

# KENWOOD

MULTIPLE DVD VCD CD PLAYER

## DV-6050



## INSTRUCTION MANUAL

KENWOOD CORPORATION

# Before applying power

 **Caution : Read this page carefully to ensure safe operation.**

Units are designed for operation as follows.

**U.S.A. and Canada ..... AC 120 V only**

## Safety precautions

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

	<p><b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN</p>		<p>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.</p>
	<p>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.</p>		
	<p>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.</p>		

**The marking of products using lasers  
(For countries other than U.S.A., U.S.-  
Military and Canada)**



The marking this product has been classified as Class 1. It means that there is no danger of hazardous radiation outside the product.

Location: Back panel



Inside this laser product, a laser diode classified as Class 2 laser radiation is contained as alerted by the internal caution label shown above. Do not stare into beam.

Location: DVD laser pick-up unit cover inside this product

# Features

## Compatible with DVD AUDIO, one of the latest digital audio formats

The DVD AUDIO reproduces 2-channel, 192 kHz, 24-bit sampled digital audio or 6-channel, 96 kHz, 24-bit sampled audio. This innovative technology has made possible audio reproduction in unprecedented high quality.

## Versatile DVD VIDEO Functions

The DVD provides horizontal resolution of 500 lines, which exceeds that of S VHS video (400 lines) or laserdisc (430 lines).

**Multi-audio function:** With DVD discs marked with the  icon, the desired language can be played back by selecting it from up to 8 languages. (The number of available languages is variable depending on the discs.)

**Multi-subtitle function:** With DVD discs marked with the  icon, the subtitle language can be selected from up to 32 languages. (The number of subtitle languages is variable depending on the discs.)

**Angle function:** With DVD discs marked with the  icon, a single object can be viewed in up to 9 angles by switching. (The number of available angles is variable depending on the discs.)

## Compatibility with Wide Range of Digital Surround Software

The unit incorporates Dolby Digital decoder, DTS decoder, MPEG multi-channel decoder and Packed PCM decoder so that the users can enjoy the sound of real cinemas. The unit can also be connected to the user's existing TV set.

## 6-Channel Output Terminals

These output terminals can be connected to an amplifier with 6-channel input compatibility to enjoy high-bit, high-sampling rate multi-channel sound.

## 5-Disc Carousel Disc Changer

The disc tray can accommodate up to 5 discs and the disc can be changed while another disc is being played.

## DVD player with CD-R and CD-RW disc\* compatibility

This DVD player can play back tracks recorded in CD-R (Compact Disc Recordable) and CD-RW (Compact Disc Rewritable) as well as those in music CD.

\* Only finalized discs can be played back. However, certain discs may still be unplayable on this player.

## MP3 playback capabilities

This player can also play back the MP3 files which are the latest formats for storage of music data. However, certain MP3 files may still be unplayable on this player.

## Progressive scanning

The video display format can be switched between "Interlaced" and "Progressive" scanning.

## DV-6050 advanced video technology

The DV-6050 changer includes two different video processing circuits from Faroudja® that deliver a superb DVD picture that is close to a high definition broadcast image when viewed on an HD-ready TV or monitor.

- A Faroudja DCDI™ (Directional Correlation Deinterlacing) progressive scan processor produces the highest-quality progressive video output in the industry, providing superior performance where many progressive scan DVD players have great difficulty. DCDi's Motion Adaptive De-Correlation processes motion information separate from still information, reducing video artifacts and distortion such as jagged edges which are very apparent with motion and diagonal lines. Cross-Color Separation reduces bleed across colors, and Film and Animation Detection processes film and animation information separately, reducing artifacts and distortion in both.

The DV-6050 allows you to use the on-screen menu to compare the DCDi-processed picture with the unprocessed picture. See page 38 of the instruction manual for details.

- Faroudja's Digital Video Enhancement increases resolution by processing both vertical and horizontal signals to provide maximum detail. Large edges and small details are processed independently, providing optimum edge enhancement, and a DVD image that approaches the quality of a high-definition broadcast image.

The Enhancer Gain setting allows you to fine-tune the amount of Faroudja detail enhancement to increase sharpness without adding noise or making the picture look too 'etched' or artificial. See page 38 of the instruction manual for details.

## Accessories

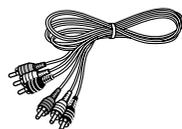
Remote control unit (1)

Batteries (R03/AAA) (2)



Audio/Video cables (1)

Coaxial cable (1)



## Unpacking

Unpack the unit carefully and make sure that all the accessories are present.

If any accessories are missing, or if the unit is damaged or fails to operate, notify your dealer immediately. If the unit was shipped to you directly, notify your shipper immediately. Kenwood recommends that you retain the original carton and packing materials in case you need to move or ship the unit in the future.

**Keep this manual handy for future reference.**



Comparison of DCDi deinterlaced (progressive scan) output (top) with conventional progressive scan processing (bottom). Proprietary Faroudja technology identifies moving images at all angles, and uses exclusive algorithms to process the moving edges, producing a smooth image that is far more film-like than is possible with conventional progressive scan processing. DCDi processing also eliminates coloration artifacts resulting from the deinter-lacing process.

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## IMPORTANT SAFEGUARDS

Please read all of the safety and operating instructions before operating this appliance. Adhere to all warnings on the appliance and in the instruction manual. Follow all the safety and operating instructions. These safety and operating instructions should be retained for future reference.

- 1. Power sources** – The appliance should be connected to a power supply only of the type described in the instruction manual or as marked on the appliance. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For appliances intended to operate from battery power, or other sources, refer to the instruction manual.
- 2. Power-cord protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

Never pull or stretch the cord.



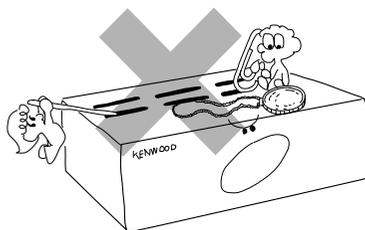
- 3. CAUTION – Polarization** – This appliance may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 4. Ventilation** – Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the appliance and to protect it from overheating, and these openings must not be blocked or covered. The appliance should be situated so that its location or position does not interfere with its proper ventilation. To maintain good ventilation, do not put records or a tablecloth on the appliance. Place the appliance at least 10 cm away from the walls. Do not use the appliance on a bed, sofa, rug or similar

 **Caution : Read this page carefully to ensure safe operation.**

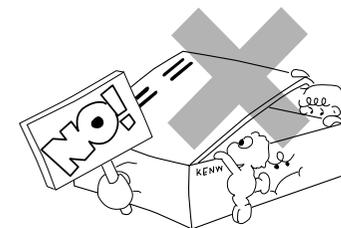
surface that may block the ventilation openings. This appliance should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.



- 5. Water and moisture** – The appliance shall not be exposed to dripping and splashing - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc. Do not place an object containing liquid, such as a flower vase, on the appliance.
- 6. Temperature** – The appliance may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5 °C (41 °F).
- 7. Heat** – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat. Do not place a flaming object, such as a candle or lantern, on or near the appliance.
- 8. Electric shock** – Care should be taken so that objects do not fall and liquid is not spilled into the enclosure through openings. If a metal objects, such as a hair pin or a needle, comes into contact with the inside of this appliance, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this appliance.



- 9. Enclosure removal** – Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.



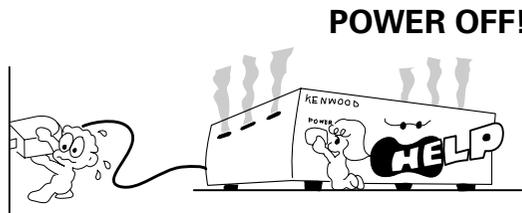
- 10. Magnetic fields** – Keep the appliance away from sources of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.
- 11. Cleaning** – Unplug this appliance from the wall outlet before cleaning. Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.
- 12. Accessories** – Do not place this appliance on an unstable cart, stand, tripod, bracket, or table. The appliance may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the appliance. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



**⚠ Caution : Read this page carefully to ensure safe operation.**

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

**14. Abnormal smell** – If an abnormal smell or smoke is detected, immediately turn the power OFF and unplug the appliance from the wall outlet. Contact your dealer or nearest service center.

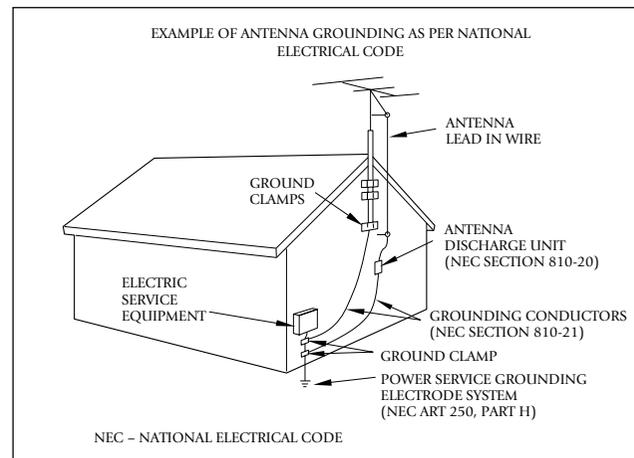


**15. Damage requiring service** – The appliance should be serviced by qualified service personnel when:

- A. The power-supply cord or the plug has been damaged.
- B. Objects have fallen, or liquid has been spilled into the appliance.
- C. The appliance has been exposed to rain or water.
- D. The appliance does not appear to operate normally by following the instruction manual. Adjust only those controls that are covered by the instruction manual as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the appliance to its normal operation.
- E. The appliance has been dropped, or the enclosure damaged.
- F. The appliance exhibits a marked change in performance.

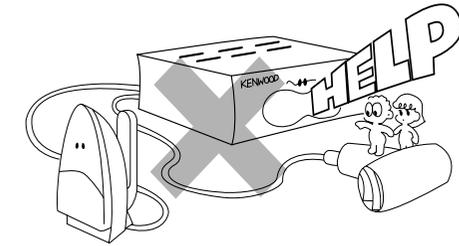
**16. Servicing** – The user should not attempt to service the appliance beyond that described in the instruction manual. All other servicing should be referred to qualified service personnel.

**17. Outdoor antenna grounding** – If an outside antenna is connected to the appliance, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Article 810 of the National Electrical Code ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.



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

**19. AC outlets** – Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical appliances, such as an iron or toaster, to it to prevent fire or electric shock.



**20. Overloading** – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

**21. Attachment** – Do not use attachments not recommended by the appliance manufacturer as they may cause hazards.

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

**23. Safety check** – Upon completion of any service or repairs to this appliance, ask the service technician to perform safety checks to determine that the appliance is in proper operating condition.

Notes:

1. Item 3 is not required except for grounded or polarized equipment.
2. Item 17 and 18 are not required except for units provided with antenna terminals.
3. Item 17 complies with UL in the U.S.A.

## Systems and Types of Playable Discs

	12 cm or 8 cm
	12 cm or 8 cm
	12 cm or 8 cm
<b>CD (CD-R, CD-RW)</b> 	12 cm or 8 cm

## Unplayable Discs

**Never attempt to play a Photo CD on this unit.**

Other discs which cannot be played on this unit:

- SACD, DVD-ROM, DVD-R/RAM, DVD-RW, DVD+R/+RW, CD-ROM (Except MP3 disc [ISO 9660 level 1 and level 2]), VSD, CDV\*, CD-G\*, CD-EG\*, CD-EXTRA\*, etc.  
\* Only the audio part can be reproduced.
- A DVD VIDEO disc with a region code which does not match this unit or without a region code. For details, see "**Region Codes of This Player**".
- When the video format of a disc differs from that of the TV in use, the disc cannot be played normally. For details, see "**Video Formats**". - 

## Icons Inscribed on DVD Discs



Indicates the playable region code.



Indicates the number of languages in the audio. The figure in the icon shows the number (max. 8 languages).



Indicates the number of available subtitle languages. The figure in the icon shows the number (max. 32 subtitle languages).



Indicates the number of viewing angles which can be viewed with the angle function. The figure in the icon shows the number (max. 9 angles).



Indicates the number of available aspect ratios. LB stands for Letter Box and PS stands for Pan & Scan. (The example shown means that the 16:9 video can be converted into letterbox.)

## Region Codes of This Player

### (DVD VIDEO disc only)

A region code defined for each country or area is assigned for each DVD VIDEO player, so it cannot play a DVD VIDEO disc if its region code do not match that of this unit. Also, a disc which does not contain any region code may sometimes be unable to be played on the player.

When purchasing a DVD VIDEO disc, make sure that it has a region code which can be played on your player.

**Region Code of Player:** 

**Usable Country or Area :** Canada, United States, American Samoa, Bermuda, Johnston Island, Midway Islands, Puerto Rico, St. Pierre and Miquelon, United States Virgin, Wake Island

**Region Code of Player :** 

**Usable Country or Area :** Albania, Andorra, Austria, Bahrain, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech, Denmark, Egypt, Finland, France, Germany, Greece, Hungary, Iceland, Iran, Iraq, Ireland, Israel, Italy, Japan, Jordan, Kuwait, Lebanon, Lesotho, Liechtenstein, Luxembourg, Macedonia, Malta, Monaco, Netherlands, Norway, Oman, Poland, Portugal, Qatar, Romania, San Marino, Saudi Arabia, Slovakia, Slovenia, South Africa, Spain, Swaziland, Sweden, Switzerland, Syrian Arab Republic, Turkey, United Arab Emirates, United Kingdom, Vatican City State, Yemen, Yugoslavia, Channel Islands, Faeroe Islands, Gibraltar, Greenland, Isle of Man, Svalbard and Jan Mayen Islands

**Region Code of Player :** 

**Usable Country or Area :** Brunei Darussalam, Cambodia, Indonesia, Korea, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam, East Timor, Hong Kong, Macau, Taiwan

**Region Code of Player :** 

**Usable Country or Area :** Antigua and Barbuda, Argentina, Australia, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Fiji, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Kiribati, Marshall Islands, Mexico, Micronesia, Nauru, New Zealand, Nicaragua, Palau, Panama, Papua New Guinea, Paraguay, Peru, Saint Christopher and Nevis, Saint Lucia, S a i n t

Vincent and the Grenadines, Samoa, Solomon Islands, Suriname, Tonga, Trinidad and Tobago, Tuvalu, Uruguay, Vanuatu, Venezuela, Anguilla, British Virgin Islands, Cayman Islands, Christmas Island, Cocos Islands, Cook Islands, Falkland Islands, French Guiana, French Polynesia, Guadeloupe, Guam, Martinique, Montserrat, Netherlands Antilles, New Caledonia, Niue, Norfolk Island, Northern Mariana Islands, Pitcairn, Tokelau, Turks and Caicos Islands, Wallis and Futuna Islands

**Region Code of Player :** 5

**Usable Country or Area :** Afghanistan, Algeria, Angola, Armenia, Azerbaijan, Bangladesh, Belarus, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central Africa, Chad, Comoros, Congo, Cote d'Ivoire, Djibouti, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Gabon, Gambia, Georgia, Ghana, Guinea, Guinea-Bissau, India, Kazakhstan, Kenya, Kyrgyz Republic, Latvia, Liberia, Libya, Lithuania, Madagascar, Malawi, Maldives, Mali, Mauritania, Mauritius, Moldova, Mongolia, Morocco, Mozambique, Namibia, Nepal, Niger, Nigeria, North Korea, Pakistan, Russia, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, Sri Lanka, Sudan, Tadjikistan, Tanzania, Togo, Tunisia, Turkmenistan, Uganda, Ukraine, Uzbekistan, Zaire, Zambia, Zimbabwe, British Indian Territory, Jammu and Kashmir, Mayotte, Reunion, St. Helena ex. dep., Western Sahara

**Region Code of Player :** 6

**Usable Country or Area :** China

**Region Code of Player :** 8

**Usable place :** Exclusively for use in aircraft

## Region codes of the DVD VIDEO discs that can be played with this player

This player can play back a DVD VIDEO disc which carries the corresponding code to the region code of the player shown in the table above, a marking containing the region code of the player or the "ALL" marking shown below. Even when a DVD VIDEO disc does not carry any indication of the region code, it may sometimes be unable to be played on this player due to certain restrictions.



## Video Formats

The TV picture display and disc signal systems can be divided roughly into two TV formats (NTSC and PAL). They are variable depending on countries and areas.

This unit reproduces NTSC discs in NTSC format. (This unit can not play PAL discs.)

### TV formats in major countries

**NTSC :** Japan, Taiwan, Korea, USA, Canada, Mexico, Philippines, Chile, etc.

**PAL :** China, U.K., Germany, Australia, New Zealand, Kuwait, Singapore, etc.

## Checking the Video Format

Check the video format of the VCD and DVD discs to be played on the player as described below.

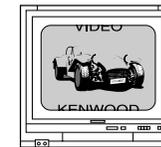
1. Check if the video formats of the TV to be used and disc to be played match each other.
  - For details, refer to the instructions provided with the TV and disc.

2. When the TV is switchable between NTSC and PAL, set the TV format according to the disc format.

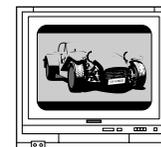
TV Format	Playable Disc Format
NTSC only	NTSC
PAL only	PAL
NTSC/PAL switchable	NTSC/PAL

- Correct video cannot be reproduced if the video formats of the TV and disc do not match.

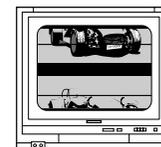
**When the video formats are different :** Try playing the disc. If the video formats of the disc and TV do not match, the played video may be black and white or become as shown below.



Top and bottom edges are not displayed.



Top and bottom areas are dark.



Picture turbulence due to sync unmatching.

# Chapter 1: Connection of Equipment

This manual describes the standard, most typical connections of the player. When an associated system component is connected, also refer to their instruction manuals.

For details on the connection of the following components, see the indicated reference pages.

