# ERRATA / ERRATUM / RÄTTELSE / KORJAUS / RETTELSE

| Page 56<br>Seite 56<br>Page 56<br>Biz. 56<br>Pàgina 56<br>Pag. 56<br>Sidan 56<br>Sivu 56<br>Side 56 | Error<br>Fehler<br>Erreur<br>Fout<br>Error<br>Errore<br>Fel<br>Virhe<br>Fejl | Correction<br>Berichtigung<br>Correction<br>Corrrctie<br>Corrección<br>Correzione<br>Rättelse<br>Korjaus<br>Rettelse |
|---|---|---|
| **English** | Dimensions (W x H x D):<br>435 mm x 127 mm x 329 mm<br>(17-3/16 inch x 5 inch x13inch) | Dimensions (W x H x D):<br>435 mm x 68 mm x 267.5 mm<br>(17-3/16 inch x 2-11/16 inch x 10-9/16 inch) |
| **Deutsch** | Abmessungen (B x H x T):<br>435 mm x 127 mm x 329 mm | Abmessungen (B x H x T):<br>435 mm x 68 mm x 267,5 mm |
| **Française** | Ecombrement (L x H x P):<br>435 mm x 127 mm x 329 mm | Ecombrement (L x H x P):<br>435 mm x 68 mm x 267,5 mm |
| **Nederlands** | Afmetingen (B x H x D):<br>435 mm x 127 mm x 329 mm | Afmetingen (B x H x D):<br>435 mm x 68 mm x 267,5 mm |
| **Español** | Dimensiones (A x A x F):<br>435 mm x 127 mm x 329 mm | Dimensiones (A x A x F):<br>435 mm x 68 mm x 267,5 mm |
| **Italiano** | Dimensioni (L x A x P):<br>435 mm x 127 mm x 329 mm | Dimensioni (L x A x P):<br>435 mm x 68 mm x 267,5 mm |
| **Svenska** | Mått (B x H x D):<br>435 mm x 127 mm x 329 mm | Mått (B x H x D):<br>435 mm x 68 mm x 267,5 mm |
| **Suomi** | Mitat (L x K x S):<br>435 mm x 127 mm x 329 mm | Mitat (L x K x S):<br>435 mm x 68 mm x 267,5 mm |
| **Dansk** | Dimensioner (B x H x D):<br>435 mm x 127 mm x 329 mm | Dimensioner (B x H x D):<br>435 mm x 68 mm x 267,5 mm |

# JVC

# DVD VIDEO PLAYER
# XV-S56BK/XV-S57SL
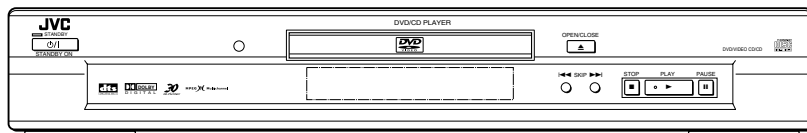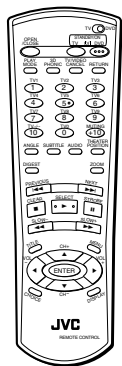
## INSTRUCTIONS

**For Customer Use:**

Enter below the Model No. and Serial No. which are located on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No.

Serial No

# Warnings, Cautions and Others

**IMPORTANT** for the U.K.

**DO NOT** cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

**BE SURE** to replace the fuse only with an identical approved type, as originally fitted.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not supplied fitted with a mains plug then follow the instructions given below:

**IMPORTANT.**

**DO NOT** make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:

    Blue :  Neutral
    Brown :  Live

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

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

**IF IN DOUBT - CONSULT A COMPETENT ELECTRICIAN.**

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**CAUTION**

To reduce the risk of electrical shocks, fire, etc.:
 1. Do not remove screws, covers or cabinet.
 2. Do not expose this appliance to rain or moisture.

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**Caution — ⏻/| switch!**
Disconnect the mains plug to shut the power off completely. The ⏻/| switch in any position does not disconnect the mains line. The power can be remote controlled.
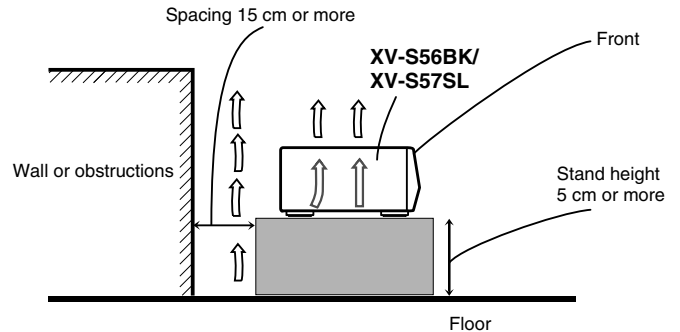
**CAUTION:**
- Do not block the ventilation openings or holes.
  (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- When discarding batteries, environmental problems must be considered and local rules or laws governing the disposal of these batteries must be followed strictly.
- Do not use this apparatus in a bathroom or places with water. Also do not place any containers filled with water or liquids (such as cosmetics or medicines, flower vases, potted plants, cups, etc.) on top of this apparatus.

**Caution: Proper Ventilation**
To avoid risk of electric shock and fire and to protect from damage.
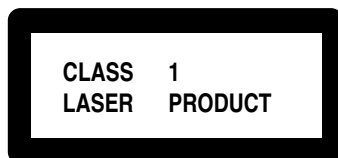Locate the apparatus as follows:

Front:    No obstructions open spacing.
Sides:    No obstructions in 3 cm from the sides.
Top:     No obstructions in 5 cm from the top.
Back:    No obstructions in 15 cm from the back
Bottom:   No obstructions, place on the level surface.

Spacing 15 cm or more

Front

XV-S56BK/
XV-S57SL

Wall or obstructions

Stand height
5 cm or more

Floor

---

## IMPORTANT FOR LASER PRODUCTS

*REPRODUCTION OF LABELS*

① CLASSIFICATION LABEL, PLACED ON REAR ENCLOSURE

② WARNING LABEL, PLACED INSIDE THE UNIT

CLASS 1
LASER PRODUCT

| | | | |
|---|---|---|---|
| **CAUTION:** Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM.  (e) | **VARNING:** Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.  (s) | **ADVARSEL:** Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling  (d) | **VARO:** Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.  (f) |

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1. CLASS 1 LASER PRODUCT
2. **CAUTION**: Visible andInvisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION**: Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.

# Table of Contents

# Introduction

## Features

### Picture functions

**■Strobe function**

The unit can display nine continuous still pictures on the TV screen.

**■Digest function**

You can select the desired selection to be played from the opening scenes displayed on the TV screen.

**■Angle function***

You can select a desired angle from multiple camera angles recorded on the DVD VIDEO disc.

**■Zoom function**

You can view scenes close-up.

**■Parental lock***

You can restrict the playback of DVD VIDEO discs with scenes which you do not want children to see, such as adult or violent films.

**■Theater position**

You can select the picture character according to the lighting of your room.

### Audio functions

**■High quality digital sound**

You can enjoy high quality sound with Dolby Digital or Linear-PCM.

**■Multichannel audio outputs**

The unit provides the multichannel (5.1-channel) analog audio outputs as well as the PCM/Bitstream digital audio outputs.

**■3D Phonic function**

You can enjoy virtual surround sound with your 2-channel system.

### Other functions

**■Multi-language subtitles and sound***

You can select a subtitle or sound language from those recorded on the DVD VIDEO disc.

**■Multi-disc playback**

You can enjoy Audio CD discs and Video CD discs, as well as DVD VIDEO discs.

**■Operation from the on-screen display**

User-friendly on-screen displays allow you to operate the unit easily.

Functions with (*) mark only work on a DVD VIDEO disc that is compatible with each function.

## Supplied accessories

• Audio/video cable (x 1)
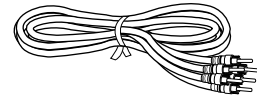


• Audio cable (x 2)



• Remote Control Unit (x 1)
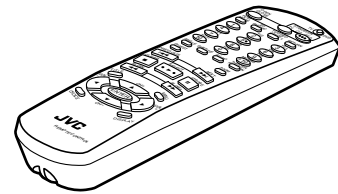


• R6P(SUM-3)/AA(15F) batteries (x 2)
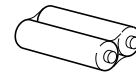


• Instruction manual (x 1)
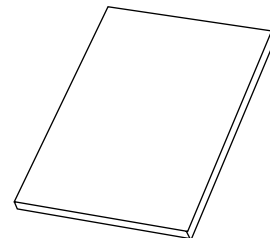


• AC power cord (x 1)

# About this instruction manual

This instruction manual basically explains operations as follows:

## To playback in random order [RANDOM]

DVD VIDEO | Audio CD | Video CD
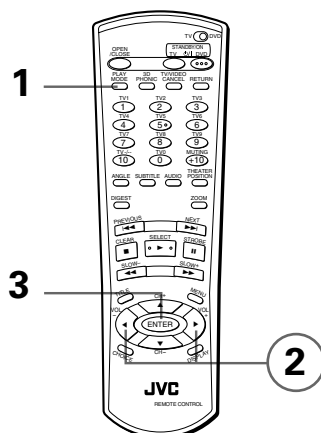
These symbols indicate the types of discs which the operation can be used for.

You can play titles or tracks in random order by using the Random function.

**1**

**3**

**2**

The number indicates the following procedural step(s) in which the button(s) is(are) used.
You may also use the corresponding buttons on the front panel of the unit if available.

● While stopped

**1** Press PLAY MODE.

The play mode menu appears on the TV screen.

The number indicates the procedural step.

**2** Use CURSOR ◄/► to move ◇ to [RANDOM].

REPEAT     PROGRAM     RANDOM

**3** Press ENTER.

The "RANDOM" indicator appears in the display window on the front panel.
The unit starts random playback. After playing all titles/tracks of the discs, random playback ends.

The names of buttons on the remote control unit (or on the front panel of the unit) are all given in uppercase letters.

Other convenient procedures, etc.

**Hints**
• The same title or track will not be played back more than once during random play.

• **To stop/quit random playback in the middle**
Press ■ to stop playback. The unit is still in random playback mode, so pressing ► starts random playback again.
To quit random playback, press ■ again while stopped. The "RANDOM" indicator in the display window turns off.

Additional supplemental remarks

**NOTE**
• **Some DVD VIDEO discs may not be played back correctly in the random mode.**

JVC
REMOTE CONTROL

# Notes on handling

## Important cautions

### Installation of the unit
- Select a place which is level, dry and neither too hot nor too cold (between 5°C and 35°C, 41°F and 95°F).
- Leave sufficient distance between the unit and the TV.
- Do not use the player in a place subject to vibrations.

### Power cord
- Do not handle the power cord with wet hands!
- A small amount of power (2.7 W) is always consumed while the power cord is connected to the wall outlet.
- When unplugging the player from the wall outlet, always pull the plug, not the power cord.

### To prevent malfunction of the unit
- There are no user-serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
- Do not insert any metallic object into the unit.
- Do not use any non-standard shape disc available on the market, because it may damage the unit.
- Do not use a disc with tape, seals, or paste on it, because damage to the unit may result.

### Note about copyright laws
- Please check the copyright laws in your country before recording from DVD VIDEO, Audio CD, and Video CD discs. Recording of copyrighted material may infringe copyright laws.

### Note about the copyguard system
- The DVD VIDEO disc is protected by the copyguard system. When you connect the unit to your VCR directly, the copyguard system activates and the picture may not be played back correctly.

## Safety precautions

### Avoid moisture, water and dust
Do not place the unit in moist or dusty places.

### Avoid high temperatures
Do not expose the unit to direct sunlight or place it near a heating device.

### When you're away
When away on travel or otherwise for an extended period of time, remove the plug from the wall outlet.

### Do not insert foreign objects into the unit
Do not insert wires, hairpins, coins, etc. into the unit.

### Do not block the vents
Blocking the vents may damage the unit.

### Care of the cabinet
When cleaning the unit, use a soft cloth and follow the relevant instructions on the use of chemically-coated cloths. Do not use benzene, thinner or other organic solvents and disinfectants. These may cause deformation or discoloring.

### If water gets inside the unit
Turn off the power switch and remove the plug from the wall outlet, then call the store where you made your purchase. Using the unit in this state may cause a fire or electrical shock.

# Preliminary knowledge

## Names of parts and controls

Refer to the corresponding pages indicated in () for details.

### Front panel



① **STANDBY indicator**    ③ **Remote sensor**    ⑤ **▲ (OPEN/CLOSE) button**

② **STANDBY/ON ⏻/| button**    ④ **Disc tray**

⑥ **Display window**

⑩ **II (PAUSE) button**

⑨ **► (PLAY) button**

⑧ **■ (STOP) button**

⑦ **I◄◄/►►I (SKIP) buttons**
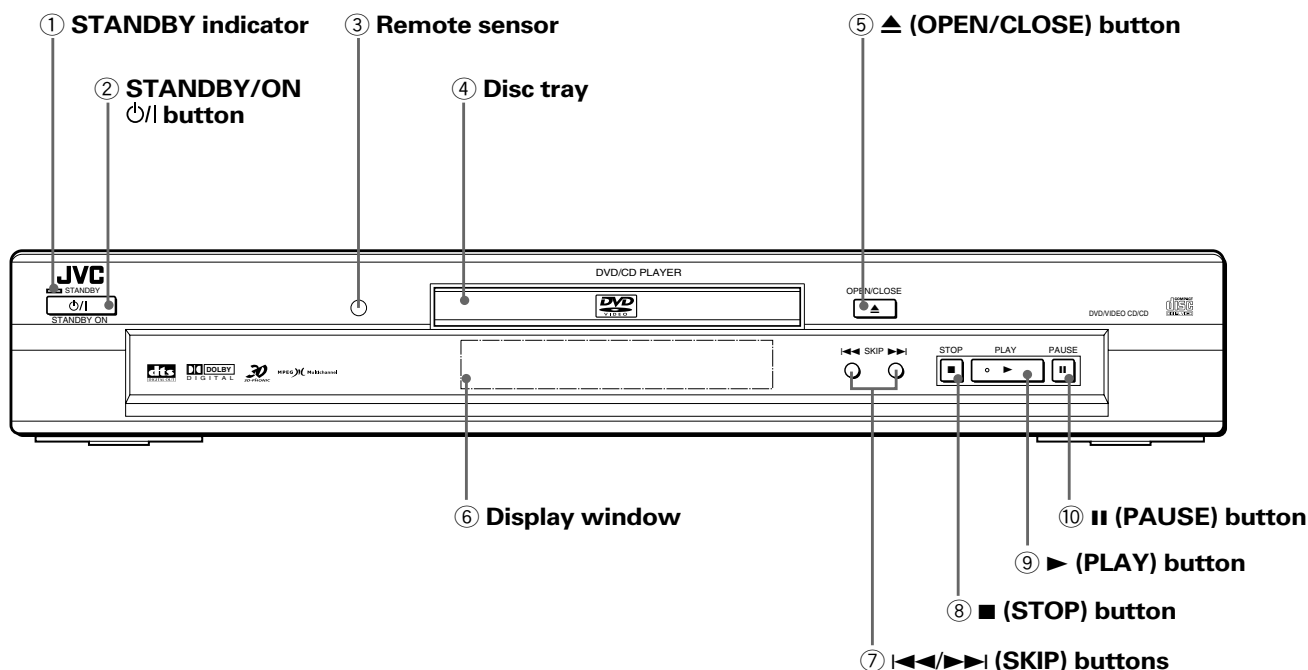
① **STANDBY indicator**
Lights when the power cord is connected and the
unit is on standby. When the unit is turned on,
the STANDBY indicator goes off.

