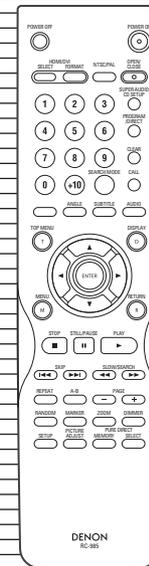
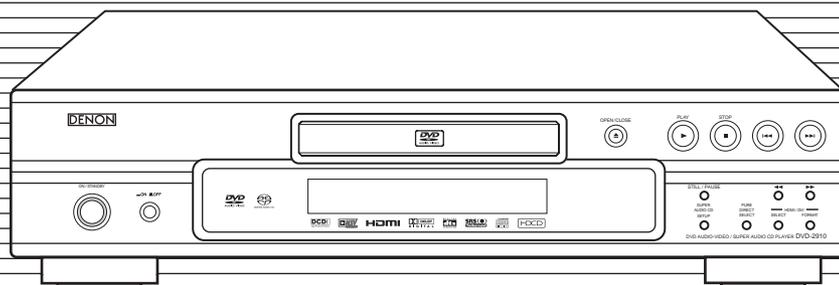


# DENON

## DVD AUDIO-VIDEO/SUPER AUDIO CD PLAYER DVD-2910

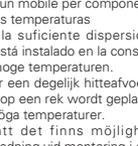
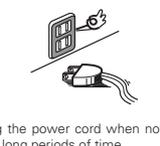
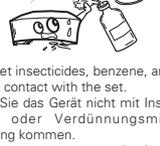
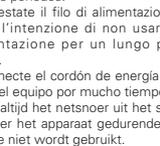
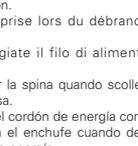
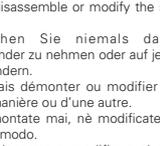
OPERATING INSTRUCTIONS  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI  
ISTRUZIONI PER L'USO

INSTRUCCIONES DE OPERACION  
GEBRUIKSAANWIJZING  
BRUKSANVISNING



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**NOTE ON USE / HINWEISE ZUM GEBRAUCH /  
OBSERVATIONS RELATIVES A L'UTILISATION / NOTE SULL'USO  
NOTAS SOBRE EL USO / ALVORENS TE GEBRUIKEN / OBSERVERA**

 <ul style="list-style-type: none"> <li>Avoid high temperatures. Allow for sufficient heat dispersion when installed on a rack.</li> <li>Vermeiden Sie hohe Temperaturen. Beachten Sie, daß eine ausreichend Luftzirkulation gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird.</li> <li>Eviter des températures élevées. Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.</li> <li>Evitate di esporre l'unità a temperature alte. Assicuratevi che ci sia un'adeguata dispersione del calore quando installate l'unità in un mobile per componenti audio.</li> <li>Evite altas temperaturas. Permite la suficiente dispersión del calor cuando está instalado en la consola.</li> <li>Vermijd hoge temperaturen. Zorg voor een degelijk hitteafvoer indien het apparaat op een rek wordt geplaatst.</li> <li>Undvik höga temperaturer. Se till att det finns möjlighet till god värmeavledning vid montering i ett rack.</li> </ul>	 <ul style="list-style-type: none"> <li>Keep the set free from moisture, water, and dust.</li> <li>Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.</li> <li>Protéger l'appareil contre l'humidité, l'eau et l'apoussièrè.</li> <li>Tenete l'unità lontana dall'umidità, dall'acqua e dalla polvere.</li> <li>Mantenga el equipo libre de humedad, agua y polvo.</li> <li>Laat geen vochtigheid, water of stof in het apparaat binnendringen.</li> <li>Utsätt inte apparaten för fukt, vatten och damm.</li> </ul>	 <ul style="list-style-type: none"> <li>Do not let foreign objects in the set.</li> <li>Keine fremden Gegenstände in das Gerät kommen lassen.</li> <li>Ne pas laisser des objets étrangers dans l'appareil.</li> <li>E' importante che nessun oggetto è inserito all'interno dell'unità.</li> <li>No deje objetos extraños dentro del equipo.</li> <li>Laat geen vreemde voorwerpen in dit apparaat vallen.</li> <li>Se till att främmande föremål inte tränger in i apparaten.</li> </ul>
 <ul style="list-style-type: none"> <li>Unplug the power cord when not using the set for long periods of time.</li> <li>Wenn das Gerät eine längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker.</li> <li>Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.</li> <li>Disinnestate il filo di alimentazione quando avete l'intenzione di non usare il filo di alimentazione per un lungo periodo di tempo.</li> <li>Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.</li> <li>Neem altijd het netsnoer uit het stopcontact wanneer het apparaat gedurende een lange periode niet wordt gebruikt.</li> <li>Koppla ur nätkabeln om apparaten inte kommer att användas i lång tid.</li> </ul>	 <ul style="list-style-type: none"> <li>Do not let insecticides, benzene, and thinner come in contact with the set.</li> <li>Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen.</li> <li>Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.</li> <li>Assicuratevi che l'unità non venga in contatto con insetticidi, benzolo o solventi.</li> <li>No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.</li> <li>Laat geen insektenverdelgende middelen, benzine of ververdunner met dit apparaat in contact komen.</li> <li>Se till att inte insektsmedel på spraybruk, bensin och thinner kommer i kontakt med apparatens hölje.</li> </ul>	 <ul style="list-style-type: none"> <li>Never disassemble or modify the set in any way.</li> <li>Versuchen Sie niemals das Gerät auseinander zu nehmen oder auf jegliche Art zu verändern.</li> <li>Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.</li> <li>Non smontate mai, nè modificate l'unità in nessun modo.</li> <li>Nunca desarme o modifique el equipo de ninguna manera.</li> <li>Nooit dit apparaat demonteren of op andere wijze modifieren.</li> <li>Ta inte isär apparaten och försök inte bygga om den.</li> </ul>
 <ul style="list-style-type: none"> <li>Handle the power cord carefully. Hold the plug when unplugging the cord.</li> <li>Gehen Sie vorsichtig mit dem Netzkabel um. Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.</li> <li>Manipuler le cordon d'alimentation avec précaution. Tenir la prise lors du débranchement du cordon.</li> <li>Manneggiare il filo di alimentazione con cura. Agitare per la spina quando scollegate il cavo dalla presa.</li> <li>Maneje el cordón de energía con cuidado. Desostenga el enchufe cuando desconecte el cordón de energía.</li> <li>Hanteer het netsnoer voorzichtig. Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeeld.</li> <li>Hantera nätkabeln församt. Håll i kabeln när den kopplas från el-uttaget.</li> </ul>	 <p>* (For sets with ventilation holes)</p> <ul style="list-style-type: none"> <li>Do not obstruct the ventilation holes.</li> <li>Die Belüftungsöffnungen dürfen nicht verdeckt werden.</li> <li>Ne pas obstruer les trous d'aération.</li> <li>Non coprite i fori di ventilazione.</li> <li>No obstruya los orificios de ventilación.</li> <li>De ventilatieopeningen mogen niet worden geblokkeerd.</li> <li>Täpp inte till ventilationsöppningarna.</li> </ul>	
		

"CLASS 1 LASER PRODUCT"



**CLASS 1 LASER PRODUCT  
LUOKAN 1 LASERLAITE  
KLASS 1 LASERAPPARAT**  
ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

<p><b>• DECLARATION OF CONFORMITY</b> We declare under our sole responsibility that this product, to which this declaration relates, is in conformity with the following standards: EN60065, EN55013, EN55020, EN61000-3-2 and EN61000-3-3. Following the provisions of 73/23/EEC, 89/336/EEC and 93/68/EEC Directive.</p> <p><b>• ÜBEREINSTIMMUNGSERKLÄRUNG</b> Wir erklären unter unserer Verantwortung, daß dieses Produkt, auf das sich diese Erklärung bezieht, den folgenden Standards entspricht: EN60065, EN55013, EN55020, EN61000-3-2 und EN61000-3-3. Entspricht den Verordnungen der Direktive 73/23/EEC, 89/336/EEC und 93/68/EEC.</p>	<p><b>• DECLARACIÓN DE CONFORMIDAD</b> Declaramos bajo nuestra exclusiva responsabilidad que este producto al que hace referencia esta declaración, está conforme con los siguientes estándares: EN60065, EN55013, EN55020, EN61000-3-2 y EN61000-3-3. Siguiendo las provisiones de las Directivas 73/23/EEC, 89/336/EEC y 93/68/EEC.</p> <p><b>• EENVORMIGHEIDSVKLAARING</b> Wij verklaren uitsluitend op onze verantwoordelijkheid dat dit product, waarop deze verklaring betrekking heeft, in overeenstemming is met de volgende normen: EN60065, EN55013, EN55020, EN61000-3-2 en EN61000-3-3. Volgens de bepalingen van de Richtlijnen 73/23/EEC, 89/336/EEC en 93/68/EEC.</p>
<p><b>• DECLARATION OF CONFORMITE</b> Nous déclarons sous notre seule responsabilité que l'appareil, auquel se réfère cette déclaration, est conforme aux standards suivants: EN60065, EN55013, EN55020, EN61000-3-2 et EN61000-3-3. D'après les dispositions de la Directive 73/23/EEC, 89/336/EEC et 93/68/EEC.</p> <p><b>• DICHIARAZIONE DI CONFORMITÀ</b> Dichiariamo con piena responsabilità che questo prodotto, al quale la nostra dichiarazione si riferisce, è conforme alle seguenti normative: EN60065, EN55013, EN55020, EN61000-3-2 e EN61000-3-3. In conformità con le condizioni delle direttive 73/23/EEC, 89/336/EEC e 93/68/EEC. QUESTO PRODOTTO E' CONFORME AL D.M. 28/08/95 N. 548</p>	<p><b>• ÖVERENSSTÄMMELSESINTYG</b> Härmed intygas helt på eget ansvar att denna produkt, vilken detta intyg avser, uppfyller följande standarder: EN60065, EN55013, EN55020, EN61000-3-2 och EN61000-3-3. Enligt stadgarna i direktiv 73/23/EEC, 89/336/EEC och 93/68/EEC.</p>

**CAUTION:**

- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Please be care the environmental aspects of battery disposal.
- The apparatus shall not be exposed to dripping or splashing for use.
- No objects filled with liquids, such as vases, shall be placed on the apparatus.

**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.

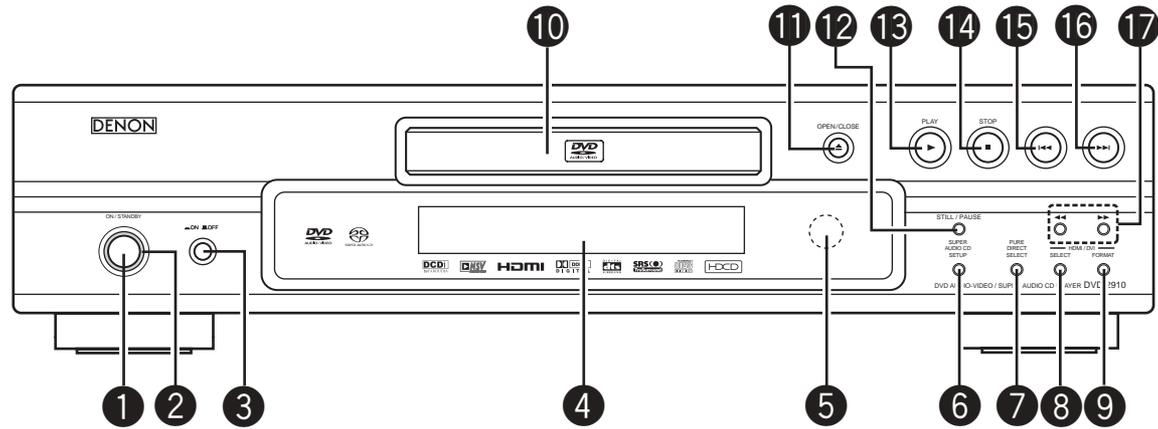
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

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.

**VAROITUS!** LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTA AALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

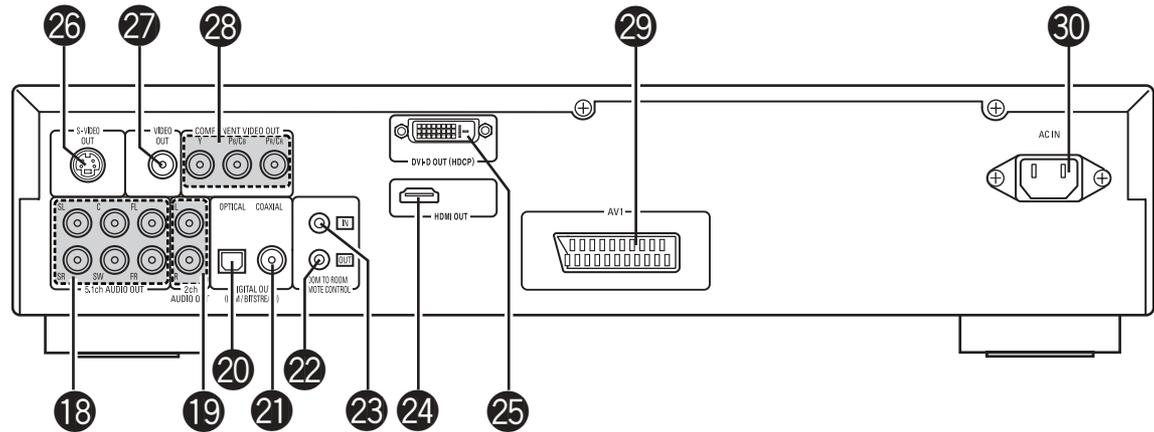
**VARNING-** OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERATS, KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

FRONT PANEL  
 FRONTPLATTE  
 PANNEAU AVANT  
 PANNELLO FRONTALE  
 PANEL DELANTERO  
 VOORPANEEL  
 FRONT PANELEN



- 29 For only European model
- 29 Nur für europäisches Modell
- 29 Pour le modèle d'Europe seulement
- 29 Solo per modelli europei
- 29 Sólo para el modelo europeo
- 29 Alleen voor Europees model
- 29 Endast på Europa-modellen

REAR PANEL  
 RÜCKWAND  
 PANNEAU ARRIERE  
 IL PANNELLO POSTERIORE  
 PANEL TRASERO  
 ACHTERPANEEL  
 BAKSIDAN



**IMPORTANT TO SAFETY**

**WARNING:**  
**TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

**CAUTION:**

- 1. Handle the power supply cord carefully**  
 Do not damage or deform the power supply cord. If it is damaged or deformed, it may cause electric shock or malfunction when used. When removing from wall outlet, be sure to remove by holding the plug attachment and not by pulling the cord.
- 2. Do not open the top cover**  
 In order to prevent electric shock, do not open the top cover.  
 If problems occur, contact your DENON DEALER.
- 3. Do not place anything inside**  
 Do not place metal objects or spill liquid inside the DVD audio-video/Super audio CD player.  
 Electric shock or malfunction may result.

Please, record and retain the Model name and serial number of your set shown on the rating label.  
 Model No. DVD-2910      Serial No. \_\_\_\_\_

**NOTE:**  
 This DVD audio-video/Super audio CD player uses the semiconductor laser. To allow you to enjoy music at a stable operation, it is recommended to use this in a room of 10°C (50°F) ~ 35°C (95°F).

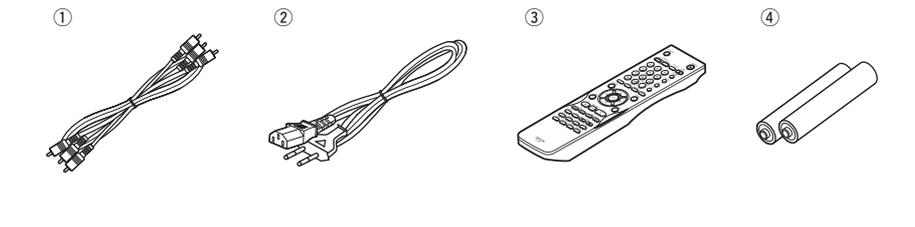
**Copyrights**

■ It is prohibited by law to reproduce, broadcast, rent or play discs in public without the consent of the copyright holder.

**• ACCESSORIES**

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

- |                                       |                                 |
|---------------------------------------|---------------------------------|
| ① Audio/Video cord .....1             | ④ R6P/AA batteries .....2       |
| ② AC cord .....1                      | ⑤ Operating instructions .....1 |
| ③ Remote control unit (RC-985) .....1 | ⑥ Service station list.....1    |



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**1** FEATURES

**1. Digital transfer connectors**

Digital transfer of video signals is possible by connecting an HDCP compatible display device equipped with one of the connectors below using a special cable.

When playing DVD AUDIO with CPPM, the video signal cannot be output, and then the audio signal cannot be output from the HDMI connector too.

(1) HDMI connector  
 Digital video signals are transferred in color space (Y/Cb/Cr) or RGB.

The audio signals can be transferred simultaneously, so both audio and video signals can be transferred with a single cable.

(2) DVI-D connector  
 Digital video signals are transferred in RGB.

**2. Super Audio CD multi-channel playback compatibility**

In addition to playing DVD audio and video discs, the DVD-2910 can play multi-channel Super Audio CDs with a playback frequency range covering 100 kHz and a dynamic range of 120 dB or greater within the audible frequency range, and a maximum of 5.1 channels can be output.

**3. High precision 24-bit D/A converter**

The audio playback circuit includes an advanced segment type D/A converter with the high technical specifications in the business, manufactured by Burr-Brown, a company with an established reputation for D/A converters. This high performance D/A converter allows not only input of the 24-bit/192 kHz data of DVD-Audio discs, it also includes an analog pure FIR filter for ideal DSD playback of Super Audio CDs. Furthermore, the same DAC is used unsparingly for the front, the surround, center and LFE channels to provide optimum sound quality during multi-channel playback as well.

**4. HDCD® (High Definition Compatible Digital®) decoder (NOTE 1)**

HDCD is an encoding/decoding technology that greatly reduces the distortion occurring at the time of digital recording while maintaining compatibility with the conventional CD format. HDCD allows 24-bit data to be converted into the 16-bit data of current CDs with no loss in sound quality.

The use of this HDCD decoder makes it possible to achieve the high resolution and low distortion characteristic of HDCD when playing HDCD-compatible discs, and DENON's digital technology optimizes the high sound quality possibilities of HDCD technology. Furthermore, normal CDs and HDCD-compatible CDs are automatically identified, and the optimum digital signal processing for that type of disc is used.

**5. Dolby/Digital DTS decoder (NOTES 2, 3)**

The DVD-2910 is equipped with a built-in Dolby Digital/DTS decoder, allowing you to recreate the atmosphere of a movie theater or concert hall when using the DVD-2910 in combination with an AV amplifier and speakers.

**6. Progressive Scan circuit "DCDi™" (NOTE 4)**

The DVD-2910 is equipped with a high precision Progressive Scan circuit "DCDi™" allowing it to reproduce movies and other images on DVDs with a quality near that of the original.

**7. 12-bit/216 MHz video D/A converter (NOTE 5)**

The DVD-2910 uses a video D/A converter that conducts D/A conversion of all video signals at 12 bits and allows 8X oversampling in the progressive mode to achieve the high quality picture that DVDs are meant to provide. In addition, NSV technology reduces noise upon D/A conversion.

**8. Thorough vibration-resistant design**

- (1) The pickup mechanism is positioned at the center to reduce the effects of external vibrations.
- (2) A low center of gravity make for a low vibration design.

**9. Multiple functions**

- (1) Still picture playback function  
Kodak Picture CD (**NOTE 6**) and Fujicolor CD (**NOTE 7**) can be played on the DVD-2910.  
Still images stored in JPEG format on CD-R/RWs can also be played.
- (2) Windows Media™ playback function (**NOTE 8**)  
Windows Media™ CDs can be played on the DVD-2910.
- (3) Multiple audio function  
Selection of up to 8 audio languages.  
(The number of languages offered differs from DVD to DVD.)
- (4) Multiple subtitle function  
Selection of up to 32 subtitle languages.  
(The number of languages offered differs from DVD to DVD.)
- (5) Multiple angle function  
The angle of view can be changed.  
(For DVDs on which multiple angles are recorded.)
- (6) GUI (Graphical User Interface) function  
The DISPLAY button on the remote control unit can be used to display player and disc information on the TV screen.
- (7) Marker function  
The positions of up to five scenes can be stored in the memory, so you can watch your favorite scenes whenever you want.
- (8) Playback disable function  
This function can be used to disable playback of DVDs you do not want children to watch.

**NOTES:**

1. HD-CD®, HDCD®, High Definition Compatible Digital® and Microsoft® are either registered trademarks or trademarks of Microsoft Corporation, Inc. in the United States and/or other countries. HDCD system manufactured under license from Microsoft Corporation, Inc. This product is covered by one or more of the following: In the USA: 5,479,168, 5,638,074, 5,640,161, 5,808,574, 5,838,274, 5,854,600, 5,864,311, 5,872,531, and in Australia: 669114. Other patents pending.
2. Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
3. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.
4. "DCDi™" is trademark of Faroodja, a division of Genesis Microchip Inc.
5. "NSV" is a trademark of Analog Devices, Inc.
6. "KODAK" is a trademark of Eastman Kodak Company.
7. "FUJICOLOR CD" is a trademark of Fuji Photo Film Co, Ltd.
8. "Windows Media™", "Windows™" are a trademarks of Microsoft Corporation, Inc.

**2 DISCS**

- The types of discs listed on the table below can be used on the DVD-2910.  
The marks are indicated on the disc labels or jackets.

Usable discs	Mark (logo)	Recorded signals	Disc size
DVD video DVD audio (NOTE 1)		Digital audio + digital video (MPEG2)	12 cm
DVD-R DVD-RW (NOTE 2)			8 cm
Super audio CD		Digital audio	12 cm
Video CD (NOTE 1)		Digital audio + digital video (MPEG1)	12 cm 8 cm
CD CD-R CD-RW (NOTE 3)		Digital audio MP3 Digital picture (JPEG)	12 cm 8 cm
Picture CD		JPEG	12 cm
Fujicolor CD		JPEG	12 cm
WMA (Windows Media Audio)		Digital audio	12 cm

**■ The following types of discs cannot be played on the DVD-2910:**

- For European model:  
DVDs with region numbers other than "2" or "ALL"
- For Oceanian, South American model:  
DVDs with region numbers other than "4" or "ALL"
- DVD-ROM/RAMs
- CD-ROMs (unless MP3, JPEG, WMA Files)
- CVD/VSDs
- CDVs (Only the audio part can be played.)
- CD-Gs (Only the audio is output.)
- Photo CDs

NOTE 1: Some DVD audio, DVD video and video CD discs do not operate as described in this manual due to the intentions of the discs' producers.

NOTE 2: Playing DVD-R and DVD-RW discs recorded in video format on a DVD recorder can be played on the DVD-2910.

Discs that have not be finalized cannot be played.  
Depending on the disc's recording status, the disc may not be accepted or may not be played normally (the picture or sound may be not be smooth, etc.).

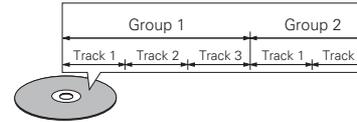
NOTE 3: According to recording quality, some CD-R/RW cannot be played.