**Before Start** →  11

**Preparation of Remote Control Unit** →  11

**MP3 Files That Can Be Played Back with This Equipment** →  11

**Connection with a TV or Stereo System** →  12

**Connection with an AV Amplifier** →  14

## Before Start

Do not insert the power cord plugs of the player and the connected components until all of the components have been connected.

Be sure to insert all connection cables securely. If a cable is plugged incompletely, lack of video, lack of audio or noise may result.

Before connecting or disconnecting a connection cord, be sure to unplug the power plug from the wall power outlet. If a connection cable is connected or disconnected while the power plug is left connected, malfunction or equipment damage may result.

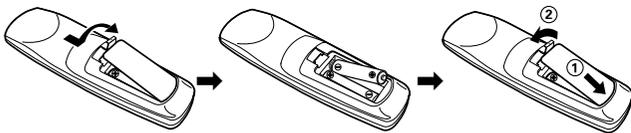
When a DVD AUDIO disc is played, the player can output audio signals at very high frequencies. As this may sometimes lead to speaker damage due to a high-volume sound, do not set "Audio Filter" to "Filter 110 kHz" when the speakers in use are not suitable for high-frequency reproduction. → 49

Also, be sure to check the actual sound level when increasing or decreasing the volume control setting.

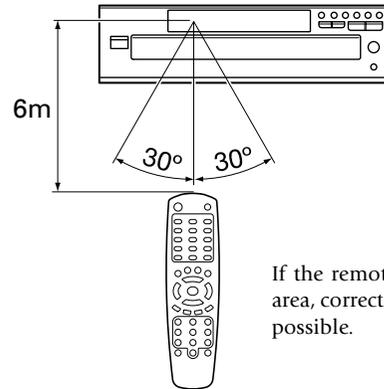
## Preparation of Remote Control Unit

### Installing the batteries:

Open the cover and insert the batteries (R03/AAA) by observing the polarity marking.



### Remote control range:



If the remote is used outside this area, correct operations will not be possible.

- When the controllable distance of the remote reduces, replace both batteries with new ones.
- Do not install the player in a place where the remote control sensor is subjected to direct sunlight or the light of a fluorescent lamp base on high-frequency lighting (inverter system, etc.). Otherwise, the control range of the remote will be reduced.

## MP3 Files That Can Be Played Back with This Equipment

### Compressing MP3 files

Please set up the transfer bit rate setting for the compression software when compressing MP3 files as follows:

**MP3 file:** 128kbps recommended (32 kbps-320 kbps)

- This unit is compatible with 32kHz, 44.1kHz (recommended) and 48 kHz sampling frequencies.

### Categorizing folders

As MP3 files are compressed into high-quality sound files at an extremely high rate of compression, it is possible to record several times more tracks than audio CDs onto a single medium. It is therefore convenient to split the tracks into different folders by genre, artist or album for retrieval and repeat playback purposes.

- A maximum of 999 folders or a maximum of 999 files can be stored on a single media.
- There are cases where it is not possible to save folders in the desired sequence depending on the software being used.

### Additional information

Usable formats :

ISO9660 level 1 and level 2 (excluding expanded formats)

#### Text display

Both file and folder names are displayed in up to 8 uppercase alphanumeric characters.

#### Time display

With a MP3 files, only the "Single Time" information is displayed.

#### ID3-TAG information

This unit is compatible with Versions 1.

#### "Digital" output from MP3 files

This unit outputs digital signal during playback of an MP3 file, but digital copy of this signal is not possible.

### Restriction by session

This unit can play back only the closed sessions.

#### With CD-DA

With a multi-session disc, this unit plays back the first session only.

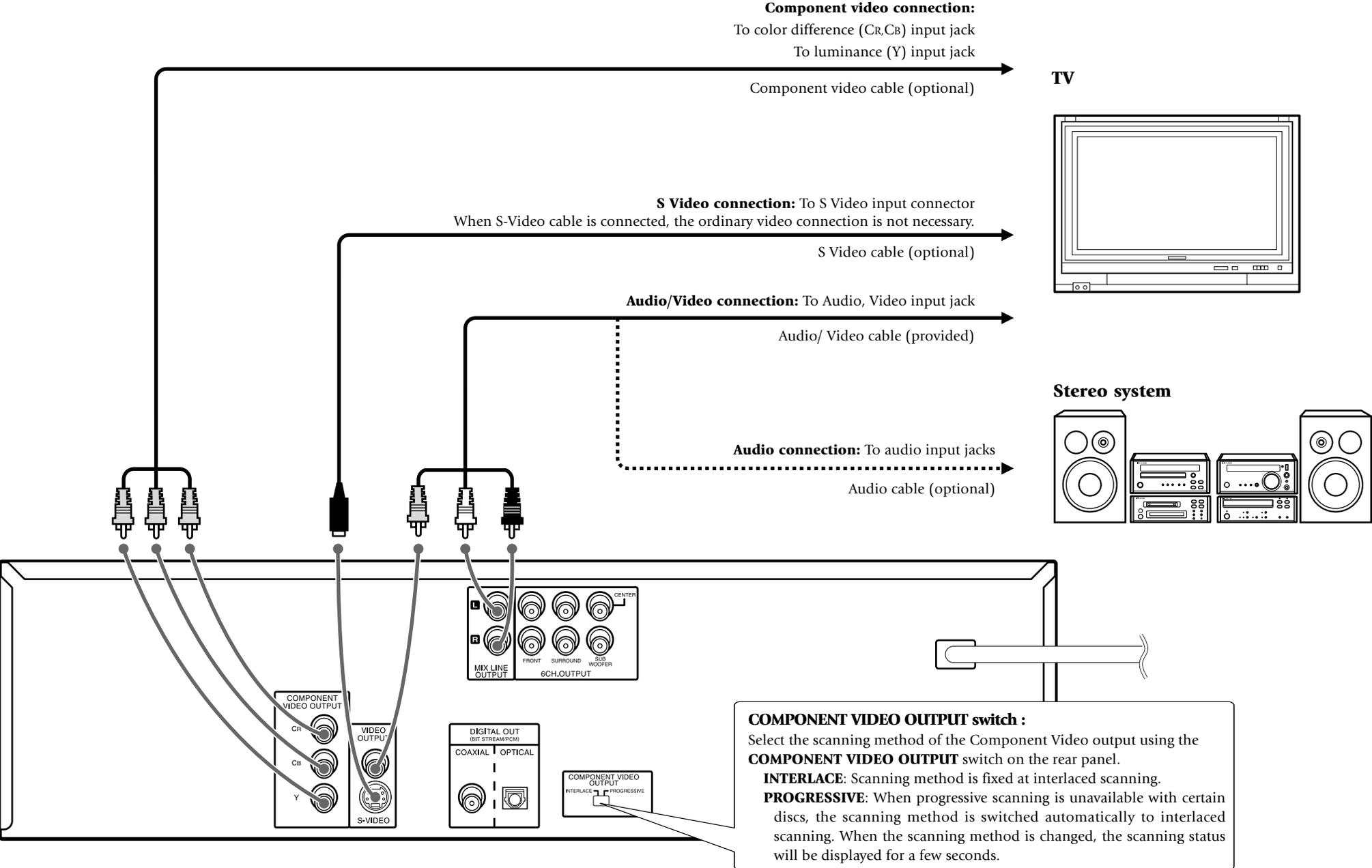
#### With MP3 files

Note on the multi-session disc and CD-DA (music data)

- This unit is compatible with multi-session discs.
- The music CD data (CD-DA data) can be played only when its first session is composed of music CD data (CD-DA data). The second and later sessions are not played back.

However, when "the number of sessions is '2'" and "its second session is composed of music CD data (CD-DA data)", the music CD data (CD-DA) can be played back.

# Connection with a TV or Stereo System (Select the video connection method according to the TV in use)



## Connection with a TV or Stereo System

Do not insert the power cord plugs of the player and the connected components until all of the components have been connected.

For details on the connection terminals and functions of the TV, refer to its instruction manual.

The video output from the player should be connected directly to the TV. If the video output is connected through a VCR, the picture displayed on the TV may be disturbed due to the copy protect function.

### To Connect a TV

**Audio/Video connection:** Connect the **MIX LINE OUTPUT** jacks of the player to the audio input jacks of the TV using the provided audio/video cables. Connect the **VIDEO OUTPUT** jack of the player to the video input of the TV using the provided audio/video cables.

**S Video connection:** If the TV has an S Video input connector, connect the **S-VIDEO** connector of the player to it using the S Video cable.

- As S Video separates video signal into the luminance signal (Y) and color signal (C), it can provide sharper pictures than ordinary video connection.

**Component video connection :** If the TV has component video input jacks, connect the **Y, Cb** and **Cr COMPONENT VIDEO OUTPUT** jacks of the player to the corresponding jacks on the TV using component video cables.

- As component video separate video signal into the luminance signal (Y) and color difference signals (Cb, Cr), it can provide sharper image than the S Video connection.
- Depending on the TV or video monitor in use, the terminal names may be different from those used with the player (Y/Pb/Pr or Y/B-Y/R-Y, etc.)
- When the TV in use is a HDTV or "Hi-Vision" TV, connect the component video signals from the player only to the DVD-compatible input jacks.

**COMPONENT VIDEO OUTPUT switch :** Use this switch to switch the video display format (between Interlaced and Progressive scanning). Be sure to unplug the power cord from the power outlet before changing the position of this switch.

### To Connect a Stereo System

**Audio connection:** Connect the **MIX LINE OUTPUT** jack of the player to the audio input jacks of the connected audio component such as a stereo system using the audio cables.

- When playing a disc containing MPEG multi-channel audio recording, connect the stereo input to the **6CH. OUTPUT L/R** jacks and activate the DOWN MIX function. → [36](#)

### To Set Up of the Player

**Setup of Menu screen:** The language to be used in the menus of the player can be selected.

- The default language set at the factory is English.

"Player Menu Language" Setting → [54](#)

**Setups Related to TV:** The following setups can be made according to the TV connected to the player.

"TV Aspect" Setting → [45](#)

"TV Mode" Setting → [45](#)

"TV Monitor Type" Setting → [45](#)

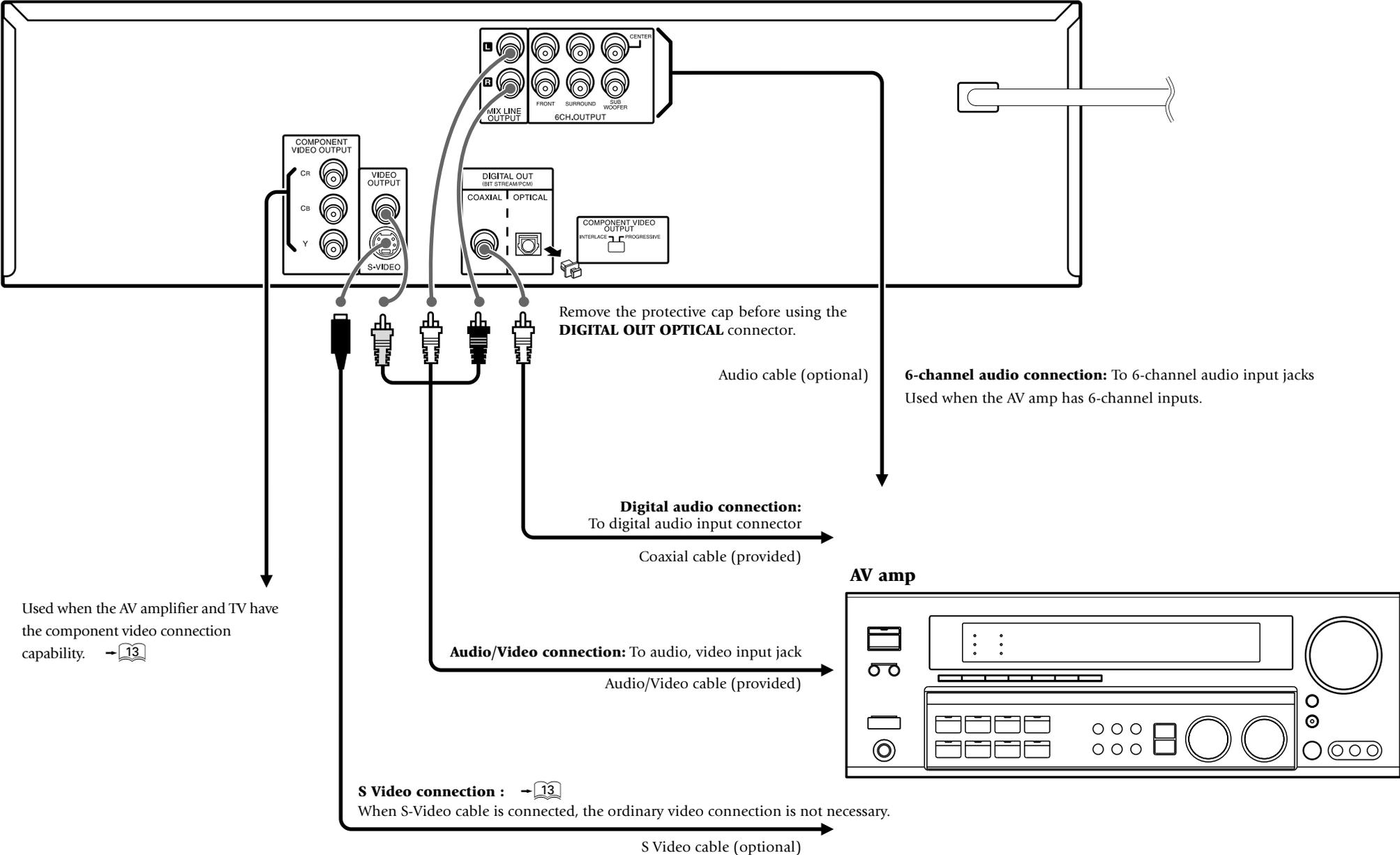
#### CAUTION

Be sure to adhere to the following, or proper ventilation will be blocked causing damage or fire hazard.

- Do not place any objects impairing heat radiation onto the top of the unit.
- Leave some space around the unit (from the largest outside dimension including projection) equal to or greater than, shown below.

Top panel : 50 cm    Side panel : 10 cm  
Back panel : 10 cm

# Connection with an AV Amplifier



## Connection with an AV Amplifier

Do not insert the power cord plugs of the player and the connected components until all of the components have been connected.

For details on the connection terminals and functions of the AV amplifier, refer to its instruction manual.

The video output from the player should be connected directly to the AV amplifier. If the video output is connected through a VCR, the picture displayed on the TV may be disturbed due to the copy protect function.

### To Connect an AV amplifier

**6-Channel audio connection:** When the connected AV amplifier has 6-channel audio input jacks, connect the **6CH. OUTPUT** jacks of the player to them.

- When an amplifier which is not compatible with 6-channel inputs is connected, use the signals from the **MIX LINE OUTPUT** jacks of the player. The multi-channel surround audio will be down-mixed and output. 

**Audio/Video connection:** Connect the **MIX LINE OUTPUT** jacks of the player to the audio input jacks of the AV amplifier using the provided audio/video cables. Connect the **VIDEO OUTPUT** jack of the player to the video input jack of the AV amplifier using the provided audio/video cables.

**Digital audio connection:** Connect the **DIGITAL OUT COAXIAL** connector of the player to the digital audio input connector of the AV amplifier.

- It is also possible to perform digital connection using a commercially available optical fiber cable and the **DIGITAL OUT OPTICAL** jack.

### To Set Up of the Player

**Setup of Menu screen:** The language to be used in the menus of the player can be selected.

- The default language set at the factory is English.

**"Player Menu Language" Setting** 

**Setup for digital audio connection:** If the connected AV amplifier does not contain any of Dolby Digital, DTS and MPEG decoder, be sure to set the **"Digital Audio"** settings after connecting the player to it.

For the nonexistent decoders, set the **"Digital Audio"** setting to **"PCM"**. If the player is played without changing the initial **"Bitstream"** setting, extremely loud noise will be produced and may damage the speakers.

**"Digital Audio PCM Down Conversion" Setting** 

**"Digital Audio Dolby Digital" Setting** 

**"Digital Audio DTS" Setting** 

**"Digital Audio MPEG" Setting** 

**Setup for 6-channel audio connection:** When the audio is connected using the **6CH. OUTPUT** jacks of the player, set the player as follows.

**"Speaker Setting (Custom)"** 

**"Speaker Setting (Quick)"** 

### Audio output from DVD AUDIO

When the display shows **"PROHIBIT DOWN MIX"** scrolling, the **MIX LINE OUTPUT**, **DIGITAL OUT COAXIAL** and **DIGITAL OUT OPTICAL** jacks do not output the down-mixed 2-channel signals but output only the front (L/R) channel signals. The **6CH. OUTPUT** jacks output the same number of channels as the original number of channels recorded in the DVD AUDIO disc, regardless of the speaker setting. During PCM playback, the **6CH. OUTPUT** jacks output the same number of channels as the original number of channels regardless of the status of the **"PROHIBIT DOWN MIX"**.

#### DTS disclaimer clause

DTS Digital Surround™ is a discrete 5.1 channel digital audio format available on CD, LD, and DVD software which consequently cannot be decoded and played back inside most CD, LD, or DVD players. For this reason, when DTS-encoded software is played back through the analog outputs of the CD, LD, or DVD player, excessive noise will be exhibited. To avoid possible damage to the audio system, proper precautions should be taken by the consumer if the analog outputs are connected directly to an amplification system. To enjoy DTS Digital Surround™ playback, an external 5.1 channel DTS Digital Surround™ decoder system must be connected to the digital output (S/P DIF, AES/EBU, or TosLink) of the CD, LD or DVD player.

This unit is equipped with DTS Digital Surround™ decoder.

## Chapter 2: Controls and indicators

This chapter gives description on the front panel buttons, display panel of the player main unit and the provided remote control unit.