② **STANDBY/ON ⏻/| button (23)**
Turns the unit on or off (standby).

③ **Remote sensor (20)**
Receives signals from the remote control unit.

④ **Disc tray (23)**
Used to load a disc.

⑤ **▲ (OPEN/CLOSE) button (23)**
Used to open and close the  disc tray.

⑥ **Display window (8)**
Indicates the current status of the unit.

⑦ **I◄◄/►►I (SKIP) buttons (25)**
Used to skip a chapter, title or track.
Also, used for the page selection of a menu screen
(for Video CD).
Holding down I◄◄ or ►►I during playback reverses
or advances playback rapidly.

⑧ **■ (STOP) button (25)**
Stops playback.
Also used to change the video output setting
(See page 15).

⑨ **► (PLAY) button (24)**
Starts playback. Also, used as a SELECT button for
PBC of Video CDs.

⑩ **II (PAUSE) button (25, 31)**
Pauses playback.
Also, used to display nine continuous still pictures
(STROBE function).

# Remote control unit

① **OPEN/CLOSE button**

② **PLAY MODE button**

③ **3D PHONIC button**

④ **Numeric buttons**

⑤ **ANGLE button**

⑥ **SUBTITLE button**

⑦ **DIGEST button**

⑧ **|◄◄/PREVIOUS button**

⑨ **■/CLEAR button**

⑩ **◄◄/SLOW– button**

⑪ **TITLE button**

⑫ **CURSOR (▲ Up, ▼ Down) - CH (+/–) buttons**

⑬ **CHOICE button**

⑭ **Infrared signal-emitting window**

⑮ **TV STANDBY/ON ⏻/| button**

⑯ **TV - DVD switch**

⑰ **DVD STANDBY/ON ⏻/| button**

⑱ **RETURN button**

⑲ **TV/VIDEO - CANCEL button**

⑳ **THEATER POSITION button**

㉑ **AUDIO button**

㉒ **ZOOM button**

㉓ **►►|/NEXT button**

㉔ **II/STROBE button**

㉕ **►/SELECT button**

㉖ **►►/SLOW+ button**

㉗ **MENU button**

㉘ **ENTER button**

㉙ **CURSOR (◄ Left, ► Right) - VOL (+/–) buttons**

㉚ **DISPLAY button**

① **OPEN/CLOSE button (23)**
Opens and closes the disc tray.

② **PLAY MODE button (29, 33, 34, 35)**
Displays a play mode menu for controlling the advanced playback functions.

③ **3D PHONIC button (39)**
Produces a simulated surround effect.

④ **Numeric buttons (11)**
When the TV - DVD switch is set to DVD, these buttons are used to specify a title, chapter or track number, as well as used to enter a time for the Time search function.
When the TV - DVD switch is set to TV, these buttons are used to select a TV channel as well as mute the TV audio.

⑤ **ANGLE button (36, 37)**
Changes camera angles during playback of a DVD VIDEO disc containing multiple camera angles.

⑥ **SUBTITLE button (37)**
Used to display the subtitle selection display on the TV screen, as well as used to turn the subtitle on or off (for DVD VIDEO).

⑦ **DIGEST button (30)**
Displays beginning scenes of each title, chapter or track on the TV screen (for DVD VIDEO/Video CD).

⑧ **I◄◄/PREVIOUS button (25, 28)**
Skips back a chapter, title or track. Also used for the page selection of a menu screen (for DVD VIDEO/Video CD). Holding down this button during playback reverses playback rapidly.

⑨ **■/CLEAR button (25, 33)**
Stops playback. Also used to erase all the programmed tracks for the program play.

⑩ **◄◄/SLOW– button (25, 32)**
Pressing this button during playback reverses playback rapidly.
Pressing this button while a DVD VIDEO disc is paused reverses playback slowly.

⑪ **TITLE button (27)**
Displays the title menu of a DVD VIDEO disc on the TV screen.

⑫ **CURSOR (▲ Up, ▼ Down) - CH (+/–) buttons**
When the TV - DVD switch is set to DVD, these buttons are used to select an item from a menu or on-screen display, or to change the setting of an on-screen display item.
When the TV - DVD switch is set to TV,they are used to select a TV channel.

⑬ **CHOICE button (42)**
Displays the preference on-screen display on the TV screen.

⑭ **Infrared signal-emitting window**
Point this window toward the remote sensor on the front panel when pressing buttons.

⑮ **TV STANDBY/ON ⏻/Ι button (21)**
Turns the television on or off (standby).

⑯ **TV - DVD switch (11, 21, 27)**
When setting this switch to "TV", the numeric, cursor and TV/VIDEO - CANCEL buttons are used to control your TV. When setting it to "DVD", these buttons are used to control the unit.

⑰ **DVD STANDBY/ON ⏻/Ι button (23)**
Turns the unit on or off (standby).

⑱ **RETURN button (28)**
Returns to the previous menu (for DVD VIDEO/Video CD).

⑲ **TV/VIDEO - CANCEL button (21, 33)**
When the TV - DVD switch is set to TV, this button switches the TV input between TV and VIDEO. When the TV - DVD switch is set to DVD, it cancels the last programmed selection in the Program mode.

⑳ **THEATER POSITION button (39)**
Selects a picture character from 4 options (for DVD VIDEO/Video CD).

㉑ **AUDIO button (38)**
Selects the audio (for DVD VIDEO/Video CD).

㉒ **ZOOM button (32)**
Zooms in the picture (for DVD VIDEO/Video CD).

㉓ **►►Ι/NEXT button (25, 28)**
Skips forward a chapter, title or track. Also used for the page selection of a menu screen (for DVD VIDEO/Video CD).
Holding down this button during playback advances playback rapidly.

㉔ **ΙΙ/STROBE button (25, 31)**
Pauses playback. Also, used to display nine continuous still pictures (STROBE function).

㉕ **►/SELECT button (24, 27)**
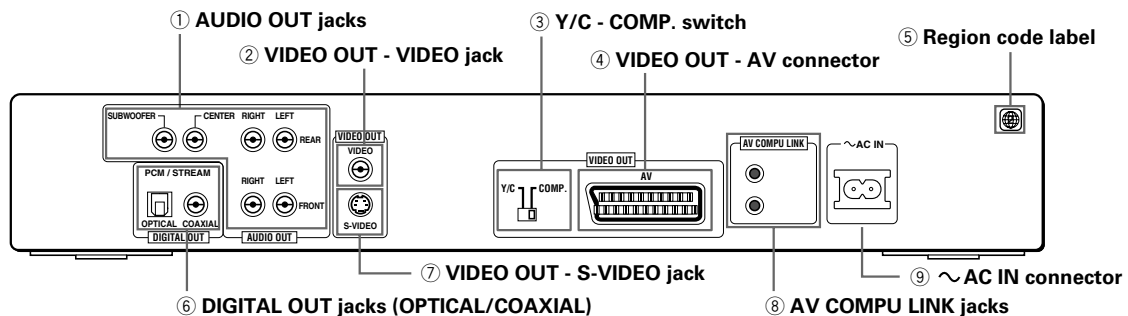Starts playback. Also used as a SELECT button for PBC of Video CDs.

㉖ **►►/SLOW+ button (25, 32)**
Pressing this button during playback advances playback rapidly.
Pressing this button while a DVD VIDEO or Video CD disc is paused advances playback slowly.

㉗ **MENU button (27)**
Displays a DVD menu on the TV screen.

㉘ **ENTER button**
Executes the selected item in a menu or on-screen display.

㉙ **CURSOR (◄ Left, ► Right) - VOL (+/–) buttons**
When the TV - DVD switch is set to DVD, these buttons are used to select an item from a menu or on-screen display, or to change the setting of an on-screen display item.
When the TV - DVD switch is set to TV, they are used to change the TV audio volume.

㉚ **DISPLAY button (40)**
Displays the status information (only for DVD disc) or the time information (for any types of discs).

# Display window

① **Audio format indicators**
② **Disc indicator**
③ ► **(play)/II (pause) indicators**
④ **Title/trackchapter indicators**
⑤ **Repeat mode indicators**

| LPCM MPEG DOLBY DIGITAL DTS | VCDVD ►II PROGRAM RANDOM | TITLE TRACK CHAP | ↻1 A-B |
| --- | --- | --- | --- |

⑥ **PROGRAM/RANDOM indicators**
⑦ **Multi-information window**

① **Audio format indicators**
Indicates the format of audio currently being played back. See "Audio formats" on page 13 for details.

② **Disc indicator**
Indicates the type of the disc set in the tray. When a DVD VIDEO disc is set, "DVD" lights up. When a Video CD disc is set, "VCD" lights up. When an Audio CD is set, "CD" lights up.

③ ► **(play)/II (pause) indicators**
► or II illuminates during playback or while paused, respectively.
Neither of them illuminates while stopped.

④ **Title/track/chapter indicators**
One or more appropriate indicators illuminate according to the disc inserted.

⑤ **Repeat mode indicators**
The appropriate indicator illuminates according to the current repeat mode.

⑥ **PROGRAM/RANDOM indicators**
The appropriate indicator illuminates while the unit is in the Program or Random playback mode.

⑦ **Multi-information window**
Displays the current title/track/chapter number(s), time and status information.

# Rear panel

① **AUDIO OUT jacks**
② **VIDEO OUT - VIDEO jack**
③ **Y/C - COMP. switch**
④ **VIDEO OUT - AV connector**
⑤ **Region code label**

⑦ **VIDEO OUT - S-VIDEO jack**
⑥ **DIGITAL OUT jacks (OPTICAL/COAXIAL)**
⑧ **AV COMPU LINK jacks**
⑨ ∼ **AC IN connector**

① **AUDIO OUT jacks (14, 16)**
Outputs the multichannel signals of a DVD VIDEO disc recorded by the Dolby Digital or MPEG Multichannel surround format.
The FRONT jacks also output stereo analog audio signals when playing back a stereo audio source.

② **VIDEO OUT - VIDEO jack (14)**
Outputs a composite video signal.
Note that, to use this jack, the Y/C - COMP. switch must be set to "COMP.".

③ **Y/C - COMP. switch (14, 15)**
This selector must be set correctly according to the video signal type to be used. If you used any signal from the VIDEO OUT - VIDEO jack, or composite or RGB signal port in the VIDEO OUT - AV connector, set it to "COMP.". If you use the VIDEO OUT - S-VIDEO jack or Y/C signal port in the VIDEO OUT - AV connector, set it to "Y/C".

④ **VIDEO OUT - AV connector (15)**
This standard 21-pin SCART connector outputs video and audio signals. It handles the composite, Y/C (S-video) and RGB video signals. The Y/C - COMP. switch must be set correctly according to the video signal used.
Note that to make this connector feed RGB signals, you must change the unit's setting. (see "How to make the unit feed the RGB signals" on page 15 for details),

⑤ **Region code label (12)**
Shows region code number.

⑥ **DIGITAL OUT jacks (OPTICAL/COAXIAL) (18)**
Outputs digital audio signals. You must select the signal type correctly according to the external device connected to via the Preference display.

⑦ **VIDEO OUT - S-VIDEO jack (14)**
Outputs an S-video signal.
Note that, to use this jack, the Y/C - COMP. switch must be set to "Y/C".
Also, this jack does not feed correct signals when you make the unit feed the RGB signals. See "How to make the unit feed RGB signals" on page 15 for details.

⑧ **AV COMPU LINK jacks**
These jacks are provided for use in the future. They are currently not used.

⑨ ∼ **AC IN connector (19)**
Connects to the wall outlet using the suppplied AC power cord.

# Operational Principles

## On-screen displays

The unit provides several on-screen displays.
With some displays, you can set or select preferences or functions, while the others are display-only.

### Opening displays

The Opening display appears automatically in some conditions.
At the bottom, the following information are indicated depending on the unit's status.
- NOW READING: The unit is now reading the disc information (TOC).
- REGION CODE ERROR!: The DVD VIDEO disc loaded cannot be played because the region code of the disc does not match the unit.
- OPEN: The disc tray is now opening.
- CLOSE: The disc tray is now closing.

Opening display
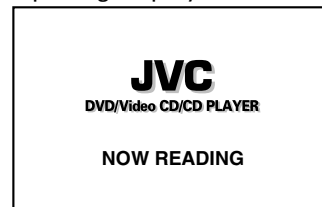


### Preference displays

When no disk is inserted or when a DVD VIDEO or Video CD disc is inserted and stopped, pressing the CHOICE button brings up the preference display for setting the preferences.
There are four pages: LANGUAGE, AUDIO, DISPLAY and SYSTEM as shown on the right.
In addition, there is the EXPERT SPEAKER SETTING sub-page that can be accessed from the AUDIO page in a certain condition.
See page 42 for detailed information.

LANGUAGE
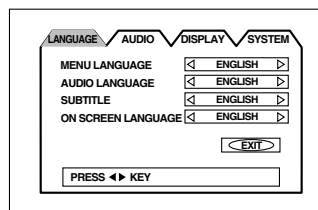


AUDIO
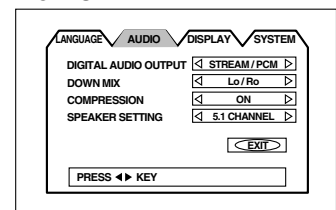


DISPLAY
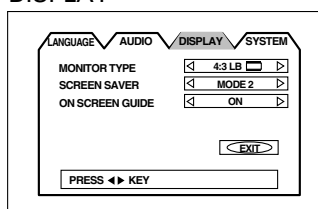


SYSTEM
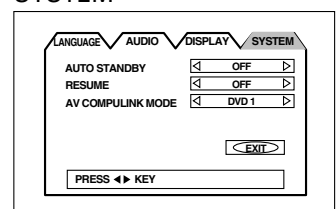


EXPERT SPEAKER SETTING
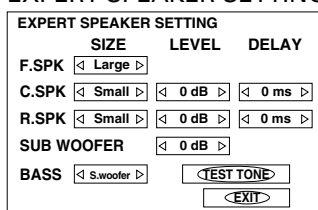


### PARENTAL LOCK display

When no disc is inserted or a DVD VIDEO disc is stopped, pressing the ENTER button while holding down the ■ button brings up the PARENTAL LOCK display in which you can set the level for limiting playback.
See page 51 for detailed information.

PARENTAL LOCK

## Play mode menus

Pressing the PLAY MODE button brings up the play
mode menu in which you can control playback functions.
Different menus appear depending on the disc type and
the unit's status.