**■ Disc terminology**

**• Groups and tracks (DVD-audios)**

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

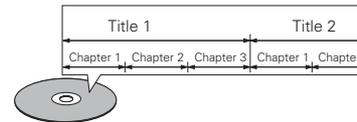
For example:



**• Titles and chapters (DVD-videos)**

DVD-videos are divided into several large sections called "titles" and smaller sections called "chapters".  
Numbers are allotted to these sections. These numbers are called "title numbers" and "chapter numbers".

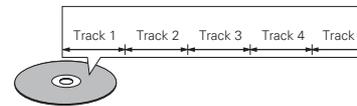
For example:



**• Tracks (Super audio CDs, video and music CDs)**

Super audio CDs, video and music CDs are divided into sections called "tracks".  
Numbers are allotted to these sections. These numbers are called "track numbers".

For example:



**• Playback control (video CDs)**

Video CDs including the words "playback control" on the disc or jacket are equipped with a function for displaying menus on the TV screen for selecting the desired position, displaying information, etc., in dialog fashion.

In this manual, playing video CDs using such menus is referred to "menu playback".  
Video CDs with playback control can be used on the DVD-2910.

**NOTE:**

- This DVD player is designed and manufactured to respond to the Region Management Information that is recorded on a DVD disc.  
If the Region number described on the DVD disc does not correspond to the Region number of this DVD player, this DVD player cannot play this disc.

For European model:  
The Region number for this DVD player is 2.



For Oceanian, South American model:  
The Region number for this DVD player is 4.



### 3 CAUTIONS ON HANDLING DISCS

#### Discs

Only the discs including the marks shown on page 5 can be played on the DVD-2910.

Note, however, that discs with special shapes (heart-shaped discs, hexagonal discs, etc.) cannot be played on the DVD-2910. Do not attempt to play such discs, as they may damage the player.



#### Holding Discs

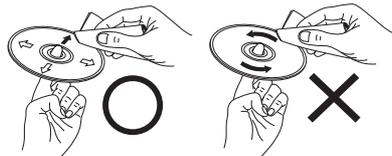
Avoid touching the surface of discs when loading and unloading them.

Be careful not to get fingerprints on the signal surface (the side which shines in rainbow colors).



#### Cleaning Discs

- Fingerprints or dirt on the disc may lower sound and picture quality or cause breaks in playback. Wipe off fingerprints or dirt.
- Use a commercially available disc cleaning set or a soft cloth to wipe off fingerprints or dirt.

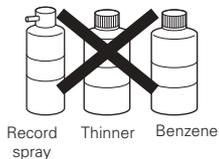


Wipe gently from the middle outwards.

Do not wipe with a circular motion.

#### NOTE:

- Do not use record spray or antistatic. Also do not use volatile chemicals such as benzene or thinner.



#### Cautions on Handling Discs

- Do not get fingerprints, grease or dirt on discs.
- Be especially careful not to scratch discs when removing them from their cases.
- Do not bend discs.
- Do not heat discs.
- Do not enlarge the center hole.
- Do not write on the labeled (printed) side with a ball-point pen or a pencil.
- Water droplets may form on the surface if the disc is moved suddenly from a cold place to a warm one. Do not use a hairdryer, etc., to dry the disc.

#### Cautions on Storing Discs

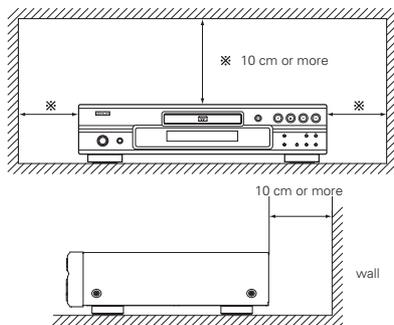
- Always eject discs after playing them.
- Keep discs in their cases to protect them from dust, scratches and warping.
- Do not put discs in the following places:
  1. Places exposed to direct sunlight for long periods of time
  2. Humid or dusty places
  3. Places exposed to heat from heaters, etc.

#### Cautions on Loading Discs

- Only load one disc at a time. Loading one disc on top of another may result in damage or scratch the discs.
- Load 8 cm discs securely in the disc guide, without using an adapter. If the disc is not properly loaded, it may slip out of the guide and block the disc tray.
- Be careful not to let your fingers get caught when the disc tray is closing.
- Do not place anything but discs in the disc tray.
- Do not load cracked or warped discs or discs that have been fixed with adhesive, etc.
- Do not use discs on which the adhesive part of cellophane tape or glue used to attach the label is exposed, or discs with traces of tape or labels that have been peeled off. Such discs may get stuck inside the player, resulting in damage.

### CAUTIONS ON INSTALLATION

For heat dispersal, leave at least 10 cm of space between the top, back and sides of this unit and the wall or other components.



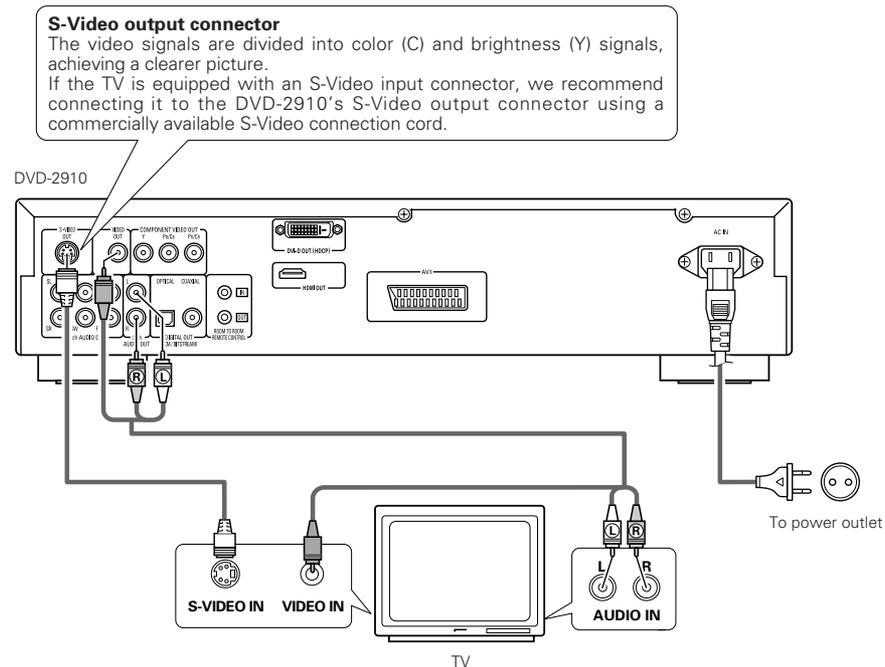
### 4 CONNECTIONS

#### NOTES:

- Read the manuals of all the components when making connections.
- Keep the power supply cord unplugged until all connections have been completed.
- If the power is on when connections are made, noise may be generated and damage the speakers.
- Be sure to connect the left and right channels properly, L (left) to L, R (right) to R.
- Plug the power supply cord securely into the power outlet. Incomplete connection may result in noise.
- Binding the power supply cord together with connection cords may result in humming or noise.

#### (1) Connecting to a TV

- Use the included audio video cord to connect the TV's video input connector and audio input connectors to the DVD-2910's VIDEO OUT or S-VIDEO OUT and AUDIO OUT.



#### NOTES:

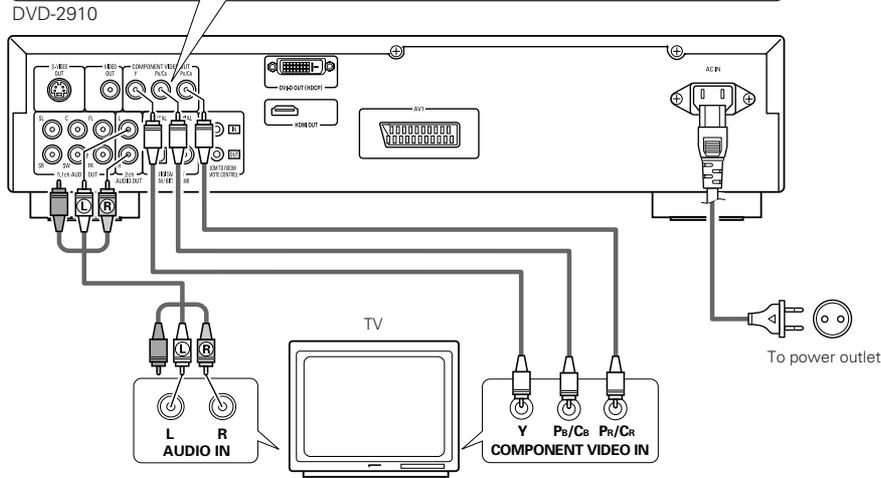
- Connect the DVD-2910's video outputs to the TV either directly or through an AV amplifier. Do not connect it via a VCR (video cassette recorder). Some discs contain copy prohibit signals. If such discs are played via a VCR, the copy prohibit system may cause disturbance in the picture.
- Set the "TV TYPE" in "VIDEO SETUP" in "SETUP" to comply with your TV's video format. When the TV is PAL formatted, set to PAL. (See page 18.)
- To use with 5.1ch audio output, set "2CH (SRS OFF)" or "2CH (SRS ON)" in "AUDIO CHANNEL" in "AUDIO SETUP" in "SETUP" at the initial settings. (See page 19.)
- Set the "TV ASPECT" in "VIDEO SETUP" in "SETUP" to comply with your TV's aspect. (See page 18.)
- To use with video out or s-video output, set "INTERLACED" in "VIDEO OUT" in "VIDEO SETUP" in "SETUP" at the initial settings. (See page 19.)

**(2) Connecting to a TV or Monitor Equipped with Color Component Input Connectors**

**Color component output connectors (PR/CR, PB/CB and Y)**

The red (PR/CR), blue (PB/CB) and brightness (Y) signals are output independently, achieving more faithful reproduction of the colors.

- The color component input connectors may be marked differently on some TVs or monitors (PR, PB and Y/R-Y, B-Y and Y/CR, CB and Y, etc.). For details, refer to the TV's operating instructions.
- **Connect in this way if your TV is compatible with Progressive Scan.**



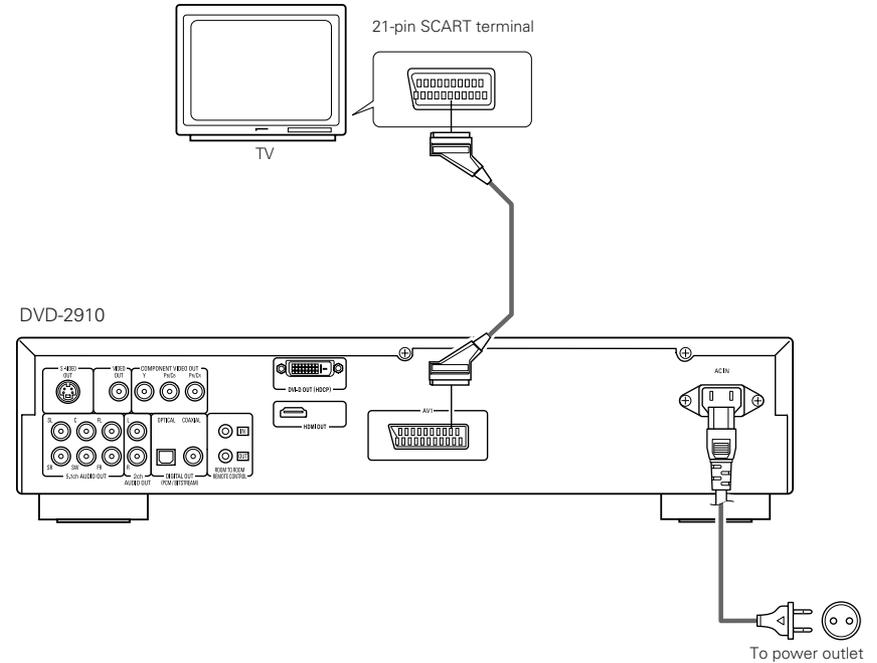
**NOTES:**

- Use the three commercially available video cords to connect the DVD-2910's color component output connectors to the TV or monitor.
- Set the "TV TYPE" in "VIDEO SETUP" in "SETUP" to comply with your TV's video format. When the TV is PAL formatted, set to PAL. (See page 18.)
- Set the "VIDEO OUT" in "VIDEO SETUP" in "SETUP" to comply with Progressive TV.
- To use with 5.1ch audio output, set "2CH (SRS OFF)" or "2CH (SRS ON)" in "AUDIO CHANNEL" in "AUDIO SETUP" in "SETUP" at the initial settings. (See page 19.)
- Set the "TV ASPECT" in "VIDEO SETUP" in "SETUP" to comply with your TV's aspect. (See page 18.)

CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE "STANDARD DEFINITION" OUTPUT.

**(3) Connecting to a TV with 21-pin SCART Terminal (For only European model)**

- Use the commercially 21-pin SCART cable to connect the TV's 21-pin SCART terminal to the DVD-2910's 21-pin SCART terminal (AV1).

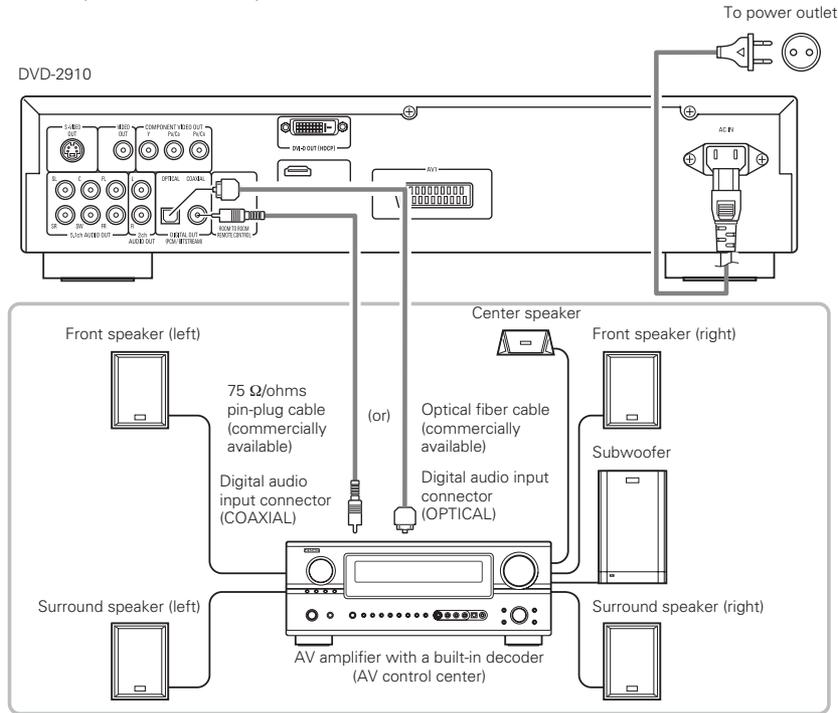


**NOTES:**

- Some discs contain copy prohibit signals. If such discs are played via a VCR, the copy prohibit system may cause disturbance in the picture.
- Set the "TV TYPE" in "VIDEO SETUP" in "SETUP" to comply with your TV's video format. When the TV is PAL formatted, set to PAL. (See page 18.)
- To improve picture quality, you can change the video signal output from the AV1 terminal from "Video" to either "S-Video" or "RGB" to suit the type of television you are using (See page 18.)

**(4) Connecting to a AV amplifier with a Built-in decoder**

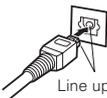
When DVDs recorded in Dolby Digital or DTS are played, Dolby Digital or DTS bitstream signals are output from the DVD player's digital audio output connectors. If a Dolby Digital or DTS decoder is connected, you can achieve sound with the power and sense of presence of a movie theater or concert hall.



**NOTES:**

- Harsh noise that could harm your ears or damage the speakers is generated when a DVD recorded in DTS is played while using a decoder, etc., that is not DTS-compatible.
- When playing copyright-protected linear PCM or packed PCM DVDs, in consideration of copyrights, no digital signals are output for sources exceeding 48 kHz/16 bits. When playing such sources, either set "LPCM (44.1 kHz/48 kHz)" under "AUDIO SETUP" at "SETUP" to "ON" (See pages 19~21.) or make analog connections. (See page 9.)
- When making digital connections to an AV amplifier that is not compatible with 96 kHz/88.2 kHz signals, set "LPCM (44.1 kHz/48 kHz)" under "AUDIO SETUP" at "SETUP" to "ON". (See pages 19~21.)
- With Super audio CDs, digital audio signals cannot be output. Use analog connections. (See page 9.)

**■ Connecting an optical fiber cable (commercially available) to the digital audio input connector (OPTICAL)**



Line up in proper direction

Line up the cable in the proper direction, then insert it securely as far as it goes.

**■ Sound output from the DVD-2910's digital audio output connectors**

In the case of bitstream output

		Settings	
		DIGITAL OUT	
Audio recording format		NORMAL	PCM
DVD video	Dolby Digital	Dolby Digital bitstream	2 channels PCM (48 kHz / 16 bit)
	DTS	DTS bitstream	2 channels PCM (48 kHz / 16 bit)
	MPEG Audio	2 channels PCM (48 kHz / 16 bit)	2 channels PCM (48 kHz / 16 bit)

In the case of PCM output

		Audio recording format		Settings		
				LPCM SELECT		
				OFF	ON	
				Copy protection ON	Copy protection OFF	
DVD video	Linear PCM	48 kHz / 16 ~ 24 bit	No output data (*1)	48 kHz / 16 ~ 24 bit PCM	48 kHz / 16 bit PCM	
		96 kHz / 16 ~ 24 bit	No output data	96 kHz / 16 ~ 24 bit PCM	48 kHz / 16 bit PCM	
DVD audio	Linear PCM or Packed PCM	44.1 kHz / 16 ~ 24 bit	No output data (*2)	44.1 kHz / 16 ~ 24 bit PCM	44.1 kHz / 16 bit PCM	
		48 kHz / 16 ~ 24 bit	No output data (*1)	48 kHz / 16 ~ 24 bit PCM	48 kHz / 16 bit PCM	
		88.2 kHz / 16 ~ 24 bit	No output data	88.2 kHz / 16 ~ 24 bit PCM	44.1 kHz / 16 bit PCM	
		96 kHz / 16 ~ 24 bit	No output data	96 kHz / 16 ~ 24 bit PCM	48 kHz / 16 bit PCM	
		176.4 kHz / 16 ~ 24 bit	No output data	88.2 kHz / 16 ~ 24 bit PCM	44.1 kHz / 16 bit PCM	
		192 kHz / 16 ~ 24 bit	No output data	96 kHz / 16 ~ 24 bit PCM	48 kHz / 16 bit PCM	
Video CD	MPEG 1		44.1 kHz / 16 bit PCM	44.1 kHz / 16 bit PCM		
Music CD	44.1 kHz / 16 bit Linear PCM		44.1 kHz / 16 bit PCM	44.1 kHz / 16 bit PCM		
MP3 CD	MP3 (MPEG-1 Audio Layer 3)		44.1, 48 kHz / 16 bit PCM	44.1, 48 kHz / 16 bit PCM		
WMA CD	WMA (Windows Media Audio)		44.1, 48 kHz / 16 bit PCM	44.1, 48 kHz / 16 bit PCM		
Super audio CD	DSD (DIRECT STREAM DIGITAL)		No output data (*3)	No output data (*3)		

\*1 Only 48 kHz/16 bit sources are output.

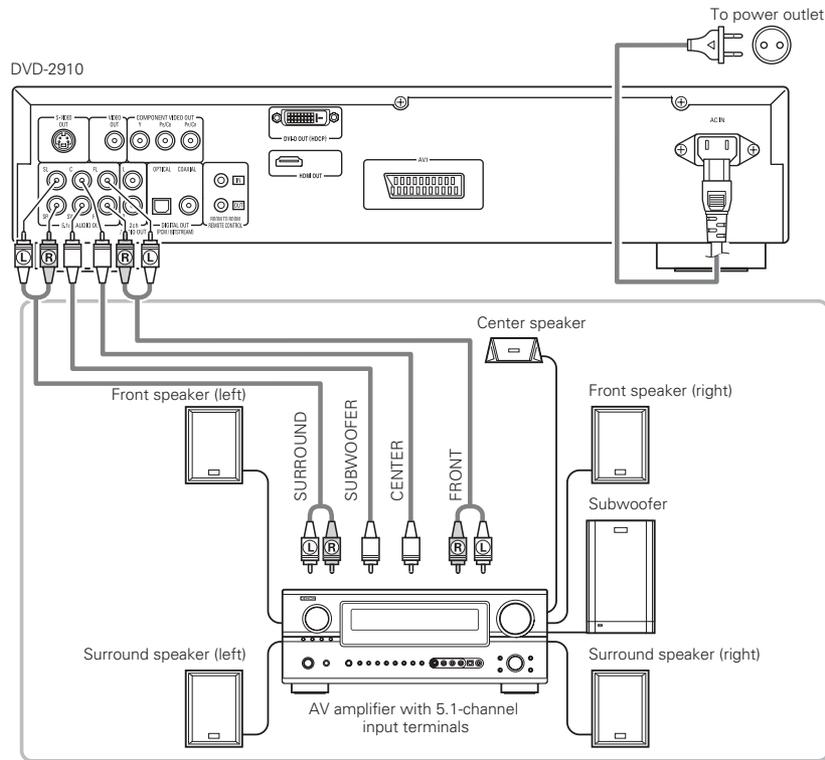
\*2 Only 44.1 kHz/16 bit sources are output.

\*3 44.1 kHz/16-bit PCM signals are output during CD layer playback.

- Down-mixed to 2 channels for multi-channel PCM sources. (Only the front left and right channels are output for sources for which down-mixing is prohibited.)
- When "DIGITAL OUT : OFF" is selected at the PURE DIRECT MODE, digital signals are not output from the digital audio output at this time.
- Bitstream signals are signals that are compressed and converted into digital format. They are decoded into multi-channel audio signals (5.1-channels, etc.) by the decoder.
- Linear PCM audio is a signal recording format used for music CDs. While signals are recorded at 44.1 kHz/16 bit for music CDs, for DVDs they are recorded at 44.1 kHz/16 bit to 192 kHz/24 bit, providing higher sound quality than music CDs.
- Packed PCM signals are high sound quality compressed PCM signals that are decompressed with virtually no loss of data.

**(5) Connecting a basic 5.1-channel surround system**

Analog 5.1-channel audio signals can be output from the DVD-2910. The multichannel audio signals recorded in packed PCM and the multichannel Super audio CDs can be played when an AV amplifier equipped with analog 5.1-channel audio inputs is connected.