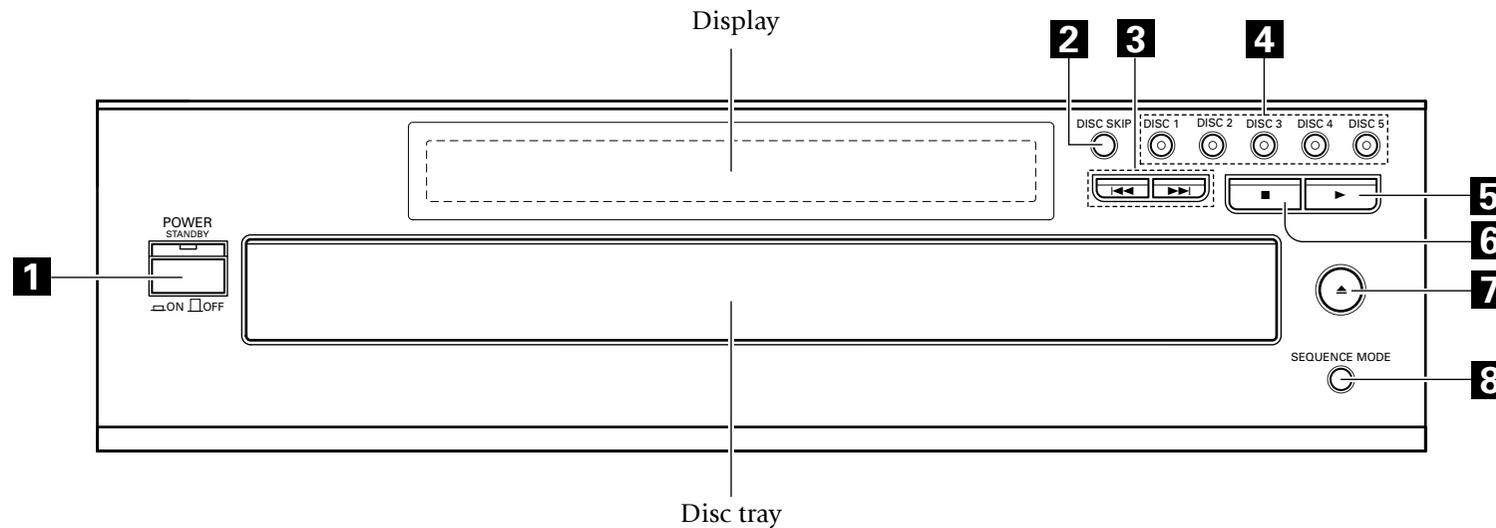
This chapter is composed of the following sections.

**Front Panel** →  17

**Display** →  18

**Remote Control Unit** →  19

# Front Panel



**1** POWER ON/OFF button/

"STANDBY" indicator → 21

**2** DISC SKIP button → 22

**3** ⏮ / ⏭ (skip down & skip up) buttons → 23

**4** DISC 1 ~ 5 buttons/ indicators → 22

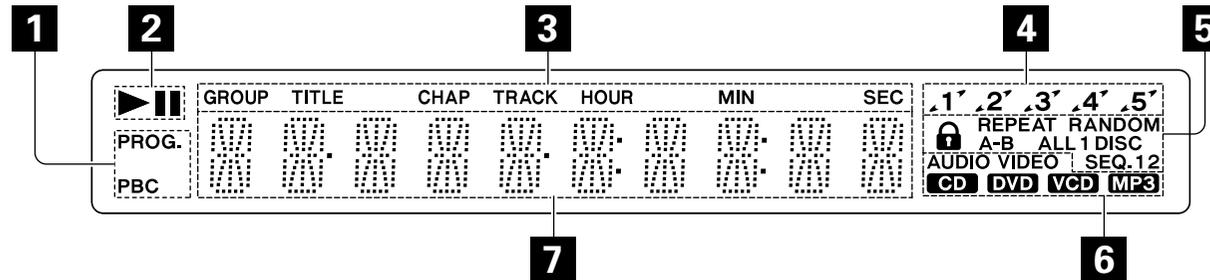
**5** ▶ (play) button → 22

**6** ■ (stop) button → 23

**7** ▲ (Open/Close) button → 22

**8** SEQUENCE MODE button → 26

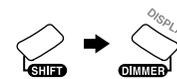
# Display



- 1** "PROG.", "PBC" indicators → 25 → 40
- 2** Operation indicators
- 3** CD(CD-R/RW), VCD and DVD related indicators
- 4** Disc number indicators
- 5** Special playback related indicators → 26 → 27 → 33 → 34 → 41 → 47
- 6** "CD", "VCD", "DVD VIDEO", "DVD AUDIO", "MP3" indicators
- 7** Character information display → 27 → 33

## Switching the Display Brightness

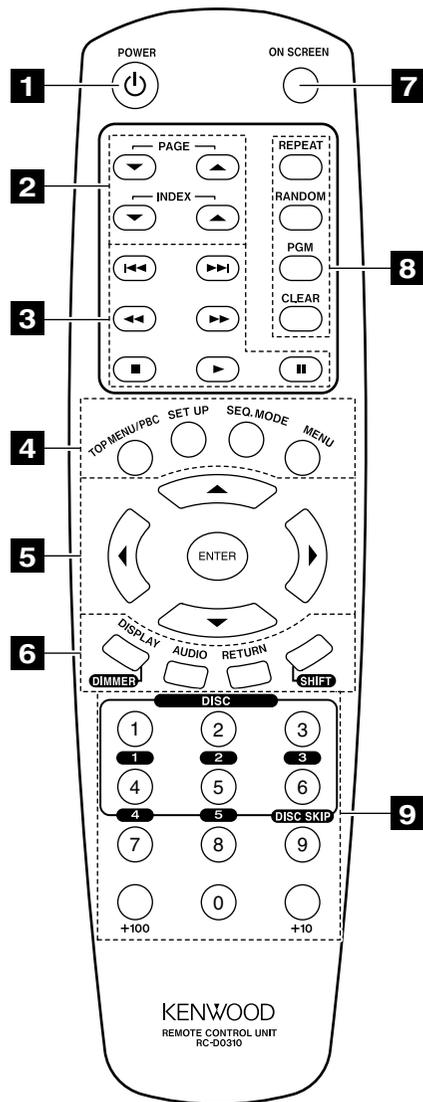
Press the **SHIFT** button on the remote and then press the **DIMMER** button. Each press of the latter button switches the display brightness to one of the three levels.



Press within 5 seconds after pressing the **SHIFT** button.

## Remote Control Unit

The buttons with the same names as those on the player main unit have the same functions as the main unit buttons.



Model: RC-D0310 (Infrared ray system)

- 1** POWER button → 21
- 2** PAGE ▼, PAGE ▲ buttons → 26
- INDEX ▼, INDEX ▲ buttons → 26
- 3** |◀◀/▶▶| buttons → 23
- ◀◀/▶▶ buttons → 24
- button → 23
- ▶ button → 22
- || button → 23
- 4** TOP MENU/PBC button → 25
- SET UP button → 44
- SEQ. MODE button → 26
- MENU button → 25
- 5** Cursor buttons → 30
- ENTER button → 22 → 25 → 30
- 6** DISPLAY button → 27
- DIMMER button → 18
- AUDIO button → 28
- RETURN button → 25
- SHIFT button → 18 → 22
- 7** ON SCREEN button → 30
- 8** REPEAT button → 27
- RANDOM button → 41
- PGM button → 40
- CLEAR button → 40
- 9** DISC 1 to 5 buttons → 22
- DISC SKIP button → 23
- Numeric buttons → 23 → 32

## Chapter 3: Basic Operation

This chapter gives description on the basic operations of the control buttons on the player main unit and remote.

This chapter is composed of the following sections.

**Configuration of Discs** →  21

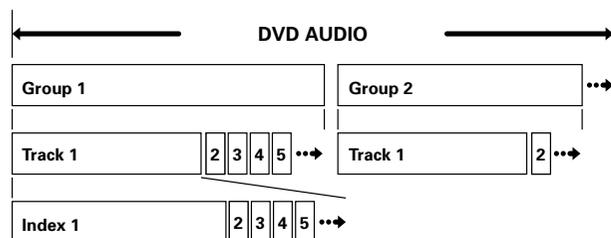
**Turning power on** →  21

**Inserting discs** →  22

**On Basic Operation** →  22

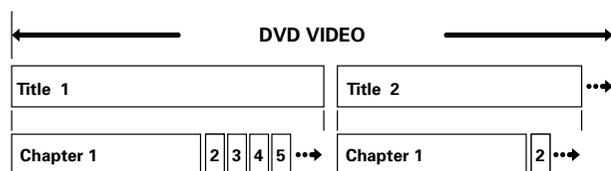
## Configuration of Discs

### DVD AUDIO disc configuration



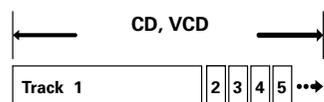
The group is the largest unit composing the music in an DVD AUDIO disc. Each group is composed of multiple tracks, and each track is composed of multiple indices.

### DVD VIDEO disc configuration

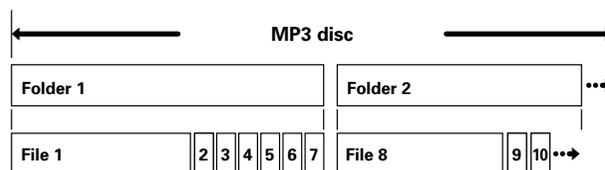


The title is the largest unit composing the music and/or pictures in an DVD VIDEO disc. Each title is composed of multiple chapters.

### CD and VCD disc configuration



### MP3 disc configuration



The folder is the storage unit at the highest level in the disc. Sometimes a single folder contains more than one file, or sometimes files are recorded directly in the disc in place of being included in a folder. Some discs also have a hierarchical structure in which a folder includes sub-folders. Note that the file numbers are not assigned on a per-folder basis but they are assigned consecutively for all the files in the whole disc.

## Turning power on

### 1. If preparation of the TV is required :

Set the input selector of the TV to monitor the video output from this unit.

### If preparation of the AV amplifier is required :

Set the input selector of the AV amplifier to monitor the audio output from this unit.

### 2. Press the **POWER ON/OFF** button on the player.

When the power of the player is in the standby mode, press the **POWER** button on the remote.

- When the player is turned on, it reads the discs in the tray and controls the lighting of the **DISC 1** to **5** buttons/indicators to inform the user of presence and absence of discs. If there is any disc in the tray at this moment, the unit will play it automatically.
- "NO PLAY" is displayed when the loaded disc is not playable on this player.

### [To put the player power in the standby mode]

- When the power is on, press the **POWER** button on the remote. The "STANDBY" indicator lights up to indicate that the player is in the standby mode of power.

### [To turn the player off]

- When the power is on or standby, press the **POWER ON/OFF** button on the player main unit to turn it off.

### STANDBY mode:

While the standby indicator is lit, a small amount of power is supplied to the system to back up the memory. This is called standby mode. Under the condition, the system can be turned ON by the remote control unit.

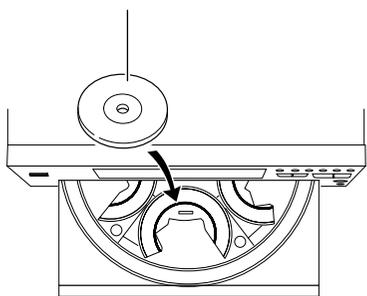
## Inserting discs

The disc tray accommodates up to five discs. The discs can be changed during playback without stopping the currently played disc.

**Be sure to operate a button when opening/closing the tray or rotating the tray. Never attempt to move the tray with your hand.**

1. Press the **▲** button on the player main unit to open the tray. (Pressing the button again closes the tray.)

The label surface must face upward. (With a double-sided disc, load it so that the label information for the side you want to play faces upward.)



- Place the disc to be played along the groove on the tray. (To prevent malfunction, do not place a disc obliquely or on another disc.)
  - When handling a disc, take care not to touch the disc surface.
  - Commercially available CD single (8 cm) disc adapters cannot be used with this player.
2. To insert or remove another disc by changing the tray position, press the **DISC SKIP** button on the player main unit.
  3. Press the **▲** button on the player main unit to close the tray.

## On Basic Operation

### Operation restriction according to the disc or player status

Operations of some DVDs and VCDs are restricted by the intention of the software producers. Operations may also be restricted due to the status of the player.

As this player plays discs in accordance with the intentions of software producers, some functions may not work as intended by the user. Be sure to read the manual provided with the disc to be played. When an inhibition icon is displayed on the connected TV screen during operation, it indicates that the player is in the operation restricted status.

Inhibition icon



### Playing discs

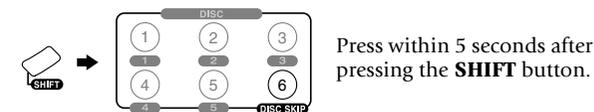
Press the **▶** button in stop mode to start playback.

- When you are operating the remote, press the **▶** or **ENTER** button.
- Playback starts with the disc indicator of which is lit.
- The TV screen shows "Play" and the **▶** indicator in the display lights up.
- The "**CD**", "**VCD**", "**DVD AUDIO**" or "**DVD VIDEO**" indicator in the display lights up according to the type of the disc.
- Certain CD-R and CD-RW discs may not be playable on this player. ("NO PLAY" is displayed in this case.)
- The "**MP3**" indicator lights when a MP3 disc is loaded.
- With certain DVD and VCD discs, a menu is displayed in the beginning.

### Playing discs by changing them

Press the **DISC SKIP** button to skip a disc.

- When you are operating the remote, press the **SHIFT** button, then press the **DISC SKIP** button.

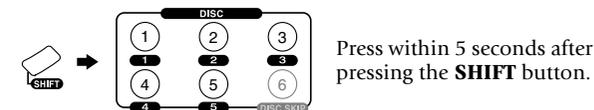


- When the **DISC SKIP** button is pressed while the tray is open, the tray simply rotates.
- One of the disc number indicators on the display starts to light up and playback starts.
- The **DISC SKIP** button is invalid when the tray is closed in the all random and program modes.

### Playing from the selected disc

Press one of the **DISC 1 to 5** buttons to select a disc.

- When you are operating the remote, press the **SHIFT** button, then press one of the **DISC 1 to 5** buttons.



- One of the disc number indicators on the display starts to light up and playback starts.
- The **DISC 1 to 5** buttons are invalid in the all random and program play modes.

## Playing discs by selecting the group, track, title, chapter or file

Input the number of the group, track, title, chapter or file using **0** to **9**, **+10** and **+100** on the remote.

- With a DVD disc when a number is input during playback, playback of the chapter or track having the same number as the input number in the same group, or title starts. When a number is input in stop mode, playback the first chapter, or track having the same number as the input number starts.
- With a CD or VCD (when P.B.C. is off), playback starts with the beginning of the track having the same number as the input number.
- With a MP3 disc, playback starts with the beginning of the file having the same number as the input number.

## Skipping a track, chapter, or file

Press the **⏮** or **⏭** button.

- A track is skipped and playback starts from the beginning of the skip destination track, chapter or file.
- When the **⏮** button is pressed once during playback, playback restarts from the beginning of the current track, chapter or file.
- With a VCD and P.B.C. is on, these buttons function as the **⏮** (**Previous**) and **⏭** (**Next**) button. → [45](#)

## Stopping playback

Press the **■** button during playback. The first press activates the resume function and the second press stops playback.

- With certain DVDs, the inhibition icon is displayed and playback cannot be stopped even when the **■** button is pressed. In this case, press the **DISC SKIP** button to select another disc then press the **■** button to stop playback.  
If there is only one disc in the tray, open the tray, place another disc, close the tray, press the **DISC SKIP** button to select the second disc, then press the **■** button to stop playback.
- The resume function stores the position where playback is stopped in memory. Later, playback can be restarted from that position by pressing the **▶** button.
- While the resume function is activated, the **▶** indicator in the display blinks and shows the time of the stored position.
- The resume function cannot be activated during random playback or VCD playback (when PBC is on).
- During playback of MP3 files, the operation of the resume function is as described below:  
The resume position is always the beginning of the file being played.

## Still picture display and playback pause

During playback, press the **⏸** button on the remote.

- The TV screen shows "**Pause**" or "**Still**" and the **⏸** indicator in the display lights up.
- To restart normal playback, press the **▶** button .
- When the "**IPB Display**" is set to On, the TV screen shows "**Still (I)**", "**Still (P)**" or "**Still (B)**" with every still picture of DVD. → [46](#)

## Frame-by-frame advance

While a still picture of DVD or VCD is displayed, press the **⏸** button on the remote.

- The picture returns to still picture when the **⏸** button is released.
- The picture frame is advanced for the same number of times as the button is pressed. Hold the button when you want to advance picture frames sequentially.
- To restart normal playback, press the **▶** button .
- When the "**IPB Display**" is set to On, the TV screen shows "**Still (I)**", "**Still (P)**" or "**Still (B)**" every time the picture frame of DVD is advanced. → [46](#)

## Forward search and reverse search

During playback, press the ◀◀ or ▶▶ button on the remote.

- When OSD is displayed, pressing the **ON SCREEN** button turns it off and shows the speed in place.
- The first press of the ◀◀ or ▶▶ button starts forward search or reverse search at the lowest speed step. Each further press increase the speed up to the fifth speed step.



The TV screen shows the speed as shown above. The indicator varies according to the speed of the forward search or reverse search.

- The display of the player shows the time display or "**SEARCH**" according to the status of the disc and player.  
**"SEARCH"** is displayed :  
 When the time information is not displayed during DVD playback.  
 When P.B.C. is on during VCD playback.
- To restart normal playback, press the ▶ button.
- Video may be disturbed during forward search or reverse search.
- When performing forward search with a VCD, DVD VIDEO or DVD AUDIO containing video and moving pictures (AVTT: Audio Video Title), the audio output can be switched on or off only while the search is at the lowest speed step. The audio is muted in the second and later speed steps.

## Slow playback and reverse slow playback

While a still picture is displayed, press the ◀◀ or ▶▶ button on the remote.

- When OSD is displayed, pressing the **ON SCREEN** button turns it off and shows the speed in place.
- The first press of the ◀◀ or ▶▶ button starts slow playback or reverse slow playback at the lowest speed step. Each further press increase the speed up to the fifth speed step.