While stopped
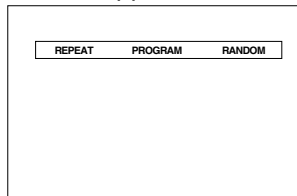
| REPEAT | PROGRAM | RANDOM |

During DVD VIDEO playback

DVD CONTROL

| REPEAT | A-B REPEAT | TIME SEARCH | CHAP. SEARCH |

During Audio CD playback

CD CONTROL

| REPEAT | A-B REPEAT | TIME SEARCH |

During Video CD playback

VCD CONTROL

| REPEAT | A-B REPEAT | TIME SEARCH | PBC CALL |
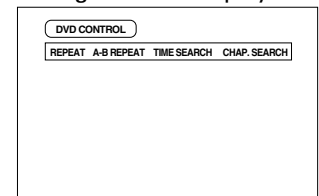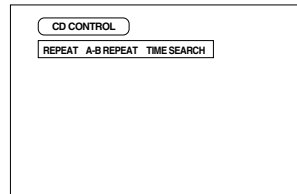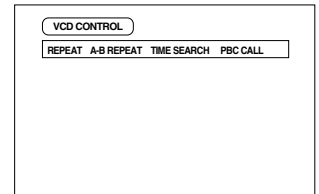
## Status displays

Pressing the DISPLAY button during playback brings up
the status display.
For a DVD VIDEO disc, pressing the DISPLAY button
toggles between the DVD VIDEO function status display,
the disc/time display and off.
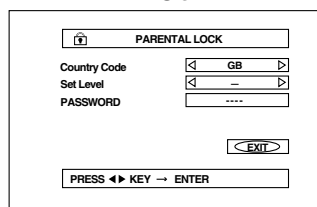For a Video CD or Audio CD disc, pressing the DISPLAY
button switches the disc/time display on and off.

DVD VIDEO function status

1/2    1/2    1/2
ENGLISH    ENGLISH

Disc/time (DVD VIDEO)

TITLE 1 CHAP. 25 TIME 2:25:25 BITRATE 3.3 Mbps
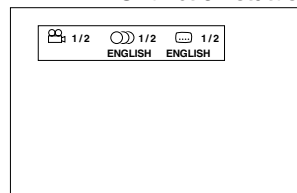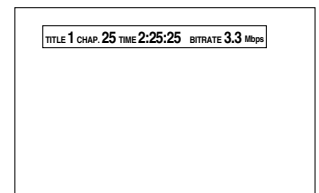
Disc/time (Audio CD/Video CD
without PBC)

TRACK 1 TIME 00:08 EACH
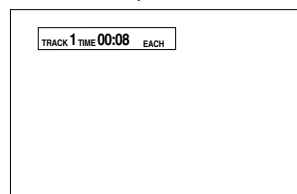
Disc/time
(Video CD with PBC)

TRACK 1 TIME 25:25 PBC
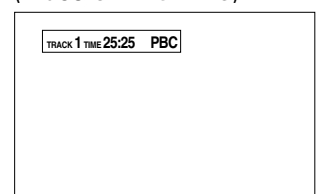
# To prevent the monitor from burning out [SCREEN SAVER]

A television monitor screen may be burned out if a static
picture is displayed for a long time. To prevent this, the
unit automatically activates the screen saver function if a
static picture, such as an on-screen display or menu, is
displayed for over 5 minutes.

- Pressing any button on the unit or the remote control
  unit will release the screen saver function and return to
  the previous display.
- You can select one of several screen saver modes
  available (see page 45).
- The screen saver function is not activated during
  Audio CD playback or after stopping Audio CD
  playback.

**JVC** DVD/Video CD/CD PLAYER *DVD*
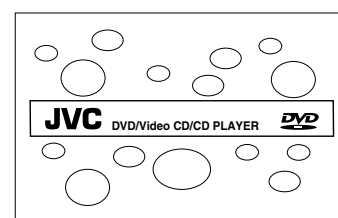
# On-screen guide icons

During DVD VIDEO playback, you may see icons displayed over the picture.  These have the following meanings.

: Displayed at the beginning of a scene recorded from multiple angles. (See page 36.)

: Displayed at the beginning of a scene recorded with multiple audio languages. (See page 38.)

: Displayed at the beginning of a scene recorded with multiple subtitle languages. (See page 37.)

You can set the unit not to display on-screen icons above via the preference settings described on page 46.

## About invalid operation icon

When you press a button, if the unit does not accept its operation, ⊘ appears on your television screen. Operations are occasionally unacceptable even if ⊘ is not displayed.

Note that some operations may not be accepted. For example, some discs may not allow rapid advance/reverse or slow-motion playback.

# How to use numeric buttons
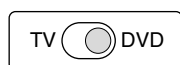
The function of the numeric buttons differs depending on the setting of the TV - DVD switch. When setting it to TV, the buttons are used to select a TV channel (see page 21). When setting it to DVD, the buttons are used to select a track/title or enter a disc time or chapter number.
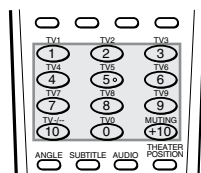
## To select a track/title number

- **To select a number between 1 and 10**
  Press the corresponding button for the number.

- **To select a number higher than 10**
  Use the +10 button.

  Examples:
  To select 13          +10 → 3
  To select 34          +10 → +10 → +10 → 4
  To select 40          +10 → +10 → +10 → 10

## To enter a time or chapter number

The method for entering a time for Time search or chapter number for Chapter search is different from above. See the corresponding sections in this manual for the details.

## To select a TV channel

Press the corresponding numeric buttons. See pages 21 and 22 for details.
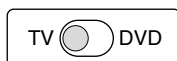
# About discs

## Playable disc types

Playable and non-playable disc types are as follows:

### Playable discs

| DVD VIDEO | Video CD | Audio CD |
|-----------|----------|----------|
| **DVD** VIDEO™ | **Video CD**  COMPACT disc DIGITAL VIDEO | COMPACT disc DIGITAL AUDIO |

The DVD VIDEO Logo is a trademark.

- CD-R and CD-RW discs recorded with the Audio CD format can be played back, though some may not be played back because of the disc characteristics or recording condition.
- DVD VIDEO players and DVD VIDEO discs have their own Region Code numbers. This unit only can play back DVD VIDEO discs whose Region Code numbers include "2."
  Examples of playable DVD VIDEO discs:

ALL    2    2 5    2 3 4 5    1 2 3 4 5 6

This unit accommodates discs recorded with the PAL system.

### Non-playable discs

DVD-ROM, DVD-RAM, DVD AUDIO, DVD-R, DVD-RW, CD-ROM, PHOTO CD, CD-EXTRA, CD-G, CD-TEXT

- Playing back discs listed as "Non-playable discs" above may generate noise and damage speakers.
- This unit can play back audio recorded in CD-G, CD-EXTRA and CD-TEXT discs.

## Disc structure

A DVD VIDEO disc is comprised of "titles," while an Audio CD, Video CD is comprised of "tracks". Each title may be divided into some "chapters". For example, if a DVD VIDEO disc contains some movies, each movie may have its own title number, and each movie may be divided into some chapters. In a DVD VIDEO KARAOKE disc, each song usually has its own title number and does not have chapters. In general, each title has independent content, while each chapter in the same title has continuity.

(Example: DVD VIDEO disc)

| Title 1 | | | Title 2 | |
|---------|---------|---------|---------|---------|
| Chapter 1 | Chapter 2 | Chapter 3 | Chapter 1 | Chapter 2 |

(Example: Audio CD/Video CD)

| Track 1 | Track 2 | Track 3 | Track 4 |
|---------|---------|---------|---------|
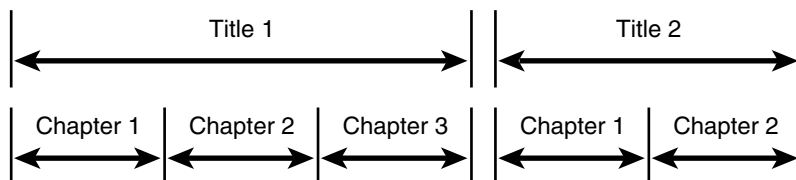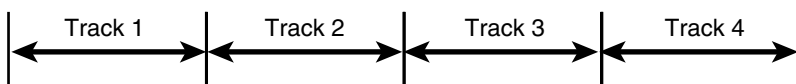
# Audio formats

There are some formats of audio recorded on discs as shown below. The associated indicator lights up in the display window when playing back a disc.

| Indicator | Audio format |
|---|---|
| LPCM | Linear PCM |
| MPEG | MPEG Multichannel |
| DOLBY DIGITAL | Dolby Digital |
| DTS | DTS (Digital Theater Systems) |

Note that, with some formats and/or depending on the unit's "DIGITAL AUDIO OUTPUT" setting, digital audio signals are not always output from the unit's DIGITAL output jacks as are recorded on the disc.
See "DIGITAL AUDIO OUTPUT" on page 43 for details.

# Getting started

---

# Connections

*In the following description, "TV" may be substituted with "monitor" or "projector."
*Before using the unit, you have to connect the unit to a TV and/or amplifier.

## Before making any connections

- **Do not connect the AC power cord until all other connections have been made**.
- Since different components often have different terminal names, carefully read the instructions supplied with the component you are going to connect.

## To connect to a TV

You can enjoy using the unit by simply connecting it to a TV.  To improve audio sound quality, connect the audio outputs to your separate audio equipment. (See the following pages.)
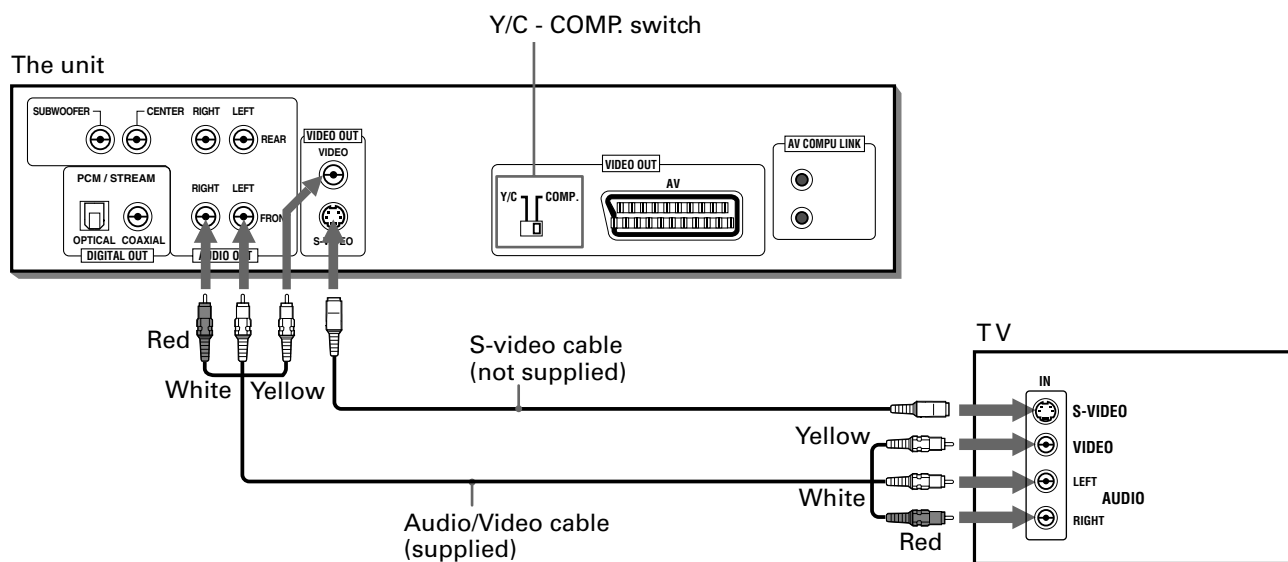


Connect the unit to a TV equipped with stereo audio input and video input jacks using the supplied audio/video cables.

- If your TV has a monaural audio input instead of stereo, you need to use an optional audio cable which converts stereo audio output to monaural.
- If your TV has an S-video input, you can get better picture quality by connecting it with the S-VIDEO output of the unit using the S-video cable in addition to the (standard) video connection. Note that, to use the VIDEO jacks, the Y/C - COMP. switch must be set to "COMP." and to use the S-VIDEO jacks, the Y/C - COMP. switch must be set to "Y/C".

---

**NOTES**

- **Connect VIDEO OUT jacks of the unit directly to the video input of your TV. Connecting VIDEO OUT jacks of the unit to a TV via a VCR may cause a monitor problem when playing back a copy-protected disc.**

- **Connect the unit to a PAL or Multi-scan TV. Do not connect the unit to an NTSC TV.**

- **When making the audio connection using the FRONT (LEFT and RIGHT) jacks, set "DOWN MIX" on the "AUDIO" page of the preference display to "Lo/Ro" and the "SPEAKER SETTING" to "2 CHANNEL" (see pages 44 and 45).**

---

# To connect to a TV with the SCART connector

You can enjoy using the unit by simply connecting it to your television set with a 21-pin SCART cable. To hear audio sound with better quality, connect the audio output to your audio equipment.
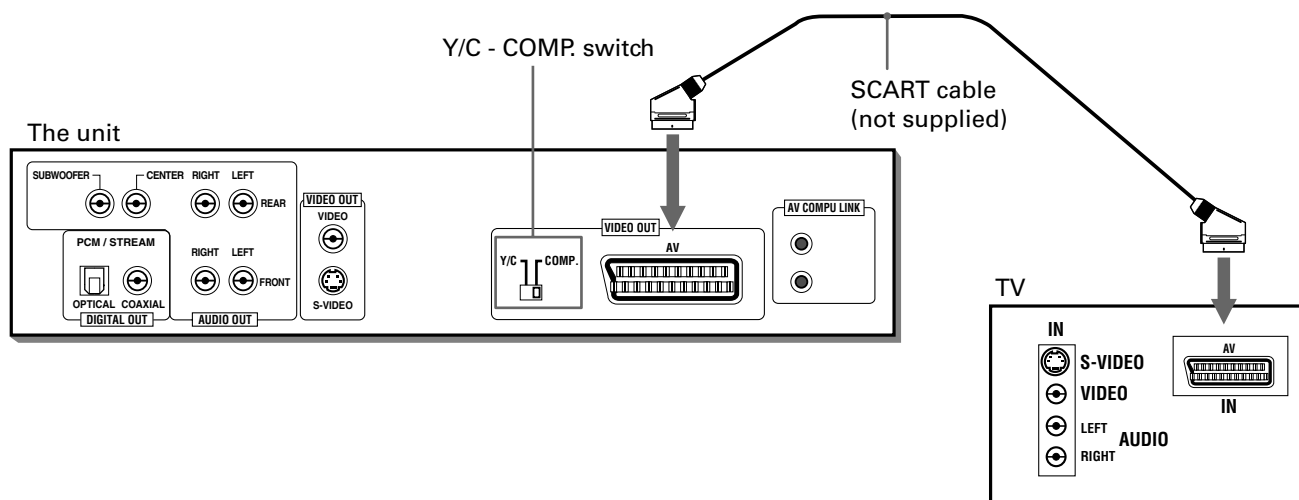


Set the Y/C - COMP. switch correctly according to your TV.
• If the TV only accommodates the composite video signal, set the switch to "COMP.".
• If the TV accommodates the Y/C signals, set the switch to "Y/C" so that you can enjoy better-quality pictures.
• If the TV accommodates the RGB signals, set the switch to "COMP.", as well as make the unit feed the RGB signals by following the procedure shown below.

## How to make the unit feed the RGB signals

The unit cannot output the RGB signals from the SCART connector and the S-video (Y/C) signals from the S-VIDEO jack simultaneously.
In the initial (factory-preset) condition, the S-VIDEO jack is active, while the RGB signals cannot be output.
To make the unit feed the RGB signals, follow the procedure below. Note that the S-VIDEO jack does not feed correct signals when the unit is set to output the RGB signals.

● When the unit is turned on

**1** Set the Y/C - COMP. switch to "COMP.".

**2** Press and hold down the ■ (STOP) button on the front panel when no disc is inserted or while the unit is stopped.
"S-VIDEO" appears in the display window after a few seconds.

