

SAMPO

DVE-6xx DVD Player USER MANUAL



<http://www.sampo.com.tw>

SAMPO Corporation

No. 201, Chung Shan Road, Sec. 1,

Panchiao, Taipei Hsien, Taiwan

Tel: 886-2-2961 1141

Fax: 886-2-2962 2051

— E-mail: marcom@sampo.com.tw

Entertaining the Future™

FEATURES

↳ **Compatible with DVD, VCD, CD, Super VCD, CVD, and MP3**

This DVD player can play a variety of disc media including: DVD Video, Video CD, CD, Super VCD, CVD, and MP3 audio recorded on CD-ROM discs.

↳ **Component Video Output (Y/CB/CR)**

This DVD player's component video output can send DVD video signals directly to a component video input-equipped television without the degradation of video quality. The result is superior image quality with lifelike colors and crisp details.

↳ **Built-In Dolby® Digital Decoder (5.1ch model only)**

The unit's built-in Dolby® Digital 5.1 Channel decoder eliminates the need for an external decoder and directly supports any Dolby® Digital Ready receiver or preamplifier with 5.1 channel inputs.

↳ **Optical & Coaxial Digital Audio Outputs**

The DVD player features both optical and coaxial digital audio outputs. User selectable Dolby® Digital AC-3 and PCM digital audio maximizes convenience when switching between DVD and CD playback.

↳ **High Quality 96KHz/24Bit D/A Audio Converter**

This DVD player features a 96KHz/24Bit D/A converter for superior audio reproduction of encoded discs.

↳ **10-Bit 27Mhz D/A Video Converter**

This DVD player's 10-bit D/A converter is four times more accurate than conventional 8-bit converters. The result is artifact-free and crystal clear video image.

↳ **Auto NTSC and PAL Video Disc Conversion**

This unit can play NTSC and PAL discs. This DVD player can automatically convert either format to

match your TV/monitor. For example, when your TV/monitor requires a NTSC video and you're playing a PAL disc, this DVD player will automatically convert the PAL disc to play on your display.

↳ **DTS Digital Audio Support**

This DVD player can send DTS Digital audio data via its built-in digital audio outputs to an external DTS Digital decoder.

↳ **Digital Video Markers**

This DVD player features digital video markers so users can quickly bookmark favorite parts of the movie for quick retrieval.

↳ **2X/4X Video Zoom Support**

The user selectable digital video zoom can zoom-in on a specific portion of a video image.

↳ **30X Multi-Speed Fast Forward/Reverse Scan**

The digital fast forward/reverse scan is capable of scanning speeds of 2X, 4X, 8X, 12X, 15X, and 30X.

↳ **Multi-Speed Slow Motion Forward / Reverse Scan**

This DVD player offers perfect slow motion scans in the following speeds: 1/2X, 1/4X, and 1/8X.

↳ **Built-In Karaoke Function (karaoke model only)**

The built-in karaoke functionality with 2 microphone inputs can work with a variety of karaoke discs recorded on DVD, VCD, and SVCD.

- Key Control
- Echo Control
- Vocal Control

PACKAGE CONTENTS

Please verify that the following items are included within the DVD carton. If items are missing, please promptly return this unit to the retailer for an exchange.

↘ **DVD Player** **x1**



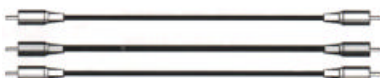
↘ **Remote Control Unit** **x1**



↘ **AA (R6) Batteries** **x2**



↘ **Video & Audio (L/R) Cable** **x1**



↘ **User Manual** **x1**



INDEX

FEATURES	1
PACKAGE CONTENTS	2
INDEX	3
PRECAUTIONS	4
DISC CARE	5
DISC COMPATIBILITY CHART	6
FRONT PANEL/DISPLAY WINDOW	7
FRONT PANEL	7
DISPLAY WINDOW	8
REMOTE CONTROL UNIT	9
REAR PANEL AND CONNECTIONS	11
VIDEO OUTPUT TERMINALS & CONNECTIONS	11
AUDIO OUTPUT TERMINALS AND CONNECTIONS	12
INITIAL SETTING	13
GENERAL SETUP	13
<i>TV Display</i>	13
<i>Angle Mark</i>	13
<i>OSD (On-Screen Display) Language</i>	13
<i>Audio Output</i>	14
<i>Video Output</i>	14
<i>SCART Out (Euro Model Only)</i>	14
<i>CAPTIONS (Closed Captioning)</i>	14
<i>Screen Saver</i>	14
SPEAKER SETUP (2CH MODEL ONLY)	15
SPEAKER SETUP (5.1 CH MODEL ONLY)	15
<i>Center Speaker</i>	15
<i>Rear Speaker</i>	15
<i>Subwoofer</i>	15
<i>Center Delay</i>	16
<i>Rear Delay</i>	16
DIGITAL AUDIO OUT	16
<i>AC-3 (Dolby Digital)</i>	16
<i>DTS</i>	17
<i>MPEG</i>	17
<i>LPCM</i>	17
PREFERENCES	17
<i>Audio</i>	17
<i>Subtitle</i>	18
<i>Disc Menu</i>	18
<i>Parental</i>	18
<i>Password</i>	18
<i>Defaults</i>	19
ON-SCREEN DISPLAY (OSD)	20
DVD OSD MODES	20
CD/VCD OSD MODES	20
BASIC OPERATION	21
START PLAYBACK	21
STOP PLAYBACK	21
SKIP PLAYBACK	21
STILL/PAUSE PLAYBACK	21
STEP PLAYBACK.....	21
FAST FORWARD/REVERSE SCAN	21
SLOW-MOTION FORWARD/REVERSE PLAYBACK.....	21
ADVANCED OPERATION	22
REPEATED PLAYBACK.....	22
A-B REPEATED PLAYBACK.....	22
RANDOM PLAYBACK	22
PROGRAM PLAYBACK	22
DIGITAL VIDEO MARKERS	23
TITLE MENU (DVD ONLY)	23
DVD MENU (DVD ONLY)	24
MULTI-ANGLE PLAYBACK	24
CHANGING SUBTITLE DURING PLAYBACK.....	24
CHANGING AUDIO LANGUAGE DURING PLAYBACK	25
SEARCH	25
VCD PLAYBACK CONTROL (PBC)	26
CONNECTION METHOD OF MICROPHONE (WIRELESS KARAOKE MODEL ONLY)	27
KARAOKE MODE (KARAOKE MODEL ONLY)	28
CONNECTING THE MICROPHONES	28
KARAOKE ON/OFF SETTINGS.....	28
MICROPHONE VOLUME ADJUSTMENT	28
OTHER CONTROLS	28
<i>KEY Control</i>	28
<i>ECHO Control</i>	28
<i>VOCAL Control</i>	29
MP3	30
MP3 FORMAT.....	30
OPERATION METHOD.....	30
<i>Play</i>	30
<i>Menu</i>	30
<i>Song Selection</i>	30
TROUBLESHOOTING	31
SPECIFICATION	32
<i>Label</i>	32
<i>Dolby License</i>	32
<i>DTS License</i>	32
<i>Note</i>	32
REGION MANAGEMENT INFORMATION	33
DESCRIPTION OF SCART TERMINAL (EURO MODEL ONLY)	34

PRECAUTIONS

Please read the following carefully to get the best and safest performance from this DVD player

Power Supply

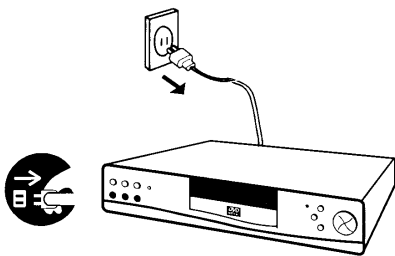
- Make sure to use the correct power outlet as rated on the back of the DVD unit.(AC100 – 240V)

Power Cord

- Do not put any heavy objects on top of the power cord to avoid fires or electrical shocks caused by cord damage.



- Unplug the power cord if the unit will not be used for a long time.



Unit Placement

- Do not** place this unit in locations with:
 - ✓ Vibrations
 - ✓ High humidity
 - ✓ Poor ventilation
 - ✓ Direct sunlight
 - ✓ Extremely high or low temperatures
- This unit should be placed on a horizontal surface only.
- Keep this unit away from television sets, radios, computers and loudspeakers to avoid magnetic field interference.

Usage and Storage

- Do not remove the top cover to avoid possible electric shock from touching the inside of this unit.
- Do not place any heavy objects on top of this unit.

Condensation

- Condensation may result from moving the unit from a cold place to a hot place. Please turn the power on for 1 to 2 hours before using this unit if condensation occurs.

Unit Cleaning

- Clean the front panel and the body of the unit with a dry soft cloth. Other areas can be cleaned using a soft cloth moistened with a mild detergent. Do not clean with evaporative solutions to avoid possible damage to the unit.



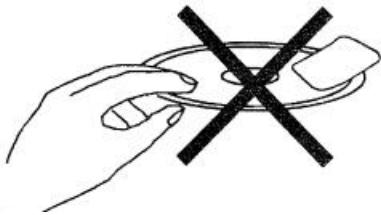
DISC CARE

Disc Usage

- Please hold all discs by their edges or the center opening as shown below. Do not touch the shiny surface of the discs.



- Do not stick labels or tape on the discs, and do not scratch or damage the discs.

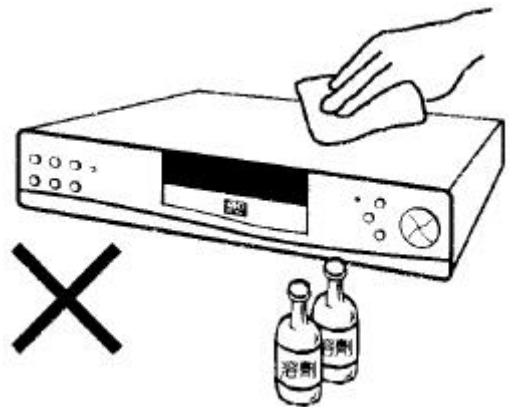


- The disc spins at a high speed during playback. Do not use damaged, cracked, or warped discs because they could damage the unit.



Disc Cleaning

- Fingerprints or dirt on disc surfaces can weaken the light reflected from the disc and directly influence the signal quality. The poorer the signal quality, the poorer the playback performance. Keep the disc clean by wiping it straight out from the center with a dry soft cloth.






- If the disc is very dirty, wipe with a moist soft cloth, then follow with a dry soft cloth.
- Do not use record cleaning sprays, benzene, thinner, anti-static electricity liquids, or any other solvent. These may damage the disc surface.

Disc Storage

- Please keep the discs in their original cases to avoid bending the discs. Do not keep discs in locations with high temperature, high humidity, or direct sunshine. These conditions may also cause damage to the discs.
- Carefully read all instructions on the disc label.

