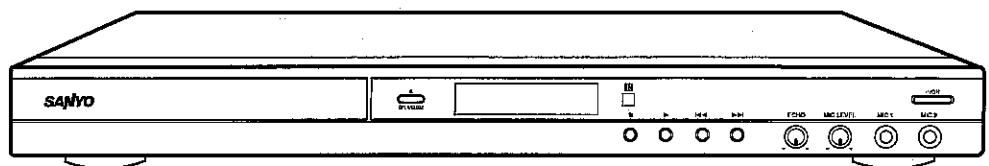
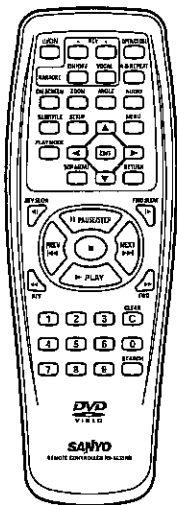


SANYO

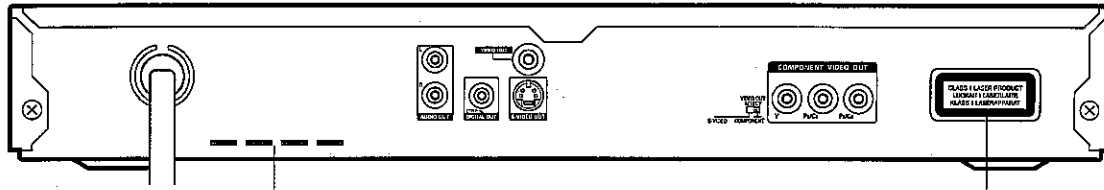
INSTRUCTION MANUAL

DVD-SL38KR

DVD Player



PRECAUTIONS



CAUTION – INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL – USYNLIG LASER STRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION, UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARNING – OSYNLIG LASER STRÅLNING NÅR DENNA DEL ÅR ÖPPNAD OCH SPÄRR ÅR URKOPPLAD. STRÅLEN ÅR FARLIG.
VORSICHT – UNSICHTBARE LASERSTRAHLUNG TRITT AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITVERRIEGELUNG ÜBERBRÜCKT IST. NICHT, DEM STRAHL AUSSETZEN.
VARO – AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.



CLASS 1 LASER PRODUCT LUOKAN 1 LASERLAITE KLASS 1 LASERAPPARAT

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

THIS UNIT SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED PERSONNEL.

- The apparatus shall not be exposed to dripping or splashing.
- No objects filled with liquids, such as vases, shall be placed on the apparatus.
- Do not use where there are extremes of temperature (below 5 °C or exceeding 35 °C) or where direct sunlight may strike it.
- Because of the DVD player's extremely low noise and wide dynamic range, there is a tendency to set the volume on the amplifier higher unnecessary high. Doing so may produce an excessively large output from the amplifier which could damage to your speakers.
- Sudden changes in the ambient temperature may cause condensation to form on the optical lens inside the unit. If this happens, take out the disc, leave the unit for about 1 hour, and then proceed to operate.
- When carrying the unit, be sure to remove a disc which may be inside and turn the power off. Wait at least 10 seconds, then unplug the mains lead from the AC outlet. Carrying the unit with a disc inside may damage the disc and/or the unit.
- Do not install this equipment in a confined space, such as a book case or built in cabinet.
- The unit is not completely disconnected from the mains when the ON/OFF button is set to the ON position.
- The unit is automatically set to the screen saver mode after approximately 15 minutes have elapsed under the stop or pause mode.
- The unit is automatically set to the standby mode after approximately 30 minutes have elapsed under the complete stop or pause mode.

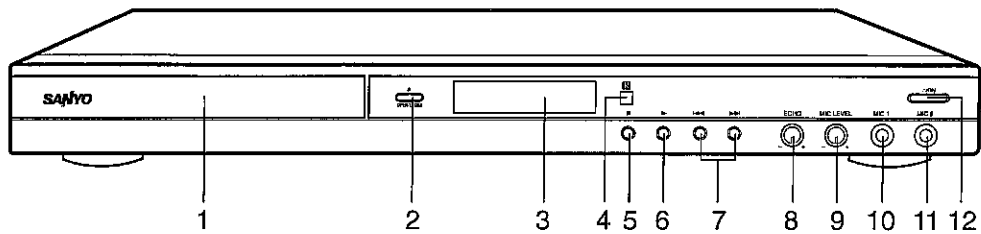
Important information:

To connect this unit to a TV, TV must have a set of Audio/Video composite input sockets at least. You cannot use an RF input socket or aerial terminal to connect this unit.

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.

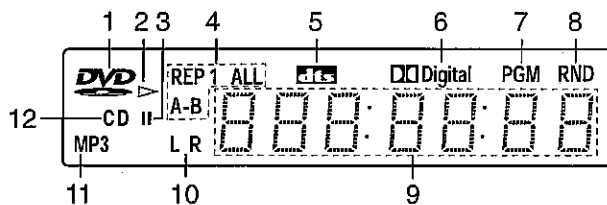
CONTROLS

Front Panel



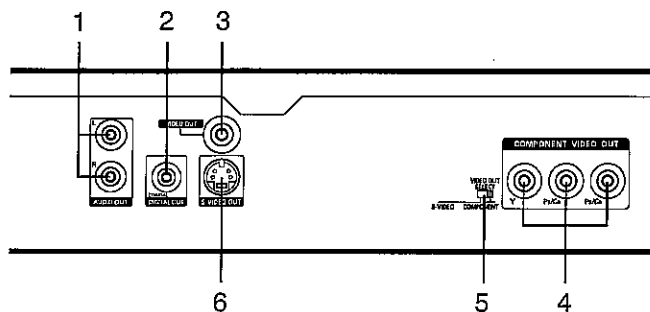
- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> 1. Disc tray 2. Open/Close button (OPEN/CLOSE/▲) 3. FL display 4. Remote sensor (IR) 5. Stop button (■) 6. Play button (▶) | <ul style="list-style-type: none"> 7. Skip/Next/Previous buttons (◀◀▶▶) 8. Echo Volume (ECHO) 9. Mic Level Volume (MIC LEVEL) 10. Mic 1 Input socket (MIC 1) 11. Mic 2 Input socket (MIC 2) 12. Power button (⏻/ON) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Display



- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> 1. DVD indicator (DVD) 2. Play indicator (▶) 3. Pause indicator (⏸) 4. Repeat mode indicators (REP, 1, ALL, A-B) 5. DTS indicator (dts) 6. Dolby Digital indicator (Digital) | <ul style="list-style-type: none"> 7. Program indicator (PGM) 8. Random play indicator (RND) 9. Message or number indicators
(Title, chapter, track, playing time or other information) 10. Channel indicator (L R) 11. MP3 indicator (MP3) 12. CD indicator (CD) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