The TV screen shows the speed as shown above. The indicator varies according to the speed of the slow playback or reverse slow playback.

- The display of the player shows the time display or "**SLOW**" according to the status of the disc and player.  
**"SLOW "** is displayed :  
 When the time information is not displayed during DVD playback.  
 When P.B.C. is on during VCD playback.
- To restart normal playback, press the ▶ button.
- Audio is not output during slow playback or reverse slow playback.
- Reverse slow playback is not available with VCD.
- Slow playback and reverse slow playback are not available with CD(MP3) or DVD AUDIO containing only still pictures and audio (AOTT: Audio Only Title).

## Menu playback of DVD

When a DVD containing the recording of the top menu or menu is played, the top menu or menu is displayed.

These menus allow you to select the position you want to play easily based on an interactive method. The following operation procedure is the basic procedure.

The functions vary depending on certain softwares.

1. Press the **TOP MENU/PBC** button to display the top menu.
  - When the **TOP MENU/PBC** button is pressed again while the top menu is displayed during playback, the played position returns to the position where the button was pressed for the first time and playback restarts from there.
2. Select the scene to be played by pressing the cursor button on the remote. (Step 3 is not required if numeric buttons are used to select the item.)
3. Press the **ENTER** button to play the DVD from the selected title.
  - To display multiple menus sequentially, repeat steps 2 and 3 above. If the menus are provided in a hierarchical structure, this operation allows you to move to the menus in the lower hierarchy level.
  - The **MENU** button on the remote is pressed, the menu is displayed. The operation is the same as that of the top menu.

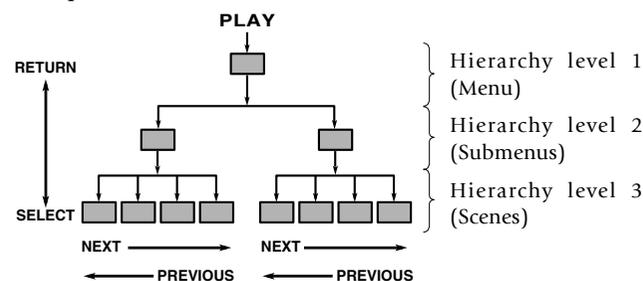
## Menu playback of P.B.C.-compatible VCD

When a P.B.C. (PlayBack Control) capable VCD is played with P.B.C. on, the menu is displayed. Perform operation according to the procedure indicated by the menu. (For details on the operation method and control buttons, refer to the manual provided with the played software.)

### Hierarchical structure of VCD menus

When a P.B.C.-compatible VCD containing menu is played and an item is selected in the displayed menu, a menu with more detailed items may sometimes be displayed. Such a structure in which multiple menus are distributed in different levels and interconnected is referred to as the hierarchical structure. In this structure, the target scene can be reached by repeatedly selecting items in multiple menus.

Example of hierarchical structure



**To advance in the hierarchy:** When an item is selected in the menu using the **ENTER (Select)** button or numeric buttons, you can advance to the menu at the level immediately below the current level. When the selected item is a [scene], the scene will be played back.

**To return in the hierarchy:** You can return to the level immediately above the current level every time you press the **RETURN** button.

- When there are multiple menus (scenes) in a hierarchy level, they can be switched over by pressing the **◀◀ (Previous)** button or **▶▶ (Next)** button.

### Main control buttons used in VCD playback, and examples of indications

Indication on software jacket	Control button on the player
▶ (Select)	<b>ENTER</b> button
↻ (Return)	<b>RETURN</b> button
◀◀ (Previous)	◀◀ button
▶▶ (Next)	▶▶ button

- The indication on the jacket is variable depending on the software.

### Switching P.B.C. On and Off

When there is a VCD in the played position of the stocker and the player is in stop mode, press the **TOP MENU/PBC** button to switch P.B.C. on or off.

**P.B.C. on:** The TV screen shows "**P.B.C. On**" and the P.B.C.-compatible VCD is played according to P.B.C.

The "**PBC**" indicator in the display lights up.

**P.B.C. off:** The TV screen shows "**P.B.C. Off**" and the P.B.C.-compatible VCD is played in normal playback without P.B.C.

The "**PBC**" indicator in the display turns off.

- P.B.C. is switched off automatically when the sequential play mode is set to "**SEQ.2**" or when the play mode is set to the program or random mode. → 26

## Skipping indexes in DVD AUDIO

DVD AUDIO tracks contain the recording of indexes. The following operation makes it possible to skip the currently played track index and restart playback from the next index.

Press the **INDEX ▼** or **INDEX ▲** button during playback. The same number of indexes as the number of times the button is pressed can be skipped.

- Indexes in the direction corresponding to the pressed button are skipped and the destination index is played back from the beginning.
- The display shows the index number.

## Switching still pictures of DVD AUDIO

When a DVD AUDIO (AOTT: Audio Only Title) disc containing the recording of still pictures is played, the still pictures can be displayed. (The operation may be restricted with certain discs.)

To switch the still pictures, press the **PAGE ▼** or **PAGE ▲** button on the remote during playback.

- Press the **RETURN** button to switch to the home still picture.

## Switching the sequential play mode

The player is capable of sequential playback using the 5-disc carousel disc changer. If a DVD and/or VCD is mixed in the discs to be played sequentially, the sequential playback may stall in the middle while the menu remains displayed. In such a case, switch the sequential play mode of the player.

Set the sequential play mode of the player to "**SEQ.2**" using the remote as described below. The DVD VIDEO playback will be skipped in order not to interrupt the sequential playback.

When playing a VCD with menu playback or playing a DVD VIDEO, set the sequential play mode of the player to "**SEQ.1**".

1. Set the player to normal play mode
  - If the player is in the program or random play mode, the sequential play mode cannot be switched.
2. Each press of the **SEQUENCE MODE (SEQ. MODE)** button switches the sequential play mode of the player alternately.

### [Sequential play mode 1 ("SEQ.1" lit)]

All discs can be played including DVD VIDEO discs.

When there is a P.B.C.-compatible VCD or a DVD VIDEO on the tray, sequential playback may sometimes be interrupted and the menu displayed. In this case, perform menu playback. → 

### [Sequential play mode 2 ("SEQ.2" lit)]

Playback of DVD VIDEO discs is skipped in order not to interrupt sequential playback. (The display shows "**SKIP DVD-V**" to indicate this.)

With a DVD AUDIO disc containing the recording of menu, menu playback is not available.

With a P.B.C.-compatible VCD, playback is performed by switching P.B.C. automatically to off.

- When the sequential play mode is changed, "**SEQ 1**" or "**SEQ 2**" is displayed on the TV screen and the "**SEQ.1**" or "**SEQ.2**" indicator light in the display to indicate the current sequential play mode.

## Switching the time display

The information in the time display can be switched over.

This operation is not available in stop mode, during menu playback of DVD or with a DVD for which time display is disabled.

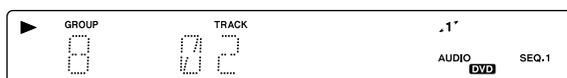
If P.B.C. is set to On with a VCD, set P.B.C. to Off. → 25

Every time the **DISPLAY** button is pressed during playback, the time display switches to the number display of the group, track, title, and chapter or file.

Time display



Number display



- When an MP3 disc is played, the time display is switched to the display of the file number, file name, folder name and elapsed play time.

## Repeat playback

Repeat playback allows you to play the desired audio or video repeatedly. (Repeat playback is also available with the OSD operation. → 33)

This function may be unavailable with certain discs.

Press the **REPEAT** button during playback to display the "**MAIN**" OSD. Each further press of the button switches the repeat icons as shown.

- Repeat playback is canceled when it is stopped, except when "**All**" is selected.
- When the player is set to the repeat play mode, the repeat indicator in the display lights up. The character information display also shows the repeat mode information for a few seconds.
- When the player is in stop mode, only "**All**" or "**Off**" can be selected.

### [During playback of DVD AUDIO]

 : Repeat playback of the track being played.

 : Repeat playback of the group being played.

 : Repeat playback of the disc being played.

 : Repeat playback of all discs in the tray.

 : Repeat playback Off.

- "**Disc**" is displayed only when "**SEQ.2**" indicator is lit.

### [During playback of DVD VIDEO]

 : Repeat playback of the chapter being played.

 : Repeat playback of the title being played.

 : Repeat playback of all discs in the tray.

 : Repeat playback Off.

### [During playback of CD or VCD]

 : Repeat playback of the track being played.

 : Repeat playback of the disc being played.

 : Repeat playback of all discs in the tray.

 : Repeat playback Off.

**[During playback of MP3 disc]**

 : Repeat playback of the file being played.

 : Repeat playback of the folder being played.

 : Repeat playback of the disc being played.

 : Repeat playback of all discs in the tray.

 : Repeat playback Off.

**[In the program mode]** → 

 : Repeat playback of programmed contents.

 : Repeat playback Off.

**[In the random mode]** → 

 : Repeat playback according to the current random play mode.

 : Repeat playback Off.

**Switching the audio language**

When a VCD or a DVD containing the recording of audio in multiple languages is played, the language used in the voice can be switched over. (The audio language can also be switched by the OSD operation. → )

Press the **AUDIO** button during playback to display the "**SOUND**" OSD. Each further press of the button switches the displayed  (Audio icon).

- With a DVD AUDIO disc, an audio language number can be selected from up to 2 numbers.
- With a DVD VIDEO disc, an audio language number can be selected from up to 8 numbers.
- With VCD, "**STEREO**", "**L**", "**R**" or "**L+R**" can be selected.
- The default audio language set by the user is selected when the power is turned on or the disc is changed. If the default language is not contained in the disc, the priority language defined for the disc will be played back.
- The above operation is not available in stop mode. It is also unavailable with ordinary music CD(CD-R/RW)s.

# Chapter 4: OSD Operation

The operations described in this chapter allows the user to perform operations and settings by referring to the OSD (On-Screen Display). As the OSD operation uses only the specific buttons on the remote, the user can enjoy the functions of the player even before memorizing the functions of all buttons.

This chapter is composed of the following sections.

**Basic OSD Operation** →  30

**"MAIN" OSD Operation** →  31

**"SOUND" OSD Operation** →  35

**"VISUAL" OSD Operation** →  36

- If the on-screen message or OSD is displayed outside the TV screen when using a widescreen TV or similar monitoring device, set the "**OSD Position**" setting to "**Cinema**". →  46
- The OSD cannot be displayed when DVD is played by menu playback. It may also be unavailable with certain discs.
- The "**SOUND**" OSD and "**VISUAL**" OSD can be displayed only in a play mode.

## Basic OSD Operation

Various operations can be performed by selecting the OSD icons on the TV screen using the cursor button on the remote.

1. Press the **ON SCREEN** button to display OSD.

### "MAIN" OSD :



Only the "MAIN" OSD can be displayed when the button is pressed in stop mode. (The up and down arrows shown in the above figure are not displayed.)

When the button is pressed in a play mode, the OSD can be changed by pressing the cursor up/down button.

### "SOUND" OSD :



### "VISUAL" OSD :



- If the on-screen message or OSD is displayed outside the TV screen when using a widescreen TV or similar monitoring device, set the "OSD Position" setting to "Cinema". → 46

2. Select an OSD icon by pressing the cursor up/down button, then press the **ENTER** button to display the pull-down menu.

- Press the cursor button to move the cursor. But the cursor cannot be moved to the icons of currently unavailable functions.
- The OSD includes icons with a variety of functions. The displayed icons are variable depending on the player status and played disc.
- When the cursor is located on the left or right end, if you attempt to move the cursor toward the outside, the cursor will move to the opposite end.
- To clear the OSD display, move the cursor to the **EXIT** icon and press the **ENTER** button. (The same effect can also be obtained by pressing the **ON SCREEN** button.)

3. From the displayed pull-down menu, select the desired item by pressing cursor button up/down button or by inputting the desired item number using **0 to 9** , **+10** and **+100** button.

### Example of pull-down menu display:



### Example of menu display when a number is input:



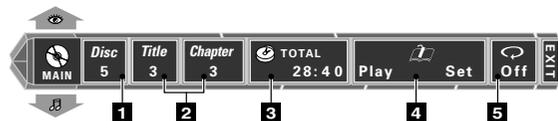
When a group, title, chapter, track, folder, or file number is input using numeric buttons, the pull-down menu display changes and the input number blinks in it. (The figure on the right of the input number shows the number of chapters in the disc.)

If you commit a mistake in the numeric button input, press the **CLEAR** button and restart the input from the beginning.

- When ▲ and ▼ are displayed on the top and bottom of the pull-down menu, the menu has more pages above or below the current page. When the cursor is located on the bottom edge, press the cursor down button makes it possible to advance to the next page. (When the cursor is located on the top edge, press the cursor upward makes it possible to return to the previous page.)
  - "↵" and "↶" on the left and right edges of pull-down menu indicates that pressing the cursor button makes it possible to clear the pull-down menu and move the cursor to the originally pressed icon. (The same effect is also available by pressing the **RETURN** button.)
4. Press the **ENTER** button to enter the selection in memory.
    - The OSD icon display varies depending on the content of change.

## "MAIN" OSD Operation

This section describes the display contents and controllable items of the "MAIN" OSD. (Note that certain items may not be controllable depending on the played disc and player status.)



**1 Disc icon:** Shows the disc number. Select to change the disc.

**2 Group icon:** Shows the group number in DVD AUDIO disc.

**Track icon:** Shows the track number in DVD AUDIO, VCD or CD disc.

**Title icon:** Shows the title number in DVD VIDEO disc.

**Chapter icon:** Shows the chapter number in DVD VIDEO disc.

**Folder icon:** Shows the folder number in MP3 disc.

**File icon:** Shows the file number in MP3 disc.

Select an icon to change its content.

**3 Time display icon:** Shows the disc time. Select to perform time search or change the time display. → [32](#)

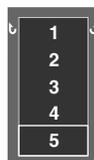
**4 Memory Play/Memory Set icon:** Select to register or recall memory. → [33](#)

**5 Repeat icon:** Shows the repeat mode. Select to use repeat play mode. → [33](#) → [34](#)

## Selecting the disc to be played

Use the following procedure to select a new disc to be played using OSD. (The disc can also be selected directly by pressing the **DISC SKIP** button or one of the **DISC 1 to 5** buttons. → [22](#))

1. Press the **ON SCREEN** button to display the "MAIN" OSD.
2. Move the cursor to the  (Disc icon) by pressing the cursor left/right button, then press the **ENTER** button.
  - This operation is not available in the all random and program mode.
3. Select the disc number by pressing the cursor up/down button, then press the **ENTER** button to start playback.



The cursor is displayed on the currently selected disc number.

## Selecting a group, track, title, chapter, folder or file

Use the following procedure to select a new group, track, title, chapter, folder or file to be played using OSD. (They can also be selected directly by pressing the numeric buttons or a **◀▶** buttons. → [23](#))

When performing this operation with a P.B.C.-compatible VCD, set P.B.C. to off. → [25](#)

1. Press the **ON SCREEN** button during playback to display the "MAIN" OSD.
2. Move the cursor to the "**Group**", "**Track**", "**Title**", "**Chapter**", "**Folder**" or "**File**" icon by pressing the cursor left/right button, then press the **ENTER** button.

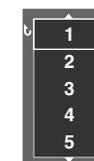
**DVD AUDIO:** Select  or 

**DVD VIDEO:** Select  or 

**CD, VCD :** Select 

**MP3 disc:** Select  or 

3. Select the number by pressing the cursor up/down button, then press the **ENTER** button to start playback.



During playback, the cursor is located on the current group, track, title, chapter, folder or file number. (In this figure, the last number can be displayed by pressing the cursor up button.)

The number can also be selected by composing the number with numeric buttons on the remote.

- Only the title or group icon can be selected in stop mode of DVD.

## Time display switching and time search

Use the following procedure to switch the type of information shown by the time display shown in the OSD or player display. Time search is also available for specifying the position to start playback by inputting the time information.

Time search is not available in stop mode, during menu playback of a DVD or with a DVD VIDEO which does not provide the time display.

When performing this operation with a P.B.C.-compatible VCD, set P.B.C. to off. → 

1. Press the **ON SCREEN** button during playback to display the "MAIN" OSD.

2. Move the cursor to  (Time Display icon) by pressing the cursor left/right button, then press the **ENTER** button.

3. Select the type of time display information by pressing the cursor up/down button, then press the **ENTER** button.

If time search is required, move the cursor to the time display icon to select the type of time display information, then perform the operations in step 4.



"**Time Search -- : -- : --**": The time search target time can be input. ("**Time Search -- : -- : --**" is displayed with a CD or VCD.)

"**Single Time**": Elapsed play time of track chapter or file.

"**Single Remain Time**": Remaining play time of track or chapter.

"**Total Time**": Elapsed play time of disc, group or title.

"**Total Remain Time**": Remaining play time of disc, group or title.

- Time search is not available in the program and random modes. The time display can be switched between "**Single Time**" and "**Single Remain Time**".
- The time display icon in the OSD and the time display in the player display varies according to the change.
- With a MP3 disc, only the "**Single Time**" information is displayed.

4. Input the time to start playback using **0** to **9**, then press the **ENTER** button.

Input examples:

1 hr. 05 min. 00 sec. (with a DVD):

**1, 0, 5, 0, 0**

32 min. 00 sec. (with a CD or VCD):

**3, 2, 0, 0**

1 min. 28 sec.:

**1, 2, 8**

- If you commit a mistake in the numeric button input, press the **CLEAR** button and restart the input from the beginning.
- When playing a DVD AUDIO, it is possible to use the time search function within the same group.
- When playing a DVD VIDEO, it is possible to use the time search function within the same title.
- When playing a CD or VCD, it is possible to use the time search function within the same track.
- This operation is not available with a MP3 disc.

## Memory playback

When you register a scene you like in memory, you can start playback from that scene any time you want. Up to 10 scenes can be registered in memory.

Memory registration and deletion are not available during menu playback of DVD or with a DVD VIDEO for which time display is disabled.