DISC COMPATIBILITY CHART

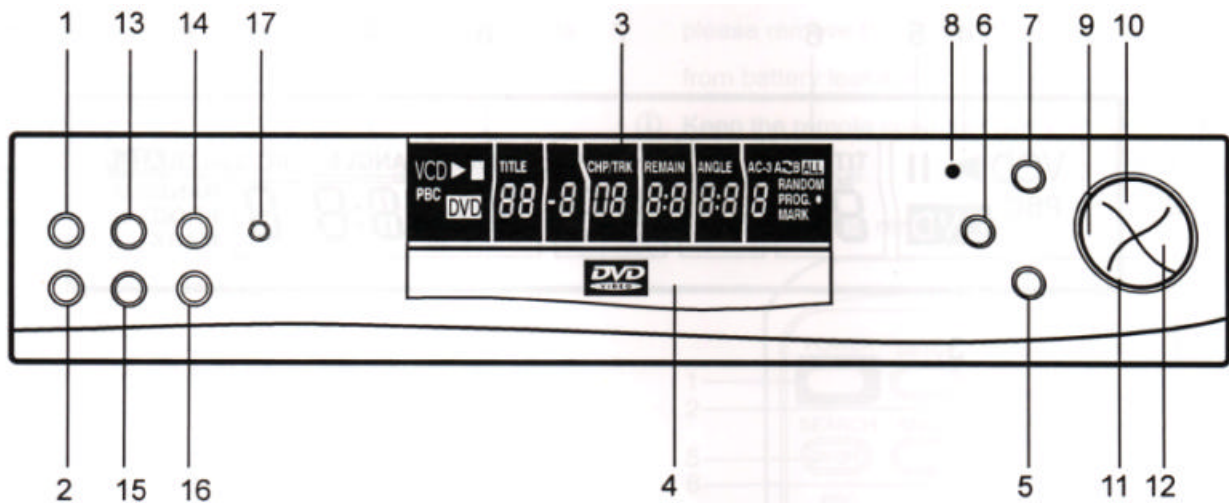
This DVD player can play the following types of discs:

Disc Type	Dimension/Side/Layer	Max. Playback Time (Storage Capacity)
DVD Video 	DVD 12 cm/single sided/single layer 12 cm/single sided/double layer 12 cm/double sided/single layer 12 cm/double sided/double layer	MPEG2 TYPE 133 min. (4.7 GB) 242 min. (8.5 GB) 266 min. (9.4 GB) 484 min. (17 GB)
	8 cm/single sided/single layer 8 cm/single sided/double layer 8 cm/double sided/single layer 8 cm/double sided/double layer	41 min. 75 min. 82 min. 150 min.
Video CD 	VCD 12 cm/single sided/single layer	MPEG1 TYPE 74 min.
	8 cm/single sided/single layer	20 min.
CD-DA 	CD-DA 12 cm/single sided/single layer	74 min.
	8 cm/single sided/single layer	20 min.

- DVD and VCD Discs contain both video and audio and can support multiple audio tracks.
- CD-DA: Discs have audio only.
- Do not insert DVD-ROMs, CD-ROMs or Photo CDs in this DVD player.
- This unit complies with VCD ver. 1.1, ver. 2.0, and ver. 3.0.

FRONT PANEL/DISPLAY WINDOW

Front Panel



1. Headphone Volume Control

Adjusts the volume level of the headphone.

2. Headphone Jack

Connects the headphone to the unit.

3. LCD Display Window

Displays operation information.

4. Disc Tray

5. Disc Tray **OPEN/CLOSE Button**

Opens/closes the disc tray.

6. **STILL Button**

Goes into "Step" playback mode.

7. **POWER Button**

Turns the unit's power on and off.

8. Standby Indicator

Lights up in standby mode when the unit is turned off.

9. **PREVIOUS Button**

Goes to the previous chapter/track during playback with DVD/VCD/CD. It functions as "Go to the previous page" in the PBC menu with VCD discs.

10. **PLAY Button**

Plays the inserted disc.

11. **STOP Button**

Stops playback.

12. **NEXT Button**

Goes to the next chapter/track during play with DVD/VCD/CD. However, it works as "Go to the next page" in the PBC menu with VCD discs.

13. MIC 1 Volume Control (Karaoke Model Only)

Adjust the volume level of the microphone 1

14. MIC 2 Volume Control (Karaoke Model Only)

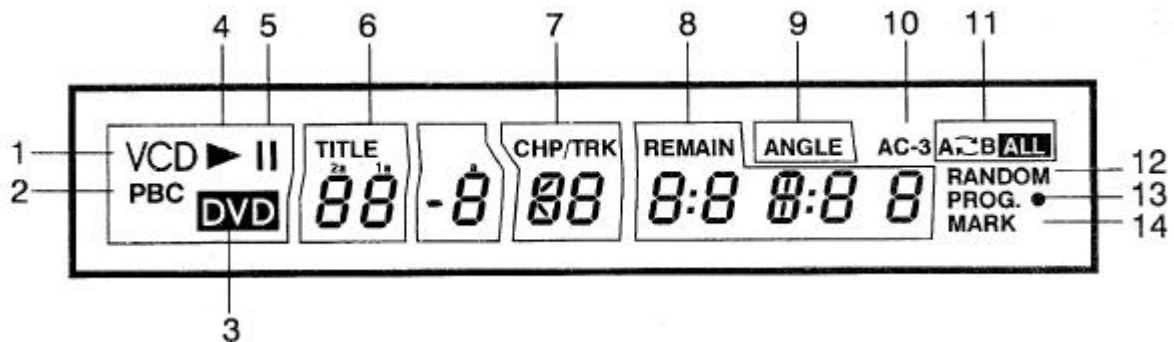
Adjust the volume level of the wireless/microphone 2

15. MICROPHONE JACK 1 (Karaoke Model Only)

16. MICROPHONE JACK 2 (Karaoke Model Only)

17. Wireless MIC Switch (Wireless Karaoke Model Only)

Display Window



As Per Real Model

1. CD/VCD Indicator

Identifies the inserted disc as audio CD or Video CD.

2. PBC Indicator for VCD Disc

Playback control indicator.

3. DVD Indicator

Identifies the inserted disc as a DVD disc.

4. Operation Status Indicator – Playback

Indicates the disk is in playback mode.

5. Operation Status Indicator – Pause

Indicates the disk is in pause mode.

6. Title Number Indicator

Some DVD's contain multiple title pages. This indicator displays the title number currently in use.

7. Chapter/Track Number Indicator

Indicates the chapter (DVD) or track number (CD) currently playing.

8. Elapsed Playback Time/Remaining Playback Time Indicator

Displays elapsed playback time and playback remainder time.

9. Multi-Angle Indicator

For DVD discs containing multiple view angles, the multi-angle indicator will display during playback of a scene with multi-angle views.

10. Dolby Digital AC-3 Audio Indicator

Indicates the disc played contains Dolby Digital AC-3 audio encoding.

11. Repeat Playback Mode Indicator

Indicates the disc is in repeat playback mode.

12. Random Playback Indicator

Indicates the disc is in random playback mode.

13. Program Playback Indicator

Indicates playback programming is turned on.

14. Digital Video Marker Indicator

Indicates digital video marker mode is selected.

REMOTE CONTROL UNIT

To use the remote control unit to operate the DVD player, insert two R6 batteries (size AA) making sure that the + and - ends of the batteries are matched to the +/- marks printed inside the battery compartment.

To use the remote controller, please point the remote control unit at the remote sensor on the DVD player.

Notes

① Do not use different types of batteries together, or mix old and new batteries.

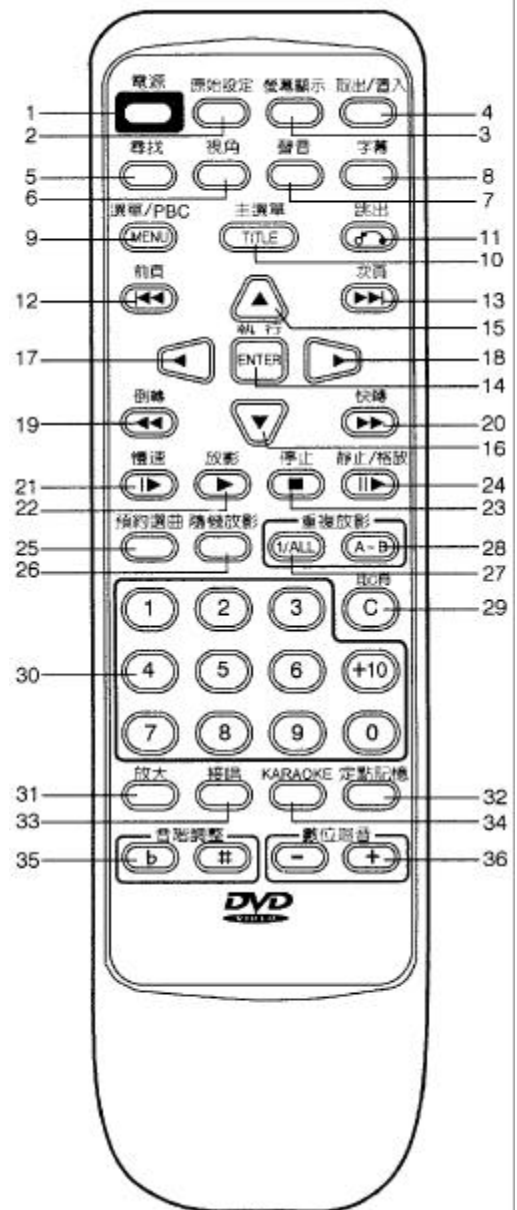
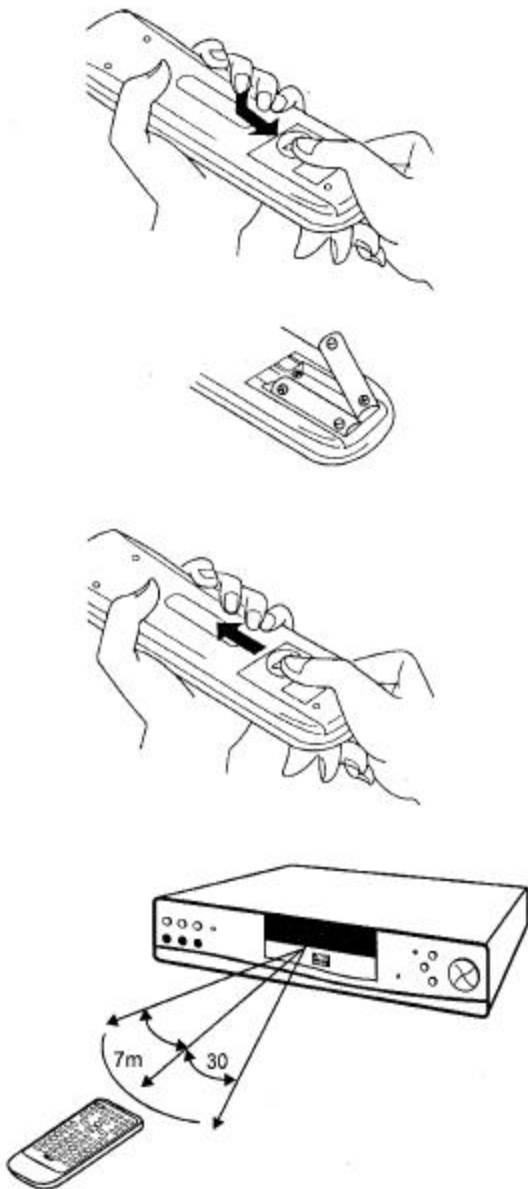
①


When the remote control unit does not function correctly or its operation range reduces, please replace both batteries at the same time.

① If the remote control unit will be not used for a long time, please remove the batteries to avoid possible damage from battery leakage or corrosion.

① Keep the remote controller away from extremely hot or humid locations.

① Do not open the remote controller unit.