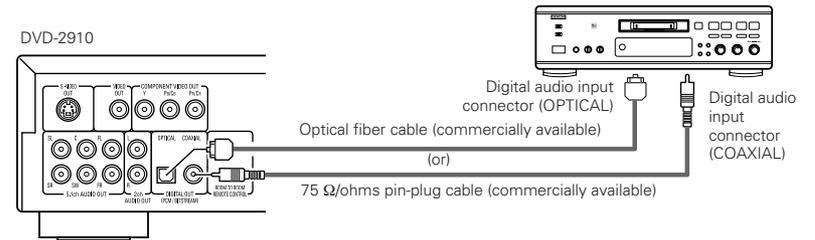
**NOTES:**

- For multi-channel connections, set "AUDIO CHANNEL" under "AUDIO SETUP" at "SETUP" to "MULTI CHANNEL" and make the "SPEAKER CONFIGURATION", "CHANNEL LEVEL" and "DELAY TIME" settings. (See pages 19, 20.)
- With the DVD-2910, we recommend turning the digital output off by using the PURE DIRECT MODE and only outputting analog signals in order to keep interference from the digital output circuitry to the minimum and allow you to enjoy high bit, high sampling frequency, high quality multi-channel sound. (See page 24.)

**(6) Connecting to a Digital Recorder (MD Recorder, DAT Deck, etc.)**

- \* Set the "AUDIO SETUP" default setting as shown below. (See page 19.)
- "DIGITAL OUT" → "PCM"
- "LPCM (44.1 kHz / 48 kHz)" → "ON"

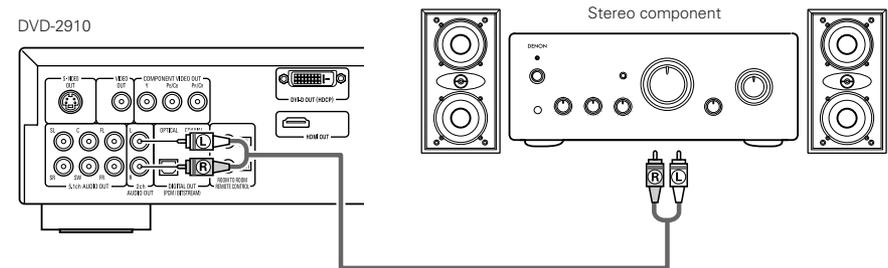
Playing DVDs with incorrect settings may result noise that could damage your ears or the speakers.



**NOTE:**

- Digital audio signals cannot be output when playing Super Audio CDs. Use analog connections to record Super Audio CDs.

**(7) Connecting to a Stereo Component**



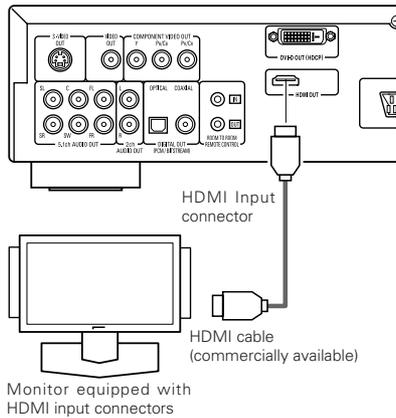
**NOTE:**

- When connecting to a 2-channel audio stereo device using the 5.1ch AUDIO OUT, set "AUDIO CHANNEL" under "AUDIO SETUP" on the "SETUP" to "2CH (SRS OFF)" or "2CH (SRS ON)" (See page 19.). For multi-channel sources, the signals are down-mixed into two channels (analog). (Only the front left and right channels are output for sources for which down-mixing is prohibited.)

**(8) HDMI connections**

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

DVD-2910



		Setting of HDMI			
		Audio recording format	2CH	MULTI (NORMAL)	MULTI (LPCM)
DVD Video	Dolby digital	2 channel PCM	Dolby digital	Multi PCM	
	DTS	2 channel PCM	DTS	Multi PCM	
DVD Audio	LPCM or P.PCM (with CPPM)	X	X	X	
	LPCM or P.PCM (without CPPM)	2 channel PCM	Multi LPCM	Multi PCM	
	Video CD	2 channel PCM	2 channel PCM	2 channel PCM	
	CD	2 channel PCM	2 channel PCM	2 channel PCM	
	MP3 CD	2 channel PCM	2 channel PCM	2 channel PCM	
	WMA CD	2 channel PCM	2 channel PCM	2 channel PCM	
Super Audio CD	Multi area	X	X	X	
	Stereo area	X	X	X	
	CD layer	2 channel PCM	2 channel PCM	2 channel PCM	

- \* The multi-channel/stereo area sound of Super Audio CD is not output.
- \* The video and audio signals cannot be output when playing DVD AUDIO with CPPM.

**Connection Examples for HDMI AUDIO SETUP**

**HDMI-supported monitor or projector, etc. (2-channel support or no audio support)**

- 2CH .....Use this connection when you would like to enjoy the multi-channel audio output from an analog audio output connector.

**HDMI-supported monitor/AV amplifier, etc. (Supports DTS and Dolby Digital decoders)**

- MULTI (NORMAL) ...Use this connection when you would like to enjoy the multi-channel audio output from an HDMI connector and you wish to have a DTS, Dolby Digital, or other decoder connected to do the processing. (Speaker and other settings are not required.)

**HDMI-supported monitor (Supports audio input for 2 or more channels)**

- MULTI (LPCM) .....Use this connection when you would like to enjoy the multi-channel output from an HDMI connector and the connection point does not support a DTS, Dolby Digital, or other decoder. (Speaker settings are permitted.)

**NOTES:**

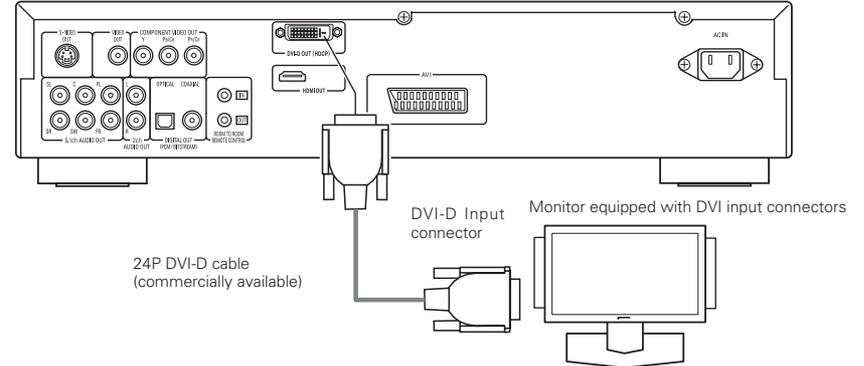
- HDMI audio output settings permit the selection of either 2 channels or multi-channels. A down-mixed audio signal is only output from the analog connectors (Left/Right and Front Left/Front Right) of the DVD-2910. To output multi-channel sound from the analog audio output connectors, set HDMI to OFF, or select "2CH".
- When the HDMI audio setting is set to multi-channel, the "AUDIO CHANNEL", "DIGITAL OUTPUT", "LPCM (44.1kHz/48kHz)", "SOURCE DIRECT" and "BASS ENHANCER" under "AUDIO SETUP".
- The HDMI video and audio output are both turned off if the video output is set to "OFF" or if "ALL OFF" is set. Also note that it will not be possible to select the setting of digital output when selecting "MULTI (NORMAL)" at "HDMI AUDIO SETUP". (See Pages 17, 18.)
- When selecting MULTI (NORMAL) or MULTI (LPCM), the DVD-2910 speaker settings under "AUDIO SETUP" become invalid.
- When playing a Super Audio CD with an HDMI connection, audio cannot be transferred beyond the CD layer. Make an analog connection for this.
- Among the devices that support HDMI, some devices can control other devices via the HDMI connector; however, the DVD-2910 cannot be controlled by another device vice the HDMI connector.
- When using display equipment that is not supported by the HDCP (content protection function), the image will not be output properly. (See the compatibility table.)
- The audio signals from the HDMI connector (including the sampling frequency and bit length) may be limited by the equipment that is connected.

**(9) DVI connections**

Connection with equipment that has a DVI (Digital Visual Interface)-D connector permits the transfer of digital images.

- \* When using display equipment that is not supported by the HDCP (content protection function), the image will not be output properly. (See the compatibility table.)
- \* Make an audio connection also because an audio signal will not be output from the DVI-D connector.
- \* Commercially-available DVI cables are available in 24-pin and 29-pin types. The DVD-2910 supports the 24-pin DVI-D cable, but the 29-pin DVI cable cannot be connected.

DVD-2910



**NOTE:**

**HDMI and DVI connectors.**

- The table below indicates the compatibility of connections between the HDMI/DVI-D output connector of the DVD-2910 and monitors that support HDMI/DVI-D.

	Monitor with HDMI	Monitor with DVI-D (HDCP compatible)	Monitor with DVI-D (HDCP incompatible)
HDMI output terminal	○	○ (Only Video)*2	x
DVI-D output terminal	○	○ (Only Video)	x

\*1 Among the monitors that support HDMI, some do not support audio output (for example, projectors). In connections with equipment such as this, audio signals are not output from the HDMI output connector. Use analog audio outputs connectors to provide the audio output at "DIGITAL INTERFACE SETUP" under "SETUP", set "HDMI AUDIO SETUP" to "2CH".

\*2 When the set's HDMI connector is connected to a DVI-D compatible monitor (HDCP compatible) with an HDMI-DVI converter cable (commercially available), the signals are output in digital RGB, regardless of the "HDMI/DVI SELECT" setting.

**Copyright Protection System**

To play the digital images and sounds of DVD video or DVD audio via an HDMI/DVI-D connection, it is necessary that both the player and monitor (or AV amplifier) support a copyright protection system called HDCP (High-bandwidth Digital Content Protection System). HDCP is copy protection technology that comprises data encryption and authentication of the partner equipment. The DVD-2910 supports HDCP. Please see the user's manual of your monitor (or AV amplifier) for information about this.

## 5 PART NAMES AND FUNCTIONS

### (1) Front Panel

See page 3.

- 1 Power ON/STANDBY button**
  - Press once to set to the standby mode. The indicator lights up in red.
  - Press again to turn the power on. The indicator lights up in green.
- 2 Power indicator**
  - This indicator lights when the power is on and when the power is in the standby mode.
    - Light green: Power is on
    - Light red : Power is in the standby mode
- 3 Power switch**
  - Press once to turn the power on.
  - Press again to set to the "OFF" position and turn the power off.
- 4 Display**
  - Information on the disc that is currently playing is shown on the display. (See page 12.)
- 5 Remote control sensor**
- 6 Select the playback area/layer of SUPER AUDIO CD (SUPER AUDIO CD SETUP)**
  - Switch the area /layer of the Super audio CDS played with priority.
  - MULTI.....When playing Super audio CDs, the Multi channel area is played with priority.
  - STEREO....When playing Super audio CDs, the stereo channel area is played with priority.
  - CD.....When playing Super audio CDs, the CDs layer area is played with priority.

→MULTI → STEREO → CD ←
- 7 PURE DIRECT SELECT button**
  - Press to switch the modes with the specific video signals and digital audio signals and indicate in display on and off. (See pages 24.)

→NORMAL → MODE 1 → MODE 2 → ALL OFF ←

- 8 SELECT of HDMI/DVI button**
  - Press this to set the video signal output from the HDMI connector or the DVI connector. (See page 26.)

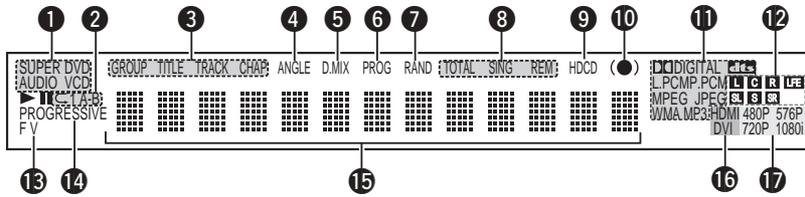
→ HDMI Y Cb Cr → HDMI RGB → DVI ←  
 ─────────── HDMI/DVI OFF ─────────── ←
- 9 FORMAT of HDMI/DVI button**
  - Press this to set the video signal format from the HDMI connector or the DVI connector. (See page 26.)

→ 480P/576P → 720P → 1080i ←
- 10 Disc tray**
  - Load discs here. (See pages 13, 27.)
  - Press the OPEN/CLOSE button **11** to open and close the disc tray.
  - The disc tray is also closed when the PLAY button **13** is pressed.
- 11 OPEN/CLOSE button (▲)**
  - Press this to open and close the disc tray. (See pages 13, 27.)
- 12 STILL/PAUSE button (■)**
  - Press this to pause images or music or to play images frame by frame. (See page 28.)
- 13 PLAY button (▶)**
  - Press this to play the disc. (See page 27.)
- 14 STOP button (■)**
  - Press this to stop the disc. (See page 28.)
- 15 Skip button (I◀◀)**
  - Press this to move back to the beginning of the current track (or chapter).
  - Press again to move back to the beginning to the previous track (or chapter). (See page 28.)
- 16 Skip button (▶▶I)**
  - Press this to move ahead to the beginning of the next track (or chapter). (See page 28.)
- 17 Slow/Search buttons (◀◀ ▶▶)**
  - Press this to set the slow play or search mode. (See page 28.)
  - ◀◀: search in the reverse direction.
  - ▶▶: search in the forward direction.

### (2) Rear Panel

- 18 Audio output connectors (5.1ch AUDIO OUT)**
  - Connect using the audio cord (available in stores).
- 19 Audio output connectors (2ch AUDIO OUT)**
  - Connect using the included audio cord.
  - Multi-channel sound is down-mixed and output.
- 20 Digital audio output connector (OPTICAL)**
  - Connect using an optical fiber cable (available in stores).
  - Digital data is output from this connector.
- 21 Digital audio output connector (COAXIAL)**
  - Connect using an digital audio cord. Connect a commercially available 75 Ω/ohms pin-plug cord.
  - Digital data is output from this connector.
- 22 Control output connector (ROOM TO ROOM/OUT)**
  - This is the output connector for wired remote control. Consult your DENON dealer if you wish to use this connector.
- 23 Control input connector (ROOM TO ROOM/IN)**
  - This is the input connector for wired remote control. Consult your DENON dealer if you wish to use this connector.
- 24 HDMI output connector**
  - Connect using HDMI connection cord (available in stores).
- 25 DVI-D-Video output connector (DVI-D OUT)**
  - Connect using 24P DVI-D connection cord (available in stores).
- 26 S-Video output connector (S-VIDEO OUT)**
  - Connect using an S-Video connection cord (available in stores).
- 27 Video output connector (VIDEO OUT)**
  - Connect using the included video cord.
- 28 Component video output connectors (COMPONENT VIDEO OUT)**
  - Connect using video cords (available in stores).
- 29 21-pin SCART terminal (AV1) (For only European model)**
  - Connect using a 21-pin SCART cable (available in stores).
- 30 Power input (AC IN)**
  - Connect to AC power supply using the included power supply cord.

**(3) Display**



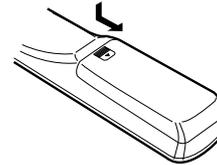
- ① Lights to indicate the currently playing disc.
- ② Lights in the repeat play mode.
- ③ These light to indicate the names of sections of the disc being played.
- ④ Lights during playback of multiple angles disc.
- ⑤ Lights when the audio signals can be down-mixed.
- ⑥ Lights in the programmed play mode.
- ⑦ Lights in the random play mode.
- ⑧ There light to indicate the time display mode.
- ⑨ Lights when HDCD is playing.
- ⑩ Lights when SRS TruSurround is on.
- ⑪ Lights to indicate the currently playing audio format
- ⑫ Lights to indicate the currently playing audio.  
L : Front left channel  
C : Center channel  
R : Front right channel  
SL : Surround left channel  
S : Mono surround channel  
SR : Surround right channel  
LFE: Low frequency effect
- ⑬ Lights to indicate the currently playing video type.  
F :Film source  
V :Video source
- ⑭ Lights when progressive video signals are being output.
- ⑮ Displays the title , track number and elapsed time during playback.
- ⑯ Lights when the video (or audio) signals is output from HDMI or DVI terminals.(Lights only one of the HDMI or DVI.)  
(Flashes while the connection to the DVI-D or HDMI connector is being checked.)
- ⑰ Lights to indicate the currently video format of HDMI or DVI terminals.  
(Flashes while the connection to the DVI-D or HDMI connector is being checked.)

**6] REMOTE CONTROL UNIT**

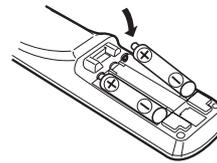
■ The DVD-2910 can be controlled from a distance using the included remote control unit (RC-985).

**(1) Inserting Batteries**

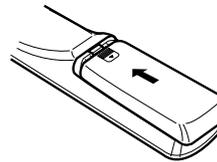
① Remove the remote control unit's rear cover.



② Place two R6P/AA batteries in the battery compartment in the direction indicated by the marks.



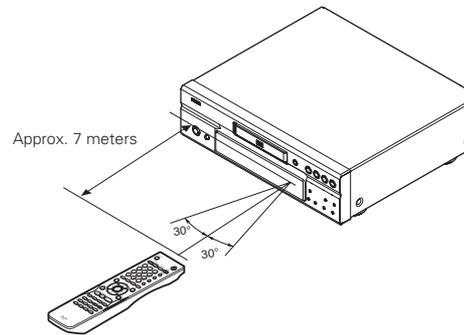
③ Close the rear cover.



**Cautions On Batteries**

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

**(2) Using the Remote Control Unit**



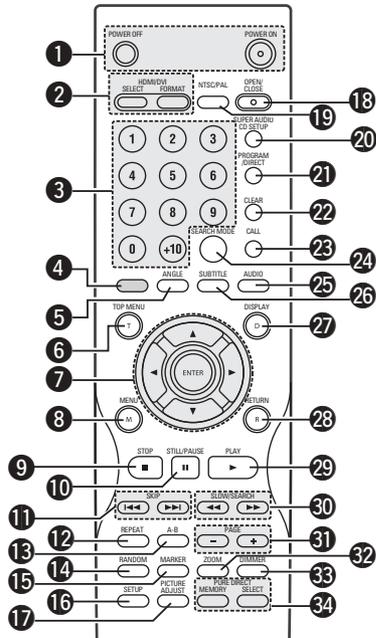
- When operating the remote control unit, point it at the remote control sensor as shown on the diagram.
- The remote control unit can be used from a direct distance of approximately 7 meters. This distance will be shorter, however, if there are obstacles in the way or if the remote control unit is not pointed directly at the remote control sensor.
- The remote control unit can be operated at a horizontal angle of up to 30° with respect to the remote control sensor.

**NOTES:**

- It may be difficult to operate the remote control unit if the remote control sensor is exposed to direct sunlight or strong artificial light.
- Do not press buttons on the main unit and on the remote control unit at the same time. Doing so will result in malfunction.

**(3) Names and Functions of Remote Control Unit Buttons**

■ Button not explained here function in the same way as the corresponding buttons on the main unit.



- 1 POWER ON/POWER OFF buttons**
  - Press this to switch the power between on and standby.
- 2 HDMI/DVI SELECT/FORMAT buttons**
  - Use these to select to use HDMI terminal or DVI terminal, and the format of video signals (480P/576P, 720P, 1080i).
- 3 Number buttons**
  - Use these to input numbers.
  - Use the +10 button to input numbers of 10 or over.
  - Example: To input 25



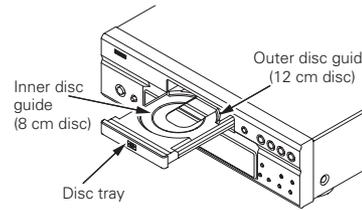
- 4 This button does not function.**
- 5 ANGLE button**
  - Press this to switch the angle.
- 6 TOP MENU button**
  - The top menu stored on the disc is displayed.
- 7 Cursor buttons/ENTER button**
  - Use the ▲ and ▼ cursor buttons to select in the vertical direction.
  - Use the ◀ and ▶ cursor buttons to select in the horizontal direction.
  - Press the ENTER button to select the item selected with the cursor buttons.

- 8 MENU button**
  - The DVD menu stored on the disc is displayed.
- 9 STOP button (■)**
- 10 STILL/PAUSE button (||)**
- 11 SKIP buttons**
- 12 REPEAT button**
  - Press this to play tracks repeatedly.
- 13 A-B repeat button (A-B)**
  - Use this to repeat sections between two specific points.
- 14 RANDOM button**
  - Press this to play the tracks on the video or music CD in random order.
- 15 MARKER button**
  - Press this to mark places you want to see again.
- 16 SETUP button**
  - Press this to display the default setting screen.
- 17 PICTURE ADJUST button**
  - Press this to adjust the picture quality to suit your tastes.
- 18 OPEN/CLOSE button**
- 19 NTSC/PAL button**
  - Use this to switch the set's video output format (NTSC/PAL).
- 20 SUPER AUDIO CD SETUP button**
- 21 PROGRAM/DIRECT button**
  - Press this to switch between the normal play, programmed play.
- 22 CLEAR button**
  - Press this to clear numbers that you have input.
- 23 CALL button**
  - Press this to check the program contents.
- 24 SEARCH MODE button**
  - Press this to change the search mode to search for groups or titles, tracks or chapters when selecting sections of discs directly using the number buttons.
- 25 AUDIO button**
  - For DVDs, press this to switch the audio language. For video CDs, press this to switch the channel between "STEREO", "MONO LEFT" and "MONO RIGHT".
- 26 SUBTITLE button**
  - Press this to switch the DVD's subtitle language.
- 27 DISPLAY button**
  - Press this to display the ON-SCREEN.
- 28 RETURN button**
  - Press this to return to the previous menu screen.
- 29 PLAY button (▶)**

- 30 SLOW/SEARCH buttons**
- 31 PAGE -/PAGE + buttons**
  - Use these to selected the desired still picture on DVD audio discs containing browseable still pictures.
- 32 ZOOM button**
  - Press this to enlarge the image.

**7 LOADING DISCS**

■ Set discs in the disc tray with the labeled (printed) side facing up.

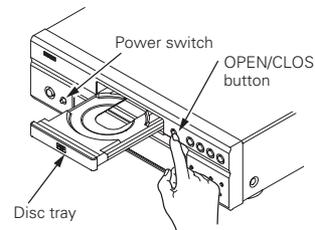


**NOTE:**

- Do not move the DVD-2910 while a disc is playing. Doing so may scratch the disc.

**(1) Opening and Closing the Disc Tray**

- ① Turn on the power.
- ② Press the OPEN/CLOSE button.



**NOTES:**

- Be sure to turn on the power before opening and closing the disc tray.
- Do not strike on the button with a pencil, etc.

- 33 DIMMER button**
  - Use this to adjust the brightness of the main unit's display.
  - Can be switched in 4 steps, from all off to always on.
- 34 PURE DIRECT MEMORY/SELECT buttons**
  - Use these to make and select that various setting to achieve higher quality sound.

**(2) Loading Discs**

- Pick up the disc carefully so as not to touch the signal surface and hold it with the labeled side facing up.
- With the disc tray fully open, set the disc in the disc tray.
- Set 12 cm discs in the outer disc guide (Figure 1), 8 cm discs in the inner disc guide (Figure 2).
- Press the OPEN/CLOSE button. The disc is automatically loaded.
- The disc tray can also be closed automatically to load the disc by pressing the PLAY button.