When performing this operation with a P.B.C.-compatible VCD, set P.B.C. to off. → [25]

This function may be unavailable with certain discs.

### Registering a scene in memory

1. Press the **ON SCREEN** button during playback to display the "MAIN" OSD.
2. Move the cursor to  (Memory Set icon) by pressing the cursor button left/right, then press the **ENTER** button.
3. Select the memory number to be used in registration by pressing the cursor up/down button, then press the **ENTER** button when the scene to be registered comes.

Disc	Tl/Grp/Trk	Time
1	4 1	0 : 0 8 : 2 8
2	- - -	- : - : - -
3	- - -	- : - : - -
4	- - -	- : - : - -

The memory numbers in which scenes have already been registered show the disc number, title, group, track number and the time. Memory numbers 5 to 10 are displayed on the next display page.

- The displayed time value is the accumulated count since second 0 of the first track in the same group.
- To delete a scene from memory, select the memory number and press the **CLEAR** button.
- Up to 10 scenes can be registered in memory.

- When a number in which a scene has already been registered is selected, the scene will overwrite the existing memory.
- The memory of the disc at the disc replacement position of the tray is cleared when the power is turned off or standby or the tray is opened.
- This operation is not available with a MP3 disc.

### Recalling memory

1. Press the **ON SCREEN** button during playback to display the "MAIN" OSD.
2. Move the cursor to  (Memory Play icon) and press the **ENTER** button.
3. Select the memory number of the scene to be recalled by pressing the cursor up/down button, then press the **ENTER** button.

## Repeat playback

Desired video and audio can be played repeatedly. However, with some DVDs and VCDs, the partitions in the recording are not related with the track number assignment. As a result, repeat playback may not be available with such software.

(The same effect can also be obtained directly by pressing the **REPEAT** button. → [27])

This function may be unavailable with certain discs.

1. Press the **ON SCREEN** button during playback to display the "MAIN" OSD.
2. Move the cursor to  (Repeat icon) by pressing the cursor left/right button, then press the **ENTER** button.
3. Select the repeat mode by pressing the cursor up/down button, then press the **ENTER** button.
  - Repeat playback is canceled when it is stopped, except when "All" is selected.
  - When the repeat mode is changed, the repeat icon varies according to the change. When the player is set to a repeat play mode, the repeat indicator in the display lights up and the character information display also shows the repeat mode information for a few seconds.
  - When the player is in stop mode, only "All" or "Off" can be selected.

## A-B repeat playback

A-B repeat playback allows you to play a specified section repeatedly.

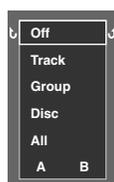
This function may be unavailable with certain discs.

1. Perform the repeat playback procedure steps **1** and **2**. 
2. Select **"A"** by pressing the cursor up/down button, then press the **ENTER** button.

The current disc position is stored in memory as point A where the repeat playback is to be started and the cursor is moved to **"B"**.

- The Repeat icon changes to **"A"** and the **"REPEAT"** and **"A –"** indicators in the display light up.
3. When point B where you want to stop repeat playback comes, press the **ENTER** button again. Repeat playback of the section between points A and B starts.
    - The Repeat icon changes to **"A B"** and the **"REPEAT"** and **"A – B"** indicators light in the display.
    - To cancel repeat playback, select **"Off"**.
    - A-B repeat playback may be unavailable during P.B.C. playback of a VCD or with certain discs, for example a DVD without the time display facility.
    - This operation is not available in the all random and program mode.
    - A-B Repeat playback can be used only within a same group. (DVD Audio)
    - A-B Repeat playback can be used only within a same title. (DVD Video)
    - This operation is not available with a MP3 disc.

### [During playback of DVD AUDIO]



**"Off"**: Repeat playback off.

**"Track"**: Repeat playback of the track being played.

**"Group"**: Repeat playback of the group being played.

**"Disc"**: Repeat playback of the disc being played.

- **"Disc"** is displayed only when **"SEQ.2"** indicator is lit.

**"All"**: Repeat playback of all discs in the tray.

**"A"**: A-B repeat playback.

### [During playback of DVD VIDEO]



**"Off"**: Repeat playback off.

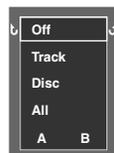
**"Chapter"**: Repeat playback of the chapter being played.

**"Title"**: Repeat playback of the title being played.

**"All"**: Repeat playback of all discs in the tray.

**"A"**: A-B repeat playback.

### [During playback of CD or VCD]



**"Off"**: Repeat playback off.

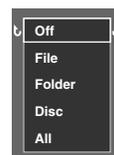
**"Track"**: Repeat playback of the track being played.

**"Disc"**: Repeat playback of the disc being played.

**"All"**: Repeat playback of all discs in the tray.

**"A"**: A-B repeat playback.

### [During playback of MP3 disc]



**"Off"**: Repeat playback off.

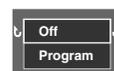
**"File"**: Repeat playback of the file being played.

**"Folder"**: Repeat playback of the folder being played.

**"Disc"**: Repeat playback of the disc being played.

**"All"**: Repeat playback of all discs in the tray.

### [In the program mode]



**"Off"**: Repeat playback off.

**"Program"**: Repeat playback of programmed contents.

### [In the random mode]

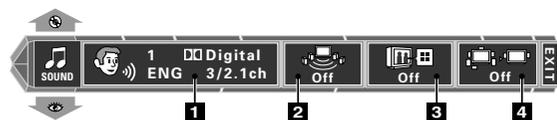


**"Off"**: Repeat playback Off.

**"Random"**: Repeat playback according to the current random play mode.

## "SOUND" OSD Operation

This section describes the items which can be controlled with the "SOUND" OSD. (Some items may be uncontrollable depending on the played disc and player status.)



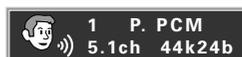
- 1 Audio icon:** Shows the audio signal, audio language and number of audio channels. Select to switch the audio language.
- 2 Virtual Surround icon:** Shows the level of the Virtual Surround effect. Select to adjust the level of Virtual Surround or switch it off.
- 3 Cinema voice icon:** Shows the on/off status of Cinema Voice. Select to switch Cinema Voice on or off. - (36)
- 4 Down Mix icon:** Shows the on/off status of Down mix. Select to switch Down mix on or off. - (36)

### Switching the audio language

When a VCD or a DVD containing the recording of audio in multiple languages is played, the language used in the voice can be switched over. (The audio language can also be switched directly by pressing the **AUDIO** button. - (28))

1. Press the **ON SCREEN** button during DVD playback and select the "SOUND" OSD by pressing the cursor up/down button.
2. Move the cursor to  (Audio icon) by pressing the cursor left/right button, then press the **ENTER** button.
3. Select the desired audio language number by pressing the cursor up/down button, then press the **ENTER** button.

- With a DVD AUDIO disc, an audio language number can be selected.



- With a DVD VIDEO disc, an audio language number can be selected from up to 8 numbers.
- With VCD, "STEREO", "L", "R" or "L+R" can be selected.
- The default audio language set by the user is selected when the power is turned on or the disc is changed. If the default language is not contained in the disc, the priority language defined for the disc will be played back.

### Virtual Surround function

When playing a DVD recorded with Dolby Digital Surround audio, powerful surround sound can be reproduced even if you use headphones or only two speakers with the amplifier or receiver connected to this unit.

1. Press the **ON SCREEN** button during DVD playback, and select the "SOUND" OSD by pressing the cursor up/down button.
2. Move the cursor to  (Virtual Surround icon) by pressing the cursor left/right button, then press the **ENTER** button.
  - The icon can be selected only when the played software is recorded in Dolby Digital audio (with 2 or more channels).
3. Select the level of Virtual Surround effect by pressing the cursor up/down button, then press the **ENTER** button.



The effect is increased when the selected level is higher. Select "Off" to switch the effect Off. To select the level of the Virtual Surround effect through headphones, select "HP 1" or "HP 2".

## Cinema Voice function

This function to be used when words are hard to be distinguished during playback of DVD recorded with Dolby Digital Surround, Dolby Digital, DTS, or DVD AUDIO LPCM.

To use this function, it is required that the disc being played provides the center channel audio.

- When the digital output terminal is used, the "**Digital Audio**" setting should be set to "**PCM**". → [48](#)
1. Press the **ON SCREEN** button during playback of DVD, then select the "**SOUND**" OSD by pressing the cursor up/down button.
  2. Move the cursor to  (Cinema Voice icon) by pressing the cursor left/right button, then press the **ENTER** button.
    - The icon can be selected only when the played software is recorded with Dolby Digital Surround, Dolby Digital, DTS, or DVD AUDIO LPCM. (with center channel).
  3. Select on or off by pressing the cursor up/down button, then press the **ENTER** button.

## Down Mix function

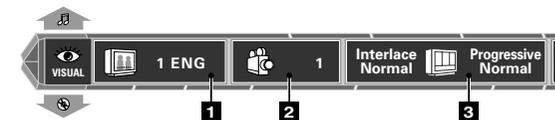
This function is available with a DVD containing the recording of multi-channel audio.

This function converts the multi-channel audio into 2-channel audio and outputs to **6CH. OUTPUT L/R** terminals.

1. Press the **ON SCREEN** button during playback of DVD, then select the "**SOUND**" OSD by pressing the cursor up, down button.
2. Move the cursor to  (Down mix icon) by pressing the cursor left/right button, then press the **ENTER** button.
3. Select on or off by pressing the cursor up/down button, then press the **ENTER** button.

## "VISUAL" OSD Operation

This section describes the items which can be controlled with the "**VISUAL**" OSD. (Some items may be uncontrollable depending on the played disc and player status.)



- 1 **Subtitle icon:** Shows the language used in subtitles. Select the subtitle language. → [37](#)  
 During playback of a DVD-AUDIO disc containing the recording of still pictures (ASV ; Audio Still Video), the Sub-title icon shows the still image display information (display timing, image display sequence, etc.).
- 2 **Angle icon:** Shows the angle number. Select to change the viewing angle. → [37](#)
- 3 **Picture quality icon:** Shows the current picture quality. Select to adjust the picture quality. → [37](#)

## Switching the subtitle language

When a DVD contains recording of subtitles in multiple languages, the desired subtitle language can be selected.

1. Press the **ON SCREEN** button during playback of DVD, and select the **"VISUAL"** OSD by pressing the cursor up/down button.

2. Move the cursor to  **1 ENG** (Subtitle icon) by pressing the cursor left/right button, then press the **ENTER** button.

3. Select the desired subtitle language number by pressing the cursor up/down button, then press the **ENTER** button.

- The desired subtitle language number can be selected from up to 32 numbers.
- No subtitle is displayed when **"Off"** is selected. When the desired language is not included in the options, the language is not recorded in the disc.
- The default subtitle language set by the user is selected when the power is turned on or the disc is changed. If the default language is not contained in the disc, the priority language defined for the disc will be played.

## ID3-TAG information

When an MP3 disc containing ID-3 tag information is played, the tag information can be viewed as follows.

1. Press the **ON SCREEN** button during playback of an MP3 disc containing tag information, then display the **"VISUAL"** OSD by pressing the cursor up/down.

2. Move the cursor to  **On** (TAG information icon) by pressing the cursor left/right button, then press the **ENTER** button.

3. Select on or off by pressing the cursor up/down button, then press the **ENTER** button.

- With an MP3 disc, the information recorded in the disc (file name, folder name, title name, artist name and album name) is shown on the TV screen.

```
Folder : ROOT
File   : 01_SIMME.MP3
Title  : Simmer Down (at Studio One)
Artist : The Wailing Wailers
Album  : C.S.C Dot in Trench Town
```

## Switching the viewing angle

When a DVD containing the recording of multiple viewing angles is played, the angles can be switched as desired.

1. Press the **ON SCREEN** button during playback, then display the **"VISUAL"** OSD by pressing the cursor up/down.

2. Move the cursor to  **1** (Angle icon) by pressing the cursor left/right button, then press the **ENTER** button.

3. Select the desired angle number by pressing the cursor up/down button, then press the **ENTER** button.

- With a DVD, a viewing angle number can be selected from up to 9 numbers.

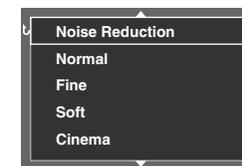
## Adjusting the Noise Reduction

1. Press the **ON SCREEN** button during playback, then display the **"VISUAL"** OSD by pressing the cursor up/down.

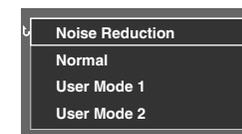
2. Move the cursor to  or  (Picture quality adjustment icon) by pressing the cursor left/right button, then press the **ENTER** button.

3. Select the **"Noise Reduction"** by pressing the cursor up/down button, then press the **ENTER** button.

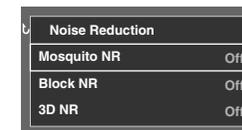
(When "Interlace" is set → )



(When "Progressive" is set → )



4. Select a setting item by pressing the cursor up/down button, then press the **ENTER** button.



**"Mosquito NR"**: Mosquito noise reduction.

**"Block NR"**: Block noise reduction.

**"3D NR"**: Total display noise reduction.

5. Select a value by pressing the cursor up/down button, then press the **ENTER** button.

- The picture quality varies according to the selected value. Set the desired picture quality by repeating steps 4 and 5.

## Adjusting the picture quality

Use the following procedure to adjust the picture quality. (If the desired picture quality cannot be obtained by the following operation, adjust it on the TV.)

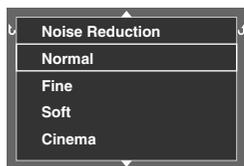
**COMPONENT VIDEO OUTPUT switch** : The setting items vary depending on the position of the **COMPONENT VIDEO OUTPUT** switch on the rear of the player. → 

### When "Interlace" is set

1. Press the **ON SCREEN** button during playback, then display the "**VISUAL**" OSD by pressing the cursor up/down button.

2. Move the cursor to  (Picture quality adjustment icon) by pressing the cursor left/right button, then press the **ENTER** button.

3. Select one of the following picture quality settings by pressing the cursor up/down button, then press the **ENTER** button.

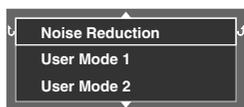


"**Normal**": Normal picture quality.

"**Fine**": Sharp picture quality with enhanced contours.

"**Soft**": Soft picture quality with less noise.

"**Cinema**": Picture quality close to the images on the movie theater screen.



When "**User Mode 1**" or "**User Mode 2**" is selected, more detailed setting is available. In this case, also perform the operation in step 4.

4. Select a setting item by pressing the cursor up/down button, then press the **ENTER** button.



"**Contrast**": Adjustment of the difference between the bright and dark parts of picture in the range between -7 and +7.

"**Color**" : Adjustment of the depth of colors in the range between -7 and +7.

"**Sharpness**": Adjustment of the degree of picture contour enhancement in the range between -2 and +2.

"**Brightness**": La luminosité de l'image peut être réglée entre 0 et +15.



The following setting items are provided on the next page.

"**GAMMA**": Le gamma du moniteur peut être réglé entre -7 et +7.

5. Select a value by pressing the cursor up/down button, then press the **ENTER** button.

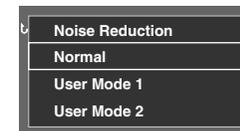
- The picture quality varies according to the selected value. Set the desired picture quality by repeating steps 4 and 5.

### When "Progressive" is set

1. Press the **ON SCREEN** button during playback, then display the "**VISUAL**" OSD by pressing the cursor up/down button.

2. Move the cursor to  (Picture quality adjustment icon) by pressing the cursor left/right button, then press the **ENTER** button.

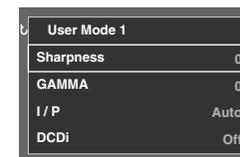
3. Select a setting item by pressing the cursor up/down button, then press the **ENTER** button.



"**Normal**": Normal picture quality.

When "**User Mode 1**" or "**User Mode 2**" is selected, more detailed setting is available. In this case, also perform the operation in step 4.

4. Select a setting item by pressing the cursor up/down button, then press the **ENTER** button.



"**Sharpness**": Adjustment of the degree of picture contour enhancement in the range between -2 and +2.

"**GAMMA**": Adjustment according to the gamma curve of the monitor, in the range between -7 and +7.

"**I/P**": If the disc is changed in the middle of programming, the playback may become different from the intended playback.

"**DCDi**": Minimizes jaggies on angled lines.

5. Select a value by pressing the cursor up/down button, then press the **ENTER** button.

- The picture quality varies according to the selected value. Set the desired picture quality by repeating steps 4 and 5.

# Chapter 5: Applied Operations

This chapter gives descriptions on the special playback operation.

This chapter is composed of the following sections.

**Switching the Play Modes** →  40

**Program Playback** →  40

**Disc Random Playback** →  41

**All Random Playback** →  41

**MP3 disc Operation** →  42

**Bonus Group** →  42

## Switching the Play Modes

The play modes of the player include the program mode, disc random mode and all random mode in addition to the track mode for normal playback.

Select the desired play mode and enjoy disc playback in many ways.

**Program mode :** Desired tracks in a desired disc can be programmed in the desired order.

**Random mode :** Tracks can be played in a random order.

**Disc random mode :** Tracks in a desired disc can be played in a random order. → 41

**All random mode :** Tracks in all discs in the stoker can be played in a random order. → 41

- This function may be unavailable with certain discs.
- Some operations may be restricted depending on the played disc or player status.
- When the played disc is a P.B.C.-compatible VCD, its P.B.C. is on and you want to switch the play mode, stop the player, press the **TOP MENU/PBC** button to switch it off. → 25

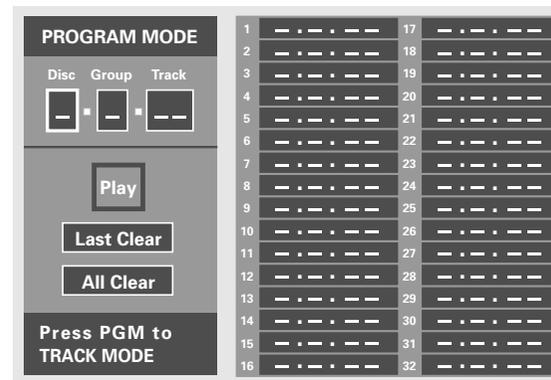
## Program Playback

Desired tracks in a desired disc can be programmed in the desired order. (Program playback is not available with DVD VIDEO, MP3 disc.)

