 Select LOCK using the ▲/▼ keys.
- 7 Press OK or ◀ to confirm, then press ◀ again to exit the menu. Now unauthorized discs will not be played unless the 4-digit code is entered.
- 8 Select UNLOCK to deactivate the CHILD LOCK.



NOTE:

Confirmation of the 4-digit code is necessary when:

- The code is entered for the very first time (see above),
- The code is changed (see 'Changing the 4-digit code'),
- The code is cancelled (see 'Changing the 4-digit code').

AUTHORIZING DISCS

- Insert the disc. See 'Loading discs'.
- The 'child protect' dialog will appear. You will be asked to enter your secret code for 'Playback Once' or 'Playback Always'. If you select 'Playback Once', the disc can be played as long as it is in the player and the player is ON. If you select 'Playback Always', the disc will become child safe (authorized) and can always be played, even if the Child Lock is set to ON.

NOTES:

- The player memory maintains a list of 120 authorized ('Child safe') disc titles. A disc will be placed in the list when 'Playback Always' is selected in the 'child protect' dialog.
- Each time a 'child safe' disc is played, it will be placed on top of the list. When the list is full and a new disc is added, the last disc in the list will be removed from the list.
- Double sided DVDs may have a different ID for each side. In order to make the disc 'child safe', each side has to be authorized.
- Multi-volume VCDs may have a different ID for each volume. In order to make the complete set 'Child safe', each volume has to be authorized.

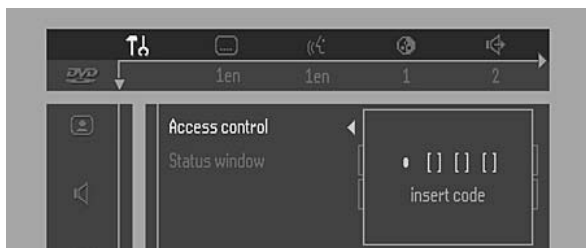


DEAUTHORIZING DISCS

- Insert the disc. See 'Loading discs'.
- Playback starts automatically.
- Press ■ while ☺ is visible.
- The ☹ will appear and the disc is now deauthorized.

PARENTAL CONTROL (DVD VIDEO ONLY)

Movies on DVDs may contain scenes not suitable for children. Therefore, a disc may contain 'Parental Control' information which applies to the entire disc or to certain scenes on the disc. These scenes are rated from 1 to 8, and alternative, more suitable scenes are available on the disc. Ratings are country dependent. The 'Parental Control' feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.



ACTIVATING/DEACTIVATING PARENTAL CONTROL

- 1 When disc playback is stopped, press SETUP, select ACCESS CONTROL in the features menu using the ▲/▼ keys.
- 2 Enter your 4-digit code. If necessary, enter the code a second time.
- 3 Move to Parental Control using the ▲/▼ keys.
- 4 Move to VALUE ADJUSTMENT (1-8) using the ► key.
- 5 Then use the ▲/▼ keys or the numerical keys on the remote control to select a rating from 1 to 8 for the disc inserted.

Rating 0 (displayed as '- -'):

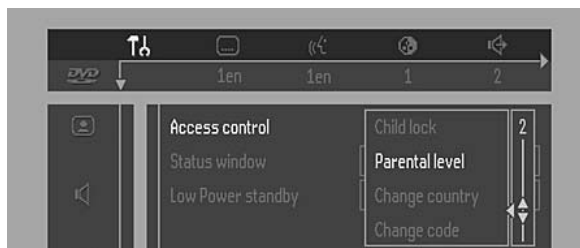
Parental Control is not activated. The Disc will be played in full.

Ratings 1 to 8:

The disc contains scenes not suitable for children. If you set a rating for the player, all scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternative is available on the disc. The alternative must have the same rating or a lower one. If no suitable

alternative is found, playback will stop and the 4-digit code has to be entered.

- 6 Press OK or ◀ to confirm, then press ◀ again to exit the menu.



COUNTRY

- 1 When disc playback is stopped, press SETUP, select ACCESS CONTROL in the features menu using the ▲/▼ keys.
- 2 Enter the 4-digit code.
- 3 Move to CHANGE COUNTRY using the ▼ key.
- 4 Press the ► key.
- 5 Select a country using ▲/▼.
- 6 Press OK or ◀ to confirm, then press ◀ again to exit the menu.

CHANGING THE 4-DIGIT CODE

- 1 When disc playback is stopped, press SETUP, select ACCESS CONTROL in the features menu using the ▲/▼ keys.
- 2 Enter the old code.
- 3 Move to CHANGE CODE using the ▼ key.
- 4 Press the ► key.
- 5 Enter the new 4-digit code.
- 6 Enter the code a second time and reconfirm by pressing OK.
- 7 Press ◀ to exit the menu.