Figure 1

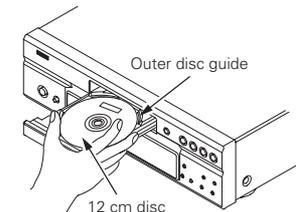
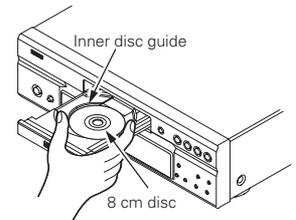


Figure 2

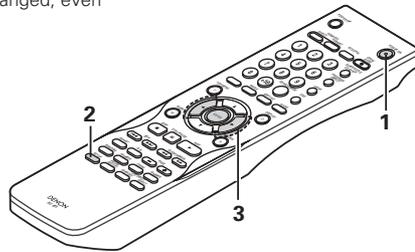
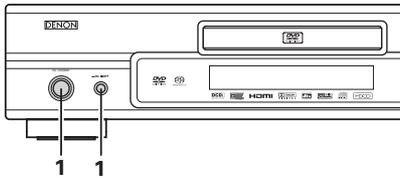


**NOTES:**

- If a foreign object is caught in the disc tray during closing, simply press the OPEN/CLOSE button again and the tray will open.
- Do not press the disc tray in by hand when the power is off. Doing so will damage it.
- Do not place foreign objects in the disc tray. Doing so will damage it.

## 8 CHANGING THE DEFAULT SETTINGS

- Make the initial settings to suit your usage conditions before starting playback. The initial settings are retained until they are next changed, even if the power is turned off.



1	<p>Turn on the power.</p> <ul style="list-style-type: none"> <li>Press the power button, the power indicator lights green and the power turns on. When pressed again, the power turns off and indicator is off.</li> <li>In the standby mode (the power indicator lights red), press the ON/STANDBY button on the main unit or POWER ON button on the RC-985.</li> </ul>	
2	<p>In the stop mode, press the SETUP button.</p> <ul style="list-style-type: none"> <li>The setup (default settings) screen appears.</li> </ul> <p><b>NOTE:</b> For some menus, the initial values can be changed during playback.</p> <p><b>LANGUAGE SETUP</b> </p> <p>Use this to set the language to be used when playing the disc. If the set language is not offered on that disc, the discs default language is set. And use this to set the language for the default setting screen and messages displayed on the TV screen ("PLAY", etc.).</p> <p><b>DIGITAL INTERFACE SETUP</b> </p> <p>Use this to set the output of DVI, HDMI, terminals.</p> <p><b>VIDEO SETUP</b> </p> <p>Use this to set the DVD-2910's screen mode. (TV aspect, TV type and AV1 video output.)</p> <p><b>AUDIO SETUP</b> </p> <p>Use this to set the DVD-2910's audio output mode. (Digital and LPCM output settings.)</p>	<p><b>RATINGS</b> </p> <p>Use this to disable playback of adult DVDs so that children cannot watch them. Note that playback of adult DVDs cannot be disabled if the rating level is not recorded on the DVD, but that it is possible to disable playback of all DVDs.</p> <p><b>OTHER SETUP</b> </p> <p>These include special settings such as CAPTIONS, WALL PAPER, etc.,</p>
3	<p>Use the ◀ and ▶ cursor buttons to select the desired setting item, then press the ENTER button. Select "LANGUAGE SETUP". (See page 15.) Select "DIGITAL INTERFACE SETUP". (See page 17.) Select "VIDEO SETUP". (See page 18.) Select "AUDIO SETUP". (See page 19.) Select "RATINGS". (See page 22.) Select "OTHER SETUP" (See page 23.)</p>	

**\* To exit the setup mode**

Use the ▼ cursor button to select "EXIT SETUP", then press the ENTER button. It is also possible to quit by pressing the SETUP button on the remote control unit.

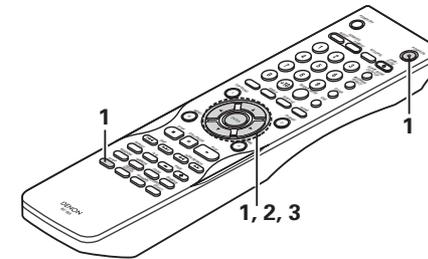
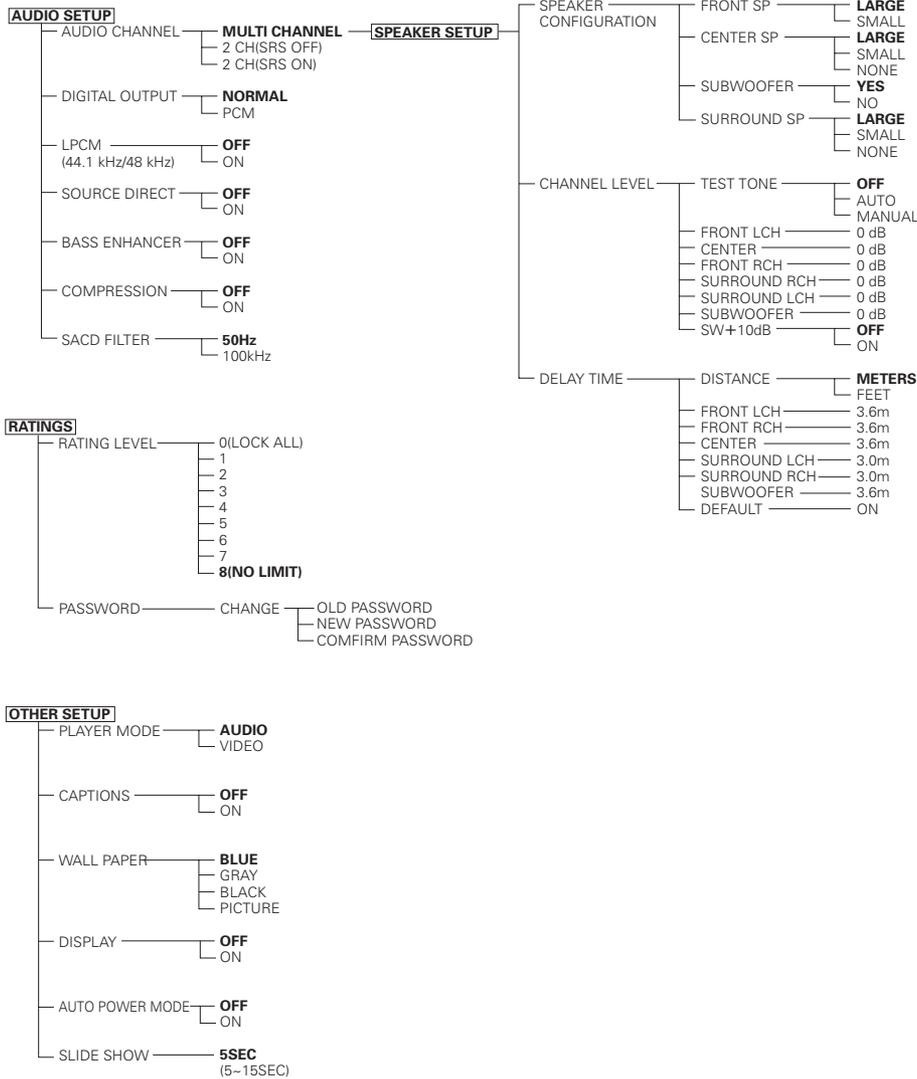
### Setup items for use

Bold characters indicate factory defaults.

<p><b>LANGUAGE SETUP</b></p> <ul style="list-style-type: none"> <li>DIALOG — <b>ENGLISH</b> FRENCH SPANISH GERMAN ITALIAN OTHERS</li> <li>SUBTITLE — OFF <b>ENGLISH</b> FRENCH SPANISH GERMAN ITALIAN OTHERS</li> <li>DISC MENUS — <b>ENGLISH</b> FRENCH SPANISH GERMAN ITALIAN OTHERS</li> <li>OSD LANGUAGE — <b>ENGLISH</b> FRANÇAIS ESPAÑOL DEUTSCH</li> </ul>	<p><b>DIGITAL INTERFACE SETUP</b></p> <ul style="list-style-type: none"> <li>HDMI/DVI — <b>NORMAL</b></li> <li>BLACK LEVEL (without HDMI Y Cb Cr) — ENHANCED</li> <li>HDMI AUDIO SETUP — <b>2CH</b> MULTI(NORMAL) MULTI(LPCM) — <b>HDMI SPEAKER SETUP</b></li> </ul>	<p><b>VIDEO SETUP</b></p> <ul style="list-style-type: none"> <li>TV ASPECT — 4:3 PS 4:3 LB <b>WIDE (16:9)</b></li> <li>TV TYPE — NTSC PAL <b>MULTI</b></li> <li>VIDEO OUT — <b>PROGRESSIVE</b> INTERLACED</li> <li>PROGRESSIVE MODE — <b>AUTO1</b> AUTO2 VIDEO1 VIDEO2 VIDEO3</li> <li>SQUEEZE MODE — <b>OFF</b> ON</li> <li>AV1 VIDEO OUT — <b>VIDEO</b> S-VIDEO RGB</li> </ul>	<p><b>SPEAKER CONFIGURATION</b></p> <ul style="list-style-type: none"> <li>FRONT SP — <b>LARGE</b> SMALL</li> <li>CENTER SP — <b>LARGE</b> SMALL NONE</li> <li>SUBWOOFER — <b>YES</b> NO</li> <li>SURROUND SP — <b>LARGE</b> SMALL NONE</li> </ul> <p><b>CHANNEL LEVEL</b></p> <ul style="list-style-type: none"> <li>TEST TONE — <b>OFF</b> AUTO MANUAL</li> <li>FRONT LCH — 0 dB</li> <li>CENTER — 0 dB</li> <li>FRONT RCH — 0 dB</li> <li>SURROUND RCH — 0 dB</li> <li>SURROUND LCH — 0 dB</li> <li>SUBWOOFER — 0 dB</li> </ul> <p><b>DELAY TIME</b></p> <ul style="list-style-type: none"> <li>DISTANCE — <b>METERS</b> FEET</li> <li>FRONT LCH — 3.6 m</li> <li>FRONT RCH — 3.6 m</li> <li>CENTER — 3.6 m</li> <li>SURROUND LCH — 3.0 m</li> <li>SURROUND RCH — 3.0 m</li> <li>SUBWOOFER — 3.6 m</li> <li>DEFAULT — ON</li> </ul>
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\* The display depends on the connected device.

When "LANGUAGE SETUP" is selected



<p><b>1</b> See page 14.</p> <p>Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.</p> <p><b>DIALOG</b> Use this to set the language of the sound output from the speakers.</p> <p><b>SUBTITLE</b> Use this to set the language of the subtitles displayed on the TV.</p> <p><b>DISC MENUS</b> Use this to set the language of the menus recorded on the disc (top menu, etc.).</p> <p><b>OSD LANGUAGE</b> Use this to set the language for the default setting screen and messages displayed on the TV screen("PLAY", etc.)</p>	<p>Remote control unit      Remote control unit</p> <p>LANGUAGE SETUP DIALOG      ENGLISH SUBTITLE      ENGLISH DISC MENUS      ENGLISH OSD LANGUAGE      ENGLISH EXIT SETUP</p> <p>SELECT: ▲▼◀▶ DECISION: ENTER BUTTON</p>
<p><b>2</b></p> <p>Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.</p> <p>① When "DIALOG" is selected:</p> <p><b>ENGLISH (Factory default)</b> Select this when you want to play the DVD with the sound in English.</p> <p><b>FRENCH</b> Select this when you want to play the DVD with the sound in French.</p> <p><b>SPANISH</b> Select this when you want to play the DVD with the sound in Spanish.</p> <p><b>GERMAN</b> Select this when you want to play the DVD with the sound in German.</p> <p><b>ITALIAN</b> Select this when you want to play the DVD with the sound in Italian.</p> <p><b>OTHERS</b> Use the number buttons to input the language number. (See "Language code list" on page 16.)</p>	<p>Remote control unit      Remote control unit</p> <p>LANGUAGE SETUP DIALOG      ENGLISH SUBTITLE      FRENCH DISC MENUS      SPANISH OSD LANGUAGE      GERMAN EXIT SETUP      ITALIAN OTHERS</p> <p>SELECT: ▲▼◀▶ DECISION: ENTER BUTTON</p>

② When "SUBTITLE" is selected:

**OFF**

Select this if you do not want to display the subtitles.  
(For some discs it is not possible to turn off the subtitle display.)

**ENGLISH (Factory default)**

Select this when you want to play the DVD with the subtitles in English.

**FRENCH**

Select this when you want to play the DVD with the subtitles in French.

**SPANISH**

Select this when you want to play the DVD with the subtitles in Spanish.

**GERMAN**

Select this when you want to play the DVD with the subtitles in German.

**ITALIAN**

Select this when you want to play the DVD with the subtitles in Italian.

**OTHERS**

Use the number buttons to input the language number.  
(See "Language code list" on page 16.)



3

③ When "DISC MENUS" is selected:

**ENGLISH (Factory default)**

Select this when you want to display the menus in English.

**FRENCH**

Select this when you want to display the menus in French.

**SPANISH**

Select this when you want to display the menus in Spanish.

**GERMAN**

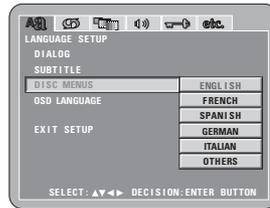
Select this when you want to display the menus in German.

**ITALIAN**

Select this when you want to display the menus in Italian.

**OTHERS**

Use the number buttons to input the language number.  
(See "Language code list" on page 16.)



④ When "OSD LANGUAGE" is selected:

**ENGLISH (Factory default)**

Select this to set the OSD language to English.

**FRANÇAIS**

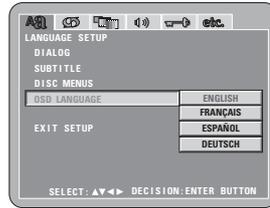
Select this to set the OSD language to French.

**ESPAÑOL**

Select this to set the OSD language to Spanish.

**DEUTSCH**

Select this to set the OSD language to German.



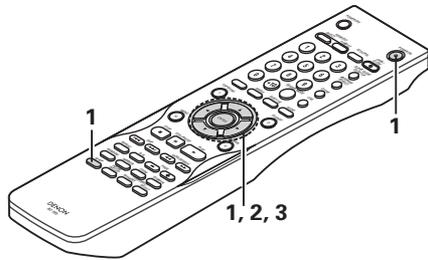
**\* To exit the setup mode**

Use the ▼ cursor button to select "EXIT SETUP", then press the ENTER button. It is also possible to quit by pressing the SETUP button on the remote control unit.

**Language code list**

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

When "DIGITAL INTERFACE SETUP" is selected



<b>1</b>	See page 14.	
<b>2</b>	<p>Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.</p> <p><b>HDMI/DVI BLACK LEVEL</b> Switches the digital RGB video level (data range) of the HDMI and the DVI-D terminals.</p> <p><b>HDMI AUDIO SETUP</b> Use this to adjust for the audio signals from the HDMI terminal.</p>	   <p>Remote control unit      Remote control unit</p>
<b>3</b>	<p>Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.</p> <p>① When "HDMI/DVI BLACK LEVEL" is selected: <b>NORMAL (Factory default)</b> Signals are output from the HDMI and the DVI-D terminals with a digital RGB video level (data range) of 16(black) to 235(white).</p> <p><b>ENHANCED</b> Signals are output from the HDMI and the DVI-D terminals with a digital RGB video level (data range) of 0(black) to 246(white).</p> <p>* When the HDMI and the DVI-D terminals are connected, the black may seem to stand out, depending on the TV or the Monitor you are using. In this case, set this to "ENHANCED".</p> <p>* When select "HDMI Y Cb Cr" under "HDMI/DVI SELECT", will have no effect. (See page 26.)</p>	 

② When "HDMI AUDIO SETUP" is selected:

**2CH (channel) (Factory default)**  
The audio signals are output from the HDMI terminal with a down-mixed to 2 channel.

**MULTI(NORMAL)**  
The multi-channel audio signals are output from the HDMI terminal with a bit-stream.

**MULTI(LPCM)**  
The multi-channel audio signals are output from the HDMI terminal with a linear PCM.

Ⓞ When "MULTI (LPCM)" is selected, use the ▲ and ▼ cursor buttons to select the item to be set, then press the ENTER button.

**SPEAKER CONFIGURATION**  
Use this to select the types of the different speakers.

**CHANNEL LEVEL**  
Use this to adjust the output level of the different speakers.

**DELAY TIME**  
Use this to set the distance from the different speakers to the listening position.

\* To exit the HDMI SPEAKER SETUP mode  
Use the ▼ cursor button to select "DIGITAL INTERFACE SETUP" then press ENTER button.

Ⓞ When "SPEAKER CONFIGURATION" is selected, use the ▲ and ▼ cursor buttons to select the speaker to be set then press the ENTER button.

- The type of speaker used for the front speakers, center speaker, subwoofer and surround speakers can be set. Use the ▲ and ▼ cursor buttons to select the speaker type, then press the ENTER button.

**LARGE**  
Select this when a large speaker is connected.

**SMALL**  
Select this when a small speaker is connected.

**NONE**  
Select this when no speaker is connected.

**YES**  
Select this when a subwoofer is connected.

**NO**  
Select this when no subwoofer is connected.

\* Press the RETURN button to return to the "HDMI SPEAKER SETUP" menu.

Ⓞ When "CHANNEL LEVEL" is selected, use the ▲ and ▼ cursor buttons to select the speaker to be adjusted, then use the ◀ and ▶ cursor buttons to set the level.

**TEST TONE**  
Use the ◀ and ▶ cursor buttons to select auto or manual.

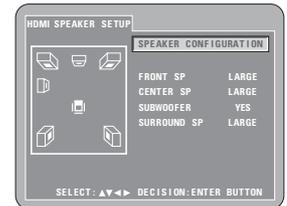
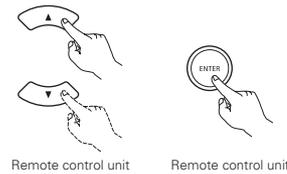
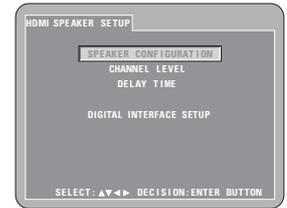
Adjust so that the volume of the test tones output from the different speakers sounds the same.

- The volume level output from the front speakers (left and right channels), center speaker, surround speakers (left and right channels) and subwoofer can be adjusted.

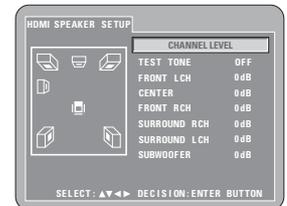
- The volume level can be adjusted between 0 and -10 dB in steps of 1 dB.

\* Press the RETURN button to return to the "HDMI SPEAKER SETUP" menu.

**3**



\* The display depends on the connected device. (Indicates whether or not speakers are connected)



© When "DELAY TIME" is selected:

With 5.1-channel surround sound, ideally the distance between the listening position and all the speakers aside from the subwoofer should be the same. The delay time setting can be used to make the sound from the different speakers reach the listening position at the same time.

Use the ▲ and ▼ cursor buttons to select the setting item, then press the ENTER button.

• When "DISTANCE" is selected:

**METERS** (when the ◀ cursor button is pressed):  
The unit of distance is set to meters ("m").

**FEET** (when the ▶ cursor button is pressed):  
The unit of distance is set to feet ("ft").

• When "FRONT LCH", "FRONT RCH", "CENTER", "SURROUND LCH", "SURROUND RCH", "SUBWOOFER" is selected:

Use the ◀ and ▶ cursor buttons to set the distance from the listening position to the different speakers.

\* The distance can be set within the range of 0 to 18 meters (60 feet).

\* The maximum difference in speaker distance for which adjustment is possible is 4.5 meters (15 feet).

• When "DEFAULT" is selected:

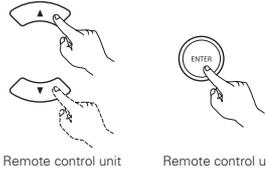
When "DEFAULT" is selected and the ENTER button is pressed, all the items are restored to their factory default settings.

\* When digital connections are made with an AV amplifier, make the speaker settings on the AV amplifier.

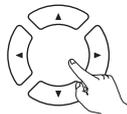
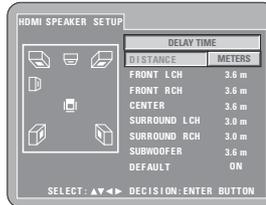
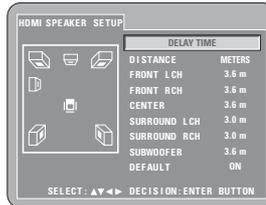
For DVD audio discs, the disc's settings are given priority, so the sound may not be produced as set with the above speaker mode setting.

\* Press the RETURN button to return to the "HDMI SPEAKER SETUP" menu.

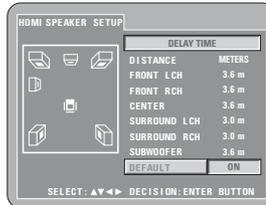
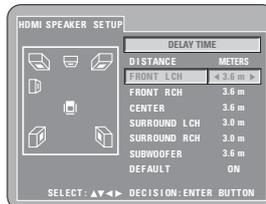
\* When the HDMI connection cable is disconnected, the "SPEAKER CONFIGURATION", "CHANNEL LEVEL", and "DELAY TIME" settings under "HDMI SPEAKER SETUP" are stored.



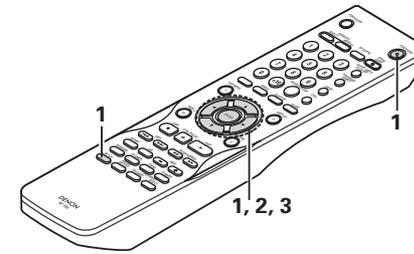
Remote control unit Remote control unit



Remote control unit



When "VIDEO SETUP" is selected



1 See page 14.

Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.

**TV ASPECT**

Use this to set the shape of your TV's screen.

**TV TYPE**

Use this to set your TV's video format (NTSC, PAL or MULTI).

**VIDEO OUT**

Use this to select either the progressive image output or interlace image output.

**PROGRESSIVE MODE**

A method of progressive conversion can be set depending on the image recorded to the DVD.

**SQUEEZE MODE**

The size of the screen to be output can be switched.

**AV1 VIDEO OUT (For only European model)**

To select whether composite video signals or S video signals or RGB signals will be output from the AV1 SCART terminals.

Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.

① When "TV ASPECT" is selected:

**4:3 PS**

Select this to play wide DVDs in the pan & scan mode (with the sides of the picture cut off). Discs for which pan & scan is not specified are played in the letter box mode.

**4:3 LB**

Select this to play wide DVDs in the letter box mode (with black strips at the top and bottom).

**WIDE (16:9) (Factory default)**

Select this to play wide DVDs in the full-screen mode.

3

② When "TV TYPE" is selected:

**NTSC**

Select this when your TV's video format is NTSC. If NTSC is selected, output format is fixed to NTSC.

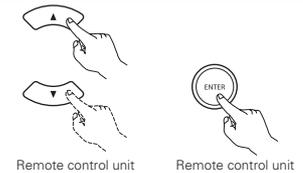
**PAL**

Select this when your TV's video format is PAL. If PAL is selected, output format is fixed to PAL.