1. **POWER**
Turns on/off the DVD player unit
2. **SETUP**
Customizes DVD player settings. Refer to p.13.
3. **DISPLAY**
On-Screen Display of the DVD player's operational status
4. **OPEN/CLOSE**
Opens or closes disc tray
5. **SEARCH**
Enables search mode by title/chapter and time. Refer to p.25.
6. **ANGLE**
If the DVD disc contains multiple view angles, this button changes the viewing angle displayed by the DVD player. Refer to p.24.
7. **AUDIO**
During playback of a DVD disc with more than two audio languages, this button changes the audio language played. Refer to p.25.
8. **SUB-T**
During playback of a DVD disc with more than two subtitle languages, this button toggles between subtitle languages or disables subtitle function. Refer to p.24.
9. **PBC/MENU**
Some DVDs have complex submenus. This button allows access to these submenus. For VCD, the button turns on/off the Playback Control (PBC) function. Refer to pp.24/26.
10. **TITLE**
Enters the title menu for DVD discs. Refer to p.23.
11. **RETURN**
Goes back to the previous page of the menu
12. **PREV**
Goes back to the previous chapter during play
13. **NEXT**
Skips to the next chapter during play
14. **ENTER**
Confirms selection of an item in the menu
15. 
Used for navigation within a selection menu
16. **REV** **FWD**
Engages fast forward or reverse scan during playback. Toggles between 2X, 4X, 8X, 12X, 15X, and 30X.
17. **SLOW**
Engages slow-motion forward/reverse playback. Refer to p.21.
18. **PLAY**
Starts playing the disc
19. **STOP**
Stops playback
20. **STILL/STEP**
Pauses the playback and enters into step mode where the video can be advanced frame by frame
21. **PROGRAM**
Displays program playback for CD/VCD. Refer to p.22.
22. **RANDOM**
Shows random playback for CD/VCD. Refer to p.22.
23. **1/ALL**
Shows repeat playback for one title, or all titles on the disc. Refer to p.22.
24. **A- B**
Displays A-B repeat playback. Refer to p.22.
25. **CLEAR**
Clears the program, input password, repeat, or digital video markers.
26. Digits
Used for direct selection of menu choices, audio tracks, and other inputs such as time and password
27. **ZOOM**
Enters the zoom mode during playback
28. **MARK**
Activates/deactivates the digital video marker function. Refer to p.23.
29. **VOCAL ASSIST** button (Karaoke Model Only)
Vocal function switch. Refer to p.29.
30. **KARAOKE** button (Karaoke Model Only)
Refer to p.28.
31. **KEY CONTROL** button (Karaoke Model Only)
Refer to p.28.
32. **ECHO** button (Karaoke Model Only)
Refer to p.28.

REAR PANEL AND CONNECTIONS

Video Output Terminals & Connections

Y/Cb/Cr Component Video Output Terminals +

Use component video output with televisions or monitors equipped with component video inputs for best picture quality. Whenever the component video output terminal is used, you must set the DVD player's VIDEO OUT setting to Y/CB/CR (Refer to p. 14).

S-Video Output Terminal +

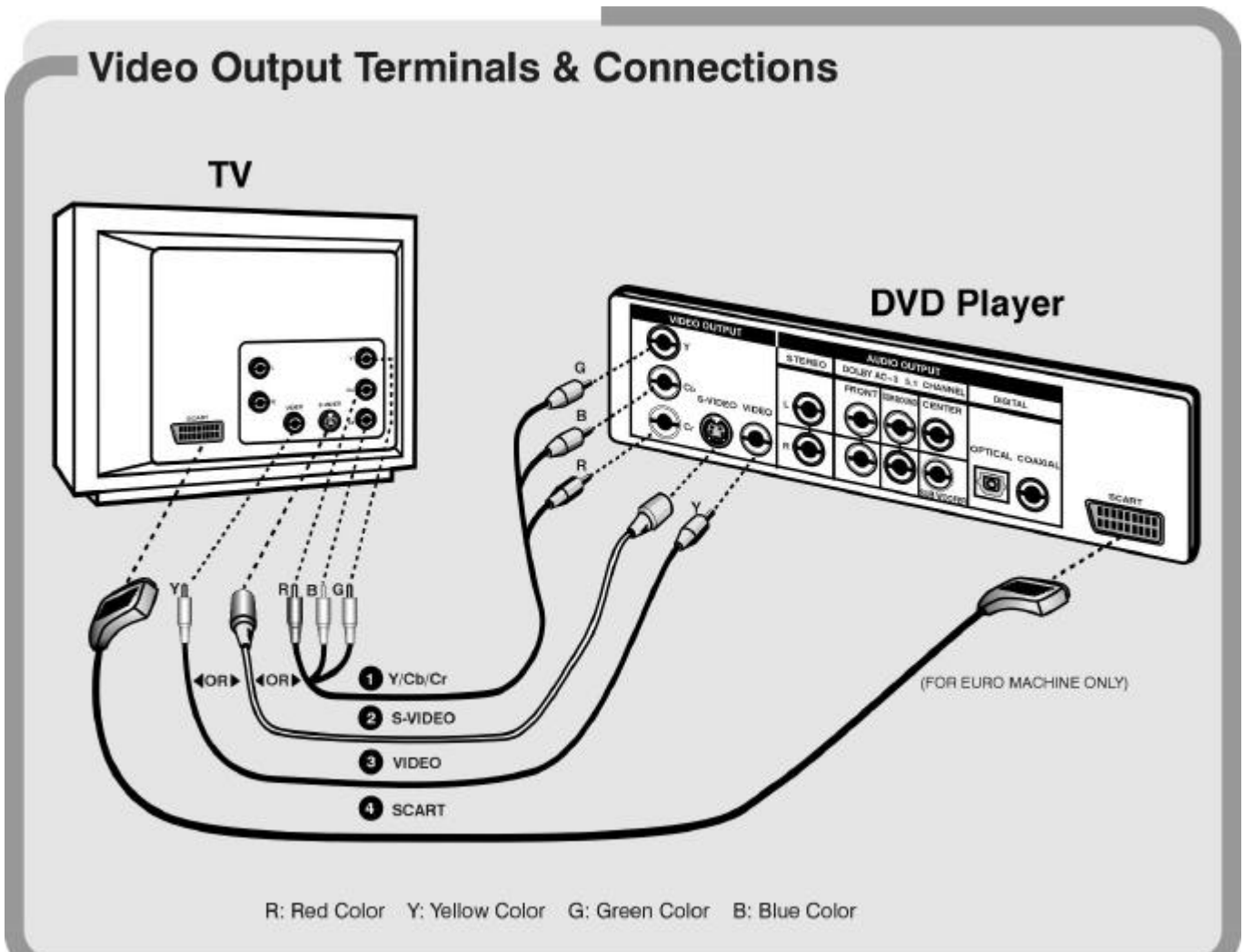
You will want to use S-video output with televisions or monitors equipped with an S-video input whenever component video inputs are not available. To activate the S-video output, you must set the DVD player's VIDEO OUT setting to S-VIDEO (Refer to p. 14).

Composite Video Output Terminal +

Composite video output is the most commonly used video connection in use today and is supported by most televisions and A/V receivers. Composite video is set to display without user setup.

SCART Terminal × (Euro Model Only)

The SCART terminal can be connected to the TV set equipped with SCART connectors. The audio transmitted on the SCART is stereo sound and the video can be selected among RGB-video, S-video and Composite video.



Audio Output Terminals and Connections

Stereo Audio Output Terminals (L/R) +

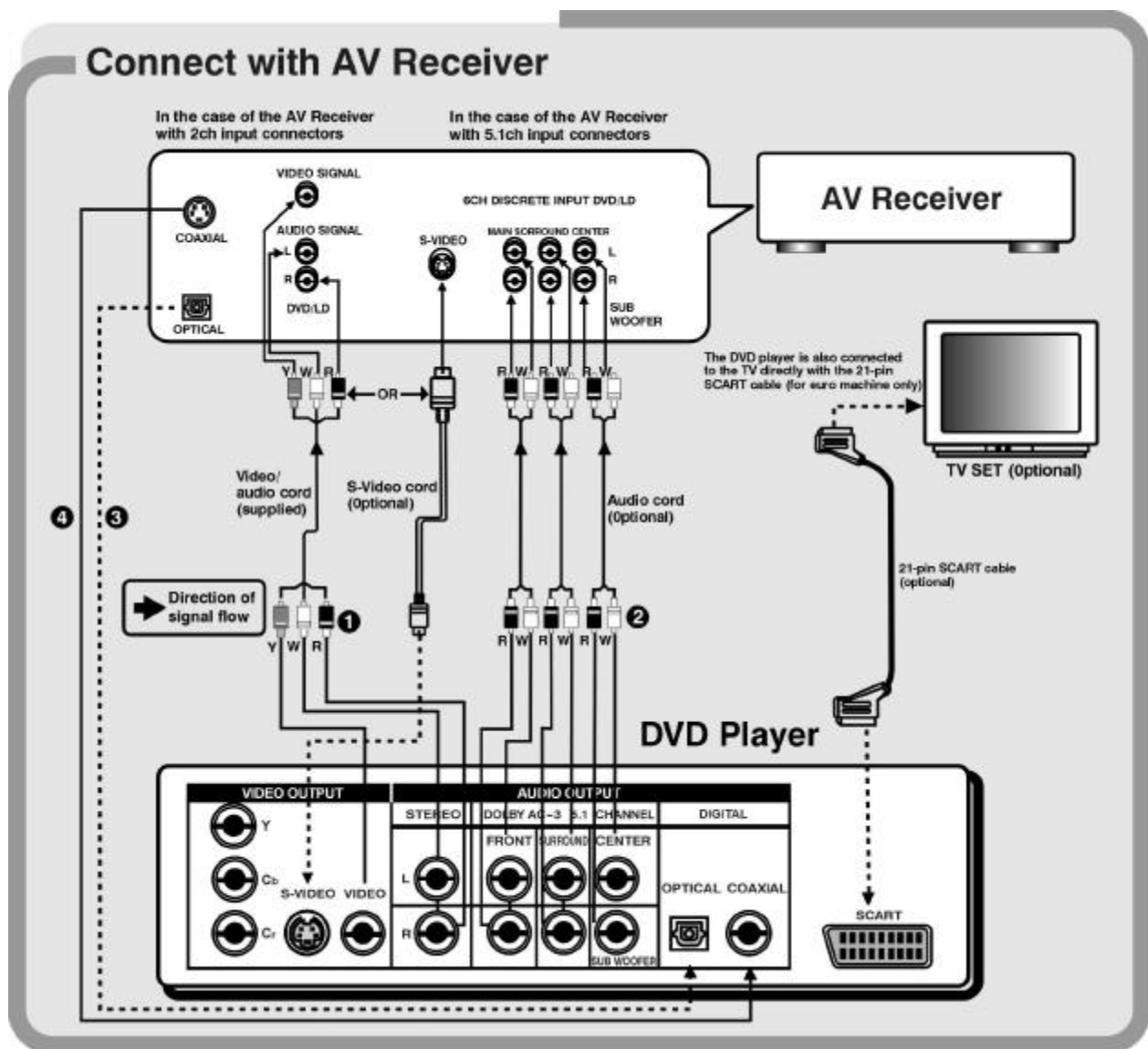
Use stereo output terminals for connection with your television or other non-Dolby Digital A/V receivers or amplifiers. These terminals provide down-mixed Dolby Digital audio signals for standard 2-channel playback.

Dolby AC-3 5.1 Channel Analog Audio Output Terminals + (5.1ch Model Only)

Use Dolby AC-3 5.1 channel analog audio outputs for connection with a Dolby Digital Ready A/V receiver or amplifier with 5.1 channel input connections. This option will utilize the DVE-660's built-in Dolby Digital Decoder to decode Dolby Digital audio from the DVD.

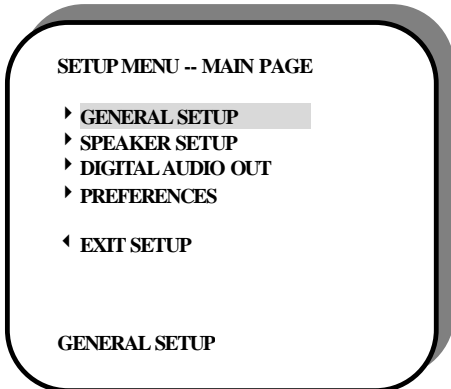
Optical + and Coaxial × Digital Audio Output Terminals

Use digital audio outputs for connection with an external Dolby Digital or DTS decoder. To use the optical output, you will need to purchase a TOSLINK fiber optical cable. To use the coaxial output, you will need to purchase a coaxial cable.