### Registering and playing the program

Insert all of the discs to be used in programming in the tray, close it and press the **DISC 1 to 5** buttons so that the player reads the disc information by playing each disc until display "**READING**" disappears. (If the tray is opened after this, the above procedure should be repeated so that the player reads all disc information again.)

1. In stop mode, press the **PGM** button.



- When the player enters the program mode, the screen as shown in the figure appears and the "**PROG.**" indicator in the display lights to indicate that the player is in the program mode.
- Newly programmed tracks are appended to the end of the existing program.

2. Select a disc by pressing one of the **DISC 1 to 5** button.
  - If you commit a mistake in the numeric button input, press the **CLEAR** button and restart the input from the beginning.
  - It is also possible to enter the disc number alone without selecting a group and/or track number in the program list. In this case, all of the tracks in the disc will be played back.
3. With a DVD AUDIO, select a group by pressing one of **0 to 9** buttons on the remote.
  - It is also possible to enter the disc number and group number in the program list without selecting a track number. In this case, all of the tracks in the group will be played back.
4. Select a track number with **0 to 9** and **+10** button.
5. Press the **ENTER** button to enter the track in the program list.
  - Up to 32 tracks can be programmed by repeating steps **2 to 5** for each.
6. Select **Play** in the screen using the cursor up/down button, then press the **ENTER** button to start program playback.
  - When the **◀◀** or **▶▶** button is pressed during playback, the track will be skipped in the direction of the pressed button.

- If the disc is changed in the middle of programming, the playback may become different from the intended playback. In this case, the programming should be restarted from the beginning.

## Clearing the program

1. Perform operations in step **1** of the procedure in "**Registering and playing the program**". → 
2. Move the cursor to **Last Clear** or **All Clear** in the screen, then press the **ENTER** button.
  - Every time "**Last Clear**" is selected, the last track in the program list is cleared. (The program can also be cleared by pressing the **CLEAR** button.)
  - When "**All Clear**" is selected, all tracks in the entire program list are cleared.

## Stopping program playback

Perform operations in step **1** of the procedure in "**Registering and playing the program**", then press the **PGM** button repeatedly until the player enters normal play mode (track mode). → 

- The "**PROG.**" indicator turns off.

## Disc Random Playback

Tracks in a desired disc can be played back in a random order. (Disc random playback is not available with DVD VIDEO.)

1. While the player is in stop mode, press the **RANDOM** button repeatedly until the player enters the disc random mode.



- When the player enters the disc random mode, the screen as shown in the figure appears and the "**RANDOM**" indicator in the display lights to indicate that the player is in the disc random mode.
2. Select the disc by pressing the cursor left/right button, then press the **ENTER** button to start disc random playback.
    - Disc random playback can also be started by pressing the **▶** button.

## Stopping disc random playback

Perform step **1** of the procedure in "**Disc Random Playback**", then press the **RANDOM** button repeatedly until the player enters normal play mode (track mode).

- The "**RANDOM**" indicator turns off.

## All Random Playback

Tracks in all discs in the tray can be played in a random order. (All random playback is not available with DVD VIDEO.)

1. While the player is in stop mode, press the **RANDOM** button repeatedly until the player enters the all random mode.



- When the player enters the all random mode, the screen as shown in the figure appears and the "**ALL RANDOM**" indicator in the display lights to indicate that the player is in the all random mode.
2. Press the **ENTER** button to start all random playback.
    - All random playback can also be started by pressing the **▶** button. (When a DVD VIDEO disc is encountered in the tray, the disc is skipped and the display shows "**SKIP DVD-V**".)

## Stopping all random playback

Perform step **1** of the procedure in "**All Random Playback**", then press the **RANDOM** button repeatedly until the player enters normal play mode (track mode).

- The "**ALL RANDOM**" indicator turns off.

## MP3 disc Operation

When playing an MP3 disc, files or folders containing files can be searched by displaying their names on the TV screen and display panel.

1. Press the **TOP MENU/PBC** button.
  - The maximum number of folders or files that can be searched is 999. Folders or files exceeding this number cannot be searched.
  - If file search is required, press the **MENU** button instead.
2. Select the desired folder or file by pressing the cursor up/down button, then press the **ENTER** button.
  - In folder search, playback begins with the file with the minimum file number in the searched folder.
  - In file search, playback begins with the searched file.

## Bonus Group

In addition to ordinary groups, some DVD AUDIO discs provide information hidden in a special group as a user service. When this group is selected, the password input screen appears on the TV screen to inform the user of the presence of the bonus group in the disc. The bonus group can be played by inputting the password. (For the registration of password, consult the software producer.)



Input the password using the **0** to **9** button, then press the **ENTER** button to start playback of the bonus group.

## Chapter 6 : Various Setups

This chapter describes the setup operations of the player according to the connected components. Most of the operations described below can be performed using the provided remote control unit.

This chapter is composed of the following sections.

**Basic Operations in Setup Screen** →  44

**"MAIN" Setting** →  45

**"SOUND" Setting** →  48

**"VISUAL" Setting** →  54

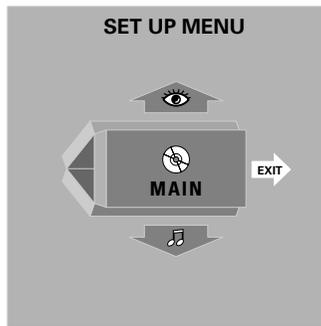
## Basic Operations in Setup Screen

The "**SET UP MENU**" includes the "**MAIN**", "**SOUND**" and "**VISUAL**" menus. When a setup screen is displayed, select the desired item according to the purpose.

If the power is turned off while the setup screen remains displayed after setting changes, the changes will be invalid. Be sure to close the setup screen before turning power off.

### Operation procedure

1. Press the **SET UP** button to open the "**SET UP MENU**" in which "**MAIN**" is displayed.



Press the cursor up/down button to switch the displayed menu name to "**SOUND**" or "**VISUAL**".

- When you press the **RETURN** button or press the cursor button in the direction of arrow "**EXIT**" while the "**SET UP MENU**" screen is displayed, the setup mode can be canceled.

2. Press the **ENTER** button to open the setup screen.
  - While a setup screen is displayed, pressing the cursor button toward "**EXIT**" allows the setup mode to be canceled and pressing it toward "**MENU**" returns to the "**SET UP MENU**".
3. Select the desired item by pressing the cursor button in the required direction, then press the **ENTER** button to open the setup change screen.
4. Select a setting by pressing the cursor button in the required direction and press the **ENTER** button to enter the change in memory.
  - Press the **RETURN** button or press the cursor left button to return to the setup screen.

For actual setup operations, see page 45 and after.

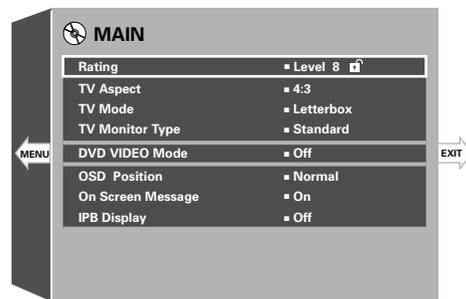
## "MAIN" Setting

### When "MAIN" is selected in "SET UP MENU":

The setups according to the connected TV, viewing restriction, DVD VIDEO mode, OSD position, on-screen messages and IPB display can be set.

#### Operation procedure

1. While the player is in stop mode, press the **SET UP** button to display the "MAIN" menu of "SET UP MENU".
2. Press the **ENTER** button to open the setup screen.



3. In the setup menu, select the Function Item (refer to Right Table) by pressing the cursor up/down button and press the **ENTER** button.
4. Select the Setting Item (refer to Right Table) by pressing the cursor up/down button, then press the **ENTER** button to enter the selection in memory.

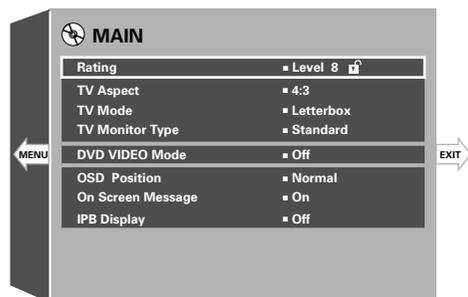
● "↶" : Select to return to the previous screen.

Table : SET UP MENU "MAIN" Function & Setting (1/2)

Function Item		Setting Item		Initial Position
Icon	Function	Icon	Means	
<b>Rating</b>	Sets the viewing restriction of DVD VIDEO. (This functions only with DVD VIDEO discs compatible with viewing restriction.)	<b>0 to 8</b> <b>Change password</b> <b>Temporary Unlocked</b>		8
<b>TV Aspect</b>	Sets the picture aspect ratio according to that of the connected TV.	<b>4 : 3</b>		4 : 3
		<b>16 : 9</b>		
<b>TV Mode</b>	Setting is required when Wide screen software is played with the conventional TV (aspect ratio 4:3).	<b>Pan &amp; Scan</b>	Wide screen Video software is played in Pan & Scan style (The picture is shown with either one or both sides cut off). Widescreen Video software w/o Pan & Scan specification will be played in Letterbox style.	<b>Letterbox</b>
		<b>Letterbox</b>	Wide screen Video software is played in Letterbox style (black bands appear at the top and bottom of the screen).	
<b>TV Monitor Type</b>	Set this item according to the format of the connected TV or video monitor.	<b>Standard</b>	Select when connecting a CRT-based TV. Usually select this item.	<b>Standard</b>
		<b>CRT Projector</b>	Select when connecting a 3-tube front projector.	
		<b>LCD Projector</b>	Select when connecting a LCD front projector.	
		<b>Projection TV</b>	Select when connecting a projection TV.	
		<b>PDP</b>	Select when connecting a plasma display panel.	

**Operation procedure**

1. While the player is in stop mode, press the **SET UP** button to display the "MAIN" menu of "SET UP MENU".
2. Press the **ENTER** button to open the setup screen.



3. In the setup menu, select the Function Item (refer to Right Table) by pressing the cursor up/down button and press the **ENTER** button.
4. Select the Setting Item (refer to Right Table) by pressing the cursor up/down button, then press the **ENTER** button to enter the selection in memory.

● "↶" : Select to return to the previous screen.

Table : SET UP MENU "MAIN" Function &amp; Setting (2/2)

Function Item		Setting Item		Initial Position
Icon	Function	Icon	Means	
<b>DVD VIDEO Mode</b>	Sets the play mode of DVD discs.	<b>On</b>	Select to play only the DVD VIDEO part in a DVD VIDEO/DVD AUDIO mixed disc.	<b>Off *</b>
		<b>Off</b>	Select to play only the DVD AUDIO part in a DVD VIDEO/DVD AUDIO mixed disc.	
<b>OSD Position</b>	Sets the position of the OSD (On-Screen Display).	<b>Normal</b>	Select to display the OSD and messages on the top of the TV screen. Usually select this setting.	<b>Normal</b>
		<b>Cinema</b>	Select to display the OSD and messages on the lower part of the TV screen. Select this setting when the OSD or messages are deviated outside the TV screen.	
<b>On Screen Message</b>	Switches the on-screen message on/off.	<b>On</b>	Select to display on-screen messages.	<b>On</b>
		<b>Off</b>	Select to not to display on-screen messages.	
<b>IPB Display</b>	Switches the IPB display on/off.	<b>On</b>	Select to view the IPB display.	<b>Off</b>
		<b>Off</b>	Select to not to view the IPB display.	

\* This setting is reset to default "Off" when the disc is changed or the power is set to off or standby.

## "Rating" Setting

This setting makes it possible to inhibit the playback of adult DVD videodiscs that you do not want the children to view. However, there are some discs which carries an X-rating indication on the jacket but do not contain recording of the viewing restriction label. With such discs, the viewing restriction of the player is invalid and playback cannot be inhibited.

The default setting is "**Level 8**" which means no restriction. When you change the restriction level for the first time, you will also be requested to register a password.

### Setting items

**"8 No Limit"** : Select to enable playback of any DVD discs whether their targets are adults, general public or children.

**"7" to "1"**: When DVD software containing the recording of restriction level (an adult-oriented disc or a disc including violence), playback is restricted in accordance with the restriction level.

**"0 Lock All"**: Select to inhibit any DVD. Use this setting for example when you want to inhibit playback of an adult-oriented DVD which does not contain the restriction information.

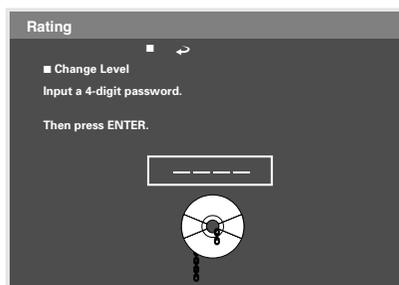
**"Change Password"**: Select to change the viewing restriction password which has been registered before. (This item cannot be selected unless a password has already been registered.)

**"Temporary Unlocked"**: Select to disable temporarily the viewing restriction which has been set previously. (This item cannot be selected unless a password has been set previously.)

## Input of Password

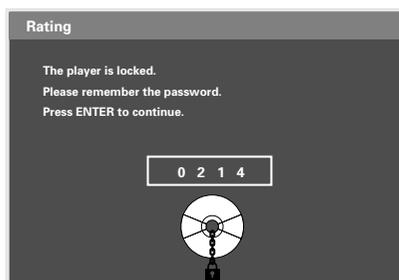
### When no password has been set previously:

- ① The password input screen as shown below appears. Now compose the password using the numeric buttons and press the **ENTER** button on the remote.



- When "**↵**" in the screen is selected and the **ENTER** button is pressed, the display returns to the setting screen. (This effect can also be achieved by pressing the **RETURN** button.)

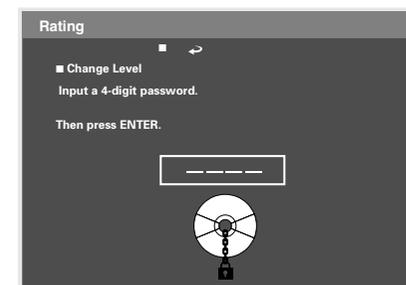
- ② The password input screen changes to the confirmation screen, and the input password is shown on the TV screen.



- ③ Note the password in a memo and retain it in a safe place before pressing the **ENTER** button. The password is required when setting the viewing restriction.

### When a password has already been set:

The password input screen as shown below appears. Now input the password using the numeric buttons and press the **ENTER** button on the remote.



- When "**↵**" in the screen is selected and the **ENTER** button is pressed, the display returns to the setting screen. (This effect can also be achieved by pressing the **RETURN** button.)

If you select "**Change Password**", the screen for input of the new password will open. Input the new password using the numeric buttons and press the **ENTER** button. When the password confirmation screen appears, note the password in a memo and retain it in a safe place then pressing the **ENTER** button.

## "SOUND" Setting

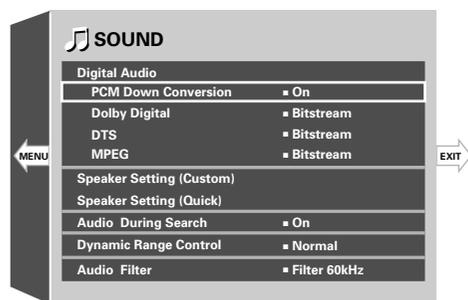
### When "SOUND" is selected in "SET UP MENU":

"SOUND" is to be selected when you want to set the audio output method when system components are connected using the digital audio output connector of the player.

When the system is connected using the **6CH. OUTPUT** jacks of the player, also select "SOUND" to set the speakers, audio output during DVD or VCD search, dynamic range control function and audio filters.

#### Operation procedure

1. While the player is in stop mode, press the **SET UP** button and press the cursor up/down button to display the "SOUND" menu of "SET UP MENU".
2. Press the **ENTER** button to open the setup screen.



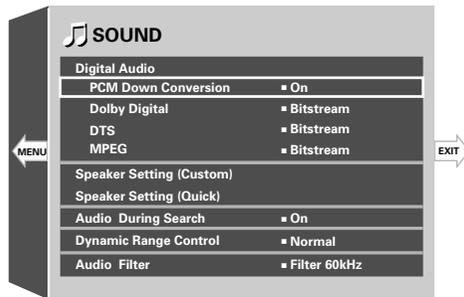
3. In the setup menu, select the Function Item (refer to Right Table) by pressing the cursor up/down button and press the **ENTER** button.
4. Select the Setting Item (refer to Right Table) by pressing the cursor up/down button, then press the **ENTER** button to enter the selection in memory.
  - "↩" : Select to return to the previous screen.

Table : SET UP MENU "SOUND" Function & Setting (1/2)

Function Item		Setting Item		Initial Position
Icon	Function	Icon	Means	
<b>Digital Audio "PCM Down Conversion"</b>	Switches on/off the down-sampling conversion for the digital signal output with a high sampling rate.  ● With DVD AUDIO discs, the signal is always output after down sampling conversion.	<b>On</b>	Down-convert the signal to 44.1 kHz/48 kHz/16-bit PCM signal. The analog output signals are converted accordingly.	<b>On</b>
		<b>Off</b>	Skip down conversion.  ● If the disc inhibits the 96 kHz digital output, the signal is down-converted even when this setting is selected.	
<b>Digital Audio "Dolby Digital"</b>	Sets the Dolby Digital output.	<b>Bitstream</b>	Bitstream signal.	<b>Bitstream</b>
		<b>PCM</b>	48 kHz (2CH.) PCM signal.	
<b>Digital Audio "DTS"</b>	Sets the DTS output.	<b>Bitstream</b>	Bitstream signal.	<b>Bitstream</b>
		<b>PCM</b>	48 kHz (2CH.) PCM signal.	
<b>Digital Audio "MPEG"</b>	Sets the MPEG output.	<b>Bitstream</b>	Bitstream signal.	<b>Bitstream</b>
		<b>PCM</b>	48 kHz (2CH.) PCM signal.	
<b>Speaker Setting (Custom)</b>				
<b>Speaker Setting (Quick)</b>				

**Operation procedure**

1. While the player is in stop mode, press the **SET UP** button and press the cursor up/down button to display the "**SOUND**" menu of "**SET UP MENU**".
2. Press the **ENTER** button to open the setup screen.