IF YOU FORGET YOUR 4 DIGIT CODE

- 1 Press ■ to exit 'Child Protect' screen.
- 2 Select ACCESS CONTROL in the features menu using the ▲/▼ keys.
- 3 The 4-digit code can be cancelled by pressing ■ four times in the 'Access Control' dialog.
- 4 You can then enter a new code (twice!) as described above (Changing the 4 digit code).

PARENTAL CONTROL DISCLAIMER

This DVD player features the PARENTAL CONTROL system which is intended to activate when playing DVD discs furnished with certain software coding. This is in accordance to technical standards adopted by the set maker and disc content industries. Please note that the PARENTAL CONTROL system will not operate a DVD disc which is not furnished with the appropriate software coding. Also note that at the time of release of this DVD player, certain aspects of the technical standards had not been settled between set makers and the disc industries. On this basis Marantz cannot guarantee the functioning of PARENTAL CONTROL system and denies any liability associated with unintended watching of disc content. If in doubt, please make sure the disc plays according to your PARENTAL CONTROL settings before you allow children access to the player.

If it appears that the DVD Video player is faulty, first consult this checklist. Under no circumstances attempt to repair the system yourself; this will invalidate the warranty. Look for the specific symptom(s) and perform only the actions listed to remedy the specific symptom(s).

SYMPTOM	REMEDY
----------------	---------------

No power

- Make sure both ends of the power cord are properly connected.
- Make sure there is power at the AC outlet by plugging in another appliance.

No picture

- Check if the TV is switched on.
- Select the same channel and source on the TV as on the player.
- Check the video connection.

Distorted picture

- Check the disc for fingerprints and clean the disc with a soft cloth, wiping from the center to the edge in a straight line.
- Sometimes a small amount of picture distortion may appear.
- This is not necessarily a malfunction.

Completely distorted picture or no color with player menu

- If the picture is distorted completely or if the picture rolls vertically, make sure the NTSC/PAL setting of the DVD player matches the video signal of your television.
- If your TV video signal is NTSC, select the NTSC setting on the DVD player.
- If your video signal is PAL, select the PAL setting - see NTSC/PAL SETTINGS.

Distorted or black/white picture with DVD or Video CD

- The disc format does not match your TV's video signal (PAL/NTSC) - See NTSC/PAL Conversion.

Disc will not play

- Make sure the disc label is facing upward.
- Clean the disc.
- Check if the disc is defective by trying another disc.
- Check to see if the disc is defective, badly scratched or warped (not flat).

No sound

- Check audio connections.
- If you are using a HiFi amplifier, try another sound source.

Distorted sound from HiFi

- Make sure the player's audio L/R output is not connected to the amplifier's

phono input.

No return to start-up screen when disc is removed

- Reset by switching the player off and on again.
- Check to see if the program indicates another disc should be loaded.

The player does not respond to the remote control

- Aim the remote control directly at the sensor on the front of the player.
- Move any objects that could obstruct with the signal path.
- Inspect or replace the batteries in the remote control.

Distorted or black and white picture with DVD or Video CD disc

- The disc format is not compatible with the type of TV set being used (NTSC/PAL).

No audio at digital output

- Check the digital connections.
- Check the settings menu to make sure the digital output is set to ALL or PCM.
- Check if the audio format of the selected audio language matches your receiver capabilities.
- Digital output is not available for MP3 playback.

Keys do not work

- In order to completely reset the player, unplug the AC cord from the AC outlet (please ensure that the set is not in Initial Setup mode).
- Operations may not be permitted by the disc. Refer to the instructions of the disc.
- Use a commonly available cleaning CD/DVD to clean the lens before sending the DVD Video player for repair.

Player freeze up

- In rare cases, static electricity can cause your player to freeze up. If this happens, simply unplug the player power cord from the AC outlet and then plug it back in after a few minutes.

DIAGNOSTIC PROGRAM

If the malfunction persists, you can run the player's Diagnostic Program.

Instructions:

- 1 Switch the player off.
- 2 Press down and hold both OPEN/CLOSE and **II** (PAUSE) and turn the player on.
 - 'Busy' will appear on the display together with a counter. The counter indicates that the test has been completed when it reaches zero.
 - After a few minutes 'Busy' changes to 'Error' or 'Pass'.
- 3 Switch the player off to exit from the Diagnostic Program.
 - 'Error' indicates that your player needs repair. Contact your dealer or Marantz Professional: www.marantz.com
 - 'Pass' indicates that the Diagnostic Program has found no errors. In this case, the malfunction may be a result of misinterpretation of the operating instructions, or could be caused by an unsuitable disc or incorrect connections. If you are unable to solve the problem, contact your dealer or Marantz Professional: www.marantz.com

PLAYBACK SYSTEM

DVD Video
Video CD & SVCD
CD (CD-R and CD-RW)
DVD+RW, DVD-RW
MP3

OPTICAL READOUT SYSTEM

Laser type:	Semiconductor AlGaAs
Numerical Aperture:	0.60 (DVD) 0.45 (VCD/CD)
Wavelength:	650 nm (DVD) 780 nm (VCD/CD)

DVD DISC FORMAT

Medium:	Optical Disc	
Diameter:	12cm (8cm)	
Playing time:	One layer	2.15 h*
(12cm)	Dual layer	4 h*
	Two side	4.30 h*
	Single layer	
	Two side	8 h*
	Dual layer	

* typical playing time for movie with 2 spoken languages and 3 subtitle languages.