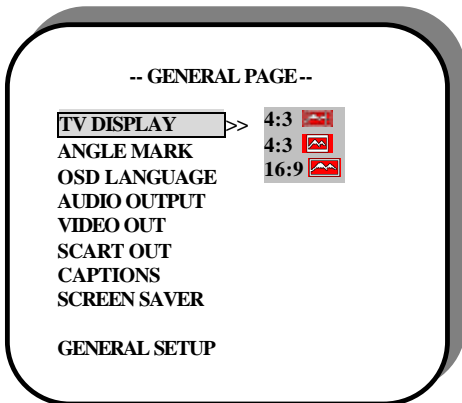
INITIAL SETTING

Press the **SETUP** button on the remote controller to set up the initial setting. The On-Screen Display (OSD) will display:



General Setup

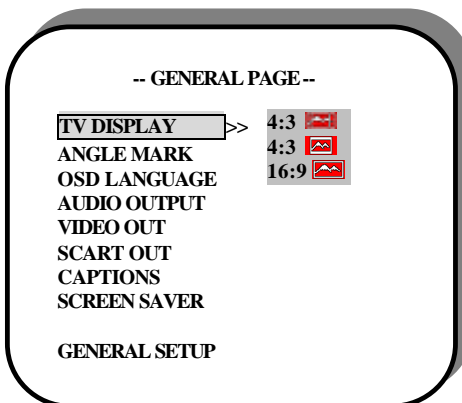
There are eight items in the general setup.



ⓘ The item "SCART OUT" is only for Euro model.

TV Display

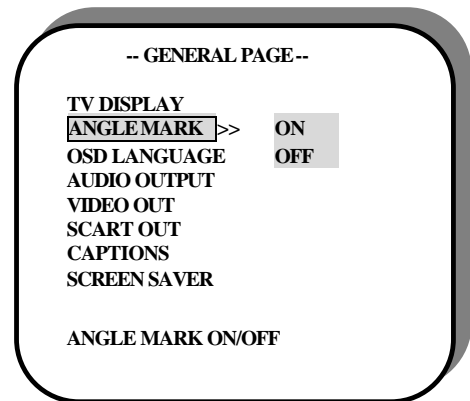
This DVD player provides three TV video modes:



- 4:3 4:3 pan & scan video output for normal TV set
- 4:3 4:3 letterbox video output for normal TV set
- 16:9 16:9 video out for wide screen TV set

Angle Mark

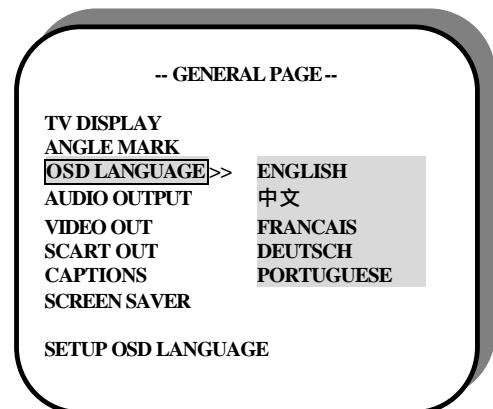
During playback of a title with multiple angle sections, the message " <" will appear on the lower corner of the screen.



- When ANGLE MARK is set to "ON", the angle mark stays on the screen until the end of the playback title.
- When ANGLE MARK is set to "OFF", the angle mark appears on the screen for 3 seconds.

OSD (On-Screen Display) Language

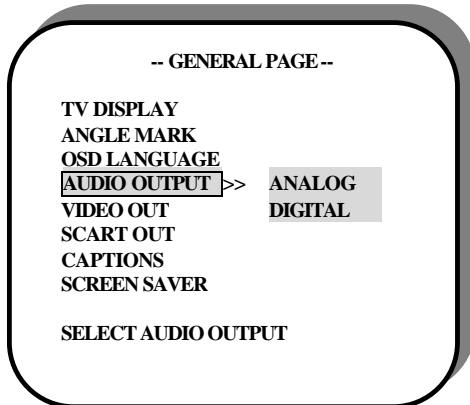
There are five available OSD languages: ENGLISH, CHINESE, FRENCH, GERMAN and PORTUGUESE.



Audio Output

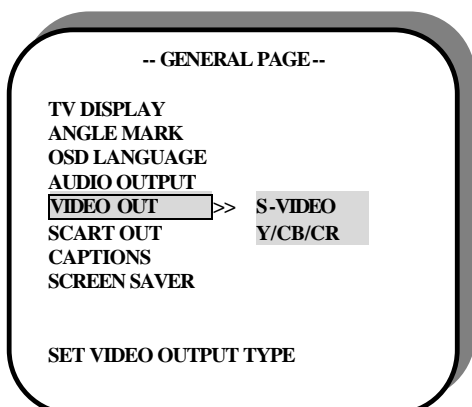
You can choose to send the player's audio signals to an external receiver using the following outputs:

- **Analog:** Audio signals are sent using Dolby Digital 5.1 channel audio terminals (5.1ch model Only) and stereo audio terminals. Selecting this choice will disable the digital audio outputs.
- **Digital:** Audio signals are sent using the optical output and the coaxial output. Selecting this choice will disable the analog outputs.



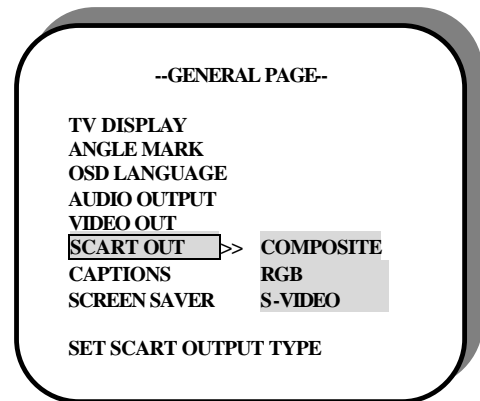
Video Output

- The unit has two video output choices, Y/Cb/Cr Component video and S-video. If you are using component video outputs, please set this setting to "Y/CB/CR". If you are using S-Video output, please set this setting to "S-Video". If you are using composite video outputs, you can ignore this setting.
- ① Component video output and S-Video output can not be used simultaneously.



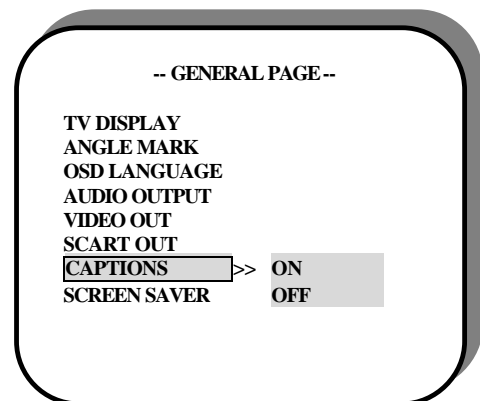
SCART Out (Euro Model Only)

This DVD player has only one SCART terminal but supports three different types of video output from this terminal. They are composite video, RGB video, and S-video, which are dedicated by setting SCART OUT at "COMPOSITE", "RGB", and "S-VIDEO", respectively.



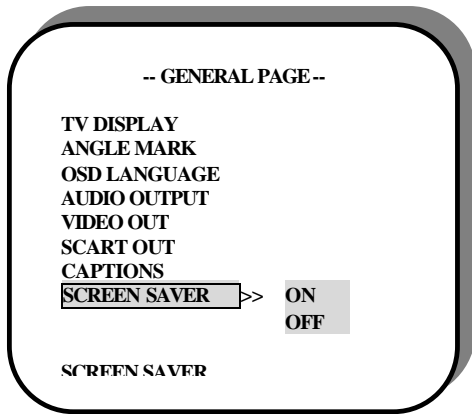
CAPTIONS (Closed Captioning)

If a DVD box contains a **CC** mark, you can set Closed Captioning to "ON" and read written captions on the TV screen. You must also have a TV that supports the caption function and have the function turned on.



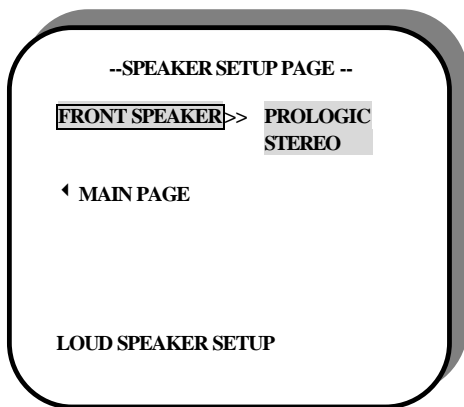
Screen Saver

When this DVD player is idle (after about 5 minutes of inactivity), the screen saver can be enabled to prolong the TV monitor's life.



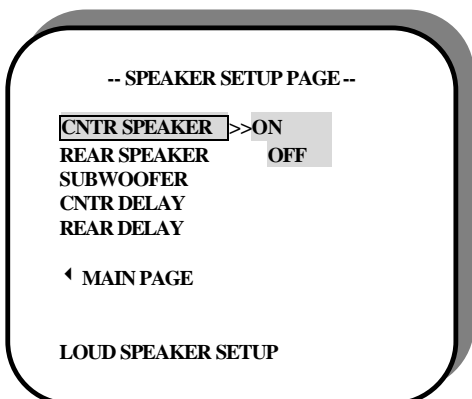
Speaker Setup (2ch Model Only)

You can set the analog audio output in PRO-LOGIC or STEREO mode. If you have a PRO-LOGIC surround sound receiver or pre-amplifier, please select this option for best sound quality.



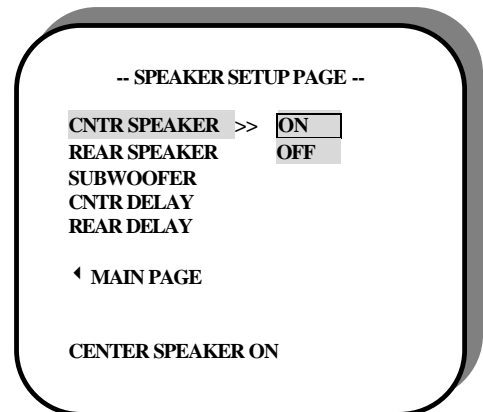
Speaker Setup (5.1ch Model Only)

This setting is only available for 5.1ch model with analog Dolby Digital AC-3 5.1channel audio outputs. All the settings are dependent on the number of speakers you have. For example, if you have no center speaker in your AV system, set CNTR SPEAKER to "OFF." The DVD player will down-mix the disabled audio channels into the other audio channels according to the Dolby AC-3 decoding rule.



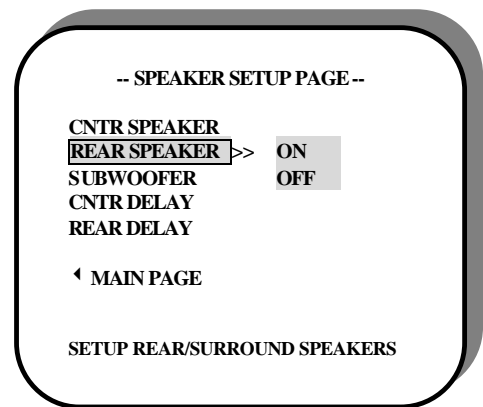
Center Speaker

Enables/Disables the center channel output. "ON" means "enable output" and "OFF" means "disable output."



Rear Speaker

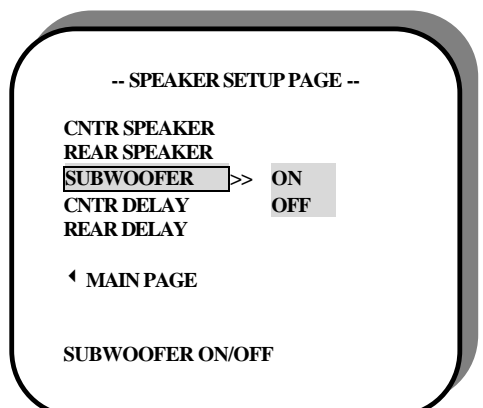
Enables/Disables the surround channels output.