3. In the setup menu, select the Function Item (refer to Right Table) by pressing the cursor up/down button and press the **ENTER** button.
4. Select the Setting Item (refer to Right Table) by pressing the cursor up/down button, then press the **ENTER** button to enter the selection in memory.
  - "**↶**" : Select to return to the previous screen.

Table : SET UP MENU "**SOUND**" Function & Setting (2/2)

Function Item		Setting Item		Initial Position
Icon	Function	Icon	Means	
<b>Audio During Search</b>	Switches on/off the audio during search.  ● Audio is output only in the first speed step of fast forward.	<b>On</b>		<b>On</b>
		<b>Off</b>		
<b>Dynamic Range Control</b>	Switches the dynamic range control function.  This function compress the difference between max. and min. volume, and makes it easier to listen dialogue at low volume.  This function only works with Dolby Digital DVD.	<b>Wide</b>	This function is OFF. Set plays the audio at the level recorded in the disc.	<b>Normal</b>
		<b>Normal</b>	This function works with Low compression ratio.	
		<b>Midnight</b>	This function works with High compression ratio.	
<b>Audio Filter</b>	Sets the audio filters for protecting the connected speakers.	<b>Filter 60 kHz</b>	Select when the speakers in use are not suitable for reproduction of high frequencies.	<b>Filter 60 kHz</b>
		<b>Filter 110 kHz</b>	Select when the speakers in use are suitable for reproduction of high frequencies.	

## "Speaker Setting"

This unit has two kinds of speaker setting methods.

### "Speaker Setting (Custom)"

This is the normal setting operation.

### "Speaker Setting (Quick)" → 52

This is the simplified setting operation.

### "Speaker Setting (Custom)"

At the factory, the player has been set to the standard setting with which the speakers can reproduce the 6-channel signals as soon as the connections are made. This setting can be changed according to each listening environment. When you want to change this setting, be sure to perform it in the listening area in your own listening environment.

#### Operation procedure

1. While the player is in stop mode, press the **SET UP** button and press the cursor up/down button to display the "**SOUND**" menu of "**SET UP MENU**".
2. Press the **ENTER** button to open the setup screen.
3. Press the cursor up/down button to select "**Speaker Setting (Custom)**" in set up menu "**SOUND**", then press the **ENTER** button.

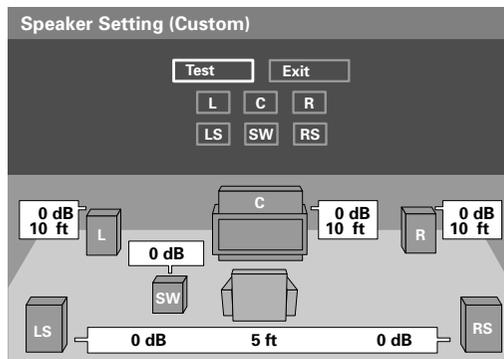


Table : "Speaker Setting (Custom)" Function & Setting (1/2)

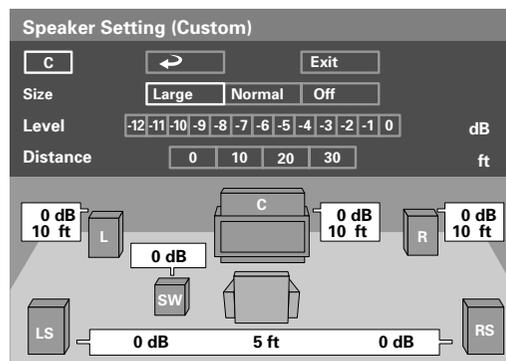
Speaker Item		Function Item		Setting Item		Initial Position
Icon	Speaker	Icon	Function	Icon	Means	
L, R	Front speaker	Size	Low cut filter	Normal	Select " <b>Normal</b> " when the connected speaker is incapable of reproducing audio below 100 Hz.	Large
				Large	Select " <b>Large</b> " when the connected speaker can reproduce audio below 100 Hz.	
		Level	Set the volume level	0 to -12 dB	—	0 dB
		Distance	→ 53	0/10/20/30	—	10 ft
C	Center speaker	Size	Center channel output ON/OFF Low cut filter	Off	Select " <b>Off</b> " if the center speaker is not used.	Large
				Normal	Select " <b>Normal</b> " when the connected speaker is incapable of reproducing audio below 100 Hz.	
				Large	Select " <b>Large</b> " when the connected speaker can reproduce audio below 100 Hz.	
		Level	Set the volume level	0 to -12 dB	—	0 dB
Distance	→ 53	0/10/20/30	—	10 ft		
LS, RS	Surround speaker	Size	Surround channel output ON/OFF Low cut filter	Off	Select " <b>Off</b> " if the surround speaker is not used.	Large
				Normal	Select " <b>Normal</b> " when the connected speaker is incapable of reproducing audio below 100 Hz.	
				Large	Select " <b>Large</b> " when the connected speaker can reproduce audio below 100 Hz.	
		Level	Set the volume level	0 to -12 dB	—	0 dB
Distance	→ 53	0/10/20/30	—	5 ft		

4. Select the Speaker item (refer to the table on the right) and press the **ENTER** button.

Select the Function item (refer to the table on the right) and press the **ENTER** button.

Select the Setting item (refer to the table on the right) and press the **ENTER** button.

- When setting the distance of each speaker, place the cursor on the nearest integral value among "0" to "10", then press the **ENTER** button and adjust the distance using the cursor up/down button. After setting the distance, press the **ENTER** button again.



Press the cursor button to select "**Exit**", then press the **ENTER** button.

5. Repeat step 4 as required.
6. Press the cursor button to select "**Exit**", then press the **ENTER** button.

Table : "**Speaker Setting (Custom)**" Function & Setting (2/2)

Speaker Item		Setting Item		Initial Position		
Icon	Speaker	Icon	Function	Icon	Means	Initial Position
SW	Subwoofer	Size	Subwoofer channel output ON/OFF	Off	Select "Off" if the subwoofer is not used.	On
				On	—	
		Level	Set the volume level	0 to -12 dB	—	0 dB

- For the "**Speaker Setting**" when an AV amplifier is connected digitally to the player, refer to the instruction manual of the AV amplifier.
- Note on the Speaker Level adjustment.  
When a set of speaker(s) is installed, it is recommended to adjust the level using the Test Tone. → 
- "↶" : Select to return to the previous screen.

**Speaker level setting using Test Tone :****Operation procedure**

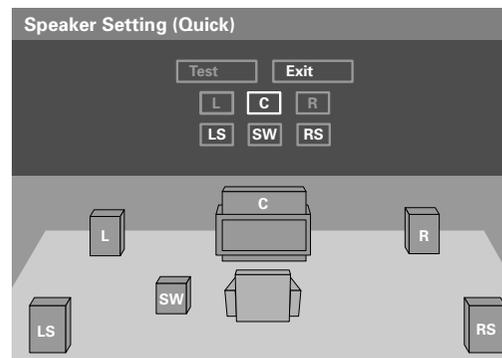
1. Perform steps 1 and 3 of "Speaker Setting (Custom)". →  50
2. Press the cursor button to select "**Test**" then press the **ENTER** button.
  - The Test Tone will be output from each speaker for a specified period of time, in the sequence beginning with the L CH speaker and ending with the Surround L CH speaker.
  - The speaker from which the Test Tone is being output is indicated by the cursor on the screen.
3. When the cursor moves to the speaker to be set, press the **ENTER** button.
4. Press the cursor left/right button to select the level to be set, and press the **ENTER** button.
  - Adjust so that the volume from all speakers is identical.
5. Press the cursor button to select "**Exit**", then press the **ENTER** button.

**"Speaker Setting (Quick)"**

- For the "**Speaker Setting**" when an AV amplifier is connected digitally to the player, refer to the instruction manual of the AV amplifier.
- Three kinds of speakers can be set, including the "**C**" (Center Speaker), "**LS/RS**" (Surround Speakers) and "**SW**" (SubWoofer).

**Operation procedure**

1. While the player is in stop mode, press the **SET UP** button and press the cursor up/down button to display the "**SOUND**" menu of "**SET UP MENU**".
2. Press the **ENTER** button to open the setup screen.
3. Press the cursor up/down button to select "**Speaker Setting (Quick)**" in set up menu "**SOUND**", then press the **ENTER** button.



4. Place the cursor on the speaker name you want to set to "Use" or "Do not use", then press the **ENTER** button.
  - Each press of the **ENTER** button turns on and off the corresponding speaker icon in the graphic room at the lower half of screen alternately. When the selected kind of speaker is to be used, the corresponding speaker icon should be displayed.
5. To set the use of other kinds of speakers, repeat step 4 for each of them.
6. After completing the setting, place the cursor on "**Exit**" and press the **ENTER** button.

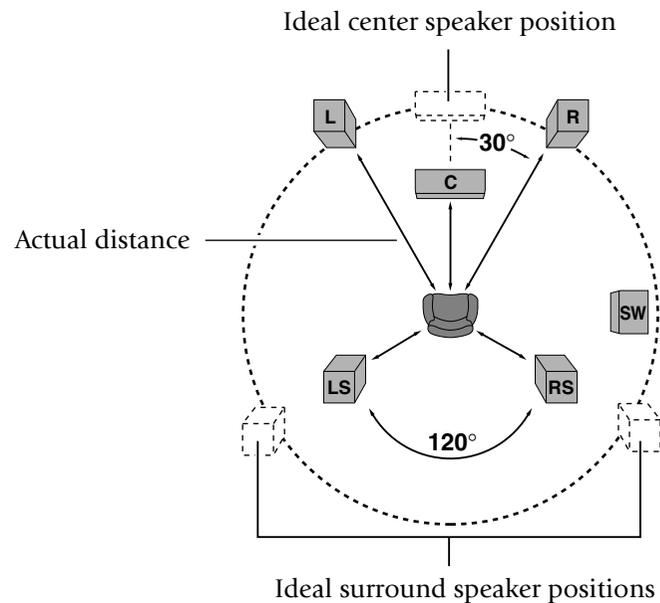
## Distance Setting

With Dolby Digital DVD playback, the distances between the listening position and all of the center/surround speakers should ideally be identical.

When the distances between the listening position and speakers are set, this unit adjusts the delay time of the speakers automatically. This setting is applied only when this unit outputs analog 6-channel signals. (The delay time adjustment is available only with Dolby Digital.)

- The delay time delays the sound output from each speaker to compensate for the difference in distances of the speakers so that the sounds of all speakers reach the listening position at the same timing.

Before setting the speakers, be sure to check their distances in advance.



## "VISUAL" Setting

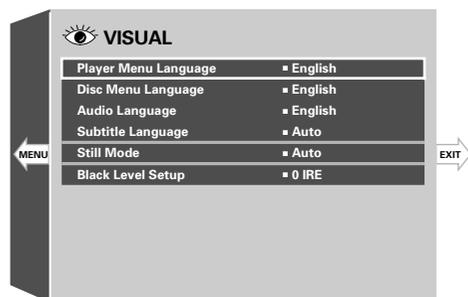
### When "VISUAL" is selected in "SET UP MENU":

Select "**VISUAL**" when you want to change the language used to display the menu screens, language use in menus on the disc, audio language, subtitle language, etc.

Also select "**VISUAL**" to set the still mode or the Black Level mode.

#### Operation procedure

1. While the player is in stop mode, press the **SET UP** button and press the cursor up, down button to display the "**VISUAL**" menu of "**SET UP MENU**".
2. Press the **ENTER** button to open the setup screen.



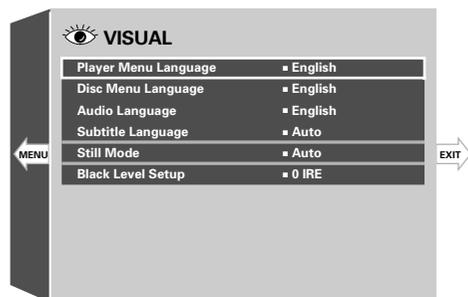
3. In the setup menu, select the Function Item (refer to Right Table) by pressing the cursor up/down button and press the **ENTER** button.
4. Select the Setting Item (refer to Right Table) by pressing the cursor up/down button, then press the **ENTER** button to enter the selection in memory.
  - "↶" : Select to return to the previous screen.

Table : SET UP MENU "**VISUAL**" Function & Setting (1/3)

Function Item		Setting Item		Initial position
Icon	Function	Icon	Means	
<b>Player Menu Language</b>	Sets the language used to display the menu screens of the player.	<b>English</b>	English.	<b>English</b>
		<b>French</b>	French.	
		<b>Spanish</b>	Spanish.	
		<b>German</b>	German.	
		<b>Italian</b>	Italian.	
		<b>Japanese</b>	Japanese.	
		<b>Chinese</b>	Chinese	
<b>Disc Menu Language</b>	Sets the language used to display the menu screens of the disc.	<b>English</b>	English.	<b>English</b>
		<b>French</b>	French.	
		<b>Spanish</b>	Spanish.	
		<b>Other</b>	Select to specify the language using a code No. listed in the " <b>Disc Language Code Table</b> ". → 57	
<b>Audio Language</b>	Sets the language of the disc audio.	<b>Original</b>	Select to reproduce audio in the language specified as the priority language by the disc.	<b>English</b>
		<b>English</b>	English.	
		<b>French</b>	French.	
		<b>Spanish</b>	Spanish.	
		<b>Other</b>	Select to specify the language using a code No. listed in the " <b>Disc Language Code Table</b> ". → 57	

**Operation procedure**

1. While the player is in stop mode, press the **SET UP** button and press the cursor up/down button to display the "**VISUAL**" menu of "**SET UP MENU**".
2. Press the **ENTER** button to open the setup screen.



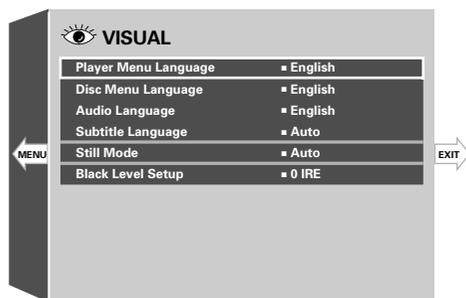
3. In the setup menu, select the Function Item (refer to Right Table) by pressing the cursor up/down button and press the **ENTER** button.
4. Select the Setting Item (refer to Right Table) by pressing the cursor up/down button, then press the **ENTER** button to enter the selection in memory.
  - "↔" : Select to return to the previous screen.

Table : SET UP MENU "**VISUAL**" Function & Setting (2/3)

Function Item		Setting Item		Initial Position
Icon	Function	Icon	Means	
<b>Subtitle Language</b>	Sets the language of the disc subtitles.	<b>Auto</b>	The subtitle language is selected automatically according to the " <b>Audio language</b> " setting.	<b>Auto</b>
		<b>English</b>	English.	
		<b>French</b>	French.	
		<b>Spanish</b>	Spanish.	
		<b>Other</b>	Select to specify the language using a code No. listed in the " <b>Disc Language Code Table</b> ". →  57	
<b>Still Mode</b>	Reduces blur in still images.	<b>Auto</b>	Frame still and field still pictures are switched automatically. Usually select this setting.	<b>Auto</b>
		<b>Frame</b>	Frame still picture. Select this position when small text or patterns cannot be seen clearly at " <b>Auto</b> " position.	
		<b>Field</b>	Field still picture. Select this position when jittering occurs in the still picture at " <b>Auto</b> " position.	

**Operation procedure**

1. While the player is in stop mode, press the **SET UP** button and press the cursor up/down button to display the "**VISUAL**" menu of "**SET UP MENU**".
2. Press the **ENTER** button to open the setup screen.



3. In the setup menu, select the Function Item (refer to Right Table) by pressing the cursor up/down button and press the **ENTER** button.
4. Select the Setting Item (refer to Right Table) by pressing the cursor up/down button, then press the **ENTER** button to enter the selection in memory.
  - "↶" : Select to return to the previous screen.

Table : SET UP MENU "**VISUAL**" Function & Setting (3/3)

Function Item		Setting Item		Initial Position
Icon	Function	Icon	Means	
<b>Black Level Setup</b>	This function makes the adjustment of the black level. Set to your preference and monitor's ability.	<b>7.5 IRE</b>	Standard black level.	<b>0 IRE</b>
		<b>0 IRE</b>	Expanded black level.	