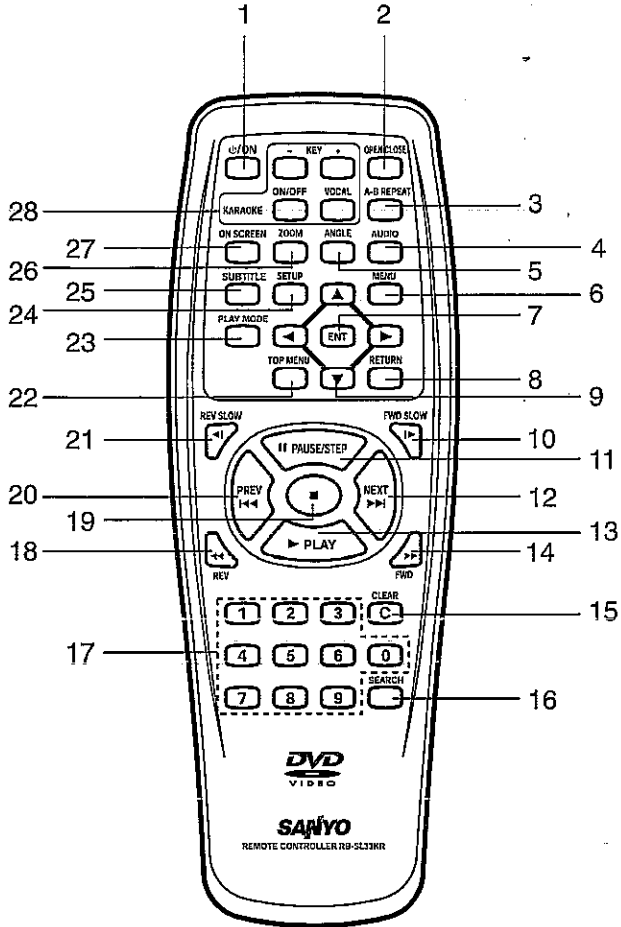
Rear Panel



- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> 1. Audio output sockets (AUDIO OUT) 2. Coaxial digital output socket (DIGITAL OUT) 3. Video output socket (VIDEO OUT) | <ul style="list-style-type: none"> 4. Component video output sockets (COMPONENT VIDEO OUT) 5. Video output select switch (VIDEO OUT SELECT) 6. S-Video output socket (S-VIDEO OUT) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

REMOTE CONTROL

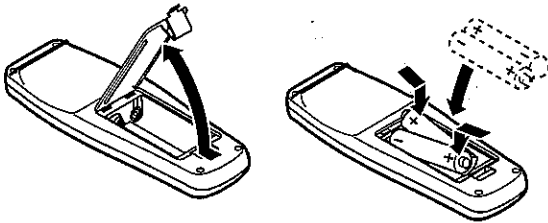
Controls



1. Power button (ON)
2. Open/Close button (OPEN/CLOSE)
3. A-B repeat button (A-B REPEAT)
4. Audio button (AUDIO)
5. Angle button (ANGLE)
6. Menu button (MENU)
7. Enter button (ENT)
8. Return button (RETURN)
9. Directional arrow buttons (▲, ▶, ▼, ◀)
10. Forward slow button (FWD SLOW ▶)
11. Pause/Step button (⏸ PAUSE/STEP)
12. Skip/Next button (NEXT ▶▶)
13. Play button (▶ PLAY)
14. Forward button (FWD ▶▶)
15. Clear button (CLEAR)
16. Search mode button (SEARCH)
17. Number buttons (1-9, 0)
18. Reverse button (REV ◀◀)
19. Stop button (■)
20. Skip/Previous button (PREV ◀◀)
21. Reverse slow button (REV SLOW ◀)
22. Top menu button (TOP MENU)
23. Play mode button (PLAY MODE)
24. Setup button (SETUP)
25. Subtitle button (SUBTITLE)
26. Zoom button (ZOOM)
27. On screen display button (ON SCREEN)
28. Karaoke function buttons
ON/OFF: On/Off button
VOCAL: Vocal button
- KEY +: Key buttons

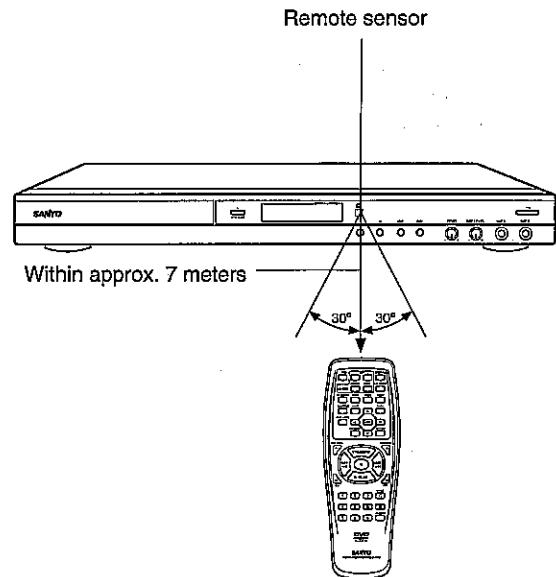
Inserting batteries

Install two "AA/R6" batteries (not supplied).



Note:
Remove the batteries if the remote control is not to be used for a month or more. Batteries left in the unit may leak and cause damage.

Remote control range

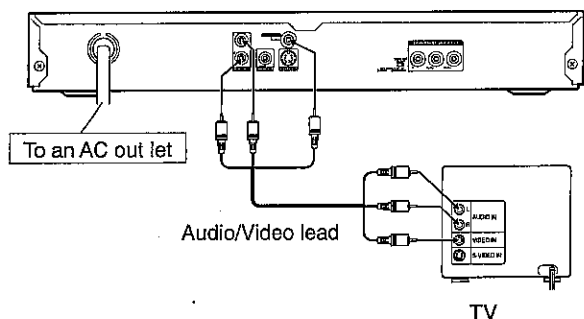


CONNECTIONS

BEFORE CONNECTIONS

- Do not connect the unit to a VCR directly. The playback picture will be distorted because DVD discs are copy protected.
- When you connect the unit to your TV and other equipment, be sure to turn off the power and disconnect all of the equipments from the wall outlet until all the connections have been made.
- Please refer to the instruction manuals for the components that you are connecting (TV, AV, amplifier, etc.)

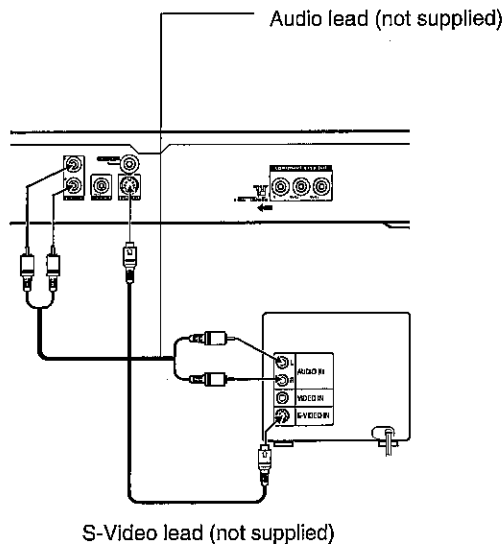
Connecting to a TV with the audio/video lead



Connecting to a TV with an audio and S-video leads

Please follow this step before turning on the power.

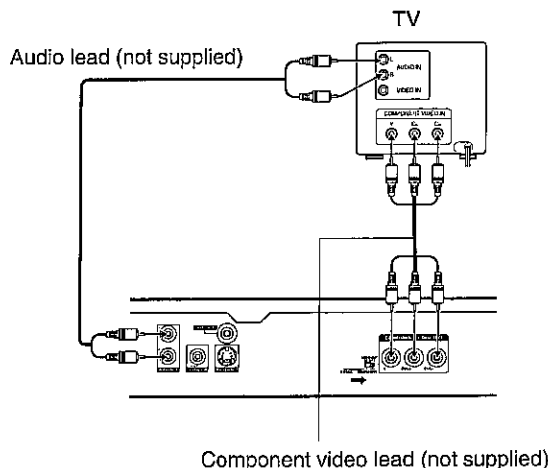
1. If your TV has an S-video input socket, connect the unit as shown. (The VIDEO OUT socket connection is not necessary.) You can enjoy clearer picture playback.
2. Set the VIDEO OUT SELECT switch to S-VIDEO.



Connecting to a TV with an Audio and Component video leads

Please follow these steps before turning on the power.

1. If your TV has component video sockets connect the unit as shown. (The VIDEO OUT socket connection is not necessary.) You can enjoy clearer picture playback.
2. Set the VIDEO OUT SELECT switch to COMPONENT.