**(Display Window)**
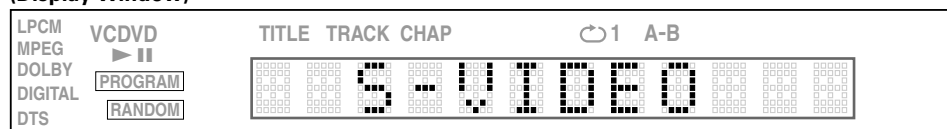
**3** Keep holding down the ■ (STOP) button on the front panel.
After a few more seconds, "RGB" replaces "S-VIDEO" in the display window.
Now the RGB signal can be output when setting the Y/C - COMP. switch to "COMP.".

**(Display Window)**

| | | | | | | |
|---|---|---|---|---|---|---|
| LPCM | VCDVD | TITLE TRACK CHAP | | ⟳1 A-B | | |
| MPEG | ►❚❚ | | | | | |
| DOLBY | PROGRAM | | **RGB** | | | |
| DIGITAL | RANDOM | | | | | |
| DTS | | | | | | |

✋Hints
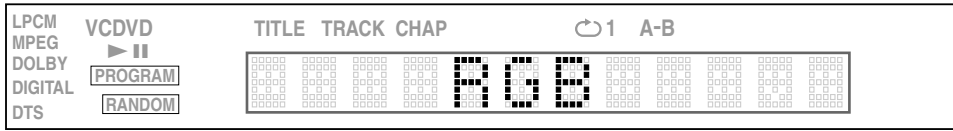
• To make the S-VIDEO outputs, use the similar procedure.

---

**NOTES**

• **Connect the unit for a PAL or Multi-scan TV. Do not connect the unit to an NTSC TV.**

• **When making the audio connection using the AV connector, set "DOWN MIX" on the "AUDIO" page of the preference display to "Lo/Ro" and the "SPEAKER SETTING" to "2 CHANNEL" (see pages 44 and 45).**

---

## To connect to an audio amplifier or receiver

You can enjoy high-quality audio by connecting the unit's audio output to your amplifier or receiver.

The unit



Red   White

Amplifier or receiver

White

Audio cable
(supplied)

Red

IN
LEFT
AUDIO
RIGHT
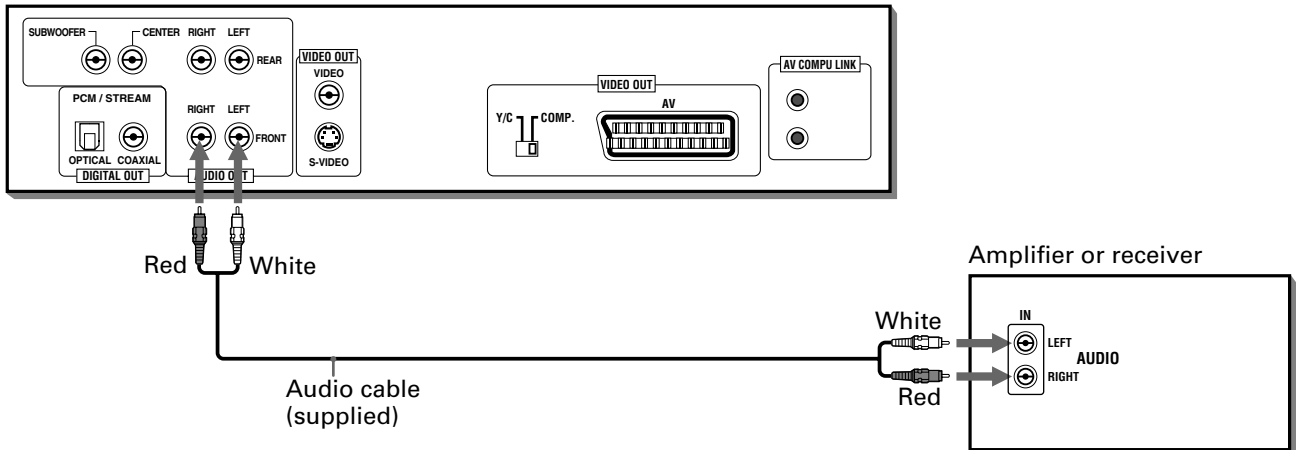
• Connect the unit's AUDIO OUT (FRONT LEFT/RIGHT) to any line-level inputs (such as AUX, DVD, CD, etc.) of an audio amplifier or receiver.

---

**NOTE**

• **When making the audio connection using the FRONT (LEFT and RIGHT) jacks for stereo use, set "DOWN MIX" on the "AUDIO" page of the preference display to "Lo/Ro" and the "SPEAKER SETTING" to "2 CHANNEL" (see pages 44 and 45).**

---

Getting started

# To connect to an amplifier/receiver equipped with 5.1-channel inputs

The unit is equipped with the Dolby Digital and MPEG Multichannel decoders and can feed 5.1-channel outputs. So you can enjoy any type of the high quality surround sounds by connecting the unit to an amplifier/receiver equipped with the 5.1-channel inputs.

Connect the unit's AUDIO OUT jacks to the analog 5.1-channel inputs of an amplifier or receiver using the supplied audio cables.
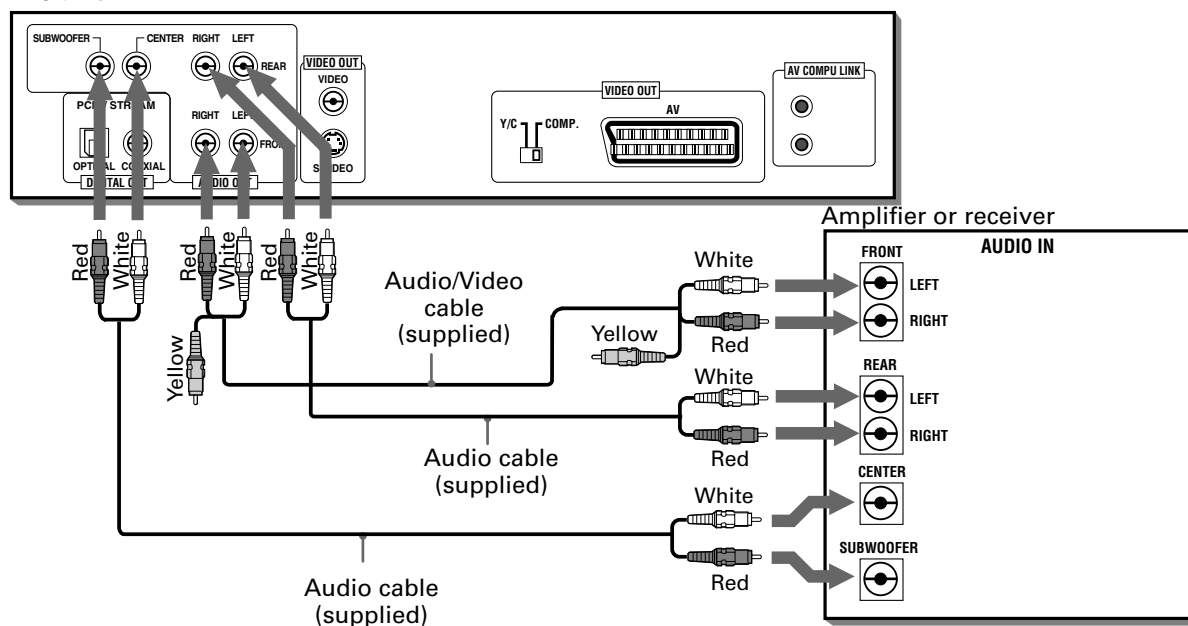


- Be sure to connect correctly between corresponding terminals. The order of the 5.1-channel terminals depends on units.

---

**NOTES**

- **The DTS surround signals are output only from the DIGITAL OUT jacks.**
- **When using the 5.1-channel outputs of the unit, set "DOWN MIX" to "OFF" and "SPEAKER SETTING" to "5.1 CHANNEL" or "EXPERT" on the "AUDIO" page of the "PREFERENCE" display. If "EXPERT" is selected, you can adjust the audio output balance of the speakers using the "EXPERT SPEAKER SETTING" display (see page 47).**

---

# To connect to audio equipment with a digital input

You can enhance the sound quality by connecting either of the unit's DIGITAL OUT jacks (OPTICAL or COAXIAL) to the digital input of an amplifier, MD, etc. by using an optional digital cable. The digital audio signal from a disc is directly transferred. If you connect the unit to a Dolby Digital, DTS or MPEG Multichannel decoder or an amplifier with a built-in decoder by using an optional digital cable, you can enjoy high-quality surround sound.
When you make the digital connection, we recommend also to make the analog connection, because, depending on discs, no signal may be output from the DIGITAL OUT.



The OPTICAL jack is protected by the hinged cover. To connect the optical cable to the jack, press the cover with the plug and connect it to the jack inside in the correct direction.

---
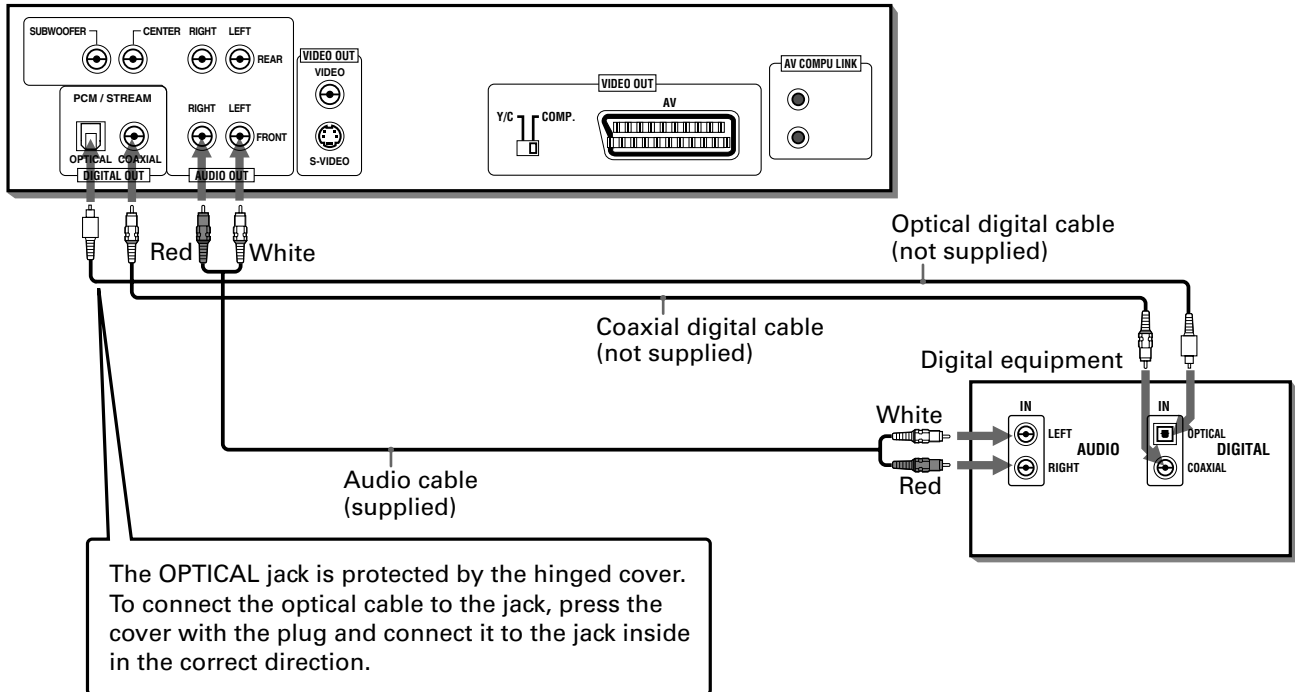
**NOTES**

- **When you connect the unit's DIGITAL OUT to digital audio equipment, before using, make the "DIGITAL AUDIO OUTPUT" setting on the "AUDIO" page of the preference display correctly according to the connected audio equipment. If the "DIGITAL AUDIO OUTPUT" is not set correctly, loud noise may be generated from speakers, causing damage to your speakers. See "DIGITAL AUDIO OUTPUT" on page 43.**
- **When you connect the unit's DIGITAL OUT to a Dolby Digital or DTS decoder (or the amplifier with a built-in decoder), the unit's "COMPRESSION" setting and "SPEAKER SETTING" on the "AUDIO" page of the preference display are invalid. Make appropriate surround audio settings within the decoder.**

# To connect the power cord

When all the audio/video connections have been made, insert the smaller plug of the supplied AC power cord to the unit's ∿ AC IN connector, then insert the other end to the wall outlet.  Make sure that plugs are inserted firmly.  The STANDBY indicator lights and setup is completed.

## ⚠ Warning
• Disconnect the power cord if you are not going to use the unit for a long time.
• Disconnect the power cord before cleaning the unit.
• Disconnect the power cord before moving the unit.
• Do not connect or disconnect the power cord with wet hands.
• Do not pull the power cord when disconnecting it, as this may damage the cord and cause fire, electric shock, or other accidents.

## ⚠ Caution
• Do not damage, alter, twist, or pull the power cord, as this may cause fire, electric shock, or other accidents.
• To prevent any accidents or damages caused by an unsuitable AC power cord, only use the supplied power cord.  If the cord is damaged, contact a dealer and get the new power cord.
• Do not put anything heavy, or the unit, on the power cord, as this may cause fire, electric shock, or other accidents.

# Using the remote control unit

Using the remote control, you can operate not only all the functions of the unit but also basic functions of your TV.

## To install batteries in the remote control unit

The battery compartment is located on the back of the remote control unit.

**1** Press down on the point shown by the arrow at the top of the compartment cover, and pull up the cover to open the compartment.
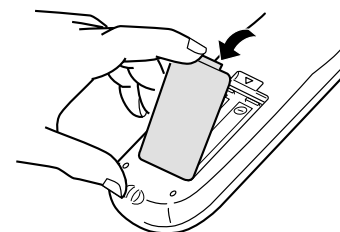
**2** Place the two accessory R6P (SUM-3)/AA(15F) batteries in the remote control according to the polarity markings ("+" and "−") inside the compartment and on the batteries.
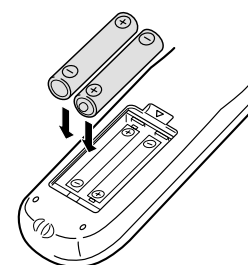
**3** Place the cover over the compartment, and press down lightly.
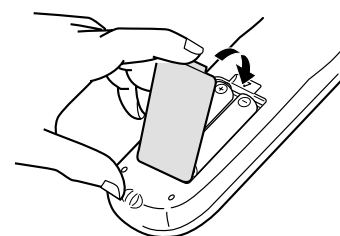
• The batteries will last about six months with normal use. If the functions of the remote control become erratic, replace the batteries. See page 20 for more information.

**Getting started**

## Precautions for the safe use of batteries

Observe the following precautions for the safe use of batteries. If they are used improperly their life will be shortened, they may burst or their contents may leak.

---

**Precaution**

- **Remove the batteries from the remote control if it is not going to be used for a long period of time.**

- **Remove dead batteries and dispose of them properly.**

- **Never leave dead batteries lying around, take them apart, mix them with other refuse, or throw them into an incinerator.**

- **Never touch liquid that has leaked out of a battery.**

- **Do not mix new and old batteries, or batteries of different types, when replacing them.**

---

# Remote sensor

- Operate the remote control unit while pointing it toward the remote sensor on the unit.
  The remote control unit can be used within a range of about 5 meters from the remote sensor. If you operate the remote control unit from a diagonal position, controllable distance may be shorter.