Subwoofer

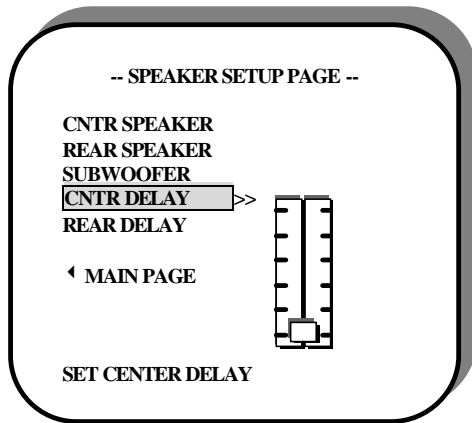
Enables/Disables the subwoofer channel output. This setting also controls the bass management of Dolby Digital.

- When SUBWOOFER is "ON," the bass of all the other channels will be redirected to the Subwoofer speaker.
- When SUBWOOFER is "OFF," all the bass signals will be redirected to the front L/R channels.



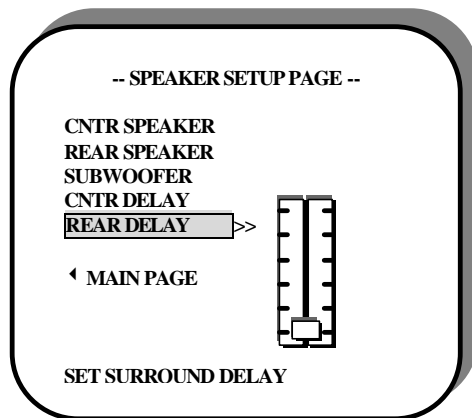
Center Delay

This unit supports the center time delay range of 0 to 5 ms in 1ms steps.



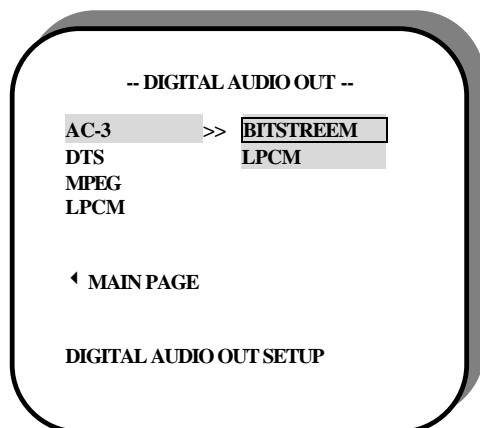
Rear Delay

This unit supports the surround/rear time delay range of 0 to 15 ms in 3ms steps.



Digital Audio Out

This option sets the audio output format sent using the unit's optical/coaxial digital audio outputs.



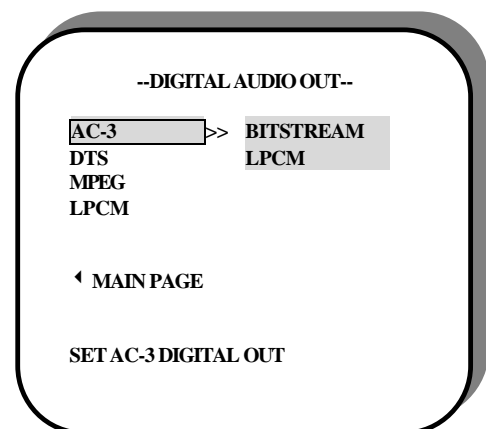
Disc	Audio encoding format	Digital output format
DVD	Dolby Digital (AC-3)	Bitstream (2~5.1ch) or 48kHz/2ch LPCM (Up to 20bits)
	DTS	Bitstream or OFF
	Linear PCM (48/ 96kHz up to 24bits)	LPCM up to 48kHz/20bits
	MPEG	2ch LPCM (16bits)
Video CD	MPEG I	LPCM
CD	Linear PCM	LPCM

— In the LPCM setting, “48K” means “the maximum output sampling rate is 48KHz”; therefore, when the encoding sampling rate is 96KHz, the audio will be converted to 48KHz. If “96K” is selected, then the maximum output sampling rate is 96KHz and no conversion will take place.

① **Sampling rate:** When a sound wave is converted to a digital signal, the sound is sampled and converted to data at a specific frequency rate. For example, a signal with a 96 kHz sampling rate indicates that in one second, the analog signal was sampled 96000 times to produce the digital signal.

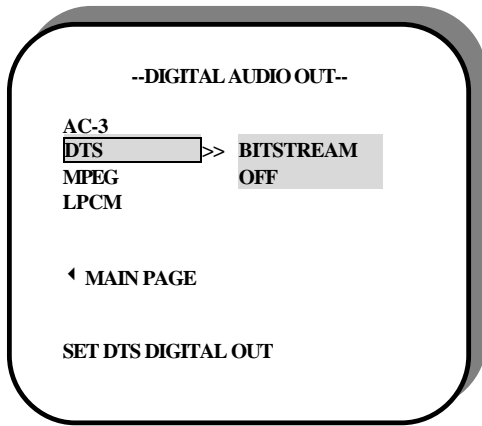
AC-3 (Dolby Digital)

The maximum 5.1 channels of audio used in the surround system for movie theaters is digital data compressed by AC-3. In order to enjoy Dolby Digital (AC-3) discs, this unit's digital output jack (either coaxial or optical) must be connected to the digital input jack of a Dolby Digital (AC-3) amplifier or processor.



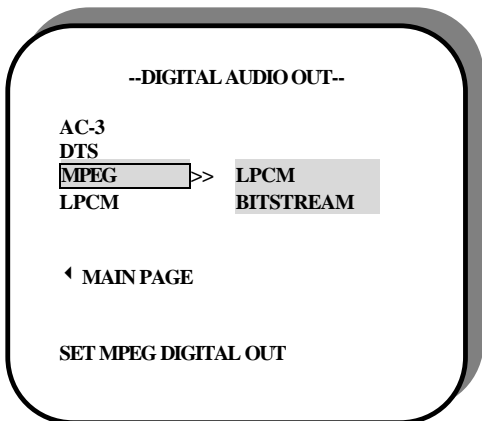
DTS

DTS stands for Digital Theater System. DTS is a surround system different from the Dolby Digital (AC-3) system. It is an encoded/decoded process that delivers multi-channels of “master quality” audio on DVD. If you have a DTS encoded disc, set the DTS to “BITSTREAM” (default) to turn this function on for better sound fidelity.



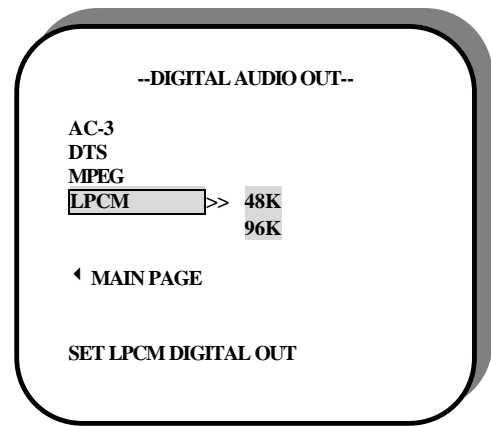
MPEG

The word “MPEG” is short for Moving Picture Experts Group. This is an international standard for compression of audio. By connecting to an MPEG decoder or an AV amplifier with a built-in MPEG decoder, the MPEG audio of DVD discs recorded in this format can be played.



LPCM

PCM stands for Pulse Code Modulation and is digital audio. Same digital audio format as on CDs. Digital audio can be played by connecting this unit to an amplifier with a built-in D/A converter. Additionally, 2 channel analog audio is output from the audio output jacks.

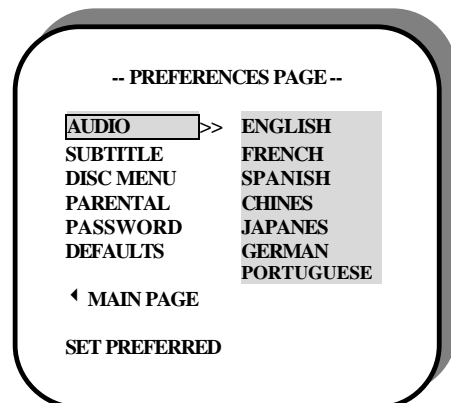


- ① This player has a conversion function for converting Dolby Digital and MPEG audio into the PCM format. This allows playback of CDs with the regular playback system without the need for a special converter.

Preferences

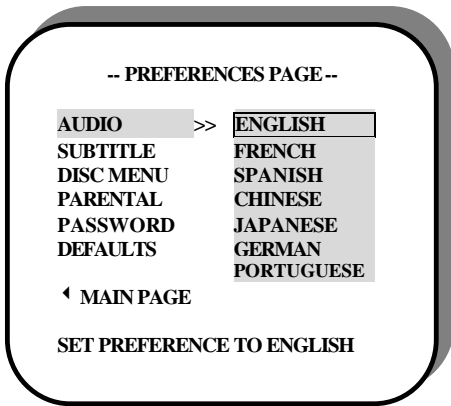
Preferences allow you to set the default audio / subtitle / disc menu language and the parental level for a DVD disc. This setting is only available when the DVD player is in the STOP mode by pressing the **STOP** button twice.

- ① Pressing the **STOP** button once only pauses the playback. You must press the **STOP** button twice to stop the playback.



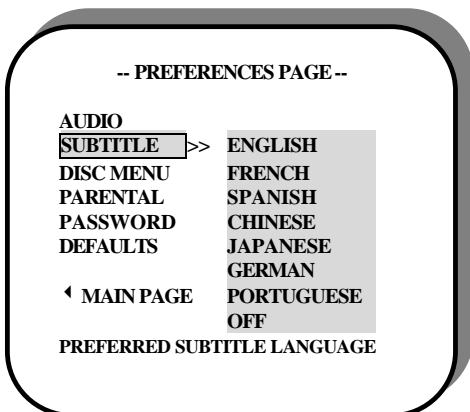
Audio

This unit supports seven audio selections, as shown below, for your preferred audio setting.



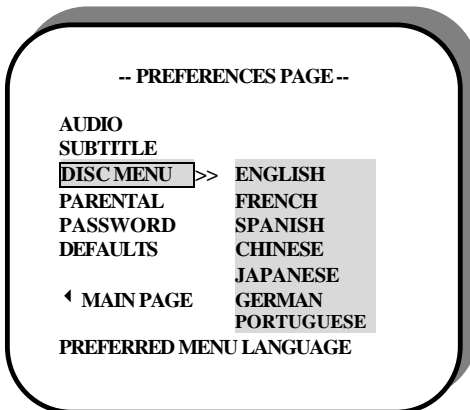
Subtitle

This unit supports seven subtitle selections, as shown below, for your preferred default subtitle setting. When "OFF" is selected, there will be no subtitle is displayed during playback.



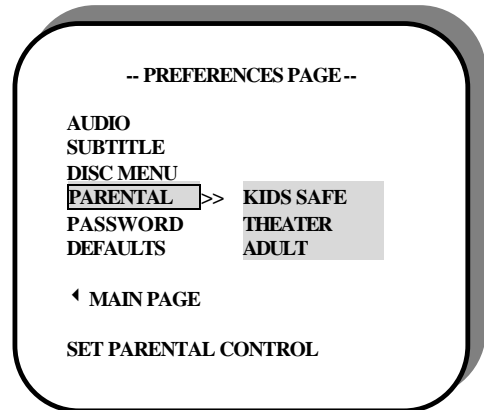
Disc Menu

This unit supports seven disc menu languages.