As an alternative to using the TV's speakers, the sound can also be played back through a HiFi system or an amplifier.

Connecting to a HiFi system with analog two-channel stereo sound

Connect an audio lead (not supplied) to the AUDIO OUT sockets of the unit and to the appropriate sockets of the HiFi system.

- The AUDIO OUT sockets can also be used for connection to an AV system with Dolby Pro Logic decoder.

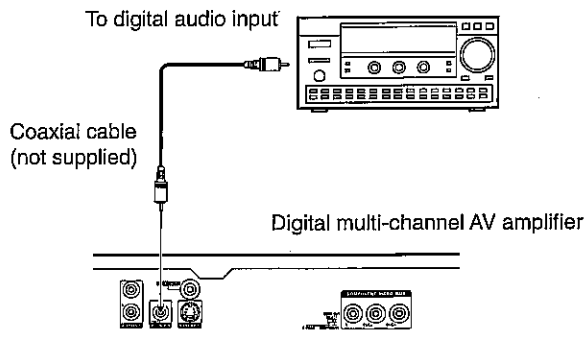
Note:

To enjoy Dolby Pro Logic sound, select "Dolby Digital: LPCM" in "Setting digital out".

Connecting to a digital multi-channel AV amplifier

The digital multi-channel sound of a DVD can best be decoded and played with a multi-channel AV amplifier (Dolby Digital decoder or MPEG AUDIO decoder).

The AV amplifier has to be able to process the DTS audio signal in order to play a DVD with DTS. If it cannot then you will not be able to hear the DVD.



Note:

Select "Setting digital out" setting as follows.

- To enjoy Dolby Digital sound, select "Dolby Digital: BitStream".
- To enjoy DTS sound, select "DTS: On".
- To enjoy MPEG AUDIO sound, select "MPEG: BitStream".
- To enjoy 2 channel digital stereo sound, select "Dolby Digital: LPCM", "DTS: Off", "MPEG: LPCM".





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"Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

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

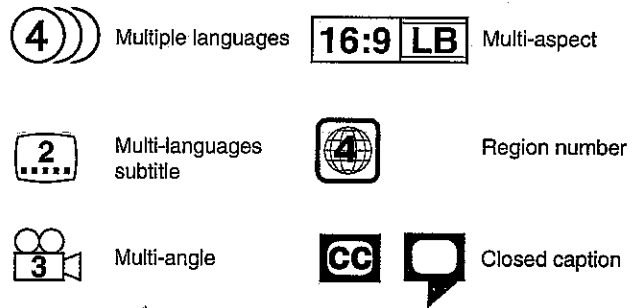
PLAYABLE DISCS

The following types of discs can be played on the unit.

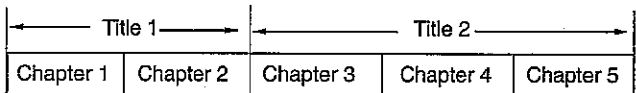
Disc type and logo mark	
DVD-Video	
Audio CD	
Video CD	 

DVD disc

There are the marks on some DVD disc packages.
Example:

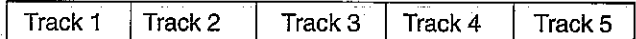


DVD discs are divided into titles, and the titles are sub-divided into chapters.



Video CD/Audio CD disc

Video CD/Audio CD discs are divided into tracks (Fig. 13).



Notes on handling discs

- Do not expose the disc to direct sunlight, high humidity or high temperatures for extended periods of time.
- Discs should be returned to their cases after use. Do not apply paper or write anything on the disc surface.
- Handle the disc by its edge. Do not touch the playing surface (glossy side).
- Fingerprints and dust should be carefully wiped off the playing surface of the disc with a soft cloth. Wipe in a straight motion from the centre to the outside of the disc.
- Never use chemicals such as record cleaning sprays; antistatic sprays or fluids, benzene or thinner to clean discs.

Note:

- Only the above types of discs can be played on this unit. DVD-ROM, CD-ROM, SVCD, CVD, etc. cannot be played.
- The unit can play back the Video CD (VCD).
- This unit can play back the DVD-R that has recorded movie data. However, some DVD-Rs cannot be played back depending on the recording conditions.
- The DVD-R that has no movie data cannot be played back.
- This unit is to be used exclusively with the PAL (or NTSC) colour system discs. SECAM system discs cannot be used with this unit.

For DVD discs: The video output signal format can be selected ("PAL 60" or "NTSC") when playing back the NTSC discs.

Region Number

Region number (Regional restriction code) is built-in to the unit and DVD video discs.

There is a region number on the rear of the unit.

The same region number or region number "ALL" of DVD discs can be used on the unit.

Example:



BASIC OPERATION

Important Note:

- This instruction manual explains the basic instruction of this unit using the remote control.
- Some DVD video discs have different functions that may not be explained in this instruction manual. You may need extra instruction. In this case, please follow the instructions displayed on the TV screen or jacket or case of the disc.
- "⊙" may appear on the TV screen during operation. This icon means that the function is not available on the disc now.
- For improvement, FL displays and on-screen displays subject to change without notice.

Preparations

- Turn on the TV and select the video input for this unit.
- Select the playback picture size according to the aspect ratio of the TV. (See "Setting display" on Page 14.)
- Turn on the AV amplifier, etc. and select the audio input for this unit.
- Select the desired languages for the on-screen menus. The following languages can be selected. (See "Setting language" on Page 14.)
English (default), Spanish, French, Chinese, Portuguese
- In this instruction manual, the language in on-screen display is English. If you change the language, please follow the selected language in on-screen display.

Notes:

- Do not touch the disc tray while it is moving.
- Never place anything except a disc on the disc tray. Foreign objects can damage the unit.
- Do not apply excessive force to the disc tray.
- Only one disc must be placed on the disc tray at a time.
- To open or close the disc tray, be sure to use the OPEN/CLOSE button. Do not press the disc tray with your hand.

When operation buttons are processed, that operation is displayed on the TV screen for several seconds.

1. Press the \odot /ON button. "SANYO" logo appears on the TV screen. "LOAD" blinks, and then "NO DISC" appears on the display.
2. Press the OPEN/CLOSE button. "OPEN" appears on the display and the disc tray opens.
3. Place the disc with the label facing up on the disc tray.

12 cm disc

8 cm disc

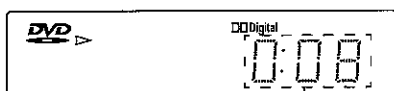


4. Press the OPEN/CLOSE button again. The disc tray closes.
Note:
Some discs may start play automatically.

Starting play

Press the \blacktriangleright PLAY button.

- When using the main unit, use the \blacktriangleright button.
Example:



Elapsed playing time

2. Press the number buttons to enter the title number.
Example:
To select No. 3, press 0, then 3 (or press 3).
To select Title No.10, press 1, then 0.
To select Title No. 24, press 2, then 4.
- If you make a mistake, press the CLEAR button.
3. Press the ENT button. Playback starts from the selected title.

Chapter Search [DVD]

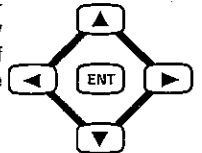
1. Press the SEARCH and \blacktriangleright , \blacktriangleleft button during playback. The chapter search screen appears on the TV screen.
Example:

Search	
Time	---:--
Title/Chapter	---/---

2. Press the number buttons to enter chapter number.
3. Press the ENT button. Play starts from the selected chapter.

Note:

If the disc is loaded with the label side downward (and it is a single sided disc), or badly scratched disc is loaded, "No Play" appears. If this occurs, load the disc correctly or replace the disc.



If a menu appears on the TV screen ...

Press the \blacktriangle , \blacktriangleright , \blacktriangledown or \blacktriangleleft button (or the number buttons), then press the ENT button to select the desired menu. Playback of the selected menu starts.