**Remote sensor**

---
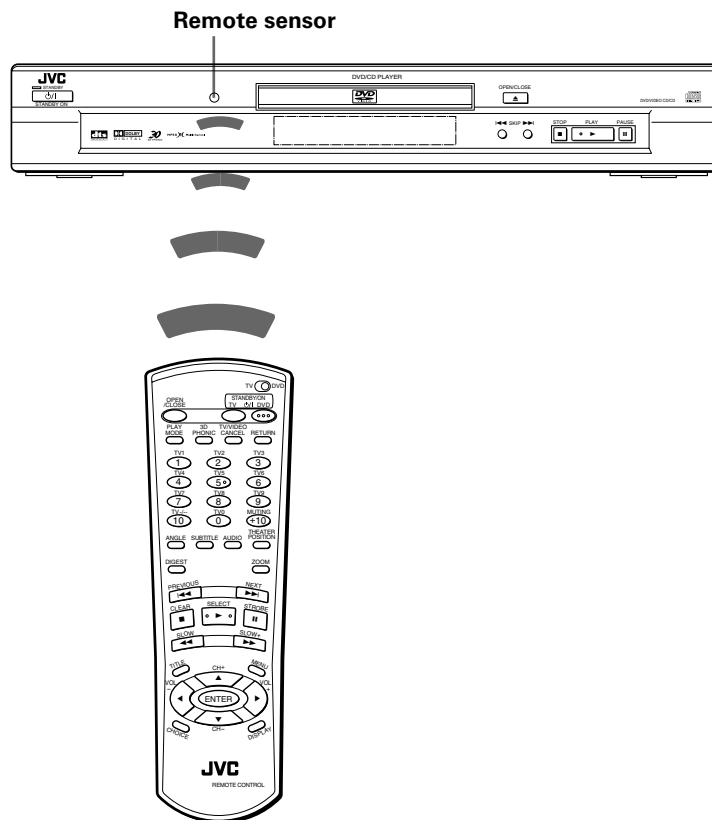
**NOTE**

- **If the remote sensor on the unit is exposed to the sunshine or strong light, you may not be able to control the unit from the remote control unit.**

---

# To use the remote control unit for TV operation

You can operate your TV from the remote control unit.

## Setting the remote control signal for operating your TV.

TV STANDBY/ON ⏻/❘

TV/VIDEO - CANCEL

Numeric buttons

TV - DVD switch

DVD STANDBY/ON ⏻/❘

■ button

JVC
REMOTE CONTROL
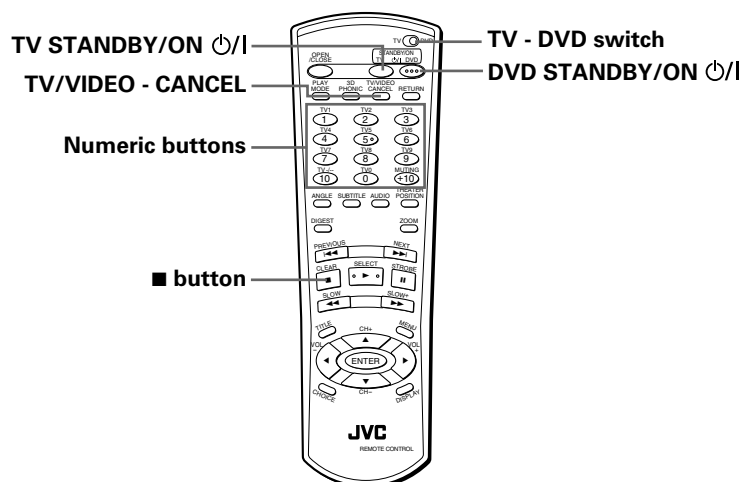
**1** Holding down TV/VIDEO - CANCEL, enter the manufacturer code of your TV listed below by using the numeric buttons (0 to 9).
Do not release TV/VIDEO - CANCEL. Keep holding it until the next step is completed.

**Example:**
To enter the manufacturer code "01": Press "0" then "1."

**2** Press ■ while holding down TV/VIDEO - CANCEL.

**3** Try to operate your TV by pressing TV STANDBY/ON ⏻/❘.
If your TV turns on or off, you have successfully set the control signal.

**Manufacturer code list**

| No. | Manufacturer |
| --- | --- |
| 01 | JVC |
| 02 | PHILIPS/CCE/MAGNAVOX |
| 03 | MITSUBISHI |
| 04 | PANASONIC |
| 05 | RCA |
| 06 | SHARP |
| 07 | SONY |
| 08 | TOSHIBA |
| 09 | ZENITH |
| 10 | PHILCO/HITACHI |
| 11 | PANASONIC |
| 12 | SAMSUNG |
| 13 | SANYO/SEARS |
| 14 | TOSHIBA |

| No. | Manufacturer |
| --- | --- |
| 15 | GRADIENTE |
| 16 | SANYO |
| 17 | PHILCO/DAEWOO |
| 18 | LG (GOLDSTAR) |
| 19 | GRUNDIG |
| 20 | NEC/GRADIENTE |
| 21 | PHILCO |
| 22 | BEIJING/NOBLEX |
| 23 | JVC (ONWA) |
| 24 | JVC (ONWA) |
| 25 | JVC (ONWA) |
| 26 | THOMSON |
| 27 | FERGUSON |
| 28 | ITT |

| No. | Manufacturer |
| --- | --- |
| 29 | MIVAR |
| 30 | FINLUX |
| 31 | NOKIA |
| 32 | FUNAI |
| 33 | SAMSUNG |
| 34 | SAMSUNG/PEONY/CHANGHONG |
| 35 | SAMSUNG |
| 36 | AIWA |
| 37 | DAEWOO |
| 38 | JINXING/PEONY |
| 39 | PEONY |
| 40 | KONKA |
| 41 | TCL |
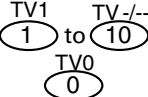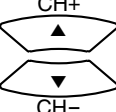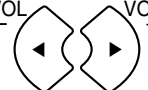
Getting started

The following buttons can be used for operating the TV:
To use the CURSOR (CH–, CH+, VOL–, VOL+), TV/VIDEO - CANCEL and numeric buttons for TV control, set the
TV - DVD switch to "TV".

TV ⦾ DVD

| | |
|---|---|
| TV | **Turns the TV on or off.** |
| TV/VIDEO CANCEL | **Switches the TV input mode between TV and VIDEO.** |
| TV1 〔1〕 to 〔10〕 TV -/-- TV0 〔0〕 | **Selects the TV channels directly.** **\*For some TVs, pressing "+10" functions as the "100+," while "10" functions as the ENTER button if your TV requires pressing the ENTER button after selecting a channel number.** |
| MUTING 〔+10〕 | **Mutes the TV sound.** |
| CH+ ▲ ▼ CH– | **Changes the TV channels.** |
| VOL – ◀ ▶ VOL + | **Adjusts the TV volume.** |

**NOTES**
- **The remote control unit is initially set operating a JVC TV.**
- **If there is more than one code listed for the manufacturer of your TV, try them one by one until you succeed.**

Getting started

# Basic operations

In the following description, the buttons on the remote control unit are mainly used, however, you may use the corresponding buttons on the front panel of the unit if available.

## Turning on/off the unit

Press DVD STANDBY/ON ⏻/| on the remote control unit or press STANDBY/ON ⏻/| on the front panel.



**DVD STANDBY/ON**
⏻/|

**STANDBY/ON ⏻/|**



**Hints**
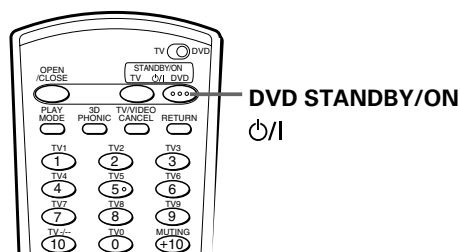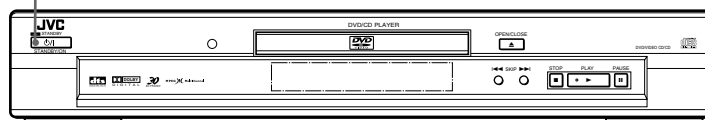
• You can turn on the unit by pressing the ▶ button. In this case, the unit starts playback if the disc is set in the disc tray.

• If no disc is set, "NO DISC" appears on the display window.

• You can turn on the unit by pressing the ⏏ (OPEN/CLOSE) button on the front panel. In this case, the disc tray opens.

---

**NOTE**
• Even if you press the DVD STANDBY/ON ⏻/| or STANDBY/ON ⏻/| button to turn off the unit, the unit is not disconnected from the AC power source as long as it is connected to the wall outlet. This state is called the standby mode. In this state, the unit consumes a very small amount of power.

---

## Inserting and removing discs

**1** Press ⏏ (OPEN/CLOSE) to open the disc tray.

**2** Place the disc in the tray.



With the label side up
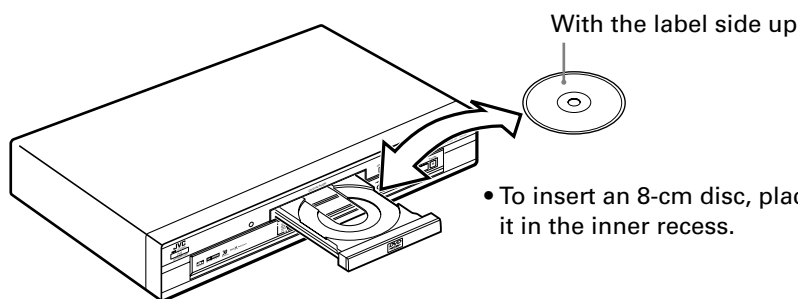
• To insert an 8-cm disc, place it in the inner recess.

**3** Press ⏏ (OPEN/CLOSE) to close the disc tray.

**Hints**

• If you press ⏏ (OPEN/CLOSE) during playback, the unit stops playback and opens the tray.

**NOTES**

- The unit can playback DVD VIDEO, Audio CD, and Video CD discs only.  Do not load non-playable disc. For details about play-able and non-playable disc types, see page 12.

- When loading a disc in the tray, be sure to position the disc inside the recess. Otherwise, the disc may be damaged when the tray is closed, or the disc may not be removed from the unit.

- Some DVD VIDEO discs may start playback automatically after loaded.

- If you load a DVD VIDEO disc whose region code does not match the unit, "REGION CODE ERROR!" is shown on the DVD open-ing display. For details about the region code, see page 12.

# Basic playback

Now you can play a disc.  First, let's enjoy simple playback according to following procedure.

Basic control buttons

## To start playback

DVD VIDEO  Audio CD  Video CD
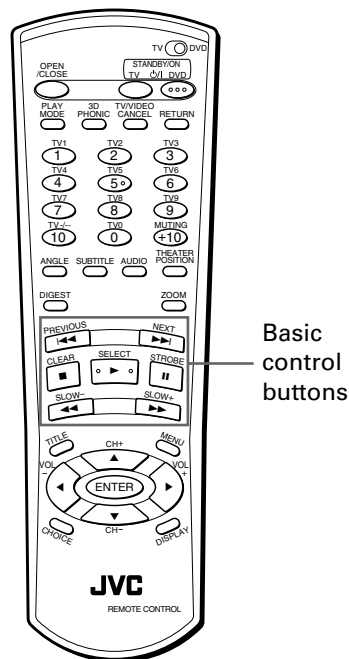
Press ►.

The unit starts playback from the biginning.

**NOTES**

- When the resume point is memorized, pressing ► starts playback from that point instead of the beginning. See page 26 and 46.

- During playback, the display window shows the disc number or the title/chapter or track number being played.

- With Video CD discs with PBC control or some DVD discs, the menu display may appear on the TV screen after starting play-back. In such a case, select an item to be played back from the menu.
  For operation using a menu, see page 27.

- Some DVD discs may starts playback automatically after loaded.

## To stop playback completely

`DVD VIDEO`  `Audio CD`  `Video CD`

Press ■.

The unit stops playback.

Hints
• If you press ▲ (OPEN/CLOSE) during playback, the unit stops playback and opens the tray.

## To stop playback temporarily

`DVD VIDEO`  `Audio CD`  `Video CD`

Press ❚❚.

The unit pauses playback. To resume playback, press ►.

## To advance or reverse playback rapidly while monitoring

`DVD VIDEO`  `Audio CD`  `Video CD`

● During playback

### From the Remote control unit

Press ◄◄ or ►►.

Each press of ◄◄ or ►► increases the playback speed. You can select the speed among 2x, 5x, 10x, 20x and 60x the normal speed.

Pressing ► returns the unit to normal playback.

### From the Front panel

Hold down I◄◄ or ►►I.

Holding down ►►I advances playback rapidly, while holding down I◄◄ reverses playback rapidly. The speed will change from 5x to 20x the normal speed if you keep holding down the button for a certain period of time. Releasing the button returns the unit to normal playback.

## To locate the beginning of the scene or song

`DVD VIDEO`  `Audio CD`  `Video CD`

● During playback

Press I◄◄ or ►►I.

Press I◄◄ to locate the beginning of the current chapter, title, or track, and press ►►I to locate the beginning of the next chapter, title, or track.

**NOTE**
• When you play a Video CD disc with the PBC function or a DVD VIDEO disc, the unit may locate a different place, but it will generally locate the beginning of the title or chapter or track.

# Resuming playback

The unit can memorize the position on a disc where you interrupt playback, and resume playback from that position later ►.

## To memorize the interrupted position

**1** Set the "RESUME" setting on the "SYSTEM" page of the preference display to "ON".

(See page 46 for details about how to set.)

**2** At the position you want to interrupt playback, press ■, or press DVD STANDBY/ON ⏻/| on the remote control or STANDBY/ON ⏻/| on the front panel.

The unit memorizes the interrupted position.

### Hints
• If you interrupt playback by pressing ■ in step 2 above and then turn off the power, the memory is not cleared.

## To resume playback

● While the disc you interrupt playback last time is still in the disc tray.

Press ►.

The unit starts playback from the position where you interrupted playback last time.

• **To clear the resume position memory**
  Carry out one of the followings.
  *Take out the disc from the tray.
  *Press ■ while stopped.
  *Turn on the unit by pressing DVD STANDBY/ON ⏻/| (on the remote control) or STANDBY/ON ⏻/| (on the front panel).

---

**NOTES**
• **The resume function does not work with Audio CD discs.**
• **The resume function does not work if "RESUME" on the "SYSTEM" page of the preference display is set to "OFF".**
• **In the case of a Video CD disc with PBC function, the unit may resume playback from a point slightly earlier than the resume point you stored.**
• **The resume function does not work in the program or random mode.**

# Advanced operations

When controlling the unit using the CURSOR ▲/▼/◄/►, TV/VIDEO - CANCEL or numeric buttons, make sure that the TV - DVD switch is set to "DVD".
When it is set to "TV", these buttons are used to control a TV.
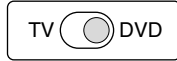
TV ◯ DVD

## Playing from a specific position on a disc

You can play a disc from the selected track, title or chapter, or from the specified time.