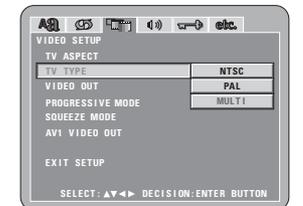
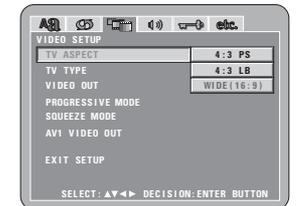
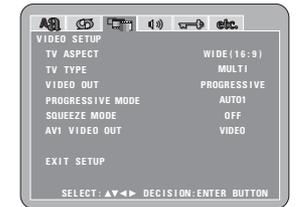
**MULTI (Factory default)**

Select this when your TV is compatible with both the NTSC and PAL formats.

If you play the disc recorded NTSC format, signal from video output terminal will be switched to NTSC is selected, output format is fixed to NTSC.



Remote control unit Remote control unit



③ When "VIDEO OUT" is selected: (NOTES)

**PROGRESSIVE (Factory default)**

Select this when using the DVD-2910 connected to a progressive type TV.

**INTERLACED**

Select this when using the DVD-2910 connected to an interlace type TV.

**NOTE:**

- For the component output only, it is possible to switch between interlace image output and progressive image output. It is not possible to specify progressive image output for the Video output connector or S-Video output connector.

④ When "PROGRESSIVE MODE" is selected:

**AUTO 1 (Factory default)**

Select this when the image recorded to the DVD is film material.

**AUTO 2**

Select this when the image recorded to the DVD is 30-frame film material.

**VIDEO 1 TO 3**

Select this when the image recorded to the DVD is video material.

**VIDEO 1**

Select this for regular video material.

**VIDEO 2**

Select this for video material having little movement.

**VIDEO 3**

Select this for video material having a lot of movement.

⑤ When "SQUEEZE MODE" is selected:

**OFF (Factory default)**

Select this to display without changing the screen size.



**ON**

Select this when playing back a 4:3 image that you wish to display at 4:3 aspect ratio at the center of a 16:9 TV.



\* Only effective for set to "WIDE (16:9)" at "TV ASPECT". (See page 18.)

\* No effective for interlaced image.

⑥ When "AV1 VIDEO OUT" is selected:

**VIDEO (Factory default)**

Composite video signals will be output from the AV1 SCART terminal.

**S-VIDEO**

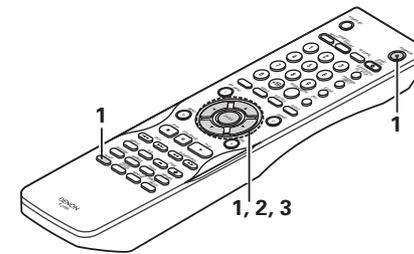
S video signals will be output.

**RGB**

RGB signals will be output.



When "AUDIO SETUP" is selected



1 See page 14.

Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.

**AUDIO CHANNEL**

Use this to adjust for the connected speaker systems.

**DIGITAL OUTPUT**

Use this to select the digital output's signal format.

**LPCM (44.1 kHz/48 kHz)**

Use this to set the digital audio output when playing DVDs recorded in linear PCM audio.

**SOURCE DIRECT**

This permits a setting to output the audio without adding speaker settings or channel level processing to the audio signals of DVD audio or Super Audio CD.

**BASS ENHANCER**

Set whether or not to output audio signals from the subwoofer when playing two-channel audio signals.

\* The BASS ENHANCER settings do not apply to digital outputs.

**COMPRESSION**

Use this to set the dynamic range output when playing disc.

**SACD FILTER**

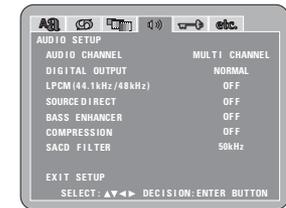
The low pass filter value when playing Super Audio CDs can be set.



Remote control unit



Remote control unit



2

Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.

① When "AUDIO CHANNEL" is selected:

◎ Use the ▲ and ▼ cursor buttons to select the item to be set, then press the ENTER button.

**MULTI CHANNEL (Factory default)**

Select this for systems in which three or more speakers are connected.

When MULTI CHANNEL is set, the speaker settings (SPEAKER CONFIGURATION), speaker output level adjustment (CHANNEL LEVEL) and speaker distances (DELAY TIME) can be set.

**2CH(SRS OFF)**

Select this does not use to the SRS TruSurround function for systems in which only two speakers are connected.

**2CH(SRS ON)**

(See pages 20, 21.)

Select this use to the SRS TruSurround function for systems in which only two speakers are connected.

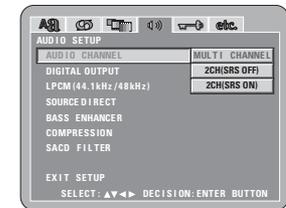
The indicator "●" in the display lights at this mode.



Remote control unit



Remote control unit



3

3

**\* To exit the setup mode**

Use the ▼ cursor button to select "EXIT SETUP", then press the ENTER button. It is also possible to quit by pressing the SETUP button on the remote control unit.

Ⓞ When "MULTI CHANNEL" is selected, use the ▲ and ▼ cursor buttons to select the item to be set, then press the ENTER button.

**SPEAKER CONFIGURATION**

Use this to select the types of the different speakers.

**CHANNEL LEVEL**

Use this to adjust the output level of the different speakers.

**DELAY TIME**

Use this to set the distance from the different speakers to the listening position.

- \* To exit the SPEAKER SETUP mode  
Use the ▼ cursor button to select "AUDIO SETUP" then press ENTER button.
- \* The SPEAKER CONFIGURATION settings only apply to analog outputs.

Ⓞ When "SPEAKER CONFIGURATION" is selected, use the ▲ and ▼ cursor buttons to select the speaker to be set then press the ENTER button.

- The type of speaker used for the front speakers, center speaker, subwoofer and surround speakers can be set. Use the ▲ and ▼ cursor buttons to select the speaker type, then press the ENTER button.

**LARGE**

Select this when a large speaker is connected.

**SMALL**

Select this when a small speaker is connected.

**NONE**

Select this when no speaker is connected.

**YES**

Select this when a subwoofer is connected.

**NO**

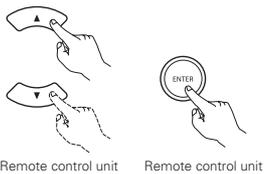
Select this when no subwoofer is connected.

- \* Press the RETURN button to return to the "SPEAKER SETUP" menu.

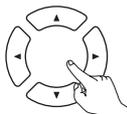
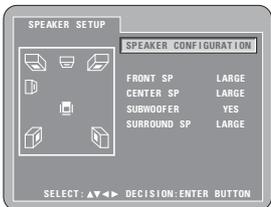
Ⓞ When "CHANNEL LEVEL" is selected, use the ▲ and ▼ cursor buttons to select the speaker to be adjusted, then use the ◀ and ▶ cursor buttons to set the level.

**TEST TONE**

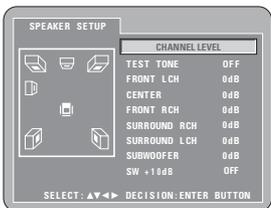
- Use the ◀ and ▶ cursor buttons to select auto or manual.  
Adjust so that the volume of the test tones output from the different speakers sounds the same.
- The volume level output from the front speakers (left and right channels), center speaker, surround speakers (left and right channels) and subwoofer can be adjusted.
- The volume level can be adjusted between 0 and -10 dB in steps of 1 dB.
- Settings SW + 10 dB to "ON" increases by 10 dB the volume level that is output from the subwoofer.
- \* Press the RETURN button to return to the "SPEAKER SETUP" menu.



Remote control unit Remote control unit



Remote control unit



Ⓞ When "DELAY TIME" is selected:  
With 5.1-channel surround sound, ideally the distance between the listening position and all the speakers aside from the subwoofer should be the same. The delay time setting can be used to make the sound from the different speakers reach the listening position at the same time.

Use the ▲ and ▼ cursor buttons to select the setting item, then press the ENTER button.

- When "DISTANCE" is selected:  
**METERS** (when the ◀ cursor button is pressed):  
The unit of distance is set to meters ("m").  
**FEET** (when the ▶ cursor button is pressed):  
The unit of distance is set to feet ("ft").

- When "FRONT LCH", "FRONT RCH", "CENTER", "SURROUND LCH", "SURROUND RCH", "SUBWOOFER" is selected:  
Use the ◀ and ▶ cursor buttons to set the distance from the listening position to the different speakers.  
\* The distance can be set within the range of 0 to 18 meters (60 feet).  
\* The maximum difference in speaker distance for which adjustment is possible is 4.5 meters (15 feet).

- When "DEFAULT" is selected:  
When "DEFAULT" is selected and the ENTER button is pressed, all the items are restored to their factory default settings.

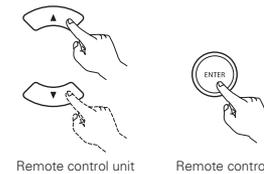
- \* When digital connections are made with an AV amplifier, make the speaker settings on the AV amplifier.

For DVD audio discs, the disc's settings are given priority, so the sound may not be produced as set with the above speaker mode setting.

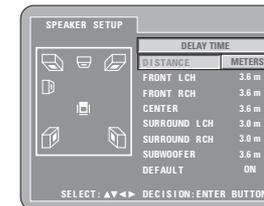
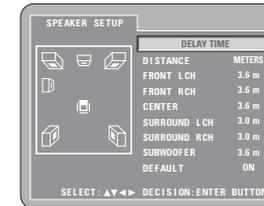
- \* Press the RETURN button to return to the "SPEAKER SETUP" menu.

**The SRS TruSurround function (only for DVD-videos and Video CDs)**

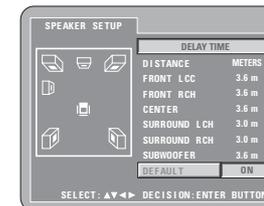
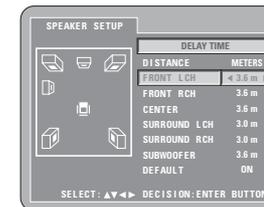
- The multi-channel sound normally achieved with five speakers is recreated using only the two front stereo speakers. This results in a sound with a nearly natural sense of movement that seems to surround the head, without the strong directivity characteristic of multi-speaker systems.



Remote control unit Remote control unit



Remote control unit



**NOTES:**

- This function only works with DVD-videos and video CDs only.
- Note that for some discs the effect will be weak or there will be no effect.
- Turn off other surround functions (the TV's surround mode, etc.).

\* **SRS TruSurround** is a trademark of SRS Labs, Inc. TruSurround technology is incorporated under license from SRS Labs, Inc.

② When "DIGITAL OUTPUT" is selected:

**NORMAL (Factory default)**

When playing DVDs recorded in Dolby Digital or DTS, bitstream signals are output from the digital audio output terminals. When playing DVDs recorded in linear PCM or packed PCM, linear PCM signals are output.

Select "NORMAL" when making digital connections to an AV amplifier with built-in Dolby Digital and DTS decoder.

**PCM**

When playing Dolby Digital/DTS bitstream signals or DVDs recorded in linear PCM or packed PCM, the signals are converted into 48 kHz/16-bit PCM (2-channel) signals and output from the digital outputs. When playing DVDs recorded in PCM, linear PCM signals are output.

3

③ When "LPCM (44.1 kHz/ 48 kHz)" is selected:

**OFF (Factory default)**

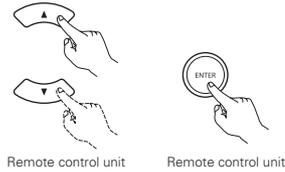
When playing linear PCM or packed PCM DVDs that are not copyright-protected, for 2-channel PCM audio signals up to 96 kHz, linear PCM signals are output as such without being converted from the digital outputs. (176.2 kHz and 192 kHz signals are converted to 88.2 kHz and 96 kHz, respectively.)

For DVDs containing multi-channel PCM signals, the digital signals are down-mixed for output into two channels, front left and right. (Only the front left and right channels are output for sources for which down-mixing is prohibited.)

When playing copyright-protected linear PCM or packed PCM DVDs, in consideration of copyrights, no digital signals are output for sources exceeding 48 kHz/16 bits. When playing such sources, either set to "ON" or make analog connections. (See page 9.)

**ON**

Linear PCM and packed PCM signals are converted to 44.1 kHz or 48 kHz and output. (The PCM digital audio output signals are converted to 48 kHz or less in consideration of copyrights.) When making digital connections to an AV amplifier that is not compatible with 96 kHz/88.2 kHz signals, set to "ON".



④ When "SOURCE DIRECT" is selected:

**OFF (Factory default)**

Please set to OFF when performing speaker settings or setting the delay time and playing back.

**ON**

Set to ON when playing back without performing the processing of speaker settings. Performing this setting will result in the setting of the DTS recommended all-channel, full bandwidth playback. (Note that the volume of the sub woofer will increase by 5 dB, and there will be an increase of 15 dB with a Super Audio CD.) This is also set when playing back a 6-channel source of DVD audio that has been recorded with all channels and full bandwidth. When set to "OFF", the speaker size will be set to "Large" for all speakers and the sub woofer will be set to "Yes". When playing back software such as this, perform the analog connections according to the software instruction manual.

⑤ When "BASS ENHANCER" is selected:

**OFF (Factory default)**

No sound is produced from the subwoofer.

**ON**

Sound is produced from the subwoofer. In the case, set the subwoofer to "YES" at the speaker settings.

\* This works only with analog audio output.

\* This mode does not work at "SOURCE DIRECT" is on.

⑥ When "COMPRESSION" is selected:

**OFF (Factory default)**

Select this for the standard range.

**ON**

Select this to achieve powerful sound even when the volume is low. This setting is suited for watching DVDs late at night with the volume low. (This setting is only valid for DVDs recorder in Dolby Digital.)

⑦ When "SACD (Super Audio CD) FILTER" is selected:

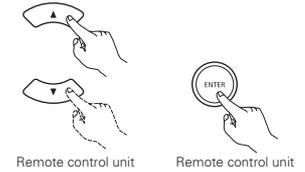
**50kHz (Factory default)**

When playing Super Audio CDs, high frequencies of 50kHz and higher are cut.

**100kHz**

When playing Super Audio CDs, high frequencies of 100kHz and higher are cut.

\* Set to 100kHz when a high frequency compatible AV amplifier is connected.

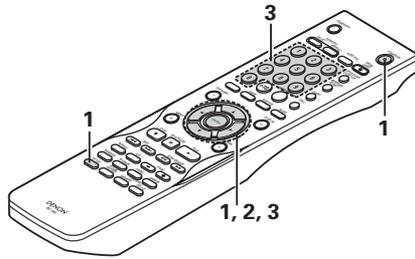


3

**\* To exit the setup mode**

Use the **▼** cursor button to select "EXIT SETUP", then press the ENTER button. It is also possible to quit by pressing the SETUP button on the remote control unit.

When "RATINGS" is selected

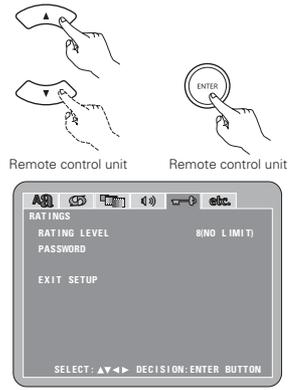


**1** See page 14.

Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.

**RATING LEVEL**  
Use this to restrict playback of adult DVDs you do not want children to view. Note that even with adult DVDs, viewing cannot be restricted unless the restriction level is recorded on the disc.

**PASSWORD**  
Use this to change the password.  
The default password is "0000".



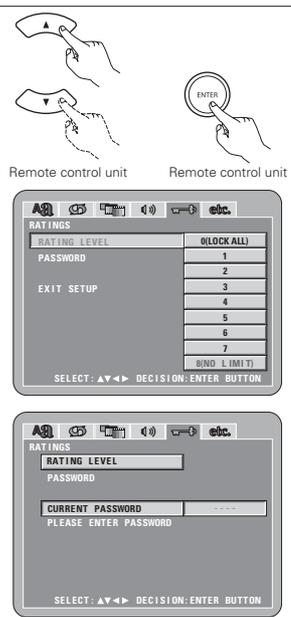
Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.

① When "RATING LEVEL" is selected:  
**0 (LOCK ALL)**  
Select this to disable playback of all DVDs.  
Use this for example to disable playback of adult DVDs on which the rating level is not recorded.

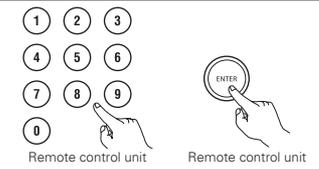
**1**  
Select this to play only DVDs for children. (Adult and general audience DVDs cannot be played.)

**2 to 7**  
Select this to play DVDs for general audiences and children. Adult DVDs cannot be played.

**8 (NO LIMIT) (Factory default)**  
Select this to play all DVDs.



Use the number buttons to input a 4-digit password, then press the ENTER button.  
\* The default password is "0000".  
\* Do not forget the password.  
\* The setting cannot be changed without inputting the correct password.



② When "PASSWORD" is selected:  
Use the ► cursor button to select the "CHANGE", then press the ENTER button.



③ Use the number buttons to input a OLD (current) 4-digit password.  
\* The default password is "0000".



Use the number buttons to input a new 4-digit password.

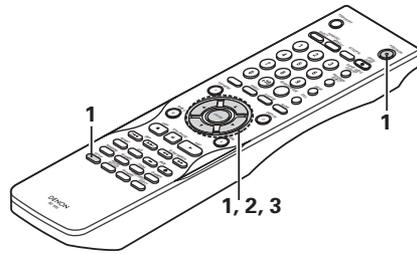


Use the number buttons to input a new 4-digit password again. (for the confirmation.)  
Then press the ENTER button.  
\* Do not forget the password. (See page 38.)  
\* The setting cannot be changed without inputting the correct password.



\* **To exit the setup mode**  
Use the ▼ cursor button to select "EXIT SETUP", then press the ENTER button. It is also possible to quit by pressing the SETUP button on the remote control unit.

When "OTHER SETUP" is selected



<b>1</b>	<p>See page 14.</p>	
<b>2</b>	<p>Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.</p> <p><b>PLAYER MODE</b> The DVD video play mode can be set to play the DVD video contents included on a DVD audio disc.</p> <p><b>CAPTIONS</b> Use this to set whether or not to display the closed captions recorded on DVDs.</p> <p><b>WALL PAPER</b> Use this to select the image to be shown on the screen in the stop mode and CD play mode.</p> <p><b>DISPLAY</b> The setting of whether or not there will be an indication on the display of this unit only for the 2 seconds immediately following the operation, even while the display has been off.</p> <p><b>AUTO POWER MODE</b> To save power, DVD-2910's can automatically be set to the standby mode when it is not used for long periods of time.</p> <p><b>SLIDE SHOW</b> The time interval for switching to the next still picture when playing slide shows of still pictures (in JPEG format) can be set.</p>	 
<b>3</b>	<p>Use the ▲ and ▼ cursor buttons to select the desired setting, then press the ENTER button.</p> <p>① When "PLAYER MODE" is selected: <b>AUDIO (Factory default)</b> Set this to play the DVD audio signals as such.</p> <p><b>VIDEO</b> Set this to play the DVD video contents included on a DVD audio disc.</p>	 

- 3**
- ② When "CAPTIONS" is selected:  
**OFF (Factory default)**  
Select this when you do not want to display the captions on the screen when playing DVDs containing English captions.
  - ON**  
Select this to display the captions on the screen when playing DVDs containing English captions.
  - ③ When "WALL PAPER" is selected:  
**BLUE (Factory default)**  
Select this to display a blue background on the TV display.
  - GRAY**  
Select this to display a gray background on the TV display.
  - BLACK**  
Select this to display a black background on the TV display.
  - PICTURE**  
Select this to display the wallpaper on the TV display.
  - ④ When "DISPLAY" is selected:  
**OFF (Factory default)**  
This is valid when the display has been switched off. The display will not show an indication even when the button (ex. skip, stop, etc.) has been pressed.
  - ON**  
This is valid when the display has been switched off. When the button (ex. skip, stop, etc.) is pressed, the indication will appear on the display for approximately 2 seconds.
  - ⑤ When "AUTO POWER MODE" is selected:  
**OFF (Factory default)**  
The power does not automatically switch to the standby mode.
  - ON**  
The DVD-2910's power turns off and the standby mode is set if the DVD-2910 remains in the stop mode for approximately 30 minutes.
  - ⑥ When "SLIDE SHOW" is selected:  
Use the ▲ and ▼ cursor buttons to set the time interval. The time interval can be set within 5 and 15 seconds. **(The factory default setting is 5 seconds.)**



**\* To exit the setup mode**

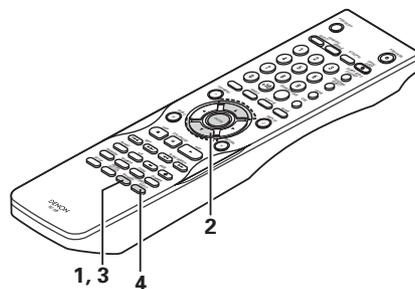
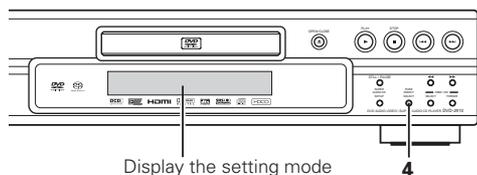
Use the ▼ cursor button to select "EXIT SETUP", then press the ENTER button. It is also possible to quit by pressing the SETUP button on the remote control unit.

**NOTES:**

- An English caption decoder is required to display English captions.
- DVDs with caption signals are indicated by the , , mark.  
English captions cannot be displayed when playing DVDs which do not contain caption signals.
- The characters in which the captions are displayed (capital letters, small letters, italics, etc.) depend on the DVD and cannot be selected with the DVD-2910.

## 9 USING THE PURE DIRECT MODE

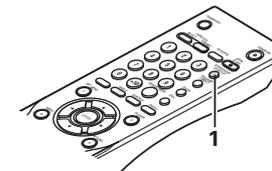
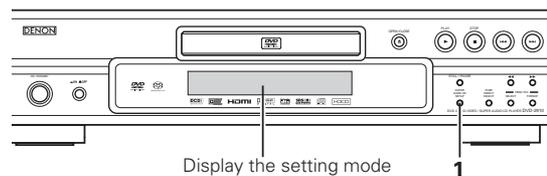
- In the pure direct mode, only analog audio signals (no video signals, etc.) are output, thereby achieving high quality sound.