Parental

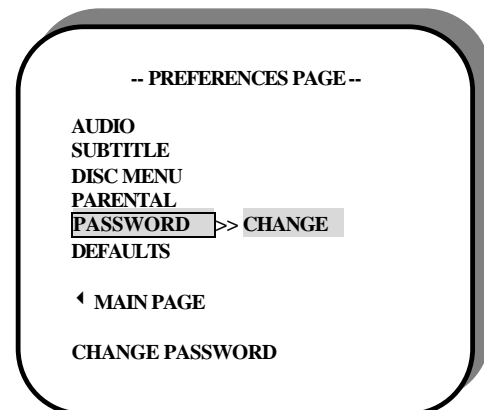
- A "KIDS SAFE" rating level allows DVDs for children to be played, but those for adults / general audiences are prohibited.
- A "THEATER" rating level, allows DVDs for children / general audiences to be played, but won't play DVDs for adults.
- An "ADULT" rating level allows all DVDs to be played.



- ① When you want to change the parental rating level, you will be asked to enter a password as shown below.

Password

The password is a 4-digit number. When you want to change the password, select "CHANGE" as shown below.

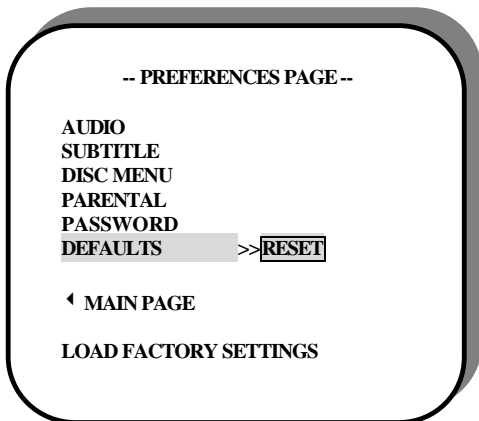


You will be asked to enter the old password, then enter the new password, and confirm it.



Defaults

When you select "RESET", all the initial settings will be restored to the default setting.

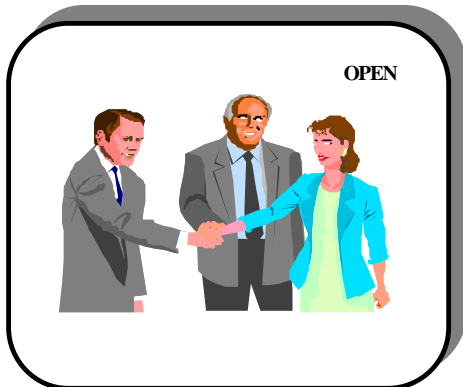


ON-SCREEN DISPLAY (OSD)

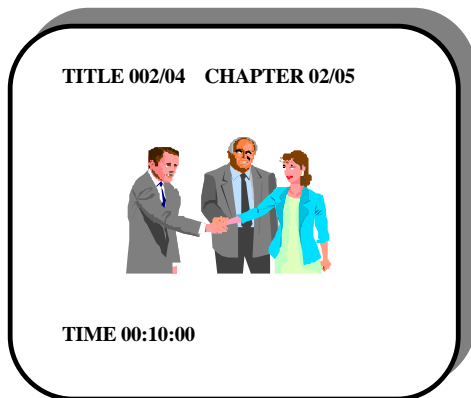
↳ DVD OSD modes

There are 3 OSD display modes available when playing a DVD disc. You can toggle the OSD mode setting by pressing the **DISPLAY** button.

- Mode 1 - Shows the status of the pressed button and some special messages are displayed. The OSD message displays for three seconds. For example, when the **OPEN/CLOSE** button is pressed, the OSD is:



- Mode 2 - Only title number, chapter number, and elapsed time are displayed as shown below:



- Mode 3 - Title number, chapter number, information about the sub-title and the audio, and elapsed time are all displayed as shown below:



↳ CD/VCD OSD Modes

When playing a CD or a VCD disc, OSD modes available are:

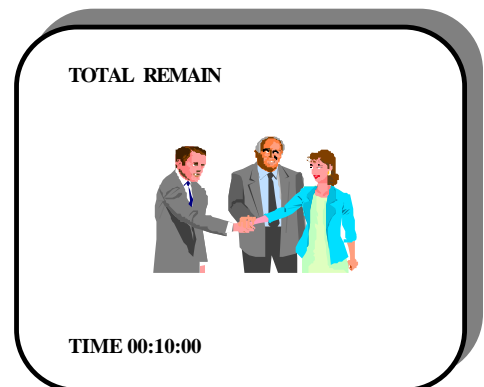
When PBC (Playback Control) is ON (VCD Only):

- OFF mode – only displays the function status of the pressed button or some messages.
- SINGLE ELAPSED mode – displays elapsed time of the playback soundtrack.
- SINGLE REMAIN mode – displays remaining time of the playback soundtrack.

When PBC (Playback Control) is OFF or during audio CD playback:

- OFF mode – only displays the function status of the pressed button or some messages.
- SINGLE ELAPSED mode – displays elapsed time of the playback soundtrack.
- SINGLE REMAIN mode – displays remaining time of the playback soundtrack.
- TOTAL ELAPSED mode – displays elapsed time of all discs.
- TOTAL REMAIN mode – displays remaining time of all discs.

The mode is displayed in the left top corner. Time is displayed in the left bottom screen corner as shown below:



BASIC OPERATION

Preparation:

- If a television set is used, turn on its power and set the TV/Video switch to "Video".
- If a sound system is used, turn on the amplifier first and make sure its outputs are set properly.

Start Playback

- Press the **POWER** button to turn on the DVD player.
- Press the **OPEN/CLOSE** button to open the disc tray.
- Place a disc onto the tray and make sure that it is placed squarely on the tray.
- Press the **OPEN/CLOSE** or **PLAY** button to play the disc.
- ① When using a DVD disc, some menu selections and some DVD playback functions are available during playback.
- ① When using a VCD disc with PBC, the PBC menu will be displayed on the screen. You can use the PBC menu, or press the PBC button to set PBC off and the disc will play immediately.
- ① For a VCD disc without PBC or a CD-DA, the disc will be played immediately.

Stop Playback

- Press the **STOP** button to stop playback.
- ① When the unit is not in use, remove the disc and press the **POWER** button to switch to standby mode.

Skip Playback

Skip playback is not available while playing a VCD with PBC ON.

- Press the **NEXT** button to search to the beginning of next track (VCD/CD) or the next chapter (DVD).
- Press the **PREV** button to search to the beginning of the current track or chapter.

Still/Pause Playback

- Pressing the **STILL/STEP** button during playback will pause play.
- To resume normal play, press the **PLAY** button.

Step Playback

Step playback is available while playing discs other than CD-DA. It provides a frame-by-frame still picture image.

- Press the **STILL/STEP** button to freeze the image.
- Press the **STILL/STEP** button again to skip to the next frame, and so on.
- Press the **PLAY** button to return to normal play.

Fast Forward/Reverse Scan

Using the **FWR** and **REV** buttons to fast forward and reverse scan.

- When the **FWR** or **REV** button is pressed, the speed of play changes in cycles of 2X □ 4X □ 8X □ 12X □ 15X □ 30X □ normal □ 2X.
- When the **PLAY** or **ENTER** button is pressed during fast forward/reverse scan, normal playback will be resumed.
- It is normal that video image may seem discontinuous during fast forward/reverse scan.
- When the fast forward scan reaches the end of a track (CD/VCD) or a title (DVD), normal playback of the next track/title will be resumed.
- When the fast reverse scan reaches the beginning of a track (CD/VCD) or a title (DVD), the normal playback of the track/title will be resumed.

Slow-Motion Forward/Reverse Playback

Pressing the **SLOW** button enables the slow-motion forward/reverse playback.

- DVD - When the **SLOW** button is pressed, the speed changes in cycles of fwd 1/2 □ fwd 1/4 □ fwd 1/8 □ rev 1/2 □ rev 1/4 □ rev 1/8 □ normal □ fwd 1/2.
- VCD - When the **SLOW** button is pressed, the speed changes in cycles of fwd 1/2 □ fwd 1/4 □ fwd 1/8 □ fwd 1/2.
- Pressing the **PLAY** or **ENTER** button, resumes normal play.
- During slow-motion play, you will not be able to hear the audio portion of the track.

ADVANCED OPERATION

Repeated Playback

When the **[1/ALL]** button is pressed, the repeated playback is triggered and the OSD message is changed in cycles of “**1**”, “**ALL**”, and “**OFF**.”

“**1**”

- Enables the repeated playback of a chapter for a DVD disc.
- Enables the repeated playback of a track for a CD disc or a VCD disc.

“**ALL**”

- Enables the repeated playback of a title for a DVD disc.
- Enables the repeated playback of a disc for a CD disc or a VCD disc.

“**OFF**”

- Resumes normal play.

A-B Repeated Playback

You are able to perform a repeated playback between any two points of a track or a chapter.

- Press the **[A-B]** button during playback to set the beginning point (A). The OSD message “A **1**” will be shown on the right lower screen corner.
- Press the **[A-B]** button again to set the end point (B). The OSD message “A **1** B” will be shown. In the meantime, the repeated playback begins between the two points, A and B.
- Pressing the **[A-B]** button again resumes normal play. The OSD message “**OFF**” will be shown.

Random Playback (only for a VCD with PBC off or a CD-DA)

- Press the **[RANDOM]** button to trigger random play. The OSD message “**RANDOM ON**” will be displayed for a few seconds. During random playback, tracks will play randomly.
- Pressing the **[RANDOM]** button again, will resume normal play. The OSD message “**RANDOM OFF**” will display for a few seconds.

Program Playback

The program playback is only available for a CD-DA or a VCD with PBC off.

Track program

- Press the **[STOP]** button to stop the play.
- Press the **[PROGRAM]** button to program the tracks for program playback. The following OSD message will display:



The “P00:00” denotes the sequence and the track of program playback. For example, if the display denotes “P01:03”, this means that the 3rd track will be played first (sequence #1).

- Use the numbers on the remote control to begin programming. Press the corresponding track number in the same sequence as your desired play order. For example, to program tracks 2, 4, 6 (in the same order), simply press key digits **[2]**, digit **[4]**, digit **[6]** sequentially.
- ① A number larger than 10 must be keyed by using **[+10]** additionally. For example, “22” is keyed in by pressing **[+10]** twice and then **[2]** once.
- ① The maximum program capability is 99 tracks.

Start/Cancel the Program Playback

- Press the **[PLAY]** button to start the program playback in the order that you programmed it.
- Press the **[STOP]** button to stop playback, press **[PROGRAM]** to reset program order, press **[PROGRAM]** again to cancel the program function.
- During the program playback, the **[NEXT]** button and the **[PREV]** button can be used to advance to the next programmed track or go back to the previous programmed track.

⌘ Digital Video Markers

This DVD player supports 5 digital video markers to bookmark your favorite scenes.

Store/Set Markers

- Press the **MARK** button during playback and the mark menu will be shown on screen. The “+” indicates an empty bookmark. If a number is displayed in place of the “+”, then there is a marker already stored in that position.



- Press the **ENTER** button to mark the scene location into memory. The position will be numbered automatically.



- Press the **MARK** button again to exit from the mark menu.

Playback/Cancel Marker

- When you press the **◀** or **▶** button to select a marked position, the OSD shows:



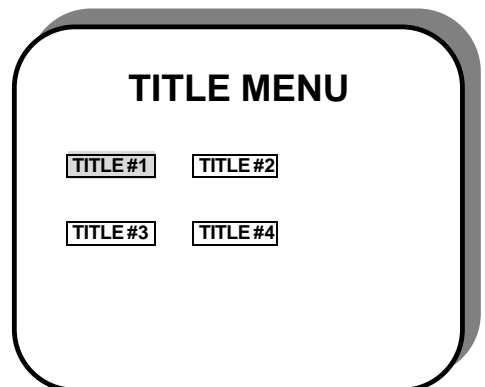
- To playback marker, press the **ENTER** button to play from the marker. The mark menu will be cleared automatically.
- To cancel the marker, Press the **CLEAR** button to clear a marker. The OSD menu will display:







⌘ Title Menu (DVD only)

Some DVD discs have a title menu recorded within them to use for selecting titles for play. This feature will only work with these discs.