### To locate a desired scene from the DVD menu

`DVD VIDEO`

DVD VIDEO discs generally have their own menus which show the disc contents. These menus contain various items such as titles of a movie, names of songs, or artist information, and display them on the TV screen. You can locate a desired scene by using the menu.
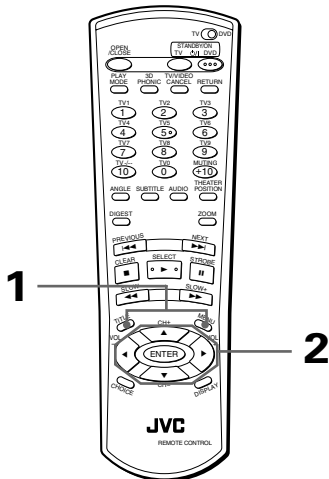


● Whenever a DVD VIDEO disc is loaded

**1** Press TITLE or MENU.

The menu appears on the TV screen.

**Hints**

**About menu**

Normally, a DVD VIDEO disc which contains more than one title may have a "title" menu which lists the titles. In this case, the menu appears on the TV screen by pressing the TITLE button. Some DVD VIDEO discs may also have a different menu which appears by pressing the MENU button.

Example:
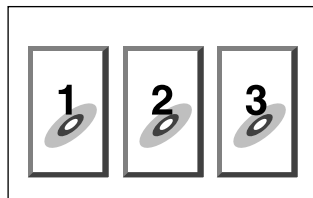


See the instructions of each DVD VIDEO disc for its particular menu.

**2** Use CURSOR ▲/▼/◄/► to select a desired item, then press ENTER.

The unit starts playback of the selected item.

**Hints**

• With some discs, you can also select items by entering the corresponding number using the numeric buttons, which may cause the unit to automatically start playback.

**NOTES**

• **When ◯ appears on the TV screen by pressing TITLE in step 1:**

The disc does not have a menu listing the titles.

• **When ◯ appears on the TV screen by pressing MENU in step 1:**

The disc does not have a menu.

• **The MENU button does not work while stopped**.

### To locate a desired scene from the menu of the Video CD with PBC

`Video CD`

Some Video CD discs supports the PBC function. PBC is an abbreviation of "PlayBack Control." A Video CD disc recorded with PBC has its own menus, such as a list of the songs of the disc. You can locate a specific scene by using the menu.
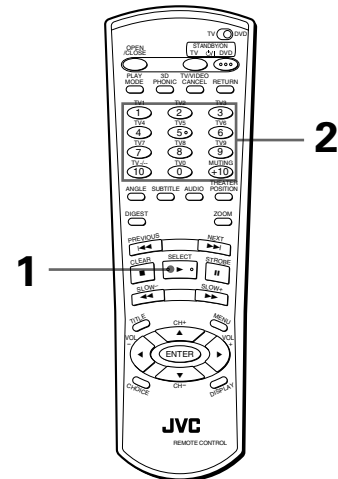


● When a Video CD disc with PBC is stopped

**1** Press ►.

A disc menu appears on the TV screen (The PBC function is activated).

Example:
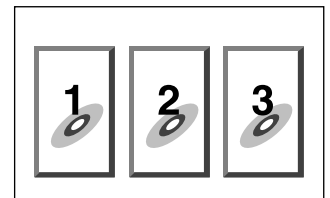


"Pbc" is indicated in the display window on the front panel.

Advanced operations

**2** Use the numeric buttons to select the desired number of the item.

• See page 11 for details about how to use the numeric buttons.

The unit starts playback of the selected item.
You can return to the menu by pressing the RETURN button.
When "NEXT" or "PREVIOUS" appears on the TV screen, the unit generally works as follows:
• Pressing ►►I advances to the next page.
• Pressing I◄◄ returns to the previous page.
\* The method of the operation is different depending on the disc.

**Hints**

• To activate the PBC function when a PBC-compatible Video CD disc is being played back without the PBC function, press ■ then press ►.

• You can also activate the PBC function using the play mode menu as follows.
  1 Press PLAY MODE.
  2 Use CURSOR ◄/► to move ↯ to [PBC CALL], then press ENTER.

• If you want to playback a PBC-compatible Video CD disc without activating the PBC function, start playback by using the numeric buttons instead of the ► button. See the next paragraph.

## To locate a desired selection using the numeric buttons

DVD VIDEO  Audio CD  Video CD

You can play from a desired title or chapter (DVD VIDEO) or track (Audio CD/Video CD) by specifying the number.



**1**
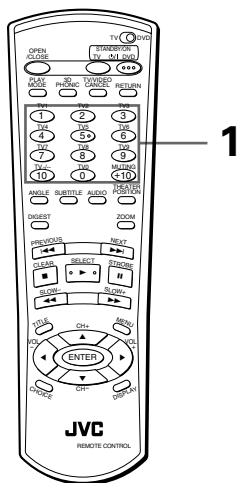
● For DVD VIDEO/Audio CD:
  During playback or while stopped
For Video CD: During playback without PBC function or while stopped

**1** Use the numeric buttons to specify the number.

\* During DVD VIDEO playback (except when a menu is shown), a chapter is specified.
\* While a DVD VIDEO is stopped, a title is specified.
\* For an Audio CD or Video CD, a track is specified.

The unit starts playback from the beginning of the selection.
• See page 11 for details about how to use the numeric buttons.

**NOTES**

• **During DVD VIDEO playback, if a menu is shown on the TV screen, the numeric buttons may be used for selecting an item in the menu**.

• **When ⊘ appears on the TV screen:**
  The title or track you have selected is not contained in the disc.

• **This function does not work during Video CD playback with PBC function**.

## To locate a desired selection using I◄◄ or ►►I

DVD VIDEO  Audio CD  Video CD

You can locate a chapter or title of a DVD VIDEO disc or track of an Audio CD/Video CD by using I◄◄ or ►►I.
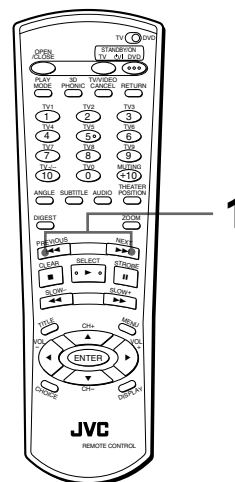


**1**

● For DVD VIDEO: During playback
  For Audio CD: During playback
  For Video CD: During playback without PBC function

**1** Press I◄◄ or ►►I.

With an Audio CD or Video CD, pressing the button skips a track. With a DVD VIDEO disc, pressing the button skips a chapter or title depending on the disc configuration.
The selection number appears in the display window on the front panel.
• To skip forward chapters/tracks, press ►►I as many times as required.
• To skip to the beginning of the current track/chapter, press I◄◄ once.
• To skip back chapters/tracks, press I◄◄ as many times required.

**NOTES**

• **This function may not work with some DVD VIDEO discs**.

• **This function does not work during Video CD playback with PBC function**.

## To locate a desired scene by specifying the chapter number [CHAP.SEARCH] **DVD VIDEO**

If the current title of a DVD VIDEO disc being played is divided into chapters, you can skip to a desired chapter by specifying the chapter number using the DVD play mode menu.
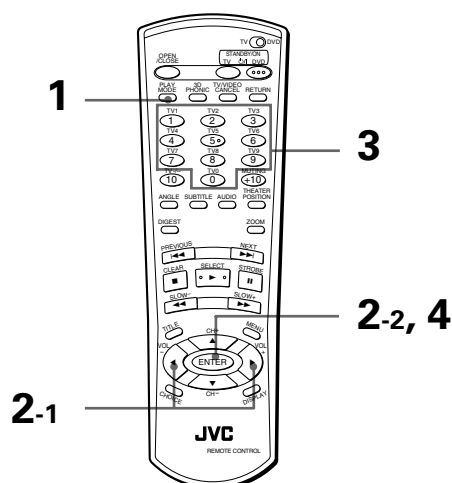


● During DVD VIDEO playback

### 1 Press PLAY MODE.

The DVD play mode menu appears on the TV screen.

### 2 Use CURSOR ◄/► to move ↖ to [CHAP. SEARCH], then press ENTER.

"GO TO CHAPTER = " appears under the menu.
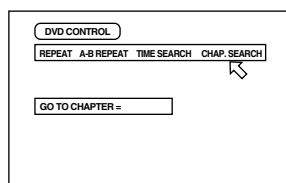


### 3 Use the numeric buttons (0 to 9) to enter the desired chapter number.

Example:
 To select chapter number 8:
  Press "8" → ENTER.
 To select chapter number 37:
  Press "3" → "7" → ENTER.

### 4 Press ENTER.

The unit starts playback from the selected chapter.

**Hints**

• The "10" and "+10" buttons are not used in this function.

---

**NOTES**

• **You can also locate a desired chapter directly by specifying the chapter number using the numeric buttons during playback (except when a menu is shown). See page 28.**

• **When the chapter number is incorrect in step 3:**
 Re-enter the correct number.

• **When ◌ is displayed in the TV screen in step 4:**
 The chapter you have selected is not available in the disc, or chapter search does not work with the disc.

• **To turn off the play mode menu:**
 Press PLAY MODE.

---

## To locate a desired position in the current title or track [TIME SEARCH]

**DVD VIDEO** | **Audio CD** | **Video CD**

You can play a disc from the desired position by specifying the elapsed time from the beginning of the current title or track using the TIME SEARCH function. Note that some DVD VIDEO discs do not contain time information, and the TIME SEARCH function cannot be used.
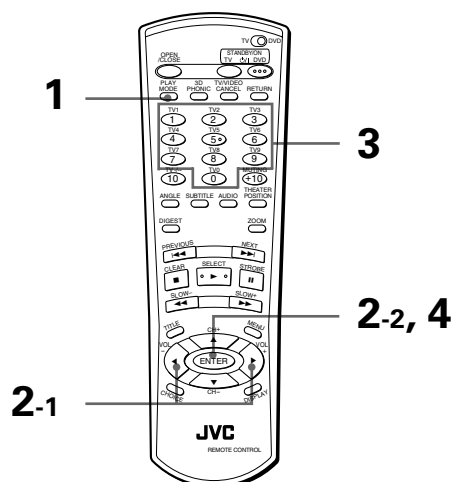


● For DVD VIDEO:  During playback
 For Audio CD:  During playback
 For Video CD:  During playback without PBC function

### 1 Press PLAY MODE.

The play mode menu appears on the TV screen.

### 2 Use CURSOR ◄/► to move ↖ to [TIME SEARCH], then press ENTER.

"GO TO" appears under the menu.

**3** Use the numeric buttons (0 to 9) to enter the time.

You can specify the elapsed time of the current title or track to set the location which you want to playback from.

**4** Press ENTER.

The unit starts playback from the specified time.

(for DVD VIDEO)
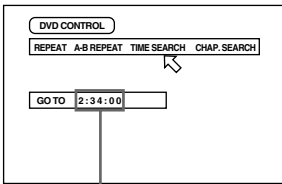
```
DVD CONTROL
REPEAT  A-B REPEAT  TIME SEARCH  CHAP. SEARCH

GO TO  2 : 3 4 : 0 0
```
Selected time

(for Audio CD)
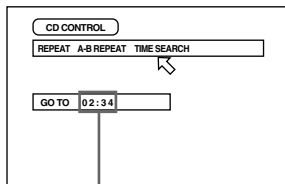
```
CD CONTROL
REPEAT  A-B REPEAT  TIME SEARCH

GO TO  0 2 : 3 4
```
Selected time

**Hints**

• "10" and "+10" buttons are not used in this function.

• You can specify the time in hour/minute/second format for DVD VIDEO discs, and in minute/second format for Audio and Video CD discs.

(for Video CD)
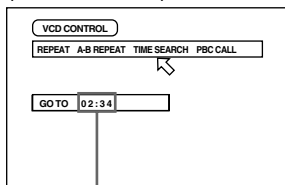
```
VCD CONTROL
REPEAT  A-B REPEAT  TIME SEARCH  PBC CALL

GO TO  0 2 : 3 4
```
Selected time

• **Example (for DVD VIDEO)**

To playback from 2(H):34(M):00(S)

```
GO TO _ : _ _ : _ _
```
↓ Press "2".
```
GO TO 2 : _ _ : _ _
```
↓ Press "3".
```
GO TO 2 : 3 _ : _ _
```
↓ Press "4".
```
GO TO 2 : 3 4 : _ _
```
↓
Press ENTER
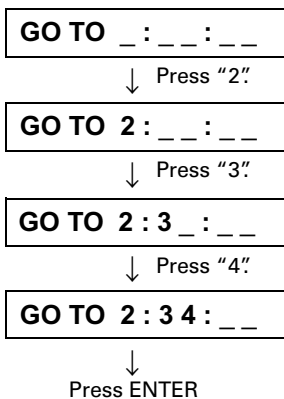
You do not have to press "0" to enter the trailing zeros (for the last two digits in the example above).
Of course, it is possible to enter them.

• **When you make a mistake**

Move the cursor to the incorrect value, then press the correct button to re-select the value.

```
GO TO 2 : 3 5 : _ _
```
↓ Press CURSOR ◄.
```
GO TO 2 : 3 _ : _ _
```
↓ Press "4".
```
GO TO 2 : 3 4 : _ _
```
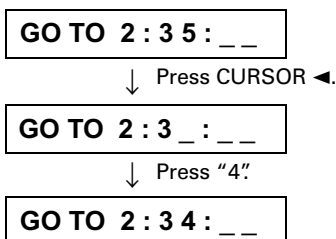
**NOTES**

• **When ◇ appears on the TV screen in step 2:**

The time you have selected is not available on the disc, or the time search function does not work with the disc.

Also note that the time search function does not work during Video CD playback with the PBC function.

• **To turn off the play mode menu:**
Press PLAY MODE.

• **The TIME SEARCH function cannot be used during program playback**.

## To locate a desired scene from the display [DIGEST]

The unit can display the opening scene of each title or chapter on a DVD VIDEO or each track of a Video CD. You can select a desired scene from those displayed on the TV screen.
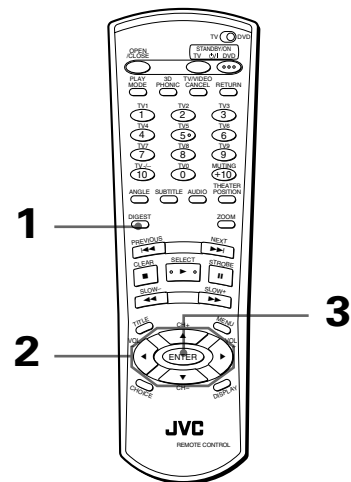
● For DVD VIDEO:   While stopped or during playback
For Video CD:    While stopped or during playback without PBC function

**1** Press DIGEST.

Up to nine opening scenes are displayed.

• While a DVD VIDEO disc is stopped:
The opening scene of each title appears on the TV screen.
• During DVD VIDEO disc playback:
The opening scene of each chapter in the current title appears on the TV screen.
• When a Video CD disc is loaded:
The opening scene of each track appears on the TV screen.

**2** Use CURSOR ▲/▼/◄/► to select the desired scene.

The selected scene is indicated by ✎.
If there are more than 9 scenes, the digest screen will have more than one page. In this case, pressing ►►। advances to the next page, while pressing ।◄◄ returns to the previous page.
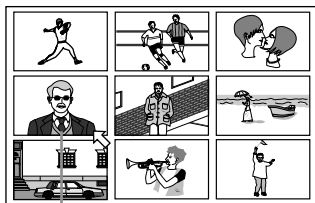
Selected scene

Hints

- When the lower right scene is selected, pressing CURSOR ► advances to the next page if available. Similarly, when the upper left scene is selected, pressing CURSOR ◄ returns to the previous page (if available).