<b>1</b>	<p>Press the PURE DIRECT MEMORY button on the remote control unit.</p> <ul style="list-style-type: none"> <li>The output status of the video signals, etc., can be stored at MODE 1 and MODE 2 as desired.</li> </ul>	<p>Remote control unit</p>
<b>2</b>	<p>Use the ▲ and ▼ cursor buttons to select the mode, then press the ENTER button.</p> <p><b>DIGITAL OUTPUT</b> ON: Digital audio signals are output. OFF: Digital audio signals are not output.</p> <p><b>VIDEO OUT</b> ON: Video signals are output. OFF: Video signals are not output.</p> <p><b>DISPLAY</b> ON: It is indicate in Display of the main unit. OFF: It is not indicate in Display of the main unit. * When the video output is set to "OFF" or "ALL OFF", neither HDMI video nor audio signals are output. Also, when the HDMI AUDIO SETUP is set to "MULTI (NORMAL)", the digital output setting cannot be made. (See page 17.)</p>	<p>Remote control unit</p> <p>Remote control unit</p>
<b>3</b>	<p>Press the PURE DIRECT MEMORY button on the remote control unit.</p> <ul style="list-style-type: none"> <li>All of the settings are stored in the memory.</li> </ul>	<p>Remote control unit</p>
<b>4</b>	<p>Press the PURE DIRECT SELECT button on the main unit.</p> <p>The modes described below will appear on the display.</p> <p>NORMAL: All signals are output normally. MODE 1: The settings stored for MODE 1 are used. The factory default settings are: "DIGITAL OUT": "ON" "VIDEO OUT": "ON" "DISPLAY": "ON" MODE 2: The settings stored for MODE 2 are used. The factory default settings are:</p>	<p>"DIGITAL OUT": "ON" "VIDEO OUT": "ON" "DISPLAY": "ON" ALL OFF: No indicate in Display of the main unit, video and digital signals are not out.(except analog audio output)</p> <p>Main unit</p> <p>Remote control unit</p>

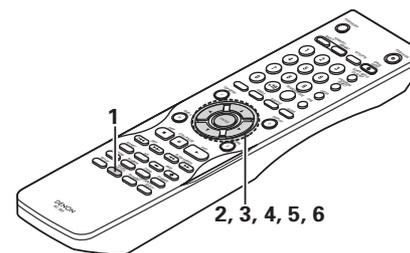
## 10 USING THE SUPER AUDIO CD SETUP

- On a Super Audio CD, the stereo and multi – channel areas are separate. Hybrid discs comprise 2-layer structure of Super Audio CD layer and a CD layer. The area/layer can be set to be played with priority.



<b>1</b>	<p>Press the SUPER AUDIO CD SETUP button.</p> <ul style="list-style-type: none"> <li>The modes described below will appear on the display.</li> </ul> <p><b>MULTI (FACTORY DEFAULT)</b> When playing a Super Audio CD disc, the multi – channel area will be played back with priority.</p> <p><b>STEREO</b> When playing a Super Audio CD disc, the stereo area will be played back with priority.</p> <p><b>CD</b> When playing a Super Audio CD disc, the CD layer will be played back with priority. * When playing back a disc that does not have a selected area/layer, another area/layer will be played back automatically.</p>	<p>Remote control unit</p> <p>MULTI</p> <p>STEREO</p> <p>CD</p>
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## 11 ADJUSTING THE PICTURE QUALITY



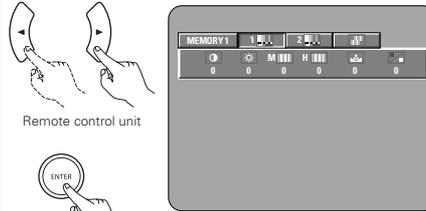
<b>1</b>	<p>Press the PICTURE ADJUST button during playback or during pause.</p> <ul style="list-style-type: none"> <li>The image quality adjustment screen will appear.</li> </ul> <p><b>STD</b> Returns the settings to the factory default settings.</p> <p><b>M1 TO M5</b> Image quality settings that have been adjusted to your preference can be stored to 5 memories, M1 to M5.</p> <p><b>SET</b> SET permits set to setup level and setting of the screen display position (horizontal and vertical).</p>	<p>Remote control unit</p>
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2 Select the memory using the 2 cursor buttons (◀, ▶) and press the ENTER button.

**IMAGE QUALITY ADJUSTMENT 1**  
This permits adjustment of the contrast, brightness, sharpness, tint, and enhancer.  
→ Advance to Operation 3.

**IMAGE QUALITY ADJUSTMENT 2**  
This permits adjustment of the setup level, white level, color density, chroma delay, and noise reduction. → Advance to Operation 4.

**GAMMA CORRECTION**  
This is selected when dark portions of the image are obscure, or bright portions are much brighter than necessary.  
→ Advance to Operation 5.



Remote control unit



Remote control unit

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3 When Image Quality Adjustment 1 Is Selected and Adjusted:

- Press cursor button (▼), then select the image quality adjustment item with cursor buttons (◀, ▶), set the adjustment value with cursor buttons (▲, ▼), and press the ENTER button.
- All of the adjusted contents will be stored.

**CONTRAST (-6 to +6) (Factory default: 0)**  
• This adjusts the light/dark difference of the image.

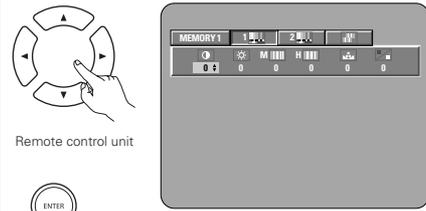
**BRIGHTNESS (0 to +12) (Factory default: 0)**  
• This adjusts the brightness of the image.

**SHARPNESS (MID) (-6 to +6) (Factory default: 0)**  
• This adjusts the sharpness of the image for the intermediate frequencies.

**SHARPNESS (HIGH) (-6 to +6) (Factory default: 0)**  
• This adjusts the sharpness of the image for the high frequencies. (Only effective for progressive images.)

**HUE (-6 to +6) (Factory default: 0)**  
• This adjusts the balance between green and red. (Not effective for progressive scan output nor component output.)

**CCS (0 to +3) (Factory default: 0)**  
• This performs removal of the color signal component for images in which the color signal component is mixed with the brightness signal. (Only effective with progressive images.)



Remote control unit



Remote control unit

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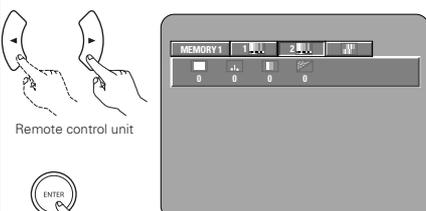
4 When Image Quality Adjustment 2 Is Selected and Adjusted:

**WHITE LEVEL (-5 to +5) (Factory default: 0)**  
• This adjusts the white level.

**CHROMA LEVEL (-6 to +6) (Factory default: 0)**  
• This adjusts the density of the color.

**CHROMA DELAY (-2 to +2) (Factory default: 0)**  
• This adjusts the shift of the brightness signal and the color signal of the image. (Only effective for progressive images.) (Adjustment between -1 and +1 is possible for interlaced video.)

**DNR (Digital Noise Reduction) (0 to +6) (Factory default: 0)**  
• This reduces video noise.

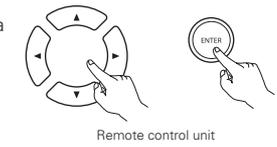


Remote control unit



Remote control unit

When Gamma Correction is Selected and Adjusted:  
Two kinds of display are prepared for adjustment of Gamma Correction.



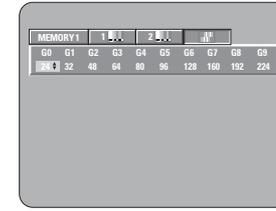
Remote control unit

- When use the Numerical table of Gamma Correction. (Figure 1)  
:Pressing the cursor button (▼)
- When use the Graph of Gamma Correction. (Figure 2)  
:Pressing the enter button

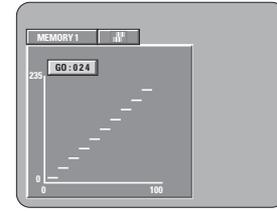
5 Select the adjust point with cursor buttons (◀, ▶), set the adjustment brightness level with cursor buttons (▲, ▼), and press the ENTER button.  
(If the PICTURE ADJUST button is pressed before pressing the enter button, an adjustment level is not stored)

- The brightness level can be adjusted in range of 16 to 235.
- Pressing the cursor button (▲) raises the level (and the image becomes brighter), and pressing the cursor button (▼) lowers the level (and the image becomes darker).
- A press of the CLEAR button returns all of the setting points to the standard level.
  - \* The level of the selected point cannot exceed the level of the points above and below that point. (A dark portion cannot be set to exceed a portion that is brighter than it.)

(Figure 1)



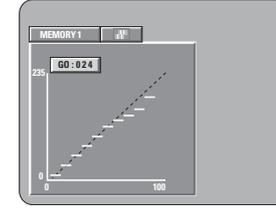
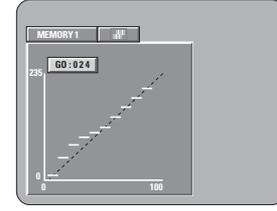
(Figure 2)



\* Ending the Image Quality Adjustment  
Press the PICTURE ADJUST button.

**REFERENCE:**

- In the Graph of Gamma Correction, the horizontal axis indicates the brightness level of the image that is recorded on the disc, and the vertical axis indicates the brightness level of the image when it is output from this unit.

- When bright points of the disc side are adjusted to the "dark" of the output side, the fine parts of the bright portion that normally become hard to see, become an easily discerned image.
- When dark points of the disc side are adjusted to the "bright" of the output side, the fine parts of the dark portion that normally become hard to see, become an easily discerned image.

6

When the Display Position is Selected and Adjusted:

- Press the cursor button (▼), then select the horizontal/vertical direction with the cursor buttons (←, →), set the adjustment value with the (▲, ▼) cursor buttons, and press the ENTER button.

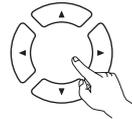
**SETUP LEVEL (0 IRE, 7.5 IRE)**

(Factory default: 0 IRE)

- This corrects floating black.
- **H. POSITION (-7 to +7) (Factory default: 0)**
- A 15-step portion of position adjustment is permitted left and right.

**V. POSITION (-3 to +7) (Factory default: 0)**

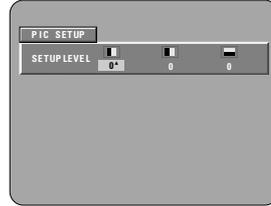
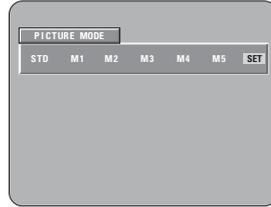
- A 11-step portion of position adjustment is permitted up and down.
- \* The picture and sound may be disturbed while the display position is being adjusted.



Remote control unit

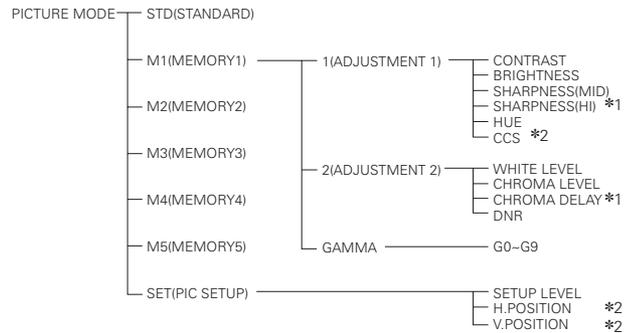


Remote control unit



**\* To exit the picture adjust mode**

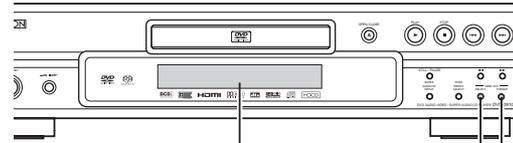
Press the PICTURE ADJUST button.



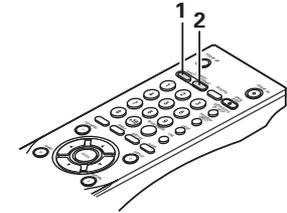
- \*1 Only effective for progressive scan.
- \*2 Only effective for HDMI, DVI and progressive scan.
- When HDMI and DVI signals are output, the SHARPNESS (MID/HI), CHROMA DELAY and Gamma correction settings will have no effect.

**12 USING THE VIDEO SETUP**

- The video output setting of the HDMI and the DVI-D connectors can be changed.
- The video output setting of the PICTURE MODE, PROGRESSIVE MODE and ADJUST MODE also can be changed.



Display the setting mode



- \* The HDMI, DVI, 480P, 576P, 720P and 1080i indicators flash when the connection is being checked, then stop flashing, remaining lit, once the check is completed.

1

Press the HDMI/DVI SELECT button.

- The modes described below will appear on the display.

**HDMI/DVI OFF (FACTORY DEFAULT)**

No output signals from the HDMI and DVI-D connectors. This mode is set to use the COMPONENT VIDEO OUT connector.

**HDMI Y Cb Cr**

Outputs the component signals from the HDMI connector.

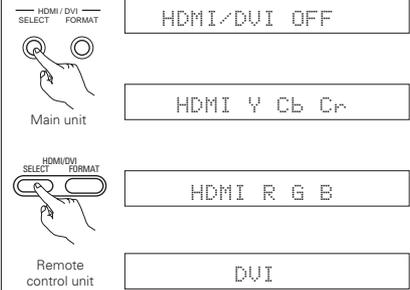
**HDMI RGB**

Outputs the RGB signals from the HDMI connector.

**DVI**

Outputs the RGB signals from the DVI-D connector.

- \* The video signals are only output from one of the HDMI, DVI or progressive component video output connectors.



2

Press the HDMI/DVI FORMAT button.

- The modes described below will appear on the display.

Select the item you wish to set and press the select knob to define it.

**480P/576P (FACTORY DEFAULT)**

Outputs the image from the HDMI or DVI-D connector at 480P or 576P.

**720P**

Outputs the image from the HDMI or DVI-D connector at 720P.

**1080i**

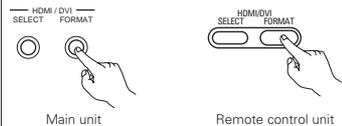
Outputs the image from the HDMI or DVI-D connector at 1080i.

- When playing back a PAL-formated disc, be sure to set the TV TYPE option to NTSC. (See pages 18, 19.)

- The video or audio signals may be interrupted when the output setting mode is switched.

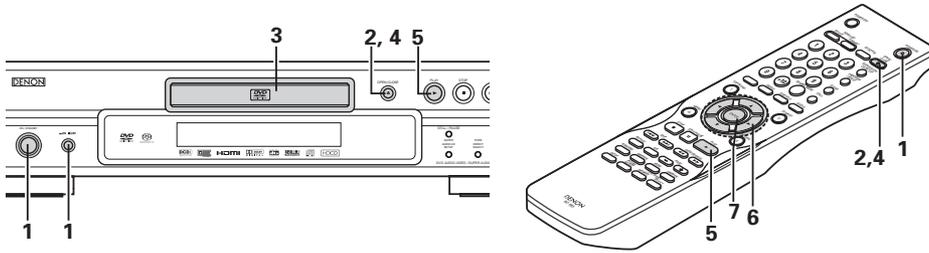
- Depending on the TV you are using, if the TV's input is not set to HDMI or DVI, the HDMI or DVI OFF mode may be set. In this case, set the TV's input setting to HDMI or DVI before performing the DVI setup procedure.

- Connect to an HDCP compatible display to view images with DVI connections.



**13** PLAYBACK

**(1) Playback**

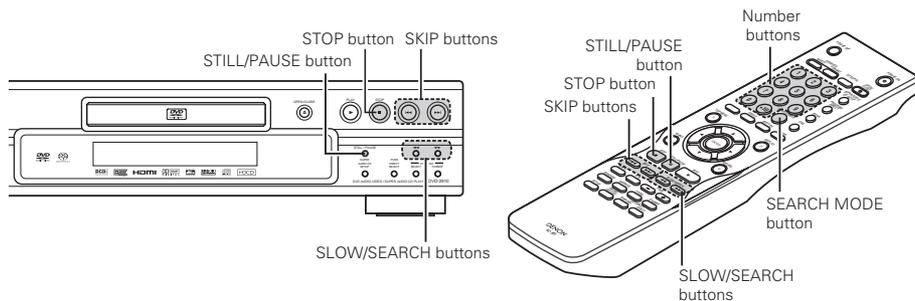


<p><b>1</b></p> <p>Turn on the power.</p> <ul style="list-style-type: none"> <li>Press the power button, the power indicator lights green and the power turns on. When pressed again, the power turns off and indicator is off.</li> <li>In the standby mode (the power indicator lights red), press the ON/STANDBY button on the main unit or POWER ON button on the RC-985.</li> </ul>	
<p><b>2</b></p> <p>Press the OPEN/CLOSE button to open the disc tray.</p>	
<p><b>3</b></p> <p>Set the disc in the disc tray.</p>	
<p><b>4</b></p> <p>Press the OPEN/CLOSE button.</p>	

<p><b>5</b></p> <p>Press the PLAY button.</p> <ul style="list-style-type: none"> <li>For many interactive DVDs and video CDs with playback control, a menu screen appears. In this case use the procedure in step 6 to select the desired item.</li> <li>Interactive DVDs are DVDs including multiple angles, stories, etc.</li> </ul>	<p>Main unit</p> <p>Remote control unit</p> <p>Example: For DVDs with menu screens</p> <table border="1"> <tr><th colspan="2">TOP MENU</th></tr> <tr><td>Apple</td><td>Banana</td></tr> <tr><td>Orange</td><td>Strawberry</td></tr> <tr><td>Peach</td><td>Pineapple</td></tr> </table> <p>Example: For video CDs with playback control</p> <table border="1"> <tr><td>1. Opening</td></tr> <tr><td>2. 1st movement</td></tr> <tr><td>3. 2nd movement</td></tr> <tr><td>4. 3rd movement</td></tr> <tr><td>5. Ending</td></tr> </table>	TOP MENU		Apple	Banana	Orange	Strawberry	Peach	Pineapple	1. Opening	2. 1st movement	3. 2nd movement	4. 3rd movement	5. Ending
TOP MENU														
Apple	Banana													
Orange	Strawberry													
Peach	Pineapple													
1. Opening														
2. 1st movement														
3. 2nd movement														
4. 3rd movement														
5. Ending														
<p><b>6</b></p> <p>Use the cursor buttons (▲, ▼, ◀ and ▶) to select the desired item.</p> <ul style="list-style-type: none"> <li>For some discs there is a second menu screen. If so, press the ►► button to display the next menu screen. (See the disc's jacket.)</li> <li>The cursor buttons (▲, ▼, ◀ and ▶) do not work for video CDs. Use the number buttons to select the desired item.</li> </ul>	<p>Remote control unit</p>													
<p><b>7</b></p> <p>Press the ENTER button.</p> <ul style="list-style-type: none"> <li>The desired item is selected and playback starts.</li> <li>You can return to the menu screen by pressing the TOP MENU/MENU button while the DVD is playing, though this depends on the disc.</li> <li>Press the RETURN button during playback of a video CD to return to the menu screen.</li> </ul>	<p>Remote control unit</p> <p>Example: When "Apple" is selected</p> <table border="1"> <tr><th colspan="2">TOP MENU</th></tr> <tr><td>Apple</td><td>Banana</td></tr> <tr><td>Orange</td><td>Strawberry</td></tr> <tr><td>Peach</td><td>Pineapple</td></tr> </table> <p>→</p> <table border="1"> <tr><td>Apple</td></tr> </table>	TOP MENU		Apple	Banana	Orange	Strawberry	Peach	Pineapple	Apple				
TOP MENU														
Apple	Banana													
Orange	Strawberry													
Peach	Pineapple													
Apple														

**NOTES:**

- If appears on the TV screen while buttons are being operated, that operation is not possible on the DVD-2910 or with that disc.
- Do not place more than one disc in the disc tray.
- Set the disc in the disc guide.
- The disc keeps turning while the menu screen is displayed on the TV screen.

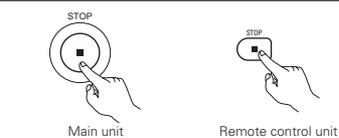


## (2) Stopping Playback

During playback, press the STOP button on the main unit or the remote control unit, playback stops and wall paper is displayed.

<Resume play memory function (DVD only)>

- With the DVD-2910, when the STOP button is pressed, that position is stored in the memory. At this time, "▶" flashes on the display. When the PLAY button is pressed after pressing the STOP button, playback resumes from the position at which it was stopped. The resume play memory function is canceled if the disc tray is opened or the STOP button is pressed a second time.
- After 30 minutes in the stop mode, the DVD-2910's power automatically turns off and the standby mode is set. (Auto Power Off)



\* The resume play memory function only works for discs for which the elapsed time is shown on the display during playback.

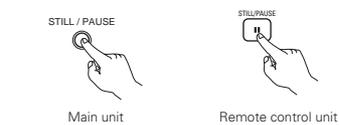
**NOTE:**

- The resume play memory function does not work during menu playback of DVD-VIDEO discs.

## (3) Playing Still Pictures (Pausing)

During playback, press the STILL/PAUSE button on the main unit or the remote control unit.

- Press the PLAY button to resume normal playback.

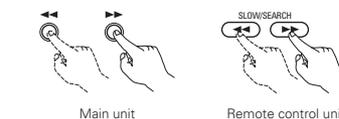


## (4) Forward/Reverse Searching

During playback, press one of the SLOW/SEARCH buttons on the main unit or the remote control unit.

◀◀ : Reverse direction  
▶▶ : Forward direction

- When pressed again, the search speed increases.
- Variable in 4 steps for Super audio CDs and CDs, 7 steps for DVD audio (movie part), DVD video and video CD discs.
- Press the PLAY button to resume normal playback.



**NOTE:**

- In some cases the menu screen may reappear when one of the SLOW/SEARCH buttons is pressed during menu playback on a video CD.

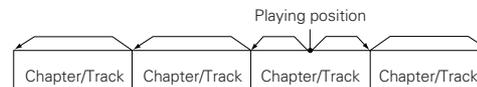
## (5) Skipping to the Beginning of Chapters or Tracks

### Cueing using the SKIP buttons

During playback, press one of the SKIP buttons on the main unit or the remote control unit.

◀◀◀ : Reverse direction (PREVIOUS)  
▶▶▶ : Forward direction (NEXT)

- A number of chapters or tracks equal to the number of times the button is pressed is skipped.
- When the SKIP ◀◀◀ button is pressed once, the pickup returns to the beginning of the currently playing chapter or track.



Reverse direction ← → Forward direction (direction of playback)

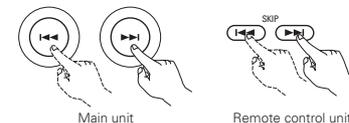
### Cueing using the number buttons

Press the SEARCH MODE button during playback.

- The search mode switches each time the button is pressed.  
For DVD audio discs : Group → Track → (Group) →  
For DVD video discs : Title → Chapter → (Title) →  
For Super audio CDs, CDs and video CDs : Track only
- \* The search mode set by pressing the SEARCH MODE button is stored in the memory until the button is pressed again.

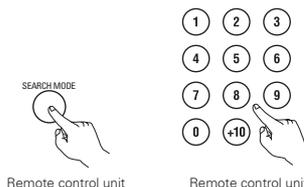
However, the search mode returns to the default mode when the power is turned off.

- Use the number buttons to input the number to be played.



**NOTE:**

- In some cases the menu screen may reappear when one of the SKIP buttons is pressed during menu playback on a video CD.