Note:

For more details, please refer to the jacket or case of the disc.

Stopping play

[DVD] [VCD]

- Press the \blacksquare button once.
When you press the \blacktriangleright PLAY button, play starts automatically from the point where you stopped.
Note:
Some discs may not resume play.
- Press the \blacksquare button twice. The unit stops completely and " \blacksquare " appears on the display.
When you press the \blacktriangleright PLAY button, play starts from the beginning of the disc.

[CD]

- Press the \blacksquare button. The unit stop completely.

To turn off the power, press the \odot /ON button.

PBC selection (for VCD version 2.0 only)

1. Press the MENU button during playback. "PBC on" appears on the screen.
2. Press the MENU button again, "PBC off" appears on the screen.

What is "PBC"?

"PBC" is an abbreviation for "Playback Control" that refers to control codes pre-recorded on Video CDs.

VARIOUS PLAYING FUNCTIONS

"⊘" may appear on the TV screen during operation. This icon means that the function is not available on the disc now.

Selecting a DVD menu [DVD]

1. Press the MENU button. The main menu screen appears.
Note: Press the MENU button again to resume play.
2. Press the ▲, ▼, ◀ or ▶ button (or the number buttons) to select the desired menu, then press the ENT button. The selected menu play starts.

Selecting a top menu [DVD]

1. Press the TOP MENU button. The top menu appears.
2. Press the ▲, ▼, ◀ or ▶ button (or the number buttons) to select the desired menu, then press the ENT button. The selected menu play starts.

Note:

Selecting a menu operation may differ depending on the disc used and may not be possible on some discs.

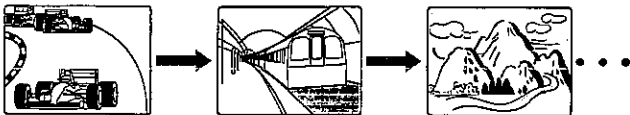
Return button (RETURN) for VCD

Normally, it returns to the previous menu when the RETURN button is pressed during play.

Note:

The operation differs according to the content of the VCD.

Chapter (Track) skip



Skipping forward

Press the NEXT ►► button during playback to skip to the next chapter (or track). A chapter (or track) is skipped each time the button is pressed.

- When using the main unit, use the ►► button.

Skipping backward

Press the PREV ◀◀ button during playback to skip back to the beginning of the chapter (or track) currently play. Press the button again immediately to skip back to the beginning of the previous chapter (or track).

Note:

You can skip only through the chapters, not over the title on the DVD disc.

Title Search [DVD]

1. Press the SEARCH and ▼ button once during play or in the stop mode.

The title search screen appears on the TV screen.

Example:

Search	
Time	--:--:--
Title/Chapter	---/---

2. Press the number buttons to enter the title number.
Example:
To select No. 3, press 0, then 3 (or press 3).
To select Title No.10, press 1, then 0.
To select Title No. 24, press 2, then 4.
- If you make a mistake, press the CLEAR button.
3. Press the ENT button. Playback starts from the selected title.

Chapter Search [DVD]

1. Press the SEARCH and ▼, ► button during playback. The chapter search screen appears on the TV screen.
Example:

Search	
Time	--:--:--
Title/Chapter	---/---

2. Press the number buttons to enter chapter number.
3. Press the ENT button. Play starts from the selected chapter.

Track Search [VCD] [CD]

Press the number buttons during play or in the stop mode, then press the ENT button. Play starts from the selected track.

Time Search

[DVD]

1. Press the SEARCH button during play. The time search screen appears.

Example:

Search	
Time	--:--:--
Title/Chapter	---/---

2. Press the number buttons to enter the time.
Example:
20 minutes 5 seconds Press 0, 0, 2, 0,0 and 5.
1 hour 4 minutes 35 seconds Press 0,1,0,4,3 and 5.
If you make a mistake, press the CLEAR button.
3. Press the ENT button. Playback starts from the searched time.

[VCD] [CD]

1. Press the SEARCH button once during play. The time search screen appears.
2. Press the number buttons to enter the time.
3. Press the ENT button. Play starts from the searched time in the track.

Note: For VCD Version 2.0, "PBC off" selection is necessary before step 1-3.

Fast Playback

Press the ►► FWD or ◀◀ REV repeatedly to select the fast speed forward playback (up to 200 times normal speed in DVD).

[DVD] [VCD]

►► x 2", ►► x 4", ►► x 8", ►► x 20" or ◀◀ x 2", ◀◀ x 4", ◀◀ x 8", ◀◀ x 20"

Slow-motion play

[DVD]: Forward/Reverse slow play. [VCD]: Forward slow play only
Press the FWD SLOW ► or REV SLOW ◀ button repeatedly to select the forward or reverse slow speed play.

"► 1/2", "► 1/4", "► 1/6", "► 1/7" or "◀ 1/2", "◀ 1/4", "◀ 1/6", "◀ 1/7"

Press the ► PLAY button to return to normal play.

Note:

The sound is muted during fast playback in DVD.

Still Picture (Pause)

[DVD] [VCD]: Still picture mode. [CD]: Pause mode

Press the || PAUSE/STEP button during play.

Press the ► PLAY button to return to normal play.

Note: The sound is muted.

Frame by frame advance play [DVD] [VCD]

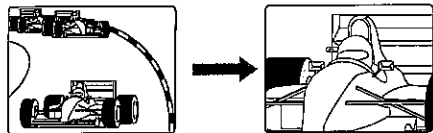
Press the **II PAUSE/STEP** button during still play. Each time the button is pressed, the picture advance one frame.

Press the **▶ PLAY** button to return to normal play.

Note:

- The sound is muted.
- Frame play is operative in forward mode only.

Picture Zoom (Pin Point Zoom) [DVD] [VCD]



1. Press the **ZOOM** button during normal, slow or still play. The central part of picture is magnified.

- Each time the button is pressed, the zoom mode changes as follows.

DVD: Q1 → Q2 → Q3 → Q Off

VCD: Q1 → Q2 → Q Off

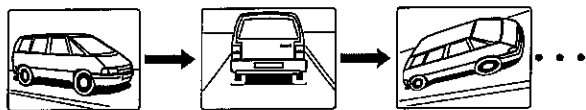
- Press the **◀, ▼, ▲** or **▶** button to change the zoom point.

2. Press the **ZOOM** button to select "Q Off" to return to the original screen.

Note:

Picture zoom may not work on some discs.

Viewing from a desired camera angle (Multi-Angle) [DVD]



Some DVD discs may contain scenes which have been shot simultaneously from a number of different camera angles. The jacket or case of discs that are recorded with angles will be marked.

Example:



Note:

The recorded angles differ depending on the disc used.

1. Play the disc that is recorded with angles.
2. Press the **ANGLE** button repeatedly until the desired angle appears.

Example:



Repeat Playback

Press the **PLAY MODE** and **▼** button to select repeat mode during playback (or programmed playback) of the title (or track) you want repeat. Then press **ENT** button to change repeat mode. Each time the button is pressed, the repeat mode will be changed as follows.

TV screen	FL display	Operation
[DVD]		
Chapter	REP 1	Repeat of chapter being played
Title	REP ALL	Repeat of title being played
Off		Repeat off mode
[VCD] [CD]		
Single	REP 1	Repeat of track being played
All	REP ALL	Repeat all tracks
Off		Repeat off mode
During Programmed Playback		
Single	REP 1	Repeat of track being played
All	REP ALL	Repeat all programmed tracks
Off		Repeat off mode

Designated Range Repeat Playback (A-B Repeat)



1. Press the **A-B REPEAT** button during playback at the beginning of the section you want to repeat (Point A). "A" appears on the screen.
2. Press the **A-B REPEAT** button again at the end of the section (Point B). "A-B" remains lit on the FL display. The section between points A and B is played repeatedly.
3. To return to normal play, press the **A-B REPEAT** button again. "Off" appears briefly on the TV screen.