- Press the **TITLE** button during playback to reach the title menu. Pressing the **TITLE** button again resumes the playback of the scene when the **TITLE** button was first pressed. For example,



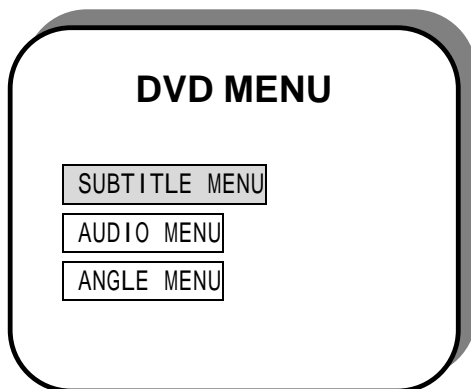
- Use the , , ,  buttons to control the direction and press the **ENTER** or **PLAY** button to select the preferred title or you can directly press the numeric buttons to select the title.





- DVD discs are divided into units referred to as titles, and titles are divided into chapters. Menu screens do not belong to any title. A disc which contains a movie may have only one title with many or chapter divisions. Karaoke discs may have many titles, assigning a title to each song on the disc.

< DVD Menu (DVD only)


Some DVDs have complex contents such as multi-subtitle, multi-audio, or multi-angle. In these cases, you may use the DVD menu to select the audio language, subtitle language, and angle.

- Press the **MENU** button during playback to display the DVD menu, if it is available on the disc. Pressing the **MENU** button again resumes the playback of the scene when the **MENU** button was first pressed

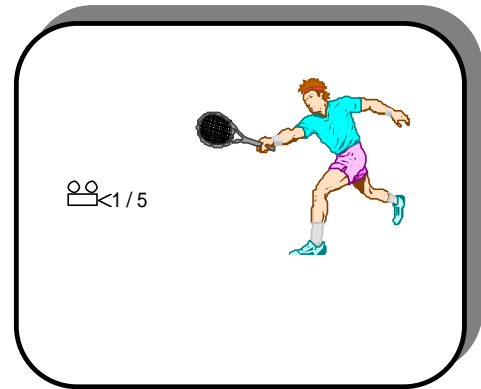


- Use the , , ,  buttons to control the direction and press the **ENTER** or **PLAY** button to select the preferred item. Or you can directly press the numeric buttons to select the item.

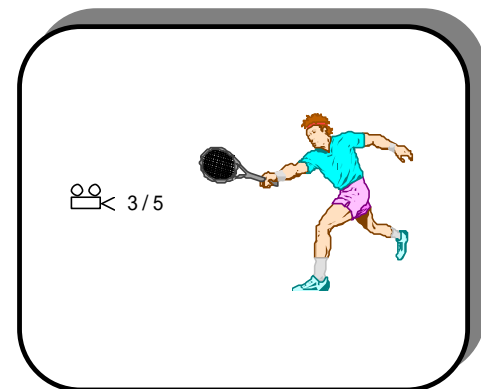
< Multi-Angle Playback

- Some DVD discs may contain scenes with a number of different angle views. Whenever a scene with multiple angle views is played, you can use the **ANGLE** button to view this scene from different angles. (The icon "" will appear on the screen during the playback of a scene with multi-angle views. The "ANGLE MARK" in the initial setting must be set to

"ON.")



- Press the **ANGLE** button and the OSD message will appear to show the current angle number. If no selection is made, this message will disappear after 3 seconds.



- When the **ANGLE** button is pressed, the angle for playback will change in cycles among the available angle numbers.

< Changing Subtitle During Playback

During playback of a DVD disc with more than two subtitle languages, you can change the subtitle or disable the subtitle by pressing the **SUB-T** button.

- Pressing the **SUB-T** button will display the OSD message showing the current subtitle number. If no selection is made, this message will disappear after 3 seconds.

- Subtitle:** subtitles are language titles superimposed on movies, etc. Up to 32 different subtitle languages can be recorded on a DVD disc. The subtitle function can be used to select the language of your choice.



- When the **SUB-T** button is pressed, the subtitle for playback will change in cycles among the available subtitle numbers and “OFF” status. “OFF” will disable the subtitle display.

Changing Audio Language During Playback

During playback of a DVD disc with more than two audio languages, you can change the audio/language by pressing the **AUDIO** button.

- Pressing the **AUDIO** button will display the OSD message showing the current audio/language number. If no selection is made, this message will disappear after 3 seconds.



- When the **AUDIO** button is pressed, the audio / language for playback will change in cycles among the available audio/language numbers.

Search

Under the search mode, specific title, chapter, or time can be located for immediate playback.

DVD search functions

During a DVD playback, pressing the **SEARCH** button can enable the search function. The OSD will show three search methods: by title number, chapter number, and time location.



The “TITLE 01/35” indicates that the player is currently playing title no. 1 of 35 titles. The “CHAPTER 06/38” indicates that the player is currently playing chapter 6 of 38 chapters. The “TIME 00:20:12” indicates that the current playback time is 20 minutes and 12 seconds into the playback.

- To search by title, use the: **▲** **◀** **▼** **▶** buttons to highlight the first two digits of the “TITLE nn/nn” section. Once highlighted, use the number keys on the remote to enter the title you want to play. Press **ENTER** to complete your search selection.
- To search by chapter, use the: **▲** **◀** **▼** **▶** buttons to highlight the first two digits of the “CHAPTER nn/nn” section. Once highlighted, use the number keys on the remote to enter the chapter you want to play. Press **ENTER** to complete your search selection.
- To search by time, use the: **▲** **◀** **▼** **▶** buttons to highlight the “TIME nn:nn:nn” section. Once highlighted, use the number keys on the remote to enter the time frame from which you want to play. Press **ENTER** to complete your search selection.

VCD/CD Search Functions

During a VCD or CD playback, this unit only supports the time search function.

- Pressing the **SEARCH** button during play will display the OSD for VCD/CD search.
- When the time is set, play from this position will start immediately.



VCD Playback Control (PBC)

This function is only available for Video-CD version 2.0 or higher. The PBC operation may differ by disc, therefore, refer to the instructions for each disc.

MENU/PBC Button

- Press the **MENU/PBC** button to switch on/off the PBC function. The OSD message "PBC ON" or "PBC OFF" will be displayed.

PREV and **NEXT** Buttons

- On the PBC menu, the **PREV** and **NEXT** buttons are dedicated for "go back to previous page" and "go to next page" of the PBC menu, if available.
- During play, press the **NEXT** button to return to the PBC menu.

Digit Buttons

- On the PBC menu, all items must be selected and executed by using the number buttons only.

CONNECTION METHOD OF MICROPHONE (Wireless Karaoke Model Only)

Wired Microphone

- Plug the smaller end of wired microphone's connector into the socket of MIC. and turn clockwise till tight ,then plug the other end of wired microphone's connector into MIC. jack of the panel.
- Turn the power switch of microphone to WD position.

Wireless Microphone

Please put batteries into microphone before using it.

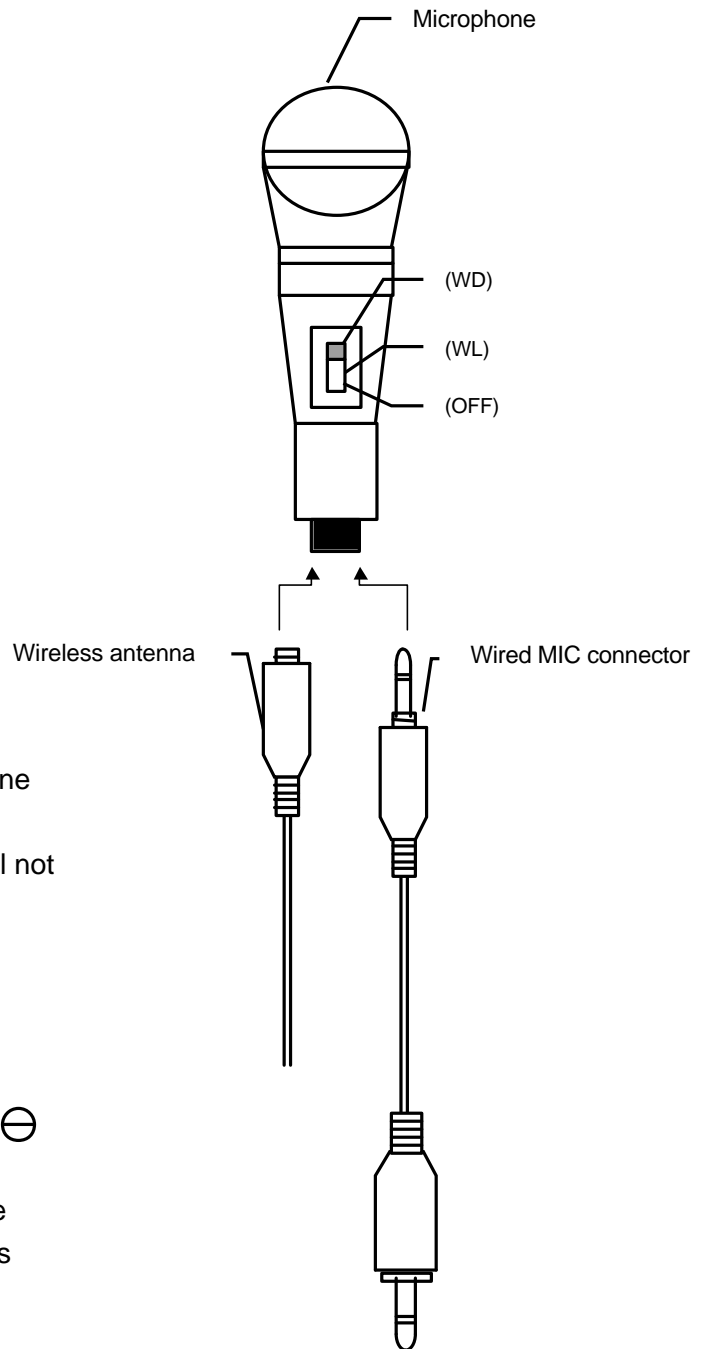
- Plug the emitting antenna into the socket of microphone and turn clockwise till tight.
- Turn the power switch of MIC. to WL position.

Power Management

- Make sure to power off the switch when microphone is not being used.
- Please take off the batteries when microphone will not being used for a long time.

Battery exchange

- Turn and open the middle position of microphone.
 - Please put batteries by following the polarity \oplus \ominus of instruction.
- ① When the emitting distance of wireless microphone become short ,please exchange both two batteries at the same time.



KARAOKE MODE (Karaoke Model Only)

< Connecting the Microphones

- Connect the microphone into the "microphone jack" on the front of the DVD player.
- Switch on the microphone.
- ⓘ This machine could use two wired microphones simultaneously.
- ⓘ Please unplug the microphones, and shift the microphone's power switch to "OFF" position when they are not in use.
- ⓘ If piercing sound is produced, please move the microphone away from the television or speakers, and turn down the volume of television; amplifier or echoing device.

< Karaoke On/Off Settings

Place karaoke disc in the DVD player and play the selected song that you would like to karaoke. Press **KARAOKE** button to begin. You can toggle between the KARAKOE, AUTO and OFF modes by pressing the **KARAOKE** button.

- **KARAOKE** Mode – Manually enables Karaoke mode by turning on both microphones despite the type of disc is inserted in the DVD player.
- **Auto** Mode – The DVD player will automatically check to see if the inserted disc is a karaoke disc. If the disc is encoded correctly, the DVD player will automatically enter the karaoke mode. Some discs are not encoded for this function; therefore, you must select KARAOKE mode pressing the **KARAOKE** key manually.
- **OFF** Mode - Turns off karaoke function.