**NOTE:**

- Some DVD audio, DVD video and video CD discs do not operate as described in this manual due to the intentions of the discs' producers.

## (6) Playing Frame by Frame (for DVD-videos and video CDs only)

During playback, press the STILL/PAUSE button on the main unit or the remote control unit.

- The picture moves forward one frame each time the button is pressed.
- Press the PLAY button to resume normal playback.
- With DVD audio discs, forward frame-by-frame skipping is only possible for the video part.

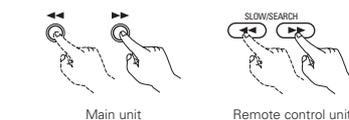


## (7) Slow Playback (for DVD-videos and video CDs only)

In the still mode, press one of the SLOW/SEARCH buttons on the main unit or the remote control unit.

◀◀ : Reverse direction  
▶▶ : Forward direction

- When pressed again, the slow play speed increases. For video CDs there are three steps.
- Press the PLAY button to resume normal playback.
- With DVD audio discs, the forward slow play function can only be used with the video part.



**NOTE:**

- Reverse slow play is not possible on video CDs.

**(8) Selecting the still image (only for DVD-audios)**

During playback, press the PAGE + or PAGE - button on the remote control unit.

- For DVD audio discs with still images, the desired image can be selected.
- On some discs the image cannot be selected due to the intentions of the discs' producers.



**(9) Playing bonus groups (only for DVD-audios)**

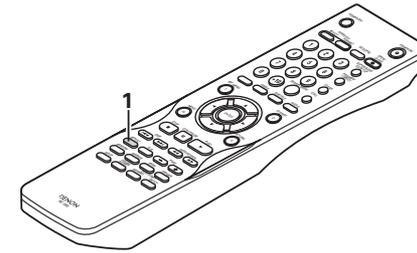
<b>1</b>	In the stop mode, press the SEARCH MODE button on the remote control unit to set the search mode to "GROUP".	 Remote control unit
<b>2</b>	Use the number buttons to input the bonus group number.	 Remote control unit
<b>3</b>	Use the number buttons on the remote control unit to input the password (4 digits), then press the ENTER button. • Playback starts from the first track in the specified group.	 Remote control unit

• In some cases the password must be input at the menu screen. In these cases, follow the instructions on the screen.  
• Once the password is input, the disc can be played as many times as you want until it is removed.  
• If you make a mistake when inputting the password, press the CLEAR button on the remote control unit.

**14 PLAYING REPEATEDLY**

■ Use this function to play your favorite audio or video sections repeatedly.

**Playing Repeatedly (Repeat Playback)**



In the play mode, press the REPEAT button.

- The display on the TV screen switches each time the button is pressed, and the corresponding repeat play mode or normal playback mode is set.

Remote control unit

**① For DVD audio discs**

- Normal playback
- Track repeated
- Group repeated
- Repeat playback cancelled

**② For DVD video discs**

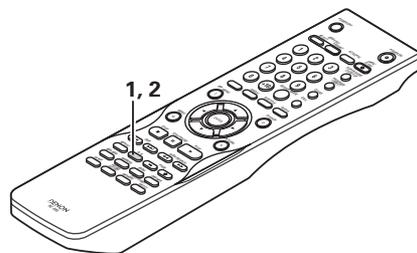
- Normal playback
- Chapter repeated
- Title repeated
- Repeat playback cancelled

**③ For video CDs, Super audio CDs and music CDs**

- Normal playback
- Track repeated
- Entire disc repeated
- Repeat playback cancelled

**\* To return to normal playback:**  
Return to normal playback by pressing the REPEAT button until "REPEAT OFF" appears on the TV screen.

**Playing a Certain Section Repeatedly (A-B Repeat Playback)**



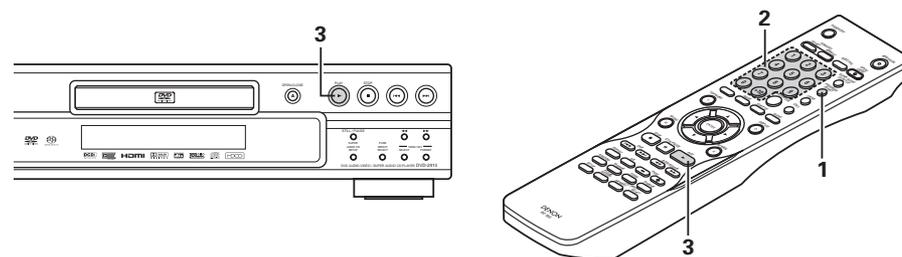
<b>1</b>	<p>During playback, press the A-B button.</p> <ul style="list-style-type: none"> <li>This sets start point A.</li> </ul>	 Remote control unit 
<b>2</b>	<p>Press the A-B button again.</p> <ul style="list-style-type: none"> <li>This sets end point B, and repeat playback of the A-B section starts.</li> </ul>	 Remote control unit 
<p>* To return to normal playback: Press the A-B button until "A TO B CANCELED" appears on the TV screen.</p>		

**NOTES:**

- Repeat playback may not work for some DVDs.
- The repeat playback and A-B repeat playback functions will not work for DVDs and video CDs for which the elapsed time is not shown on the display during playback.
- In some cases, subtitles may not be displayed near the A and B points during A-B repeat playback.

**15 PLAYING TRACKS IN THE DESIRED ORDER**

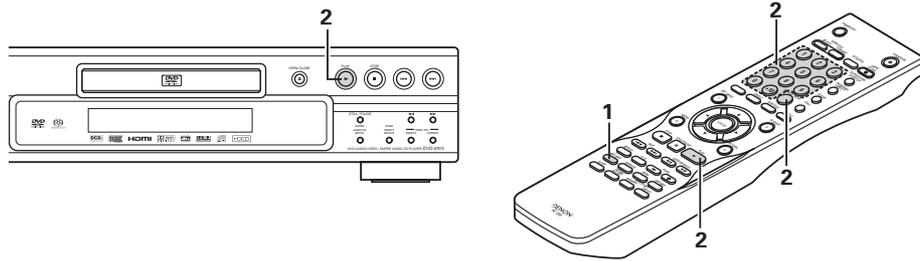
- Use this function with DVD-AUDIO discs, video CDs, Super audio CDs and music CDs to play the tracks in the desired order.
- This function does not affect with DVD-VIDEO discs.



<b>1</b>	<p>In the stop mode, press the PROGRAM/DIRECT button once.</p> <ul style="list-style-type: none"> <li>The program selection screen appears.</li> </ul>	 Remote control unit 
<b>2</b>	<p>Use the number buttons to select the track number you want to program.</p> <p><b>EX:</b> To program track 5 and track 12:</p> <ul style="list-style-type: none"> <li>With DVD-audio, group numbers can be specified and programmed. Bonus tracks, however, cannot be programmed.</li> </ul>	 Remote control unit 
<b>3</b>	<p>Press the PLAY button.</p> <ul style="list-style-type: none"> <li>Playback of the tracks in the programmed order begins.</li> </ul>	 Main unit  Remote control unit
<p>* To return to normal playback: Press the STOP button to stop programmed playback, then press the PROGRAM/DIRECT button. Now press the PLAY button to start normal playback from the beginning of the disc.</p> <p>* To clear tracks from the program: Press the STOP button. The program play screen appears. Press the CLEAR button to clear the last track in the program.</p> <p>* To clear the entire program: The entire program is cleared when the power is turned off or the disc is ejected.</p> <p>* To check the programmed contents, press the CALL button in the stop mode. The programmed contents are displayed step by step.</p> <p>* Up to 20 tracks can be programmed.</p>		

## 16 PLAYING TRACKS IN THE RANDOM ORDER

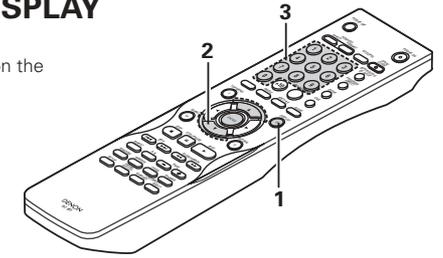
- Use this function with video CDs, Super audio CDs and music CDs to play the tracks in random order. With DVD-AUDIO discs, random playback is performed within the selected group.
- This function does not affect with DVD-VIDEO discs.



<b>1</b>	<p>In the stop mode, press the RANDOM button.</p> <ul style="list-style-type: none"> <li>• The random play screen appears.</li> </ul>	 Remote control unit 
<b>2</b>	<p>Press the PLAY button.</p> <ul style="list-style-type: none"> <li>• The tracks start playing in random order.</li> </ul>	 Main unit      Remote control unit
	<p>* For DVD audio discs: When operating from the remote control unit, use the buttons to input the number of the group you want to play.</p>	 Remote control unit * for DVD audio discs
<p>• Random playback is not possible for some discs. * To return to normal playback: Press the STOP button to stop random playback, then press the RANDOM button once.</p>		

## 17 USING THE ON-SCREEN DISPLAY

- Use this function to display and change information on the disc (titles, chapters, time, etc.)

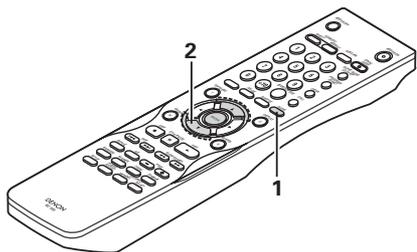


<p>In the play mode, press the DISPLAY button.</p> <ul style="list-style-type: none"> <li>• The On-Screen Display appears.</li> <li>• The picture on the TV screen switches each time the button is pressed.</li> <li>• The items displayed differ from disc to disc.</li> </ul>		 Remote control unit
<b>1</b>	<p><b>Example: For DVD audio discs</b></p> <ul style="list-style-type: none"> <li>• Normal playback screen</li> <li>• Disc information screen</li> </ul> <p><b>Example: For DVD video discs</b></p> <ul style="list-style-type: none"> <li>• Normal playback screen</li> <li>• Disc information screen</li> </ul> <p><b>Example: For video CDs, Super audio CDs and music CDs</b></p> <ul style="list-style-type: none"> <li>• Normal playback screen</li> <li>• Disc information screen</li> </ul>	<p>* Some Super audio CDs contain text data. In this case, the album title and artist are displayed in the stop mode, and the title of the currently playing track is displayed in the play mode.</p>
<b>2</b>	<p>Use the ▲ and ▼ cursor buttons to select the item you wish to change.</p> <ul style="list-style-type: none"> <li>• The selected item is displayed with a yellow frame.</li> </ul> <p>① For DVD audio discs The elapsed time of groups and tracks can be selected.</p> <p>② For DVD video discs The elapsed time of titles, titles and chapters can be selected.</p> <p>③ For video CDs, Super audio CDs and music CDs The elapsed time of tracks, tracks can be selected.</p>	 Remote control unit
<b>3</b>	<p>① Changing the elapsed time Input using the number buttons, then press the ENTER button. Example: For 1 minute 26 seconds → "00126" :DVD/SUPER AUDIO CD ↳ "0126" :VIDEO CD/CD</p> <p>② Changing the title, track or chapter</p> <ul style="list-style-type: none"> <li>• For DVDs Input using the number buttons, then press the ENTER button. (For some discs it is not possible to change the title or chapter.)</li> <li>• For video CDs, Super audio CDs and music CDs Input using the number buttons. Playback starts from that track.</li> </ul>	 Remote control unit      Remote control unit

## 18 USING THE MULTIPLE AUDIO, SUBTITLE AND ANGLE FUNCTIONS

### Switching the Audio Language (Multiple Audio Function)

■ With DVDs containing multiple audio language signals, the audio language can be switched during playback.



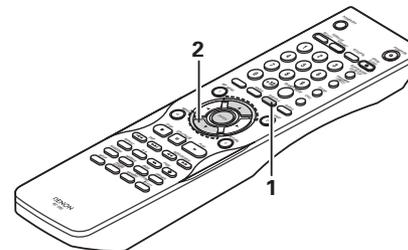
<p><b>1</b></p>	<p>During playback, press the AUDIO button.</p> <ul style="list-style-type: none"> <li>The current audio language number is displayed.</li> </ul>	<p>Remote control unit</p>
<p><b>2</b></p>	<p>Use the ▲ and ▼ cursor buttons to select the desired language.</p> <ul style="list-style-type: none"> <li>The display turns off when the AUDIO button is pressed.</li> </ul>	<p>Remote control unit</p>

**NOTES:**

- With some discs it is not possible to change the audio language during playback. In such cases, select from the DVD menu. (See page 34.)
- If the desired language is not set after pressing the ▲ and ▼ cursor buttons several times, the disc does not include that language.
- The language selected in the default settings (See page 15.) is set when the power is turned on and when the disc is replaced.

### Switching the Subtitle Language (Multiple Subtitle Function)

■ With DVDs containing multiple subtitle language signals, the subtitle language can be switched during playback.



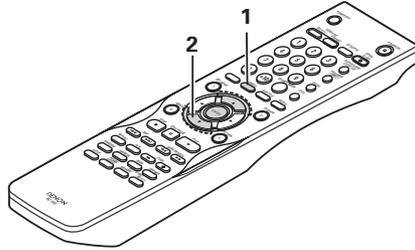
<p><b>1</b></p> <p>During playback, press the SUBTITLE button.</p> <ul style="list-style-type: none"> <li>The current subtitle language number is displayed.</li> </ul>	<p>Remote control unit</p>
<p><b>2</b></p> <p>Use the ▲ and ▼ cursor buttons to select the desired language.</p> <ul style="list-style-type: none"> <li>The display turns off when the SUBTITLE button is pressed.</li> </ul>	<p>Remote control unit</p>

**NOTES:**

- If the desired language is not set after pressing the ▲ and ▼ cursor buttons several times, the disc does not include that language.
- The subtitle language set with the default settings (See page 16.) is set when the power is turned on and when the disc is replaced. If that language is not included on the disc, the disc's default language is set.
- When the subtitle language is changed, several seconds may be required for the new language to appear.
- When a disc supporting the closed caption is played, the subtitle and the closed caption may overlap each other on the TV monitor. In this case, turn the subtitle off.

## Switching the Angle (Multiple Angle Function)

- With DVDs containing multiple angle signals, the angle can be switched during playback.



<p><b>1</b></p>	<p>During playback, press the ANGLE button.</p> <ul style="list-style-type: none"> <li>The current angle number is displayed.</li> </ul>	<p>Remote control unit</p>
<p><b>2</b></p>	<p>Use the ▲ and ▼ cursor buttons to select the desired angle.</p> <ul style="list-style-type: none"> <li>The display turns off when the ANGLE button is pressed.</li> </ul>	<p>Remote control unit</p>

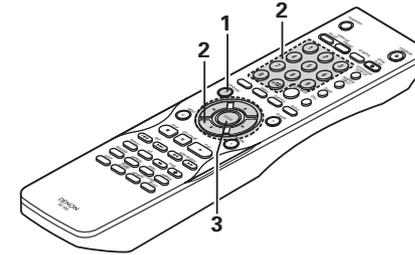
**NOTES:**

- The multiple angle function only works with discs on which multiple angles are recorded.
- "ANGLE" lights on the main unit's display when playing a section recorded in the multi-angle mode.
- At scenes where multiple angles are recorded, the angle can be switched.

## 19 USING THE MENUS

### Using the Top Menu

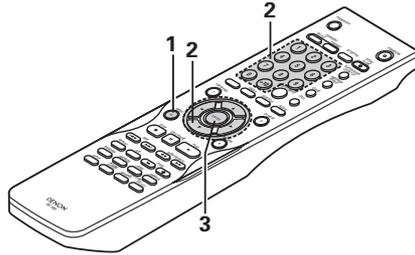
- For DVDs containing multiple titles, the desired title can be selected and played from the top menu.

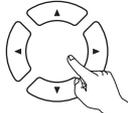
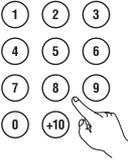


<p><b>1</b></p>	<p>During playback, press the TOP MENU button.</p> <ul style="list-style-type: none"> <li>The top menu appears.</li> </ul>	<p>Remote control unit</p>
<p><b>2</b></p>	<p>Use the cursor or number buttons to select the desired title.</p> <ul style="list-style-type: none"> <li>If you select the title number using the number buttons, skip step 3 below.</li> </ul>	<p>Remote control unit</p>
<p><b>3</b></p>	<p>Press the ENTER button.</p> <ul style="list-style-type: none"> <li>Playback starts.</li> <li>Playback also starts if the PLAY button is pressed.</li> </ul>	<p>Remote control unit</p>

## Using the DVD Menu

- Some DVDs include special menus called DVD menus. For example, DVDs with complex contents may contain guide menus, and DVDs with multiple languages may contain audio and subtitle language menus. These menus are called "DVD menus". Here we describe the general procedure for using DVD menus.

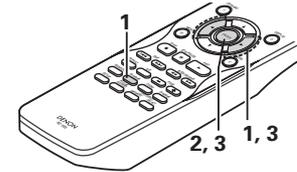


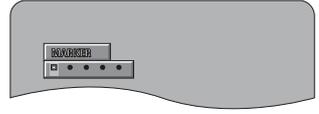
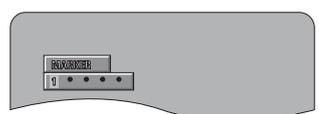
<p><b>1</b> During playback, press the MENU button.</p> <ul style="list-style-type: none"> <li>The DVD menu appears.</li> </ul>	<p>Example:</p>  <p>Remote control unit</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p style="text-align: center;">DVD MENU</p> <p>1. SUB TITLE</p> <p>2. AUDIO</p> <p>3. ANGLE</p> </div>
<p><b>2</b> Use the cursor or number buttons to select the desired item.</p> <ul style="list-style-type: none"> <li>If you select the item using the number buttons, skip step 3 below.</li> </ul>	<p>Example: "AUDIO" is selected</p>  <p>Remote control unit</p>  <p>Remote control unit</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p style="text-align: center;">DVD MENU</p> <p>1. SUB TITLE</p> <p>2. AUDIO</p> <p>3. ANGLE</p> </div>
<p><b>3</b> Press the ENTER button.</p> <ul style="list-style-type: none"> <li>The selected item is set.</li> <li>If more menus appear, repeat steps 2 and 3.</li> </ul>	 <p>Remote control unit</p>

## 20 MARKING SCENES YOU WANT TO SEE AGAIN

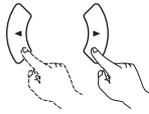
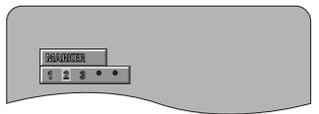
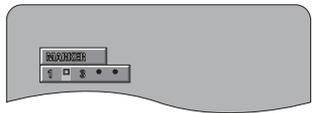
- Set marks at scenes you want to see again so that you can start playback from the marked position whenever you want.

### Setting Marks (DVD-AUDIO / DVD-VIDEO)



<p><b>1</b> During playback, press the MARKER button.</p> <ul style="list-style-type: none"> <li>The marker screen appears.</li> <li>Use the ◀ and ▶ cursor buttons to select the "⚙" marks.</li> <li>"⚙" is displayed if the mark is not set.</li> </ul>	 <p>Remote control unit</p> 
<p><b>2</b> Press the ENTER button at the scene you want to mark.</p> <ul style="list-style-type: none"> <li>A number is displayed.</li> <li>Up to five marks can be set. (To select another marker, use the cursor buttons (◀, ▶).)</li> </ul>	 <p>Remote control unit</p> 

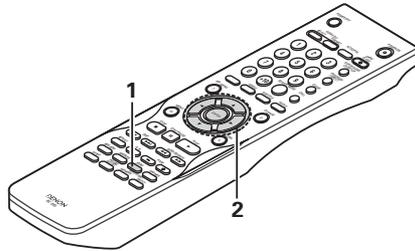
### Calling Out Marked Scenes and Clearing Marks

<p><b>3</b> Use the ◀ and ▶ cursor buttons to select the marker number and press the ENTER button.</p> <ul style="list-style-type: none"> <li>If the marker screen is not displayed during playback, press the MARKER button to display it.</li> </ul>	 <p>Remote control unit</p>  <p>Remote control unit</p> 
<p>* To clear the marker display: Press the MARKER button.</p> <p>* To clear a marker: Use the ◀ and ▶ cursor buttons to select a marker number and press the CLEAR button.</p> <ul style="list-style-type: none"> <li>You can clear existing markers, but they are restored when you open the disc tray or switch the unit to standby.</li> </ul>	

**NOTES:**

- All the markers added with this unit are cleared when the unit is switched to standby or the disc tray is opened.
- Depending on where the marker is set, subtitles may not be displayed.

## 21 PLAYING IN THE ZOOM MODE



<b>1</b>	<p>In the play or pause mode, press the ZOOM button.</p> <ul style="list-style-type: none"> <li>The zoom rate increases each time the ZOOM button is pressed.</li> </ul> <p>For DVD video discs and video CDs: OFF → x1.5 → x2 → x4 → OFF</p> <p>For DVD audio discs: OFF → x2 → x4 → OFF</p> <ul style="list-style-type: none"> <li>When "PLAYER MODE" at "OTHER SETUP" in "SETUP" is set to "AUDIO", zooming is not possible at the with still pictures.</li> </ul>	<p>Remote control unit</p>
<b>2</b>	<p>Use the cursor buttons (▼, ▲, ◀ and ▶) to move the zoomed picture.</p>	<p>Remote control unit</p>

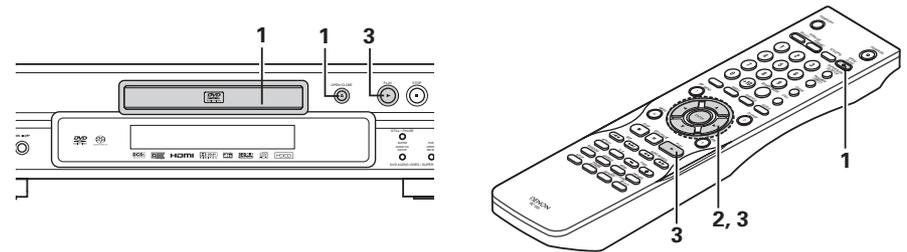
**NOTES:**

- Zooming is not possible with some discs.
- The zoom function may not work properly at some scenes.
- Zooming is not possible at the top menu or the menu screen.
- When the picture is enlarged, the picture quality may be decreased and the picture may be blurred.