Note:

Repeat playback or A-B repeat playback mode may not work correctly with some discs.

Notes on using Video CD with PBC

To use the repeat play or A-B repeat play mode, select **PBC off** play mode.

Random Playback [VCD] [CD] [MP3]

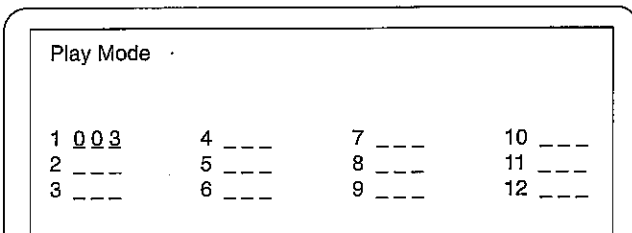
1. In the stop mode, press the **PLAY MODE** button once, then press the **ENT** button. "Random" appears on the TV screen.
2. Press the **▶ PLAY** button to begin random playback. "RND" appears on the display. The unit will automatically select tracks at random.

Programmed Play [VCD] [CD] [MP3]

Up to 12 selections can be programmed.

Programming procedure

1. Press the **PLAY MODE** button in the stop mode, then press the **ENT** button twice, "Program ▶" appears on the TV screen.
2. Press the **▶** button. The programme mode screen appears.
3. Press the number buttons to select the tracks number.
Example:
To select Track No. 3, press 0, 0, then 3.
To select Track No. 10, press 0, 1, then 0.
To select Track No. 24, press 0, 2, then 4.
4. Press the **▼** button to move the highlighted box down.



5. Repeat step 3 and 4 as above to select another track.
6. Press the **▶ PLAY** button to start play. "PGM" appears on the display.

When all programmed selections have played, the unit stops automatically.

- The programme contents are retained in memory.

Note:

To play the program again, repeat step 1 to call up the programme mode, then press the **▶ PLAY** button.

To clear the program one by one

In the programme mode, press the ▲ or ▼ button to select the track number. Then press the CLEAR button.

To clear all the programs

In programme mode, press the ▲ button to select "All Clear". Then press the ENT button.

To change the program

1. In the programme mode, press the ▲ or ▼ button to select the track number.
2. Press the number buttons to select the track number to be replaced.

Press the PROGRAM/RANDOM button to quit the programme mode screen.

Selecting subtitle language [DVD]

This operation works only with discs on which multiple subtitle languages are recorded.

1. Press the SUBTITLE button during play. The subtitle language mark appears on the screen. (Example: 1/3 en). If "Off" appears, press the button again.
2. Press the SUBTITLE button repeatedly until the desired subtitle language appears on the screen.

Example:



Notes:

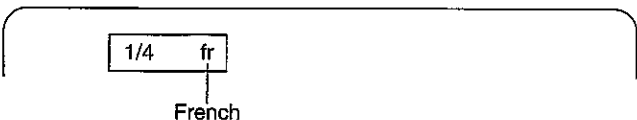
- In some cases, the subtitle language is not changed to the selected one.
- When a disc supporting closed caption is played, the subtitle and the closed caption may overlap each other on the TV screen. In this case, turn the subtitle off.
- When the desired language is not available even if the button is pressed, the language is not available on the disc.
- When the power is turned on or the disc is replaced, select the subtitle language again.
- If the subtitle language is not necessary, press the SUBTITLE button to select "Off".

Selecting Audio Soundtrack Language (Multi-Language) [DVD]

This operation works only with discs on which multiple audio soundtrack languages are recorded.

1. Press the AUDIO button during playback.
2. Press the AUDIO button repeatedly until the desired language appears on the TV screen.

Examples:



- If using an amplifier with DTS decoder, the DTS sound will be heard.

Notes:

- When the desired language is not selected even if the button is pressed, the language is not available on the disc.
- When the power is turned on or the disc is replaced, select the language again.
- If the language is not recorded on the disc, only the available language on the disc will be heard.

Changing the audio channel output [VCD]

During VCD play, press the AUDIO button to select an audio channel. Stereo → Left → Right → MIX → ...

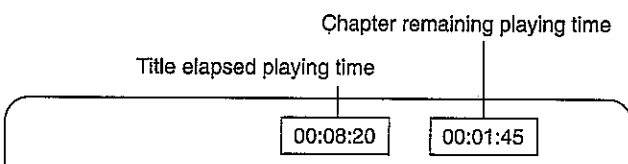
Note: You cannot change an audio channel from the DIGITAL OUT socket.

Selecting on-screen information

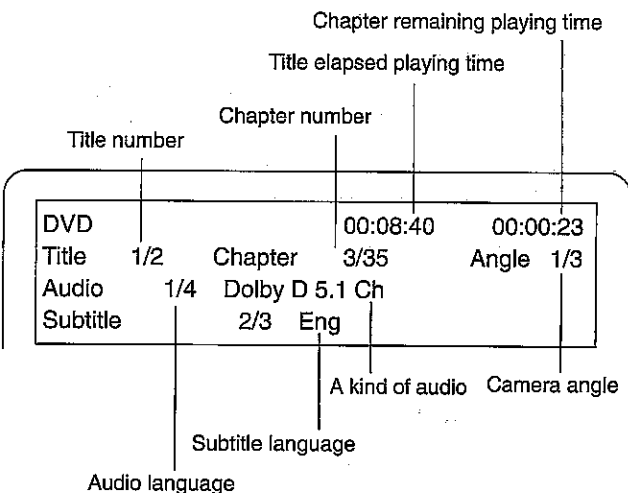
Press the ON SCREEN button repeatedly to show the disc information (Title, Chapter, Title elapsed playing time, Language, etc.).

Example for DVD:

1. Press the ON SCREEN button during play.



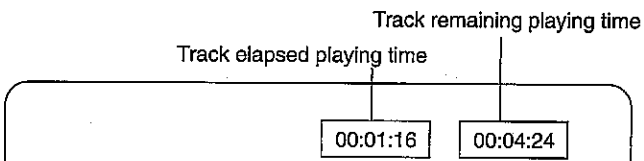
2. Press the ON SCREEN button again.



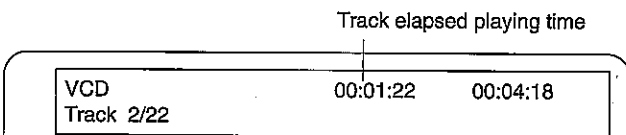
3. Press the ON SCREEN button to close the disc information.

Example for Video CD:

1. Press the ON SCREEN button during play.



2. Press the ON SCREEN button again.



3. Press the ON SCREEN button to close the disc information.

Note:
For Audio CD, the on-screen information will appear automatically when playing. To close it, press the ON SCREEN button. If you want the on-screen information appear again, please refer to "Example for Video CD" as above.

MP3 OPERATION

Before Starting

This unit can play back the CD-R/RW that has recorded music data, MP3 files.

- The file system is ISO9660 Level 1 and Level 2.
- If the CD has both audio CD tracks and MP3 files, only audio CD tracks are played.
- It would take 30 seconds or more for this unit to read MP3 files depending on its structure.
- This unit can recognize up to 256 files or folders per disc. The CD with 257 files or folders and over is not available to this unit.
- MP3 CDs may not be played in the recorded order.
 1. Please use the MP3 software with the function that can record data alphabetically or numerically.
 2. Please refrain from making many sub-folders by preference.

However, some CD-R/RWs and MP3 CDs cannot be played back depending on the recording conditions.

Before playing back MP3 files, please read the following.