- Depending on discs, it may take some time until all scenes of the current page appear on the TV screen. If you want to turn the page, you do not have to wait to press ।◄◄ or ►►। until all scenes appear.

**3** Press ENTER.

The unit starts playback from the selected scene.

**NOTE**

- **With some discs, depending on the contents, it may take some time until all the scenes appear on the screen.**

# Special picture playback

The unit provides special picture playback functions including Frame-by-frame, Strobe, Slow-motion and Zoom.

## To advance a still picture frame-by-frame

DVD VIDEO  Video CD

**1**
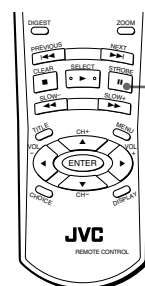
● While paused (still)

**1** Press ‖.

Each time you press ‖, the still picture advances to the next frame.
Pressing ► returns to normal playback.

## To display continuous still pictures [STROBE]

DVD VIDEO  Video CD

**1, 2**
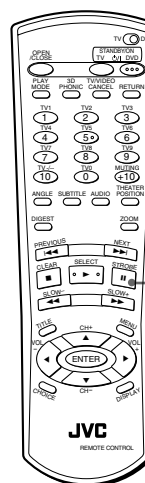
● During playback

**1** At the point you want to view as continuous Still pictures, press ‖.

The unit pauses playback.

**2** Press and hold ‖ for more than 1 second.

Nine continuous still pictures appear on the TV screen.
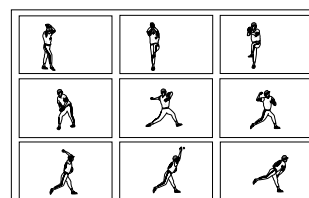
## Hints

- Pressing ⏸ when the nine still pictures is shown will advance to the next nine still pictures.
- Pressing ▶ when the nine still pictures is shown will advance pictures in normal playback speed.

- **To cancel strobe play**

  Press and hold ⏸ for more than 1 second.

**NOTE**

- **If you press and hold ⏸ for more than 1 second during playback, nine still pictures also appear but they advance in normal playback speed.**

## To playback in slow-motion [SLOW]

DVD VIDEO | Video CD
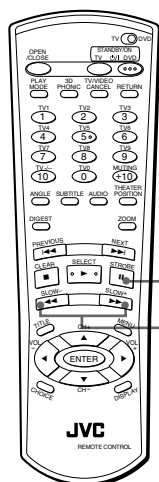


● During playback

**1** Press ⏸, then use ◀◀/▶▶.

To play forward slow-motion, press ▶▶, and to play reverse slow-motion (for DVD VIDEO discs only), press ◀◀. First, the unit plays the slowest speed, and each time you press the button, the playback speed increases.

- **To return to normal playback**
  Press ▶.

- **To pause slow-motion playback**
  Press ⏸.

**NOTES**

- **The sound is muted during slow-motion playback.**
- **Reverse slow-motion playback is not possible for a Video CD.**

## To zoom a scene [ZOOM]

DVD VIDEO | Video CD
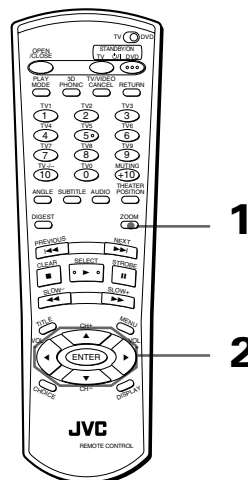


● During playback or while paused

**1** Press ZOOM.

"ZOOM" appears on the TV screen.
The unit zooms in to the center part of the scene to produce a double-sized image.
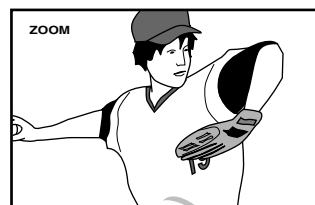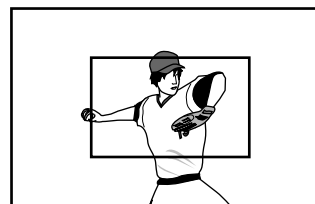


**2** Use CURSOR ▲/▼/◀/▶ to move the zoomed-in position.
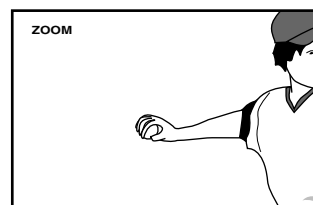


- **To return to normal playback**
  Press ZOOM.

**NOTE**

- **While zoomed, the picture may look coarse.**

# Changing the playback order

You can play titles or tracks in the desired order or in random order.

## To playback in the desired order [PROGRAM]

| DVD VIDEO | Audio CD | Video CD |
|---|---|---|

You can play titles or tracks in the desired order by using the Program function.
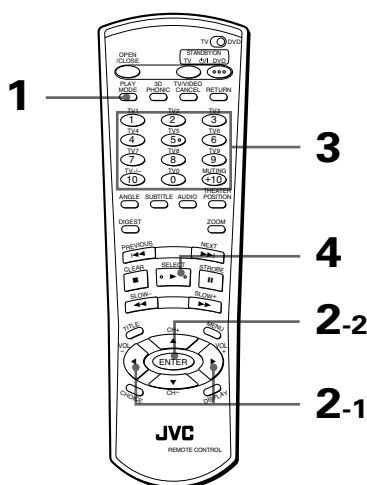


● While stopped

**1** Press PLAY MODE.

The play mode menu appears on the TV screen.

**2** Use CURSOR ◄/► to move ⬚ to [PROGRAM] and press ENTER.
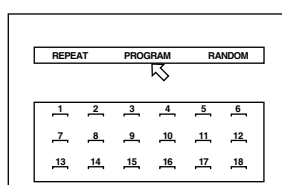


The program table appears under the menu bar (as shown above).
The "PROGRAM" indicator appears in the display window on the front panel.

**3** Specify selections in the desired order using the numeric buttons.

See page 11 for details about how to use the numeric buttons.
Up to 18 titles or tracks can be programmed. You may select the same title or track more than once.



The programmed title/track number is shown under each program number.

- **If you specify a wrong selection**

  Press TV/VIDEO - CANCEL button. The last selection programmed is erased.

- **To clear the program**

  Press ■.

**4** Press ► to start program play.

When all of the programmed titles/tracks have finished playback, the unit stops but the program remains.

---

**NOTES**

- **Some DVD VIDEO discs may not be played back correctly in program mode.**

- **During program playback, pressing ►►I skip to the next selection of the program. Pressing I◄◄ returns to the beginning of the current selection, however, you cannot skip back to the previous selection.**

- **By pressing PLAY MODE during program playback, the program table is displayed on the TV screen and the current program number is indicated in yellow.**

---

- **To quit program playback**

  Press ■ while stopped.
  The "PROGRAM" indicator in the display window turns off.
  Note that the program remains.
  To clear the program, press ■ while the program table is shown on the TV screen.

🖐Hints

- While stopped and the play mode menu is displayed on the TV screen, by moving ⬚ to [PROGRAM] and pressing ENTER, the program mode quits. Note that the program remains.

## To playback in random order [RANDOM]

DVD VIDEO | Audio CD | Video CD

You can play titles or tracks in random order by using the Random function.



**1**

**3**

**2**

● While stopped

### 1 Press PLAY MODE.

The play mode menu appears on the TV screen.

### 2 Use CURSOR ◄/► to move ↖ to [RANDOM].

```
REPEAT       PROGRAM      RANDOM
                               ↖
```
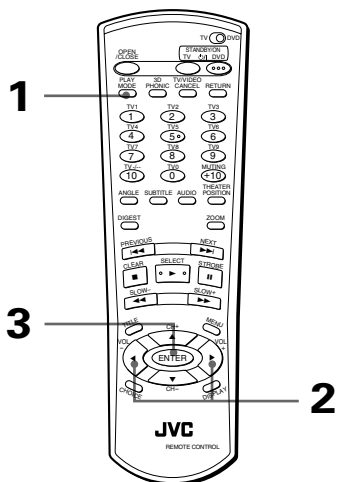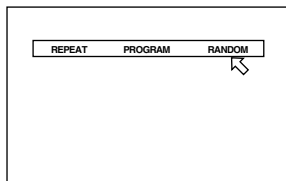
### 3 Press ENTER.

The "RANDOM" indicator appears in the display window on the front panel.
The unit starts random playback. After playing all titles/tracks of all the discs, random playback ends.

### ✏ Hints

• The same title or track will not be played back more than once during random play.

• **To stop/quit random playback in the middle**

Press ■ to stop playback. The unit is still in random playback mode, so pressing ► starts random playback again.
To quit random playback, press ■ again while stopped. The "RANDOM" indicator in the display window turns off.

### NOTE
• **Some DVD VIDEO discs may not be played back correctly in the random mode.**

# Repeat playback

You can repeat playback of the current selection or all disc contents (except DVD VIDEO). You can also repeat playback of a desired part.

## To repeat the current selection or all discs contents [REPEAT]

DVD VIDEO | Audio CD | Video CD



**1**

**2-2**

**2-1**
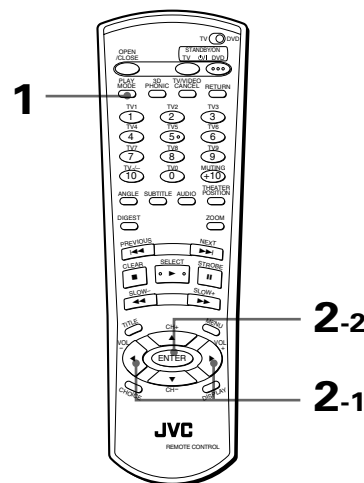
● For DVD VIDEO:        During playback
For Audio CD/Video CD:   In any condition except Video CD playback with PBC

### 1 Press PLAY MODE.

The play mode menu appears on the TV screen.

### 2 Use CURSOR ◄/► to move ↖ to [REPEAT], then press ENTER.

Each time you press ENTER, the repeat mode changes as follows depending on the disc type and unit's status:

• **During DVD VIDEO playback**

```
┌ DVD CONTROL ┐
 REPEAT  A-B REPEAT  TIME SEARCH  CHAP. SEARCH
   ↖
 REPEAT  TITLE
```

Selected repeat mode

**REPEAT TITLE**
**(current title repeat)**
↓
**REPEAT CHAPTER**
**(current chapter repeat)**
↓
**No indication (off)**

Advanced
operations
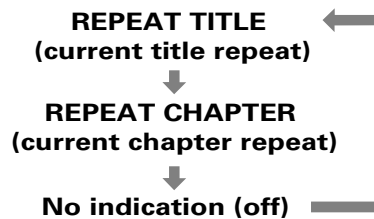
• **During Audio CD/Video CD playback**

(for Audio CD)

```
┌─────────────────────────────────┐
│  CD CONTROL                      │
│  ┌────────────────────────────┐  │
│  │REPEAT  A-B REPEAT  TIME SEARCH│ │
│  └────────────────────────────┘  │
│  ┌──────────┐                    │
│  │REPEAT  ALL│                   │
│  └──────────┘                    │
│                                  │
│                                  │
└─────────────────────────────────┘
```
Selected repeat mode

(for Video CD)

```
┌─────────────────────────────────┐
│  VCD CONTROL                     │
│  ┌──────────────────────────────┐│
│  │REPEAT A-B REPEAT TIME SEARCH PBC CALL││
│  └──────────────────────────────┘│
│  ┌──────────┐                    │
│  │REPEAT  ALL│                   │
│  └──────────┘                    │
│                                  │
│                                  │
└─────────────────────────────────┘
```
Selected repeat mode

**REPEAT ALL (all track repeat)** ←

↓

**REPEAT 1 (current track repeat)**

↓

**No indication (off)**
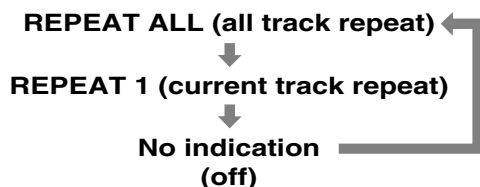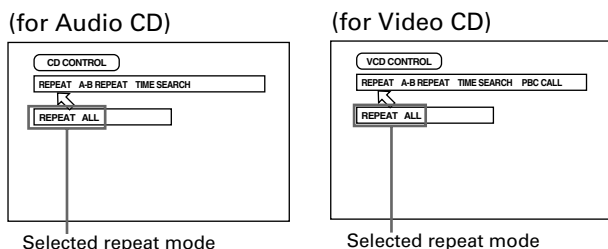
• **While Audio CD/Video CD stopped**

**REPEAT ALL (all track repeat)** ←

↓

**No indication (off)**

The selected mode is also shown on the on-screen display, however, it is shown in the different way from the display window. The following table shows the relation between them.

| Disc type | Display window | On-screen display |
|-----------|---------------|-------------------|
| DVD VIDEO | ⟳1 | REPEAT TITLE |
| | ⟳1 | REPEAT CHAPTER |
| Audio CD/ Video CD | ⟳ | REPEAT ALL |
| | ⟳1 | REPEAT 1 |

(Display window)

```
┌──────────────────────────────────────────────┐
│ LPCM   VCD DVD        TITLE TRACK CHAP   ⟳1 A-B│
│ MPEG   ▶ ▌▌                                    │
│ DOLBY  PROGRAM                                 │
│ DIGITAL                                        │
│ DTS    RANDOM                                  │
└──────────────────────────────────────────────┘
```
                                    Repeat mode indicators
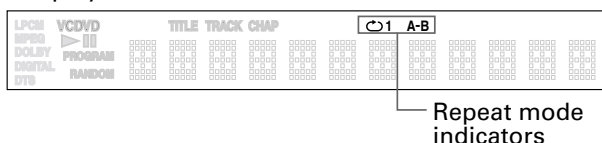
• **To stop repeat playback**
  Press ■ .

**Hints**

• If you press ■ in REPEAT ALL or REPEAT 1 mode, the unit stops playback but remains in the mode.

• If you press ■ in REPEAT TITLE or REPEAT CHAPTER mode, the unit stops playback and quits the mode.

• **To quit repeat playback**
  With ↘ pointed at [REPEAT], press ENTER repeatedly until the mode is set to off.

**NOTES**

• Some DVD VIDEO discs do not allow the title repeat or/and chapter repeat.

• Some DVD VIDEO discs automatically stops playback in the middle of the disc.

• Repeat playback function cannot be used during Video CD playback with PBC function.

• To turn off the play mode menu display
  Press PLAY MODE.

## To repeat a desired part [A-B REPEAT]

DVD VIDEO   Audio CD   Video CD
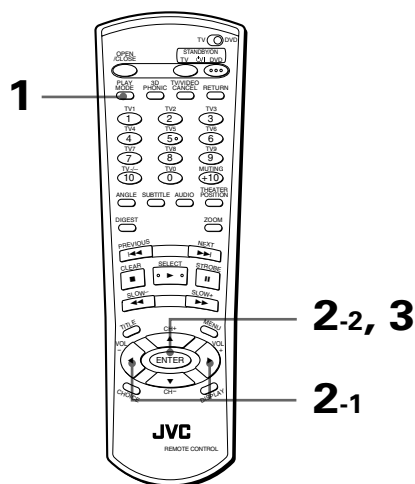
● During playback

**1** Press PLAY MODE.

The play mode menu appears on the TV screen.