## 22 PLAYING MP3

### Listening to MP3 CD, CD-Rs and CD-RWs

- There are many music distribution sites on the internet from which music files in MP3 format can be downloaded. Music downloaded as instructed on the site and written onto a CD-R/RW disc can be played on the DVD-2910.
- If music recorded on commercially available music CDs is converted on a computer into MP3 files using an MP3 encoder (conversion software), the data on a 12 cm CD is reduced into about 1/10 the amount of the original data. Thus, when written in MP3 format, the data of about 10 music CDs can fit onto the one CD-R/RW disc. The one CD-R/RW disc can contain over 100 tracks.
- \* Values when 5-minute tracks are converted with a standard bit rate of 128 kbps into MP3 files and using a CD-R/RW disc with a capacity of 650 MB.
- \* **Uses of recordings you have made other than for your personal enjoyment are not permitted under the Copyright Law without permission of the copyright holder.**



<b>1</b>	<p>Load the CD-R/W disc on which the MP3 format music files have been written into the DVD-2910. (See page 13.)</p> <ul style="list-style-type: none"> <li>When the disc is loaded in the DVD-2910, the disc information screen appears.</li> <li>If there are multiple folders, proceed to step 2.</li> <li>If there are no folders on the disc, proceed to step 3.</li> </ul>	<p>Main unit</p> <p>Remote control unit</p>
<b>2</b>	<p>Use the cursor buttons (▼, ▲, ◀ and ▶) to select the folder containing the file(s) you want to play, then press the ENTER button.</p> <p><b>* To change the folder</b> Use the cursor buttons to select "ROOT", then press the ENTER button. The screen in step 1 reappears. Select the desired folder.</p>	<p>Remote control unit</p> <p>Remote control unit</p>

Use the ▲ and ▼ cursor buttons to select the MP3 file you want to play, then press the PLAY button or ENTER button.

- Playback starts.

\* The display can be switched between the single elapsed time and the single remaining time and the track name by pressing the DISPLAY button.

\* Programmed playback is not possible with MP3 discs.

**\* To change the MP3 file**  
Press the STOP button, then use the ▲ and ▼ cursor buttons to reselect the desired MP3 file.

**\* To set the random play mode**  
In the stop mode, press the RANDOM button. Then press the PLAY button or ENTER button.

**\* To set the repeat mode**  
The repeat mode changes each time the REPEAT button is pressed.

→ FOLDER → TRACK REPEAT ←  
FOLDER REPEAT ←

**\* To return to the initial disc information screen**  
Press the STOP button, use the cursor button to select "ROOT", then press the ENTER button. The screen in step 1 reappears.

Remote control unit

Main unit

Remote control unit

## 23 PLAYING WMA

- Listening to WMA (Windows Media Audio) CD-R/CD-RW
- This unit can play CD-R/RW music files that have been recorded in the WMA (Windows Media Audio)\* audio compression format.



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

- \* WMA (Windows Media Audio): New audio coding of Microsoft Corporation.
- \* **Uses of recordings you have made other than for your personal enjoyment are not permitted under the Copyright Law without permission of the copyright holder.**
- The method of playback is the same as "Listening to Recorded MP3 CD/CD-R/CD-RW" on Page 35.
  - In the file display of the disc information screen, WMA files will be displayed with the "WMA" icon instead of the "MP3" icon. (Files for which the "WMA" icon is not displayed cannot be played. There will be a skip and the next file with an icon will be played.)

**NOTES:**

- Files recorded with a sampling frequency (fs) of 44.1 and 48 kHz are supported.
- Programmed playback cannot be performed with WMA discs.
- The digital output at the time of WMA file playback is converted to PCM regardless of the initial settings.
- Please use discs that have been recorded in conformity with the ISO 9660 level 1/level 2 CD-ROM file system. (Extended formats are excluded.)
- Copyright protected files cannot be played. Also note that depending on the writing software and conditions, playback might not be possible, or the files might not be displayed properly.
- Playback of the CD-R/RW might not be possible depending on the disc characteristics, soiling, scratches, and other factors.
- Bit rates of 64 k to 160 kbps are supported for WMA files that have an extension of ".wma" or ".WMA".
- This unit can display the folder names and file names on the screen. Up to 11 half-width alphanumeric upper case characters and symbols (including the underscore symbol) can be displayed. Kanji, hiragana, katakana and other characters cannot be displayed.
- While in the stop condition, the DISPLAY button of the remote control can be used to switch and display the title names and the artist names. (One folder has a capacity of up to 99 files.)
- Recorded discs with no more than 99 files per folder are recommended. Multiple folder configurations are possible; however, depending on the configuration, recognition and playback of all the folders and files might not be possible.
- Multi-session discs can also be played back, however, playback of discs that have had session closure within 10 sessions.
- Direct track selection using the remote control numerical keys (0 to 9, and +10) can specify up to 179 tracks (179 files) per folder. When 179 tracks are exceeded, while the unit is stopped, use the cursor buttons at the disc information screen to select the files, and use the play button or the ENTER button to play.

**NOTES:**

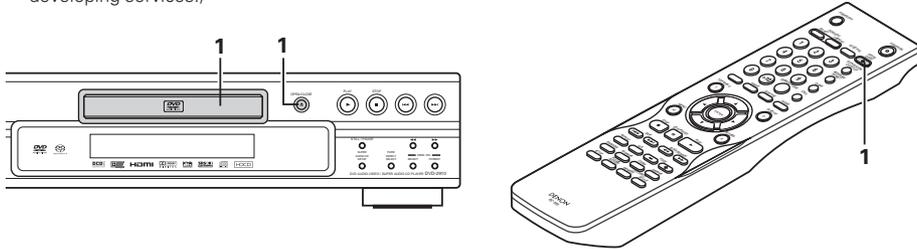
- The DVD-2910 is compatible with the "MPEG-1 Audio Layer 3" standards (sampling frequency of 44.1 kHz or 48 kHz). It is not compatible with such other standards as "MPEG-2 Audio Layer 3", "MPEG-2.5 Audio Layer 3", MP1, MP2, etc.
- It may not be possible to play some CD-R/RW discs due to disc properties, dirt, warping, etc.
- The digital signals output when playing MP3 files are MP3 signals converted into PCM, regardless of whether the audio output presetting is set to "normal" or "PCM". The signals are output with the same sampling frequency as that of the music source.
- In general, the higher an MP3 file's bit rate, the better the sound quality. On the DVD-2910, we recommend using MP3 files recorded with bit rates of 128 kbps or greater.
- MP3 files may not be played in the expected order, since the writing software may change the position of the folders and the order of the files when writing them on the CD-R/RW.
- Programmed playback is not possible with MP3 discs.
- When writing MP3 files on CD-R/RW discs, select "ISO9660 level 1" as the writing software format. This may not be possible with some types of writing software. For details, refer to the writing software's usage instructions.
- The number of files playable with the DVD-2910 is approximately 600 or less.
- With the DVD-2910 it is possible to display folder names and file names on the screen like titles. The DVD-2910 can display up to 8 characters, consisting of numbers, capital letters, and the "\_" (underscore) mark.
- If recorded in a format other than "ISO9660 level 1", normal display and playback may not be possible. In addition, folder and file names including other symbols will not be displayed properly.
- Be sure to add the extension ".MP3" to MP3 files. Files cannot be played if they have any extension other than ".MP3" or if they have no extension. (with Macintosh computers, MP3 files can be played by adding the extension ".MP3" after the file name consisting of up to 8 capital or numbers and recording the files on the CD-R/RW.)
- Do not apply stickers, tape, etc., to either the label side or the signal side of CD-R/RW discs. If adhesive gets on the surface of a disc, the disc may get stuck inside the DVD-2910 and be impossible to eject.
- The DVD-2910 is not compatible with packet write software.
- The DVD-2910 is not compatible with ID3-Tag.
- The DVD-2910 is not compatible with play lists.
- The DVD-2910 is not compatible with MP3 PRO.
- Do not play CD-R/RW discs containing any files other than music CD files (in CD-DA format), WMA, MP3 and JPEG files. Doing so may result in malfunction or damage, depending on the type of file.

## 24 PLAYING STILL PICTURE FILES (JPEG FORMAT)

JPEG files stored on Kodak picture CDs, Fujicolor CDs, CD-Rs and CD-RWs can be played as a slide show and enjoyed on the DVD-2910.

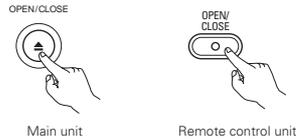
### Playing still picture

Kodak picture CDs and Fujifilm Fujicolor CDs can be played on the DVD-2910. When a CD (recording still picture) is played, the photographs on the CD can be displayed on a TV. ("Picture CD" and "Fujicolor CD" are service by which photographs taken on conventional silver film cameras are converted into digital data and written on CDs. For details on Kodak picture CD, contact a store that offers Kodak development services. For details about Fujicolor CDs, please contact a store offering Fuji Photo Film developing services.)

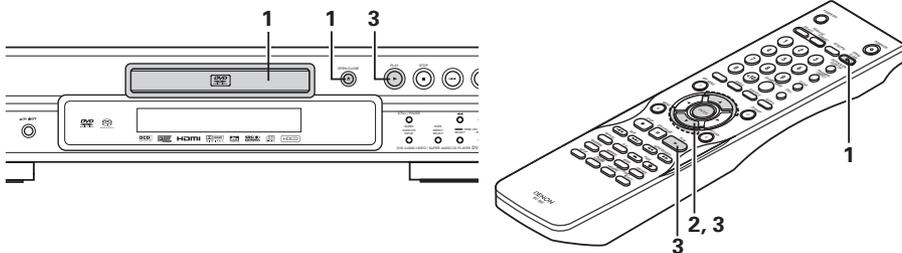


1

- Load the Kodak picture CD into the DVD-2910.
- When the disc is loaded, a slide show of the still pictures begins automatically.
  - The slide show continues until the STOP button is pressed.
- Load the Fujicolor CD into the DVD-2910.
- When the disc is loaded, a maximum of 9 still pictures are displayed automatically.
  - The slide show continues until the STOP button is pressed.

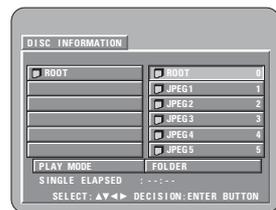


### Playing still pictures stored on CD-Rs/RWs



1

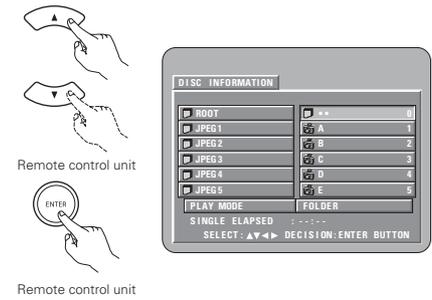
- Load the CD-R/RW on which the still pictures have been written into the DVD-2910.
- When the disc is loaded in the DVD-2910, the disc information screen appears.
  - If there are multiple folders proceed to step 2.
  - If there are no folders on the disc, proceed to step 3.



2

#### \* To change the folder

Use the cursor button to select "ROOT", then press the ENTER button. The screen in step 1 reappears. Select the desired folder.

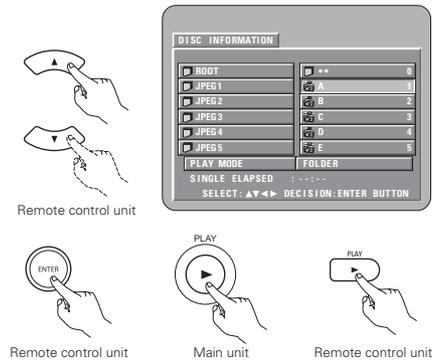


3

Use the ▲ and ▼ cursor buttons on the remote control unit to select the still picture file from which you want to start the slide show, then press the PLAY button or the ENTER button on the remote control unit.

- The slide show starts.
- Only the still picture files in the selected folder are played.

\* Once all the still picture files in the folder have been played, the disc information screen reappears.



- \* To view several of the still pictures stored on the disc at once:
  - To select and view a still picture (to start the slide show from a specific still picture), use the cursor buttons (▼, ▲, ◀ and ▶) to select the desired still picture, then press the ENTER button.
- \* To temporarily stop the slide show:
  - Press the STILL/PAUSE button.
  - To resume the slide show, press the PLAY button.
- \* To cue a still picture you want to view (from which you want to start the slide show):
  - During the slide show, press one of the SKIP (◀◀, ▶▶) buttons. Press the SKIP ◀◀ button to cue back to the previous still picture, the SKIP ▶▶ button to cue ahead to the next still picture.
- \* Flipping and rotating still pictures:
  - Use the cursor buttons (▼, ▲, ◀ and ▶) to flip the still picture.
    - ▲ cursor button: The currently displayed still picture is flipped vertically.
    - ▼ cursor button: The currently displayed still picture is flipped horizontally.
    - ◀ cursor button: The currently displayed still picture is rotate 90° counterclockwise.
    - ▶ cursor button: The currently displayed still picture is rotate 90° clockwise.
- \* Play the image in the zoom mode.
  - When the ZOOM button is pressed while playing a JPEG image ("ZOOM ON" is displayed on the screen at this time) zoom in and zoom out using the search keys.
    - ◀◀: zoom out, ▶▶: zoom in
  - When the image is zoomed, use the cursor buttons (▼, ▲, ◀ and ▶) to move the zoomed picture.
  - Continuous playback (SLIDE SHOW) is not possible in the zoom mode.
  - Zooming is not possible with files that have a low resolution.
- \* The way of switching to the next image during continuous JPEG image playback (SLIDE SHOW) can be selected.
  - Preset the SEARCH MODE button on the remote control unit.
  - Select from SLIDE SHOW MODE: 1 to MODE: 11, MODE: RAND and MODE: NONE.

**Special play modes for WMA and MP3 and JPEG files**

Use the ◀ and ▶ cursor buttons to select the play mode, the ▲ and ▼ cursor buttons to select the special play mode.

- FOLDER (the WMA and MP3 and JPEG files in the folder are played in order starting from the selected file)
- FOLDER REPEAT (all the WMA and MP3 and JPEG files in the folder are played repeatedly starting from the selected file)
- DISC (all the WMA and MP3 and JPEG files on the disc are played in order starting from the selected file)
- DISC REPEAT (all the WMA and MP3 and JPEG files on the disc are played repeatedly starting from the selected file)
- RANDOM ON (all the WMA and MP3 and JPEG files in the folder are played in random order starting from the selected file)
- TRACK REPEAT (the select WMA, MP3 or JPEG file is played repeatedly)

**NOTES:**

- The DVD-2910 is compatible with image data stored in JPEG format, but DENON does not guarantee that all image data stored in JPEG format can be viewed.
- Files with sizes of up to 30 Mbytes can be displayed.
- It may not be possible to play some CD-Rs/RWs due to disc properties, dirt, scratches, etc.
- When storing JPEG files on the CD-R/RW, set the writing program to store the files in the "ISO9660 level 1" format.
- Be sure to give JPEG files the extension ".JPG" and ".JPE". Files with other extensions or with no extensions cannot be viewed on the DVD-2910.
- Do not apply stickers, tape, etc., to either the label side or the signal side of CD-R/RW discs. If adhesive gets on the surface of a disc, the disc may get stuck inside the DVD-2910 and be impossible to eject.
- Do not play CD-R/RW discs containing any files other than music CD files (in CD-DA format), WMA, MP3 and JPEG files. Doing so may result in malfunction or damage, depending on the type of file.
- JPEG files written using Macintosh computers cannot be played.

**25 TROUBLESHOOTING**

**Check again before assuming the player is malfunctioning**

- **Are all the connections correct ?**
- **Are you following the instructions in the manual ?**
- **Are the amplifier and speakers operating properly ?**

If the DVD-2910 does not seem to be functioning properly, check the table below. If this does not solve the problem, the DVD-2910 may be damaged. Turn off the power, unplug the power supply cord from the power outlet, and contact your store of purchase or nearest DENON sales office.

Symptom	Check	Page
Power does not turn on.	<ul style="list-style-type: none"> <li>• Plug the power supply cord securely into the power outlet.</li> </ul>	6-10
Playback does not start when PLAY button is pressed. Playback stops immediately.	<ul style="list-style-type: none"> <li>• Is there condensation on the disc or player ? (Let stand for 1 or 2 hours.)</li> <li>• Discs other than DVDs, SuperAudio CDs, video CDs and music CDs cannot be played.</li> <li>• Disc is dirty. Wipe off the dirt.</li> </ul>	— 5 6
Picture does not appear.	<ul style="list-style-type: none"> <li>• Check the connections.</li> <li>• Check that VIDEO OUT has not been set to "VIDEO OUT:OFF" or "ALL OFF" for PURE DIRECT MODE.</li> <li>• Set the TV's input to "video".</li> <li>• When the HDMI or DVI-D connector output the signals, no progressive signals from the component video connector. If you wish to use the component video output, set to "OFF" for HDMI/DVI SELECT.</li> </ul>	6-10 24 — 10, 26
Sound is not produced or sound quality is poor.	<ul style="list-style-type: none"> <li>• Check the connections.</li> <li>• Properly set the input of the TV, stereo, etc.</li> <li>• Check the "DIGITAL OUTPUT" and "COMPRESSION" settings.</li> <li>• Digital signals cannot be output with Super audio CDs. Use analog connections.</li> <li>• Area/layer of Super audio CD being played (MULTI/STEREO/CD) does not match amplifier connections.</li> <li>• When the video output setting at "PURE DIRECT" is set to "VIDEO OUT: OFF" or "ALL OFF", no sound at HDMI connector.</li> </ul>	6-10 — 19, 21 9 9, 24 24
Menu playback of video CD's is not possible.	<ul style="list-style-type: none"> <li>• Menu playback is not possible with anything but video CDs with playback control.</li> </ul>	27
Picture is disturbed during the search operation.	<ul style="list-style-type: none"> <li>• Some disturbance is normal.</li> </ul>	—
Buttons do not operate.	<ul style="list-style-type: none"> <li>• Some operations are disabled for some discs.</li> </ul>	27
No subtitles are displayed.	<ul style="list-style-type: none"> <li>• Subtitles are not displayed for DVDs not containing subtitles.</li> <li>• Subtitles are turned off. Turn the subtitles setting on.</li> </ul>	— 15, 16
Audio (or subtitle) language does not switch.	<ul style="list-style-type: none"> <li>• The audio (or subtitle) language does not switch for discs which do not include multiple audio (or subtitle) languages.</li> <li>• For some discs the audio (or subtitle) language cannot be switched when the operation to switch it is performed, but can be switched on the menu screens.</li> </ul>	32 34
Angle does not switch.	<ul style="list-style-type: none"> <li>• The angle cannot be switched for DVDs which do not contain multiple angles. In some cases multiple angles are only recorded for specific scenes.</li> </ul>	33
Playback does not start when the title is selected.	<ul style="list-style-type: none"> <li>• Check the "RATINGS" setting.</li> </ul>	22
The password for rating level has been forgotten. <b>Reset all the setting to Factory Preset.</b>	<ul style="list-style-type: none"> <li>• While the player is in the stop mode, hold the player's SKIP ►► button and the PLAY button down simultaneously and then hold the OPEN/CLOSE button down for longer than 3 seconds (until "INITIALIZE" disappears from the TV monitor). The lock will be released and all default settings and picture settings will return to the default values.</li> </ul>	—
The disc is not played with the audio or subtitle language set as the default setting.	<ul style="list-style-type: none"> <li>• The disc does not play with the selected audio or subtitle language if that audio or subtitle language is not included on that DVD.</li> </ul>	15, 16
Picture is not displayed in 4:3 (or 16:9).	<ul style="list-style-type: none"> <li>• Set the "TV ASPECT" default setting to the proper setting for the connected TV.</li> </ul>	18
Menu screen messages for the desired language do not display.	<ul style="list-style-type: none"> <li>• Check the default setting for the disc language's menu language.</li> </ul>	15, 16

Symptom	Check	Page
An image is not projected with an HDMI/DVI connection.	• Check the HDMI/DVI connection.(Check the status of the HDMI/DVI-related indicators.)	10
	• Check whether the connected monitor equipment or other equipment supports HDCP. (The DVD-2910 will not output a video signal unless the other equipment supports HDCP.)	10
	• Check the settings of "HDMI/DVI SELECT".	26
	• Check whether the output format of the DVD-2910 (HDMI/DVI FORMAT) matches the supported input format of other connected equipment.	10
	• Check whether the video output setting at "PURE DIRECT" is set to "VIDEO OUT: OFF" or "ALL OFF".	24
Remote control unit does not operate.	• Check that the batteries are inserted in the proper "⊕" and "⊖" directions.	12
	• The batteries are dead. Replace them with new batteries.	12
	• Point the remote control unit at the remote control sensor when operating it.	12
	• Operate the remote control unit within a distance of 7 meters from the remote control sensor.	12
	• Remove the obstacle between the remote control unit and remote control sensor.	12

## 26 MAIN SPECIFICATIONS

<b>Signal system:</b>	NTSC/PAL
<b>Applicable discs:</b>	(1) DVD-Audio/DVD-Video discs 1-layer 12 cm single-sided discs, 2-layer 12 cm single-sided discs, 2-layer 12 cm double-sided discs (1 layer per side) 1-layer 8 cm single-sided discs, 2-layer 8 cm single-sided discs, 2-layer 8 cm double-sided discs (1 layer per side) (2) Super audio CDs Single layer 12 cm discs, Dual layer 12 cm discs, Hybrid layer 12 cm discs (3) Compact discs (CD-DA, Video CD) 12 cm discs, 8 cm discs
<b>S-Video output:</b>	Y output level : 1 Vp-p (75 Ω/ohms) C output level: 0.286 Vp-p Output connector : S connector, 1 set / AV 1 connector, 1 set
<b>Video output:</b>	Output level : 1 Vp-p (75 Ω/ohms) Output connector : Pin jack, 1 set / AV 1 connector, 1 set
<b>Component output:</b>	Y output level : 1 Vp-p (75 Ω/ohms) Pb/Cb output level : 0.7 Vp-p (75 Ω/ohms) Pr/Cr output level: 0.7 Vp-p (75 Ω/ohms) Output connector : Pin jack, 1 set
<b>HDMI output:</b>	Output connector : HDMI connector, 1 set
<b>DVI output:</b>	Output connector : DVI-D connector, 1 set
<b>RGB output:</b>	Output level : 0.7 Vp-p (75 Ω/ohms) Output connector : AV 1 connector, 1 set,
<b>Audio output:</b>	Output level : 2 Vrms (10 kΩ/kohms) 2 channel (L, R) output connector: Pin jack, 1 set Multi channel (FL, FR, C, SW, SL, SR) output connector: Pin jack, 1 set AV 1 connector, 1 set
<b>Audio output properties:</b>	(1) Frequency response ① DVDs (linear PCM) : 2 Hz to 22 kHz (48 kHz sampling) : 2 Hz to 44 kHz (96 kHz sampling) : 2 Hz to 88 kHz (192 kHz sampling) ② Super audio CDs : 2 Hz to 100 kHz ③ CDs : 2 Hz to 20 kHz (2) S/N ratio : 118 dB (3) Total harmonic distortion : 0.001% (4) Dynamic range : 106 dB
<b>Digital audio output:</b>	Optical digital output : Optical connector, 1 set Coaxial digital output : Pin jack, 1 set
<b>Power supply:</b>	AC 230 V, 50 Hz
<b>Power consumption:</b>	28 W
<b>Maximum external dimensions:</b>	434 (width) x 101 (height) x 322 (depth) mm (including protruding parts)
<b>Mass:</b>	5.5 kg
<b>Remote control unit:</b>	RC-985
<b>Type:</b>	Infrared pulse
<b>Power supply:</b>	DC 3 V, 2 R6P/AA batteries

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\* Design and specifications are subject to change without notice in the course of product improvement.

**MEMO:**



**DENON, Ltd.**  
TOKYO, JAPAN  
[www.denon.com](http://www.denon.com)

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