MP3 CD

- MP3 files must have the extension letters, ".MP3" or ".mp3".
- Standard, sampling frequency, and the bit rate:
MPEG-1 Audio
32kHz, 44.4kHz, 48kHz
48kbps ~ 320kbps (constant bit rate or variable bit rate)
- The recommended recording setting for a high-quality sound is 44.1kHz of sampling frequency and 128kbps of constant bit rate.

Limitation on display

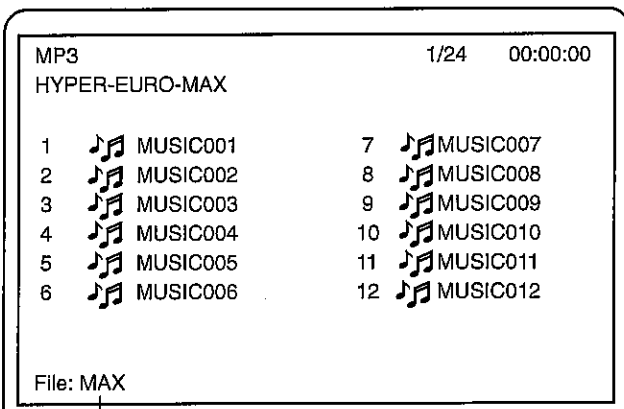
- Available letters for display are the following: capital or small alphabets of A through Z, and numbers of 0 through 9.
- Other letters than those above are replaced in "-" (hyphen).

Note:

This CD has no music data or non-MP3 files cannot be played back.

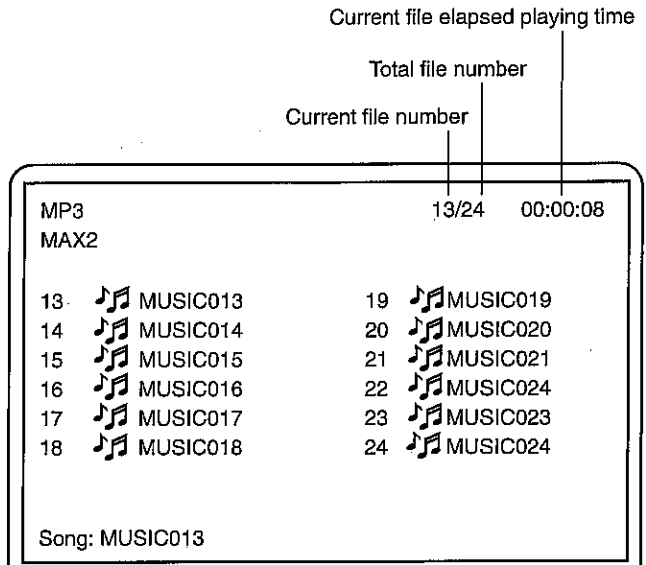
MP3 CD Playback

1. Load the MP3 CD.
A tabel of contents in the first directly appears on the screen,
Example:



File information

2. Press the ▲, ►, ▼ or ◀ button to move the highlighted box to the desired file.
 - To go on to the next directory, press the ▲ then ENT button.
3. Press the ENT or ► PLAY button to start playback.
The letter's colour in the highlighted box turns yellow. "MP3" appears on the display.
Example: (the second directory)



To stop play, press the ■ button.

PICTURE CD OPERATION

KODAK Picture CD Playback

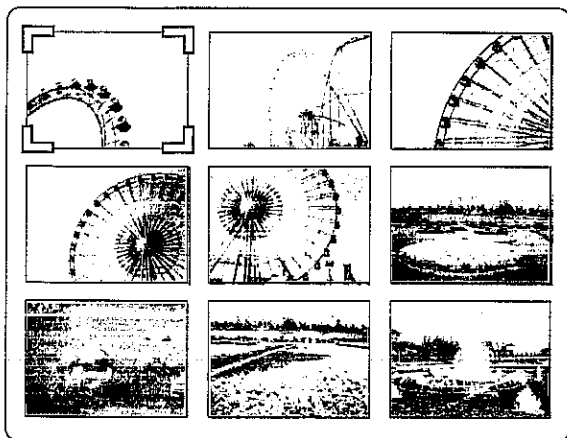
With KODAK Picture CD, it is easy to turn film into pictures you can email from your PC and view on the unit.

Just bring your film in for processing, and check the box for KODAK Picture CD. You'll get back your prints and negatives as usual-plus you will get a special CD that contains your pictures along with software that lets you view, enhance, share, and print your pictures from your PC and view them on the unit.

1. Load the KODAK Picture CD.

The first thumbnail pictures (maximum 9-picture) appear on the screen,

Example:



2. Press the ▲, ►, ▼ or ◀ button to move the cursor to the desired picture.

- To go to the next or previous thumbnail pictures, press NEXT ►► or PREV ◀◀ button.

3. Press the ENT or ► PLAY button to start the slide show from the selected picture.

If you press the || PAUSE/STEP button during the slide show to pause.

Press the ► PLAY button to continue.

If the picture appears upside down or sideways, do the following steps.

- 1) Press the || PAUSE/STEP button, if necessary.
- 2) Press the ANGLE button repeatedly until it's right side up. "↺90°", "↻180°", "↻270°" or "Normal" appears briefly on the TV screen.
- 3) Press the ► PLAY to skip to the next picture and continue the slide show.

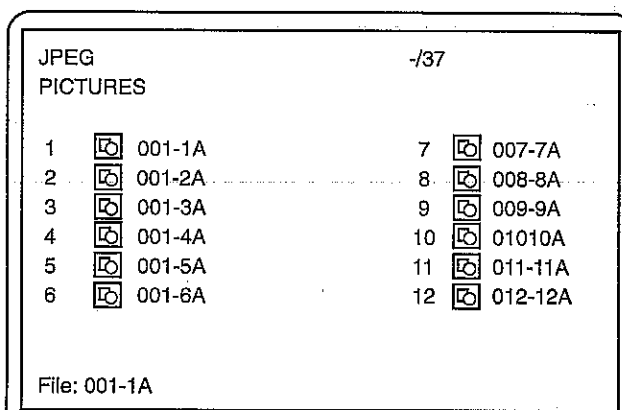
If you press the NEXT ►► or PREV ◀◀ button during the slide show, it skips to the next picture or previous picture.

After the last picture has displayed, the file list appears.

- To stop the slide show, press the ■ button.
- If the MENU button is pressed during the slide show, the thumbnail pictures appear.

If you press the ■ button, the file list appears.

Example:



To start the slide show from the file list:

1. Press the ▲, ►, ▼ or ◀ button to select the desired file.
2. Press the ENT or ► PLAY button to start the slide show.

The file list appears after the last picture has displayed.

Note:

- FUJICOLOR CD can be used.
- Some disc cannot be played back depending on the recording conditions.

KODAK and Picture CD are registered trademarks of Eastman Kodak company.

JPEG CD play

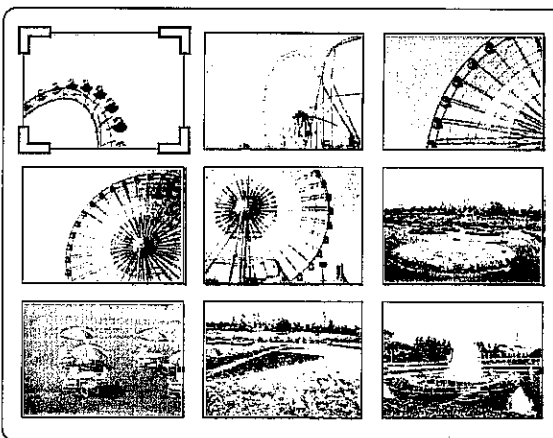
You can also view digital images from JPEG files on disc created by your PC.

- Some JPEG file cannot be played back depending on the recording conditions.