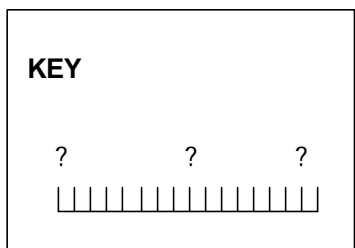
< Microphone Volume Adjustment

To adjust the microphone volume, use the microphone volume knob on the front panel.

< Other Controls

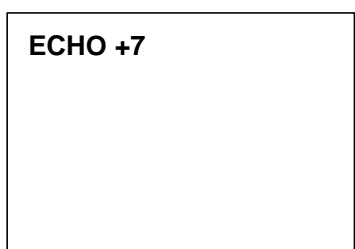
KEY Control

- Using the **[?] [?]** key on the remote controller to adjust the key scale.



ECHO Control

- Using the **[-] [+]** key on the remote controller to adjust the suitable scale.



VOCAL Control

— Using the **VOCAL ASSIST** key on the remote controller to toggle between: **LEFT VOCAL**, **RIGHT VOCAL**, **BOTH VOCAL**, and **NO VOCAL**.

- **LEFT VOCAL:**
If you keep the singing voice from the left channel, the singing voice from right channel will be worked off. In this situation, you can sing with the voice of singer from the left channel in order to present the karaoke effect of choir.
- **RIGHT VOCAL:**
If you keep the singing voice from the right channel, the singing voice from left channel will be worked off. In this situation, you can sing with the voice of singer from the right channel in order to present karaoke effect of choir.
- **BOTH VOCAL:**
If you keep the singing voice from both channels, you can depend on yourself during singing with the voice either from left or from right channel.
- **NO VOCAL:**
If you disable the singing voice from both channel, no more singing voice will be heard except the accompaniment.

MP3

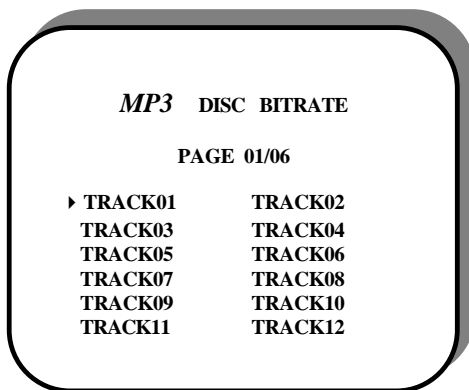
MP3 Format

- └ This unit supports 56~320Kbps/44.1KHz MP3 disc that are formatted by ISO9660 CD-ROM mode 1 file type.
- └ File name can't be over eight letters. It doesn't support a long file name and only display in English.

Operation Method

Play

- Place MP3 disc into the tray, then press **OPEN/CLOSE**. It will play the disc automatically.
- It will list twelve songs a page on the TV screen.



Menu

- Under the status of stop mode, you can press **MENU** button on the Remote Controller to display the menu of MP3 discs.
- In the menu screen, you can use **◀ ▶ ▲ ▼** buttons for movement to select a title, then press **ENTER** button to confirm.

Song Selection

- Press the numeral button directly from **0** to **9** and **+10** to select the song what you want.
EX: If you want to select #25 song, you have to press **+10** button twice and then press **5** button.
- Under the status of stop mode, you can use **◀ ▶ ▲ ▼** buttons for movement to select a song, then press **ENTER** button to confirm.
- Under the status of stop mode, you can use **PREVIOUS** **NEXT** buttons to jump page.

TROUBLESHOOTING

Before requesting service for this unit, please check the following chart for possible causes and remedies. If the remedies indicated in the chart below do not solve the problem, please consult your dealer for instructions.

Common Symptom	Possible Cause	Remedy
No power	✓ Power cord is not properly connected to the power outlet	✓ Make sure there is a connection between the power cord and the outlet.
Disc tray can't close	✓ Disc is not properly placed	✓ Replace the disc properly.
No playback	<ul style="list-style-type: none"> ✓ Power is OFF ✓ No disc is inserted ("no disc" will be shown on screen). ✓ Disc is upside down. ("no disc" is shown on screen). ✓ Dirty disk ✓ Deformed disk ✓ Condensation in unit 	<ul style="list-style-type: none"> ✓ Turn the power ON. ✓ Insert a disc. ✓ Reload disk. The label side should face upward. ✓ Clean disc surface. ✓ Replace disc. ✓ Turn power on for 1-2 hours before using the unit.
Unwanted mosaic-like garbage display during playback	✓ Poor disc	✓ Replace disc
No audio	<ul style="list-style-type: none"> ✓ Slow or fast playback ✓ Audio terminals are not connected. ✓ TV volume is too low ✓ Wrong AUDIO OUTPUT setting 	<ul style="list-style-type: none"> ✓ Press [PLAY] to resume normal playback ✓ Check audio connections ✓ Adjust TV volume ✓ Check AUDIO OUTPUT setting
No Video	<ul style="list-style-type: none"> ✓ Disconnection of video equipment ✓ Wrong input setting of video equipment 	<ul style="list-style-type: none"> ✓ Check video connections ✓ Check video input setting of video equipment
Remote control unit does not work	<ul style="list-style-type: none"> ✓ No batteries in remote control ✓ Dead batteries ✓ Remote control not being pointed at the remote sensor 	<ul style="list-style-type: none"> ✓ Put in new batteries ✓ Replace batteries ✓ Point the remote control at the remote sensor

DVD Symptom	Possible Cause	Remedy
Does not play, even when a title is selected	✓ Prohibited by the parental rating	✓ Confirm the PARENTAL setting.
Audio or subtitle language is not the one selected during the initial setting.	✓ The selected language does not exist on the disc	✓ Select another language using [AUDIO] or [SUBTITLE]
Setting language is not what you want	✓ Wrong OSD language setting	✓ Check the OSD language setting
Audio or Subtitle can not be changed	✓ The disc contains only one language	✓ Check the disc contents
The password for parental rating has been forgotten		✓ Use "0000" to override the forgotten password and re-enter a new password.
The video image brightness fluctuates during playback	✓ The DVD player is connected to the television via a video tape recorder	✓ Connect the DVD player directly to the TV, bypassing the VCR.

SPECIFICATION

Power requirement	100-240 V ~, 50/60 Hz
Power consumption	26 W (approx. 6W at standby mode)
Weight	4.2Kg (5.1ch model)
Dimensions (W x D x H)	430x310x91 (mm)
Operating temperature range	+5 to 40 °C
Operating humidity range	5 to 90 % (no condensation)

Video system	NTSC 525/60 Hz or PAL 625/50 Hz	
Component video terminal	Y output level	1 Vp-p (75 Ω)
	Cb output level	0.7 Vp-p (75 Ω)
	Cr output level	0.7 Vp-p(75 Ω)
S-video terminal	Y output level	1 Vp-p (75 Ω)
	C output level	0.286 Vp-p (75 Ω)
Composite video terminal	1 Vp-p (75 Ω)	
SCART terminal (RGB video)	R output level	0.7 Vp-p (75Ω)
	G output level	0.7 Vp-p (75Ω)
	B output level	0.7 Vp-p (75Ω)

Audio parameters	Frequency range	20Hz ~ 20kHz
	Dynamic range	Over 90 dB
	S/N ratio	Over 90 dB
	Distortion	Under 0.01%
	Output level	2 Vrms

Label

1. First class laser product. Rating labels on the back of the machine
2. Danger: when the internal functions are out of order or damaged, opening the cover may cause unseen radioactivity. It should be kept away from direct light.
3. Caution: Do not open the top cover. No internal part should be maintained or serviced by the user. All such work should be carried out by qualified personnel.

**CLASS 1
LASER PRODUCT**

Dolby License

- Product Manual LICENSE NOTICE
Manufactured under license from Dolby Laboratories
- TRADEMARK ACKNOWLEDGEMENT
"Dolby", "AC-3", "Pro logic" and the double-D symbol are trademarks of Dolby Laboratories.
COPYRIGHT NOTICE
- Confidential Unpublished Work. ©1992-1997 Dolby Laboratories, Inc. All rights reserved.

DTS License

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

Note

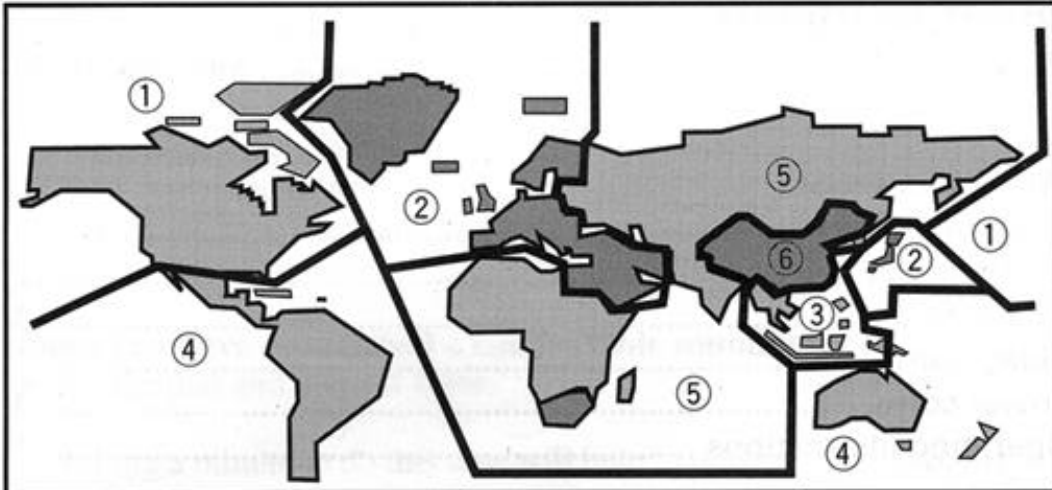
- The specifications and design of this product are subject to change without notice, due to improvement.

REGION MANAGEMENT INFORMATION

This DVD player is designed and manufactured to respond to the Region Management Information recorded on a DVD disc. If the region number described on the DVD disc does not correspond to the region number of this DVD player (The region number can be found on the rear panel of the DVD player), this DVD player will not play the disc. The OSD message “WRONG REGION” will show on the screen. The illustration below shows the regions and corresponding region numbers.

REGION NUMBER INFORMATION

- ◆ REGION 1 USA & Canada
- ◆ REGION 2 Europe, Japan, South Africa, Middle East
- ◆ REGION 3 South-East Asia
- ◆ REGION 4 Central & South America, Australia, New Zealand
- REGION 5 Former Soviet Union, India, Pakistan, Africa
- REGION 6 China



DESCRIPTION OF SCART TERMINAL (Euro Model Only)

Pin No	Video	RGB-Video	S-Video
1	Audio Output (R)	Audio Output (R)	Audio Output (R)
2	Audio Output (L)	Audio Output (L)	Audio Output (L)
3	No Connection	No Connection	No Connection
4	Audio GND	Audio GND	Audio GND
5	No Connection	Blue GND	No Connection
6	No Connection	No Connection	No Connection
7	No Connection	Blue	No Connection
8	Switching Voltage	Switching Voltage	Switching Voltage
9	No Connection	Green GND	No Connection
10	No Connection	No Connection	No Connection
11	No Connection	Green	No Connection
12	No Connection	No Connection	No Connection
13	No Connection	Red GND	S-Video (C) Output GND
14	Blanking GND	Blanking GND	Blanking GND
15	No Connection	Red	S-Video (C) Output
16	Blanking	Blanking	Blanking
17	Video Output GND	Video Output GND	S-Video (Y) Output GND
18	No Connection	No Connection	No Connection
19	Video Output	Video Output	S-Video (Y) Output
20	No Connection	No Connection	No Connection
21	GND	GND	GND

Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>