## Disc Language Code Table

Code No. : Language
6565 : Afar
6566 : Abkhazian
6570 : Afrikaans
6577 : Amharic
6582 : Arabic
6583 : Assamese
6588 : Aymara
6590 : Azerbaijani
6665 : Bashkir
6669 : Byelorussian
6671 : Bulgarian
6672 : Bihari
6678 : Bengali; Bangla
6679 : Tibetan
6682 : Breton
6765 : Catalan
6779 : Corsican
6783 : Czech
6789 : Welsh
6865 : Danish
6869 : German
6890 : Bhutani
6976 : Greek
6978 : English
6979 : Esperanto
6983 : Spanish
6984 : Estonian
6985 : Basque
7065 : Persian
7073 : Finnish
7074 : Fiji
7079 : Faroese
7082 : French

Code No. : Language
7089 : Frisian
7165 : Irish
7168 : Scots Gaelic
7176 : Galician
7178 : Guarani
7185 : Gujarati
7265 : Hausa
7273 : Hindi
7282 : Croatian
7285 : Hungarian
7289 : Armenian
7365 : Interlingua
7378 : Indonesian
7383 : Icelandic
7384 : Italian
7387 : Hebrew
7465 : Japanese
7473 : Yiddish
7487 : Javanese
7565 : Georgian
7575 : Kazakh
7576 : Greenlandic
7577 : Cambodian
7578 : Kannada
7579 : Korean
7583 : Kashmiri
7585 : Kurdish
7589 : Kirghiz
7665 : Latin
7678 : Lingala
7679 : Laothian
7684 : Lithuanian
7686 : Latvian; Lettish

Code No. : Language
7771 : Malagasy
7773 : Maori
7775 : Macedonian
7776 : Malayalam
7778 : Mongolian
7779 : Moldavian
7782 : Marathi
7783 : Malay
7784 : Maltese
7789 : Burmese
7865 : Nauru
7869 : Nepali
7876 : Dutch
7879 : Nowegian
7982 : Oriya
8065 : Punjabi
8076 : Polish
8083 : Pashto; Pushto
8084 : Portuguese
8185 : Quechua
8277 : Rhaeto-Romance
8279 : Romanian
8285 : Russian
8365 : Sanskrit
8368 : Sindhi
8372 : Serbo-Croatian
8373 : Singhalese
8375 : Slovak
8376 : Slovenian
8377 : Samoan
8378 : Shona
8379 : Somali
8381 : Albanian

Code No. : Language
8382 : Serbian
8385 : Sundanese
8386 : Swedish
8387 : Swahili
8465 : Tamil
8469 : Telugu
8471 : Tajik
8472 : Thai
8473 : Tigrinya
8475 : Turkmen
8476 : Tagalog
8479 : Tonga
8482 : Turkish
8484 : Tatar
8487 : Twi
8575 : Ukrainian
8582 : Urdu
8590 : Uzbek
8673 : Vietnamese
8679 : Volapük
8779 : Wolof
8872 : Xhosa
8979 : Yoruda
9072 : Chinese
9085 : Zulu

## Chapter 7: Other Information

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## To Be Noted

### Maintenance of the unit

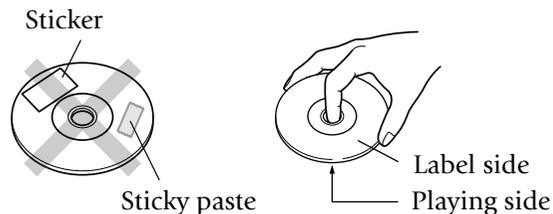
When the front panel or case becomes dirty, wipe with a soft, dry cloth. Do not use thinner, benzine, alcohol, etc. for these agents may cause discoloration.

### In regard to contact cleaner

Do not use contact cleaners because it could cause a malfunction. Be specially careful not to use contact cleaners containing oil, for they may deform the plastic component.

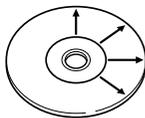
### Disc handling precautions

**Handling :** Hold the disc so that you do not touch the playing surface.



Do not attach paper or tape to either the playing side or the label side of the disc.

**Cleaning :** If there are fingerprint marks or foreign matter found on the disc, lightly wipe the disc with a soft cotton cloth (or similar) from the center of the disc outwards in a radial manner.



**Storage :** When a disc is not to be played for a long period of time, remove it from the player and store it in its case.

### Never play a cracked or warped disc

During playback, the disc rotates at high speed in the player. Therefore, to avoid danger, never use a cracked or deformed disc or a disc repaired with tape or adhesive agent. Please do not use discs which are not round because they may cause malfunction.

### Disc accessories

The disc accessories (stabilizer, protection sheet, protection ring, etc.) which are marketed for improving the sound quality or protecting discs as well as the disc cleaner should not be used with this system because they may cause malfunction.

### Malfunction of Microcomputer

In case the microcomputer malfunctions, making operations impossible or showing wrong messages on the display even if you connected everything properly. When the microcomputer malfunctions, perform the following procedure to reset the microcomputer and return it to the normal condition.

1. Turn the player power off.
2. While holding the ■ button on the player main unit, press the **POWER ON/OFF** button.
3. The display on the main unit shows "**INITIALIZE**" (initializing), then shows "**INIT OK**" (Initialization OK) to indicate that the microcomputer is reset.
4. Press the **POWER ON/OFF** button on the main unit to turn it off, then press it again to turn it on.
  - The resetting clears the setups stored in the microcomputer and returns it to the factory-set initial condition. After resetting, you should perform the various setups of the player again from the beginning.

### Transport or moving precautions

When transporting or moving the player, first remove the disc and observe the following procedure.

1. Turn the player power on.
2. If any disc is left in the player, eject all of the discs left in it.
3. Wait for a few seconds, until the display shows "**NO DISC**".
4. Turn the player power off by pressing the **POWER ON/OFF** button.

### Caution on condensation

Condensation (of dew) may occur inside the unit when there is a great difference in temperature between this unit and the outside.

This unit may not function properly if condensation occurs. In this case, leave the unit for a few hours and restart the operation after the condensation has dried up.

Be specially cautious against condensation in the following circumstances:

When this unit is carried from one place to another across a large difference in temperature, when the humidity in the room where this unit is installed increases, etc.

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

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

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 progressive scan picture problems, it is recommended that the user switch the connection to the "STANDARD DEFINITION" output. If there are questions regarding our TV set compatibility with this model 525p DVD player, please contact our customer service center.



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**SURROUND** "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.

### CAUTION (For the U.S.A.)

**Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

**In compliance with Federal Regulations, the following are reproductions of labels on, or inside the product relating to laser product safety.**

**KENWOOD CORPORATION  
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**KENWOOD CORP. CERTIFIES THIS EQUIPMENT  
CONFORMS TO DHHS REGULATIONS NO. 21 CFR  
1040.10, CHAPTER 1, SUBCHAPTER J.**

**Location: Back Panel**

### FCC WARNING (For the U.S.A.)

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

#### NOTE :

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

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

## Symptoms and Treatment

### Playback starts but the video is not output.

- The input selection of the TV and/or AV amplifier is incorrect or these devices are not turned on.
- Connection cords are connected improperly. → [12](#) → [14](#)

### Playback starts but the audio is not output.

- The "Speaker Setting" is incorrect. → [50](#)
- The input selection of the TV and/or AV amplifier is incorrect or these devices are not turned on.
- The volume of the TV and/or AV amplifier is not adjusted properly.
- Audio output cords are connected improperly. → [12](#) → [14](#)

### The picture is disturbed during forward search or reverse search.

- The picture disturbance during forward search or reverse is normal. This is not a malfunction.

### The picture is not neat or the video or audio quality is poor.

- Connection cords are connected improperly. → [12](#) → [14](#)
- A device generating noise is installed near the signal path.
- The disc is dirty or damaged. To prevent this, remove dirt and handle discs carefully so as not to damage them. → [59](#)
- There may be condensation of dew on the optical lenses. In this case, leave the player with power ON for a few hours to dry up the condensation, then retry operation. → [59](#)

### It takes long time before playback starts.

- The disc type should be detected and motor rotation stabilized before starting playback. This is normal and not a malfunction.

### A warning is displayed on the TV screen and playback is not possible.

- The reproduced video may be disturbed or audio may be skipped when the disc surface is stained with fingerprints or dirt. Clean the disc surface by wiping it in the radial directions using a soft cloth. → [59](#)
- If the disc is placed obliquely or on another disc, place the disc correctly. → [22](#)
- Playback may be unavailable due to viewing restriction or region code problem. → [8](#) → [47](#)

### The top and bottom edges of the picture are cut off.

- The video format of the played disc does not match that of the connected TV. → [9](#)

### VCD cannot be played with menu playback.

- Menu playback is not available when P.B.C. is Off or the sequential play mode of the player is set to "SEQ.2". → [25](#) → [26](#)
- Menu playback is possible only with P.B.C.-compatible VCDs. → [25](#)

### DVD VIDEO cannot be played.

- DVD VIDEO cannot be played when the sequential mode of the player is set to "SEQ.2". Switch it to "SEQ.1". → [26](#)

### Subtitles are not displayed.

- Subtitles are not displayed when the played DVD does not contain the recording of subtitles.
- The subtitle language is set to "Off". → [37](#) → [55](#)

### Audio (or subtitle) language cannot be changed.

- The language cannot be switched when the played DVD does not contain the recording of multiple audio (or subtitle) languages. → [28](#) → [35](#) → [37](#) → [54](#) → [55](#)

### Viewing angle cannot be changed.

- The viewing angle cannot be switched when the played DVD does not contain the recording of multiple angles. The viewing angle can neither be switched in part where no angle is recorded. → [37](#)

### The viewing restriction (Rating) cannot be changed.

- If you have lost the password, initialize the default setting by the user to the factory setting as described below.  
While holding the **■** button on the main unit, press the **POWER ON/OFF** button. When the display shows "INIT OK", switch the power on again. → [59](#)

### The selected audio or subtitle languages is not played.

- If the played DVD does not contain the default language set by the user, the priority language specified for the disc will be selected. → [54](#) → [55](#)

### The TV screen does not show any message when a button is pressed.

- If "On Screen Message" is set to "Off", switch it "On". → [46](#)

### The messages in the menus are not displayed in the selected language.

- If the played DVD does not contain the recording of the default language set by the user, the priority language specified for the disc will be selected. → [54](#)

**Remote control with the remote is impossible.**

- The batteries are exhausted.
- The controller position is too apart from the remote sensor, the control angle is deviated or there is an obstacle between the remote and remote sensor. → 

**An inhibition icon is displayed and no operation is accepted.**

- The operations of certain DVDs and VCDs are restricted by the intention of the software producers. Such discs should be operated in accordance with the software. Operations may also be restricted depending on the player status.

**DVD playback cannot be stopped by pressing the STOP button.**

- With certain DVDs, the inhibition icon is displayed and playback cannot be stopped even when the ■ button is pressed. In this case, press the **DISC SKIP** button to select another disc then press the ■ button to stop playback.  
If there is only one disc in the tray, open the tray, place another disc, close the tray, press the **DISC SKIP** button to select the second disc, then press the ■ button to stop playback.

**Error code "E0102" is shown in the display and no operation is accepted.**

- Up to 5 discs can be placed in the tray of the player.

If you set a 6th disc by rotating the tray manually during playback while 5 discs have already been placed in the player, the player detects an error and the display shows error code "E0102" at the moment you attempt close the tray.

In this case, turn the player off, remove one of the discs, then turn the player on again.

When an error code ("E" and 4 digits) is displayed in other cases, always turn the player off then on again.

If the error code does not disappear after this, press the **POWER ON/OFF** button while holding the ■ button on the player depressed. When the display shows "INIT OK", turn the player on again. → 

If the error code still remains in the display, note the error code and consult your dealer or local KENWOOD for servicing.

**The display shows "LOCKED" and no operation is accepted.**

- When the display shows "LOCKED" and the player cannot be set to the standby mode or the disc tray cannot be opened, perform the following procedure.

While holding the ■ button on the player main unit, press the **POWER**  on the remote.

**A MP3 disc cannot be played back.**

- Certain MP3 discs are unplayable on this player.

**An erroneous character is displayed in the title display.**

- The displayed characters may become erroneous if the disc has been created on a PC, etc.

## Glossary

**DVD (Digital Versatile Disc):** DVD VIDEO is a disc featuring high video/audio quality, made possible by large recording capacity of video and audio signals of movie software, etc. and by digital signal processing. DVD AUDIO has been desired to provide even higher audio quality than DVD VIDEO by using high-bit, high sampling rate processing.

**VIDEO CD (VCD):** This is a CD containing moving picture. By compressing video data to about 1/120 and audio data to about 1/6, a 12 cm disc with the same size as ordinary music CD can store moving pictures and audio for up to about 74 minutes.

The VCD includes the P.B.C.-incompatible discs with only the playback capability (Version 1.1) and P.B.C.-compatible discs with the menu playback and special playback capabilities (Version 2.0)

**MPEG (Moving Picture Expert Group) (DVD, VCD):** A digital video and audio compression and decompression system which is standardized as an international standard.

**Decoder:** A device for restoring standard audio signal from audio data recorded based on coding into DVD data, etc. This processing is referred to as decoding.

**Downmixing:** Conversion of multichannel audio signals of DVD or DTS-CD into 2-channel stereo signals.

**Sampling rate:** Sampling refers to converting an analog signal into digital signal by slicing the analog signal into fine parts at a certain time interval and digitizing every sliced part. The sampling rate is the count of slicing per second. The original sound can be reproduced more faithfully when the sampling rate is higher.

**Quantization bit:** The quantization bit count refers to the number used in digitizing the sliced parts obtained by slicing the analog signal as described above. The quantization bit count is the number of bits used in digitization per second. The original sound can be reproduced more faithfully when the quantization bit count is larger.

**Linear PCM (Pulse Code Modulation):** Audio signal format without using compression. In the DVD which has a very large disc capacity, the linear PCM signal using high sampling rate can be recorded.

**Packed PCM :** The packed PCM(P.PCM) signal is obtained by compressing the linear PCM signal featuring large data amount and high sampling rate. With this compression, the signal before compression can be restored perfectly.

**Bitstream (DVD):** This is the generic name given for the flow of data based on a standard such as Dolby Digital, DTS, MPEG, etc.

**Dolby Digital:** A digital audio compression technology developed by Dolby Laboratories, Inc. It is compatible with 6-channel surround audio as well as 2-channel stereo, and capable of recording a large amount of audio data efficiently in a disc.

**DTS :** Digital surround system developed by Digital Theater Systems, Inc.

**Title/Title No. (DVD VIDEO):** The title is the largest unit of video or audio recorded in DVD VIDEO. Usually, a title corresponding to a movie product with video software or an album (or a piece of music) with music software. The numbers assigned to the titles are referred to as title numbers.

**Chapter/Chapter No. (DVD VIDEO):** The chapter is a partition of video or audio that is smaller than the title. A title is composed of multiple chapters. The numbers assigned to the chapters are referred to as chapter numbers.

**Group/Group No. (DVD AUDIO):** The group is the largest unit of the contents in DVD AUDIO. Usually, a group corresponds to an album. The numbers assigned to the groups are referred to as group numbers.

**Track/Track No. (DVD AUDIO, VCD, CD):** The track is a partition of audio (such as a piece of music or music chapter) in a disc. These partitions are numbered and the numbers are referred to as track numbers. While a track usually corresponds to a piece of music with DVD AUDIO or ordinary music CD, the partitions of contents and track numbers are not always corresponding with VCD. As a result, while all of the playback operations including track skipping and programming of ordinary music CD are based on the track number information, such operations may sometimes be unavailable with VCD.

**AVTT (Audio Video Title):** Part of DVD AUDIO that contains moving pictures. The audio language, subtitle language and viewing angles in this part can be switched by the user.

**AOTT (Audio Only Title):** Part of DVD AUDIO that contains audio and still pictures. The audio language and still pictures in this part can be switched by the user.

**Subtitle language (DVD):** Some DVDs contain the recording of multiple subtitle languages. This player allows the user to select desired one of the recorded subtitle languages during playback of such a DVD.

**Angle (DVD):** Some DVDs contain the recording of multiple viewing angles. This player allows the user to select desired one of the recorded angles during playback of such a DVD.

**Audio language (DVD):** Some DVDs contain the recording of multiple audio languages. This player allows the user to select desired one of the recorded audio languages during playback of such a DVD.

**Aspect ratio:** The ratio between the horizontal and vertical sizes of picture displayed on a TV screen. The aspect ratio of ordinary TV is 4:3, and that of widescreen TV is 16:9.

**Pan & scan (DVD):** Method of displaying a horizontally-long picture recorded in 16:9 aspect ratio on a 4:3 TV screen by trimming part of picture.

In general, the trimming positions for pan & scan are determined uniformly by the reproducing device. However, the pan & scan of DVD allows the software producer to specify the trimming positions to be used in playback.

**Letterbox (DVD):** Method of displaying a horizontally-long picture recorded in 16:9 aspect ratio on a 4:3 TV screen by attaching bands at the top and bottom of the screen and displaying the horizontally-long picture at the center of screen.

**Frame (DVD, VCD):** Each frame of a moving picture, that is displayed 30 times a second with NTSC and 25 times a second with PAL. These TV formats reproduce moving pictures by displaying still pictures sequentially.

**Field (DVD, VCD):** Part of a frame obtained by dividing the video data of each frame by two. Each frame of ordinary TV is constituted by displaying the fields alternately.

**Frame still/Field still (DVD, VCD):** Types of still pictures obtained by temporarily stopping a moving picture. The frame still picture may produce blur in the picture because it displays two specific fields alternately, but the picture quality is higher. The field still picture has lower picture quality because it uses half the picture information of frame still, but is not accompanied with picture blur.

**IPB display (DVD):** With the MPEG2 which is one of the video display methods of DVD, each picture is divided into the following three picture types before being coded in digital signal.

**I-picture (Intra coded):** This is the standard video and can constitute a picture by itself. As the highest picture quality can be obtained, the still image of I-picture is most suitable for use when adjusting the picture quality.

**P-picture (Predictive coded):** Picture calculated based on past pictures (I-picture or P-picture).

**B-picture (Bidirectionally predictive coded):** Picture calculated by comparing the previous and next pictures (I-pictures or P-pictures). This picture type contains least amount of video information.

**P.B.C. (PlayBack Control) (VCD):** VIDEO CDs carrying messages such as "Playback Control Capable" can be played interactively by selecting the desired play position or information in hierarchical structures while watching the menus displayed on the TV screen.

**OSD (On-Screen Display):** OSD is a method of interactive operations using the menus and icons displayed on the TV screen.

**On-Screen Message:** Message displayed on the TV screen when an operation is performed.

**Downconversion:** Conversion of PCM signal with high sampling rate such as 96 kHz and 192 kHz into a signal with a sampling rate of 48 kHz or 44.1 kHz.

**Dynamic range:** Difference between the minimum reproducible audio signal and maximum reproducible audio signal.



# MEMORANDUM



# KENWOOD

**For your records**

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model \_\_\_\_\_ Serial Number \_\_\_\_\_