1. Load the JPEG CD.

The first thumbnail pictures appear.

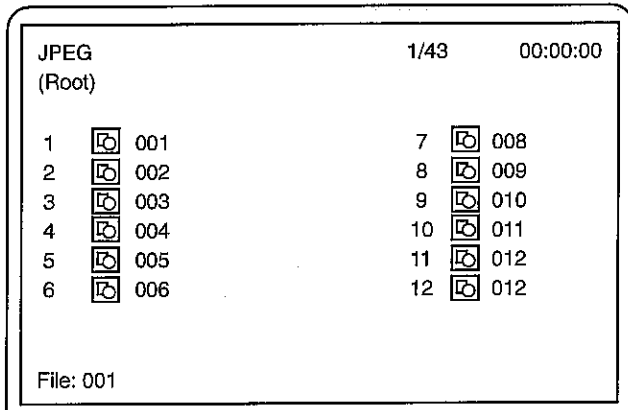
Example:



2. Press the ▲, ►, ▼ or ◀ button to move the cursor to the desired picture, then press ENT button to start the slide show.

- To go to the next or previous thumbnail pictures, press NEXT ►► or PREV ◀◀ button.

- Press the **■** button to stop the slide show. The file list appears on the screen.
Example:



To start the slide show from the file list:

- Press the **▲**, **▶**, **▼** or **◀** button to select the desired file.
- Press the **ENT** or **▶** **PLAY** button to start the slide show.

The file list appears after the last file has displayed.

- To stop the slide show, press the **■** button. The file list appears.

Picture zoom

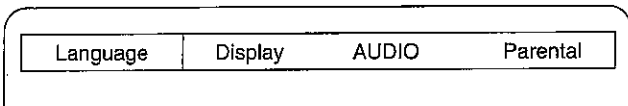
- Press the **||** **PAUSE/STEP** button at the desired picture (KODAK Picture CD and JPEG CD).
- Press the **ZOOM** button.
- Press the **▲**, **▶**, **▼** or **◀** button to change zoom point.
- Press the **▶** **PLAY** button resume the slide show.

INITIAL SETTINGS FOR DVD

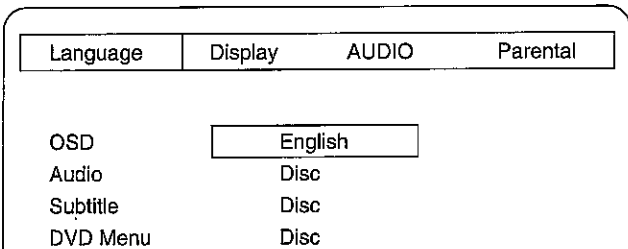
Once the initial settings have been completed, the unit can always be operated under the same conditions. The settings will be retained in the memory until they are changed, even if the power is turned off.

Setting Language

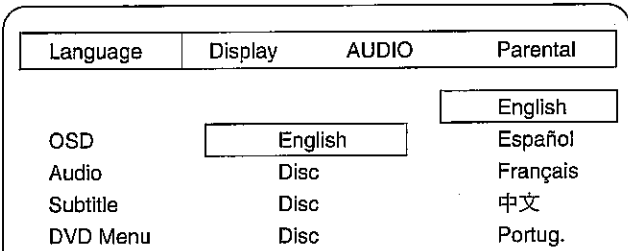
- Press the **SETUP** button in the stop mode. The setup screen appears and "Language" is highlighted.



- Press the **ENT** button. "Language" screen appears.
- Press the **▼** or **▲** button to select the item (highlighted).
Example: To set "OSD" (On screen display)



- Press the **ENT** button. The submenu appears.
Example:



- Press the **▼** or **▲** button to select the language (highlighted).
- Press the **ENT** button. The selected language remains.
- Repeat steps 3 ~ 6 for other items.
- Press the **▲** button to skip back to the setup screen (or press the **SETUP** button to quit the setup screen).

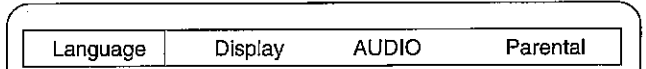
Notes:

- You cannot switch audio sound track languages if there is only one language recorded on the disc.
- When you play back a DVD disc, the unit automatically displays the pre-selected subtitle language if it is included on the disc.

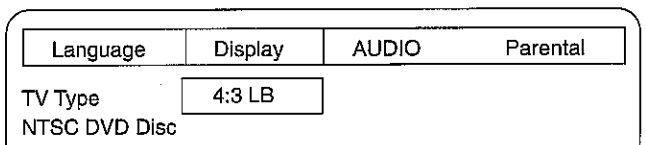
- In this instruction manual, the language in on-screen display is English. If you change the language, please follow the selected language in on-screen display.
- For improvement, on-screen displays subject to change without notice.

Setting Display

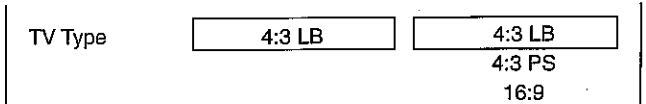
- Press the **SETUP** button in the stop mode. The setup screen appears.



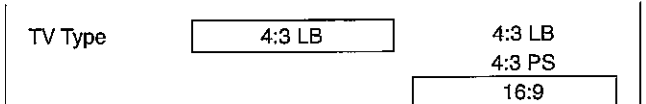
- Press the **▶** button to select "Display", then press the **ENT** button "Display" screen appears.



- Press the **▼** or **▲** button to select the item (highlighted), then press the **ENT** button. The submenu appears.
Example: To set "TV Type".



- Press the **▼** or **▲** button to select the submenu (highlighted).
Example: To select "TV Type 16:9"



- Press the **ENT** button. (In this example, "TV Type 16:9" remains.)
- Repeat step 3 - 5 for other items.
- Press the **▲** button to skip back to the setup screen (or press the **SETUP** button).

TV Type:

Select the appropriate setting for your TV screen size.

4:3 LB (Letterbox):

Select when a conventional TV set is connected. When the wide screen disc is played, the black bands appear at the top and bottom of screen (Fig. 16).

4:3 PS (Panscan):

Select when a conventional TV set is connected. When the wide screen disc is played back, it displays pictures cropped to fill to your TV screen. The left and right edges are cut off.

16:9

Select when a wide screen TV set is connected, Played in "FULL" size (Fig. 18). (Setting the wide screen TV to "FULL" mode is also necessary.)

Note:

- The screen size may differ depending on the DVD discs.
- If you select "16:9" to get rid of the black bands on screen when wide screen disc is played, picture may be slightly distorted.
- In some discs, even if "4:3 PS" is selected, the black bands may remain on the screen.

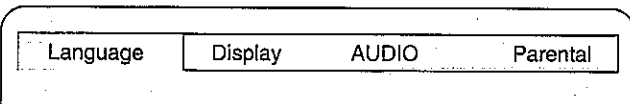
NTSC DVD Disc:

Select the video output signal format to "PAL 60" or "NTSC" when playing back the NTSC DVD discs.

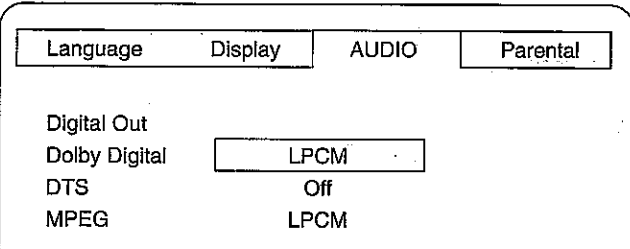
Setting digital out

If the DIGITAL OUT socket is connected to the amplifier, you must set as follows.