VIDEO FORMAT

DA Converter:	10 bits
Signal handling:	Components
Digital Compression:	MPEG 2 for DVD MPEG 1 for VCD

TV STANDARD	(PAL/50Hz)	(NTSC/60Hz)
Number of lines:	625	525
Playback	multi-standard:	(PAL/NTSC)

DVD

Horiz. Resolution:	720 pixels	720 pixels
Vertical Resolution:	576 lines	480 lines

VCD

Horiz. Resolution:	352 pixels	352 pixels
Vertical Resolution:	288 lines	240 lines

VIDEO PERFORMANCE

Video output	1 Vpp into 75 ohm
S-Video output:	Y: 1 Vpp into 75 ohm C: 0.3 Vpp into 75 ohm
RGB (SCART) output:	0.7 Vpp into 75 ohm
Black Level Shift:	On/Off
Video Shift:	Left/Right

AUDIO FORMAT

Digital	MPEG	Compressed Digital
DTS/Dolby Digital		16, 20, 24 bits
PCM		fs, 44.1, 48, 96 kHz
Analogue	Stereo Sound	
Dolby Pro Logic downmix from Dolby Digital multi-channel sound 3D Sound (TruSurround) for virtual 5.1 channel sound on 2 speakers		

AUDIO PERFORMANCE

DA Converter	24 bits	
DVD	fs 96 kHz	4 Hz - 44 kHz
	fs 48 kHz	4 Hz - 22 kHz
Video CD	fs 44.1 kHz	4 Hz - 20 kHz
CD	fs 44.1 kHz	4 Hz - 20 kHz
Signal-Noise (1kHz)		100 dB
Dynamic Range (1kHz)		97 dB
Crosstalk (1kHz)		110 dB
Distortion and Noise (1kHz)		88 dB
MPEG MP3		MPEG Audio L3

CONNECTIONS

SCART	A/V Euroconnector
S-Video Output	Mini DIN, 4 pins (Y/C)
Video Output	Cinch (yellow) (CVBS)
Audio L+R output	Cinch (white/red)
RS 232	I/O Port
Digital Output	1 coaxial, 1 optical IEC958 for CDDA/LPCM IEC1937 for MPEG 1/2, Dolby Digital and DTS

CABINET

Dimensions (w x h x d)	435 x 85 x 320 mm
Weight	Approx. 4 Kg

GENERAL FUNCTIONALITY

Stop/Play/Pause
Fast Forward/Backward
Time Search
Step Forward/Backward
Slow Motion
Title/Chapter/Track Select
Skip Next/Previous
Repeat (Chapter/Title/All) or (Track/All)
A-B Repeat
Shuffle
Scan
New enhanced user graphical interface
Perfect Still with digital multi-tap filter
Zoom (x1.33, x2, x4) with picture enhancement
Smart Picture for convenient personal color setting
Cinematic interconnection for plug & play
NTSC/PAL Conversion
Audio and video bit rate indicator
Virtual Jog Shuttle

DVD FUNCTIONALITY

Multi-angle Selection
Audio Selection (1 out of max. 8 languages)
Subtitles Selection (1 out of max. 32 languages)
Aspect Ratio conversion (16:9, 4:3 Letterbox, 4:3 Pan Scan)
Parental Control and Child Lock
Disc Menu support (Title Menu and Root Menu)
Resume (5 discs) after stop/standby
Programming Titles/chapters with Favorite Track Selection

VIDEO CD FUNCTIONALITY

Playback Control for VCD 2.0 discs
Child Lock
Resume (5 discs) after stop/standby
Programming Tracks with Favourite Selection

AUDIO CD FUNCTIONALITY

Time Display (Total/Track/Remaining Track Time)
Full audio functionality with remote control
Programming with Favorite Track Selection

MP3 FUNCTIONALITY

Time Display (Track)
Album and Track Selection
Repeat (Disc/Album/Track)

GENERAL

Additional note:

Any occurrence of the term 'Dolby Surround' in this manual is being replaced by 'Dolby Surround-compatible'.

ANALOGUE OUTPUT

Additional note:

– Activation of Dolby Pro Logic

In Analogue Output mode, if 6 channel is selected, Dolby Pro Logic is automatically activated when playing a 2 channel audio stream. Note that this is not applicable CDDA.

SPECIFICATIONS

Audio format

Amended note:

Dolby Surround-compatible down mix from Dolby Digital multi-channel sound.

* Specifications subject to change without prior notice

The products and services described herein are not necessarily available in all countries.

DVD Professional Software

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