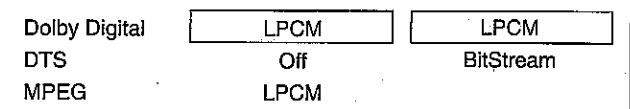
1. Press the SETUP button in the stop mode. The setup screen appears.



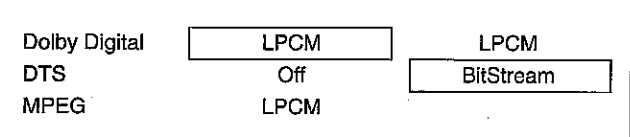
2. Press the ► button to select "Digital Out", then press the ENT button. "Digital Out" screen appears.



3. Press the ▼ or ▲ button to select the submenu (highlighted), then press the ENT button. The submenu appears. Example: To select "Dolby Digital".



4. Press the ENT button. (In this example, "Dolby Digital BitStream" remains.)



5. Press the ENT button. (In this example, "Dolby Digital BitStream" remains.)
6. Repeat steps 3 - 5 for other items.
7. Press ▲ to skip back to the setup screen (or press the SETUP button).

Dolby Digital:

If your amplifier has Dolby Digital Decoder, select "BitStream". If not, select "LCPCM".

DTS:

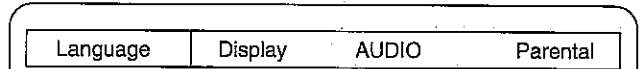
If your amplifier has DTS Decoder, select "On". If not, select "Off".

MPEG (Moving Picture Expert Group):

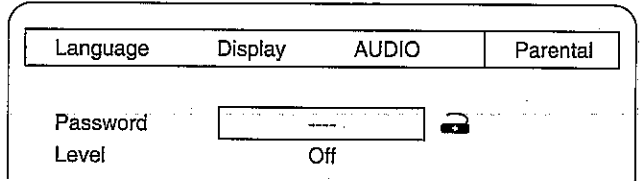
If your amplifier has MPEG AUDIO Decoder, select "BitStream". If not, select "LCPCM".

Setting Parental

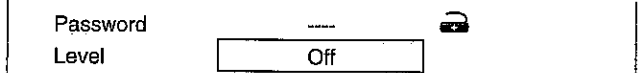
1. Press the SETUP button in the stop mode. The setup screen appears.



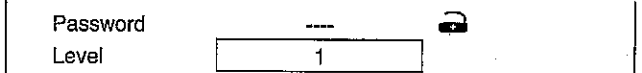
2. Press the ► button to select "Parental", then press the ENT button. "Parental" screen appears.



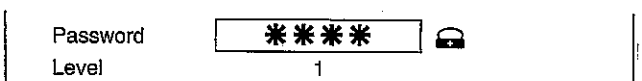
3. Press the ▼ button to skip "Password: ----" and select "Level".



4. Press the ENT button repeatedly to select the parental lock level ("Level Off" ~ "Level 8"). Example: To select "Level 1"



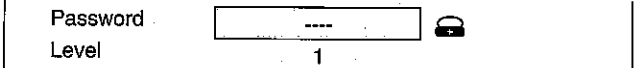
5. Press the ▲ button to return to "Password ----".
6. Enter a number in 4 digits.



Note:

If you make a mistake, press the CLEAR button.

7. Press the ENT button. The password is now set.



Note:

If you do not set it, Parental Control does not work, and it returns to the initial settings.

8. Press the SETUP button. The setup screen disappears.

Parental Control

MPAA (Motion Picture Association of America) Guideline is a rating system that provides advanced cautionary information to parent about the content of movie programs.

The parental lock level is equivalent to the following MPAA Rating System.

- Level 7: NC-17 (No one 17 and under admitted)
- Level 6: R (Restricted)
- Level 4: PG-13 (Parents strongly cautioned)
- Level 3: PG (Parental guidance suggested)
- Level 1: G (General audiences)

Some DVD discs contain a restriction level which enables parents to prevent playback of discs by children. This unit is equipped with a password designed to prevent children changing the level.

You cannot play DVD video discs rated higher than the level you selected unless you cancel the parental lock function.

For example, when you select level "5", the unit will not play discs with ratings of "6", "7" or "8". The information will appear on the TV screen.

If you forget the password...

Enter "788444" even if 4 digits "----" appears, then press the ENT button to clear the current password. Enter a new password and set the parental lock level again.

Note:

DVD discs may or may not respond to the parental lock settings. Make sure this function works with your DVD discs.

KARAOKE PLAY

Karaoke functions

1. Press the KARAOKE ON/OFF button on the remote control to select Karaoke On. During Karaoke On, "K" appears on the display and microphone can be activated.
2. Echo Level Adjustment
An echo effect can be applied to the sound from the microphone. Use the ECHO control on the front panel to adjust Echo level during Karaoke On.
3. Key Level Adjustment
The key can be raised or lowered to match your voice. Press the KEY + or - button on the remote control to adjust the Key level (-7 ~ +7) during Karaoke On.
4. Vocal Changer (Stereo/Partner Left/Partner Right)
When you using, the singer's vocal will be eliminated automatically.
Vocal changer works for almost Karaoke VCD playback. (DVD, CD and some karaoke VCD are not available this Vocal Changer function.)

Karaoke Operation

1. Connect a microphone (not supplied) to the MIC 1 or MIC 2 socket with the MIC LEVEL control turned down.
2. Load the disc.
3. Press the KARAOKE ON/OFF button on the remote control to select Karaoke On.
4. Play the disc.
5. Use the MIC LEVEL control to adjust microphone level.
6. Adjust Key level and Echo level.

(Only for Karaoke VCD playback)

7. Press the VOCAL button on the remote control to select Karaoke mode. Each time the VOCAL button is pressed, the display changes as follows
Stereo → Partner Left → Partner Right → ...
Select the position that you can hear "singer's vocal"
8. When you sing, the singer's vocal will be eliminated.

Note:

- When using a multiple audio karaoke DVD disc, press the AUDIO button to select the audio channel so that the sound of vocal is reduced.
- If howling occurs, reduce the microphone volume or place the microphone away from the speakers.
- After the karaoke play has finished, press the KARAOKE ON/OFF button to select Karaoke Off.
- When karaoke is on, the digital out is automatically cut off.
- When using a CD disc, operation of VOCAL and AUDIO buttons are prohibited.

CLEANING THE UNIT

Cleaning the outside of the unit with a clean soft cloth moistened with lukewarm water. Do not use benzene, thinner or alcohol since they will mar the finish of the surfaces.

SPECIFICATIONS

Playback standard

PAL and NTSC

Laser:

Semiconductor laser, wavelength: 650/790 nm

Laser output (Continuous wave max):

1 mW (DVD), 0.5 mW (CD)

Frequency range (digital audio):

4 Hz to 44 kHz (DVD fs: 96 kHz)

Signal to noise ratio:

More than 105 dB

Harmonic distortion (digital audio)

0.003%

Wow and flutter:

Below measurable level

Outputs:

VIDEO OUT

1.0 V_{pp} (75Ω)

AUDIO OUT:

L: 2 V rms

R: 2 V rms

S-VIDEO

Y: 0.7 V_{pp} (75Ω)

C: 0.3 V_{pp} (75Ω) PAL, 0.286 V_{pp} (75Ω) NTSC

COMPONENT VIDEO OUT

Y: 0.7 V_{pp} (75Ω)

C_B, C_R: 0.7 V_{pp} (75Ω)

DIGITAL OUT:

Coaxial

Power requirements:

AC 110 ~ 240V 50/60 Hz

Power consumption:

10 Watts

Dimensions (W x H x D):

Approx. 435 x 50 x 230 mm

Weight:

2.05 kg

IMPORTANT INFORMATION

Because its products are subject to continuous improvement.
SANYO reserves right to modify product designs and specifications
without notice and without incurring any obligation.