**2** Use CURSOR ◄/► to move ↘ to [A-B REPEAT], then press ENTER at the beginning of the part you want to repeat (point A).

Make sure that the REPEAT mode is off. If any REPEAT mode is selected, you cannot move ↘ to [A-B REPEAT].

**3** Press ENTER at the end of the part you want to repeat (point B).

The unit locates "A" and starts repeat playback between "A" and "B."

In the A-B repeat mode, "A-B" illuminates in the display window.

(for DVD VIDEO)
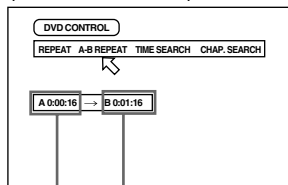
```
┌─────────────────────────────────────────┐
│  ( DVD CONTROL )                         │
│                                          │
│  REPEAT  A-B REPEAT  TIME SEARCH  CHAP. SEARCH │
│           ☝                               │
│                                          │
│  ┌──────────┐   ┌──────────┐             │
│  │A 0:00:16 │ → │B 0:01:16 │             │
│  └──────────┘   └──────────┘             │
└─────────────────────────────────────────┘
```
Point A    Point B

(for Audio CD)
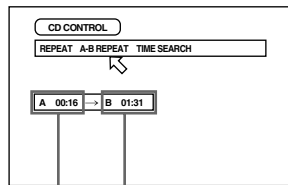
```
┌─────────────────────────────────────────┐
│  ( CD CONTROL )                          │
│                                          │
│  REPEAT  A-B REPEAT  TIME SEARCH         │
│           ☝                               │
│                                          │
│  ┌─────────┐   ┌─────────┐               │
│  │A  00:16 │ → │B  01:31 │               │
│  └─────────┘   └─────────┘               │
└─────────────────────────────────────────┘
```
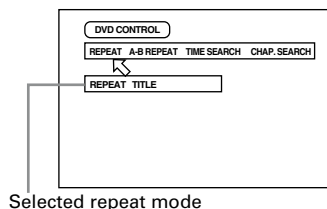Point A   Point B

(for Video CD)
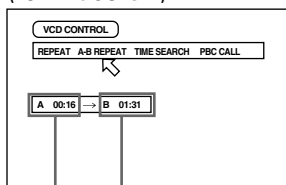
```
┌─────────────────────────────────────────┐
│  ( VCD CONTROL )                         │
│                                          │
│  REPEAT  A-B REPEAT  TIME SEARCH  PBC CALL │
│           ☝                               │
│                                          │
│  ┌─────────┐   ┌─────────┐               │
│  │A  00:16 │ → │B  01:31 │               │
│  └─────────┘   └─────────┘               │
└─────────────────────────────────────────┘
```
Point A   Point B

- **To quit A-B repeat playback**

  Press ■. The unit stops playback and quits A-B repeat mode.

📍Hints

- During playback, pressing ENTER when ☝ is pointed at [A-B REPEAT] quits A-B repeat mode and continues playback.

- You can also quit A-B repeat mode by pressing ⏮ or ⏭.

---

**NOTES**

- **To turn off the play mode menu**

  Press PLAY MODE.

- **If ⃠ appears when pressing ENTER in step 2 during DVD playback**

  You cannot repeat the selected portion because of the disc contents.

- **The A-B REPEAT function cannot be used during program playback.**

---

# Selecting a scene angle of DVD VIDEO

You can enjoy a variety of scene angles if the DVD VIDEO disc contains "multi-angle" parts, where multiple cameras were used to shoot the same scene from different angles.

📍Hints

- At the beginning of a "multi-angle" part, 📷 appears on the TV screen.

## To select a scene angle from the normal screen [ANGLE]     DVD VIDEO
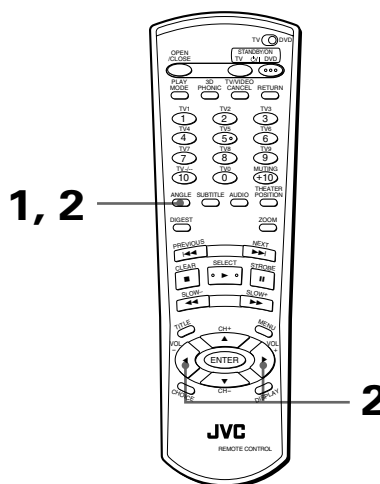


● During DVD VIDEO playback

**1** Press ANGLE.

The Angle selection display appears on the TV screen.

```
┌──────────────┐
│ 📷  ◁ 1/3 ▷   │
│              │
│              │
└──────────────┘
```
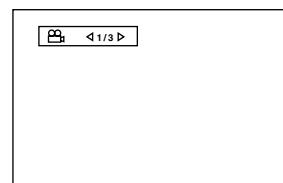
**2** Use ANGLE or CURSOR ◄/► to select the desired angle.

Each time you press ANGLE or CURSOR ◄/►, the angle changes.

Example:

**1 / 3**
↓
**2 / 3**
↓
**3 / 3**

---
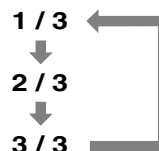
**NOTES**

- **The Angle selection display will automatically disappear if you do not change the angle for 10 seconds.**

- **To turn off the Angle selection display manually, press ENTER.**

- **When ⃠ appears on the TV screen**

  The current scene is not recorded from multiple angles.

Advanced operations

## To select a scene angle from the angle list display [ANGLE]  ![DVD VIDEO]

# Changing the language and sound

For DVD VIDEO discs, you can select the subtitle language, as well as the audio language/sound included on a disc.
For Video CD discs, you can select the audio channel(s).

## To select the subtitle language [SUBTITLE]  ![DVD VIDEO]
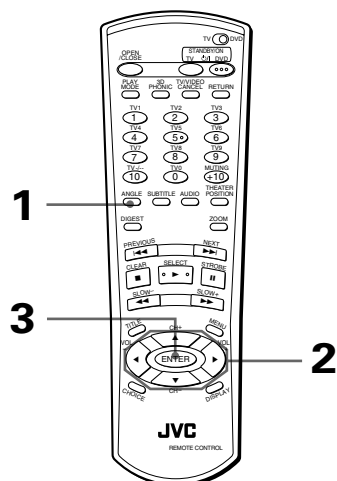
● During DVD VIDEO playback

**1** Press and hold ANGLE for more than 1 second.

Up to nine camera angles recorded on a disc appear on the TV screen.

The selected camera angle

**2** Use CURSOR ▲/▼/◄/► to select the desired angle.

**3** Press ENTER.

The unit starts playback by the selected angle on the full-sized screen.

---

**NOTES**

- **When ⃠ appears on the TV screen in step 1:**
  The current scene is not recorded from multiple angles.

- **During the operation above, audio is muted.**

---

● During DVD VIDEO playback

**1** Press SUBTITLE.

The Subtitle selection display appears on the TV screen.
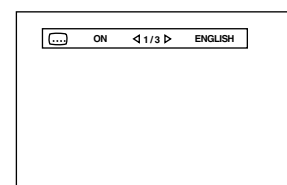
⫐…⫑  ON  ◁ 1/3 ▷  ENGLISH

**2** To turn the subtitle on and off, press SUBTITLE.

**3** To select the desired subtitle language, use CURSOR ◄/►.

Each time you press CURSOR ◄/►, the subtitle language changes.

Example:

**1/3 ENGLISH**
⬇
**2/3 FRENCH**
⬇
**3/3 SPANISH**
⬇
**-/3 (off)**

## To change the audio language or sound [AUDIO]

DVD VIDEO   Video CD

By AUDIO selection, you can choose the audio language of movies or choose to enjoy KARAOKE with or without the vocal.

**1, 2**

**2**
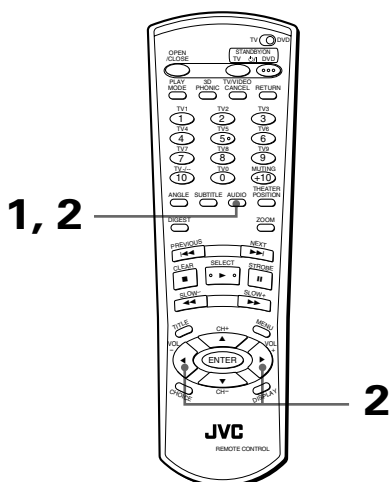
● During playback

**1** Press AUDIO.

The Audio selection display appears on the TV screen.

(for DVD VIDEO)

[ ◯◯ ◁ 1/3 ▷ ENGLISH ]

(for Video CD)

[ ◯◯ ◁ STEREO ▷ ]
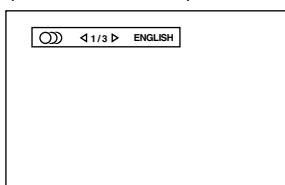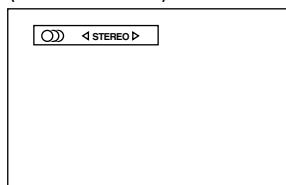
**2** Use AUDIO or CURSOR ◄/► to select the desired audio.

- **For DVD VIDEO**

  Each time you press AUDIO or CURSOR ◄/►, the audio language or sound changes.

  Example:

  **1/3 ENGLISH**
  ↓
  **2/3 FRENCH**
  ↓
  **3/3 SPANISH**
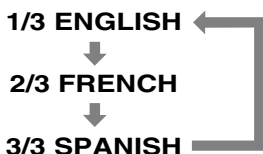
- **For Video CD**

  Each time you press AUDIO or CURSOR ◄/►, the playback audio changes as follows.

  Example:

  **STEREO**
  ↓
  **L**
  ↓
  **R**

Advanced operations

# Miscellaneous functions

## To select the picture character [THEATER POSITION]  DVD VIDEO | Video CD

You can select the picture character from among four options according to the source program, lighting condition of the room and/or personal preference.

**1, 2**
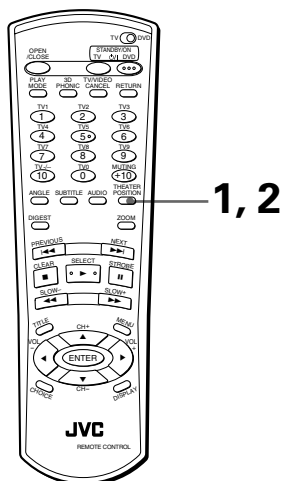
● During playback

**1** Press THEATER POSITION.

The theater position display appears on the TV screen.

**2** Select the desired theater position by using THEATER POSITION.

Each time you press the THEATER POSITION button, the picture character changes as follows:

THEATER 1

Selected picture character

**THEATER 1**
↓
**THEATER 2**
↓
**THEATER 3**
↓
**THEATER OFF**
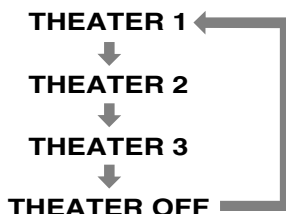
"THEATER OFF" is the normal position. Selecting a higher number tones down the picture character.

**NOTES**
- **The theater position display will automatically disappear if you do not change the theater position for 5 seconds.**
- **To turn off the theater position display manually, press ENTER.**

## To simulate surround sound [3D PHONIC]  DVD VIDEO | Audio CD | Video CD

Using the 3D Phonic function, you can get a simulated surround effect from your stereo system.

**1, 2**
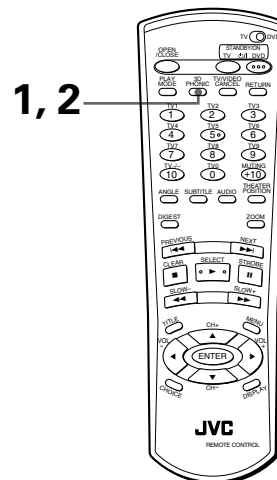
● During playback

**1** Press 3D PHONIC.

The 3D PHONIC display appears on the TV screen.

**2** Select the desired mode by using 3D PHONIC.

Each time you press the 3D PHONIC button, the 3D PHONIC mode changes as follows:

3D PHONIC DRAMA

Selected effect mode

**3D PHONIC ACTION***
↓
**3D PHONIC DRAMA**
↓
**3D PHONIC THEATER**
↓
**3D PHONIC OFF**
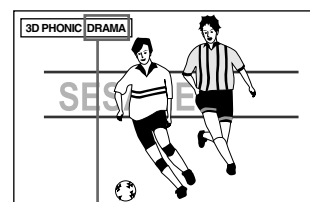
- **ACTION**
  Suitable for action movies and sports programs in which sounds dynamically move.

- **DRAMA**
  Natural and warm sound. You can enjoy movies in a relaxed mood.

• **THEATER**

You can enjoy sound effects like in a major theater in Hollywood.

* When you play a DVD VIDEO disc recorded in Dolby Digital which contains more than 3 channels, ACTION is not available.

---

**NOTES**

• **The 3D PHONIC display will automatically disappear if you do not change the 3D PHONIC for 5 seconds.**

• **To turn off the 3D PHONIC display manually, press ENTER.**

• **With a Video CD disc, if the Audio setting is set to L or R, you cannot activate the 3D PHONIC function (i.e. the 3D PHONIC mode is fixed to OFF).**

Conversely, when the 3D PHONIC function is active, changing the AUDIO setting to L or R from STEREO cancels the 3D PHONIC function.

• **The 3D PHONIC function works correctly when playing back discs recorded in the Dolby Surround or Dolby Digital 5.1-CH format.**
**It also works when playing back discs other than those above, but does not provide the correct effect.**

• **The 3D PHONIC function does not affect the DTS or Dolby Digital bitstream signal from the DIGITAL OUT jack.**

• **The sound effect will not be set or operate, even if 3D PHONIC is pressed, for the sound of DVD VIDEO discs recorded in Linear PCM.**

• **When you set the 3D PHONIC function to on, the DOWN MIX and COMPRESSION settings on the AUDIO page of the preference display are disabled.**

---

## To view the disc/time information

You can view the disc/time information on the TV screen.

**1**
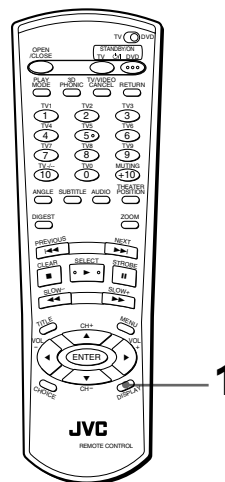
● During playback

**1** Press DISPLAY once for a Audio CD or Video CD disc, or twice for a DVD VIDEO disc.

The disc/time display appears on the TV screen.

(for DVD VIDEO)

TITLE **1** CHAP. **25** TIME **2:25:25** BITRATE **3.3** Mbps

Transmission rate
Elapsed time
Current chapter number
Current title number
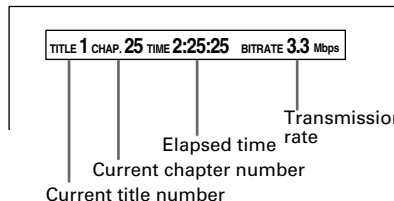
(for Audio CD or Video CD playing without PBC)

TRACK **1** TIME **00:08** EACH

Time mode
Current track elapsed time
Current track number

(for Video CD playing with PBC)

TRACK **1** TIME **00:08** PBC

PBC on status
Current track elapsed time
Current track number
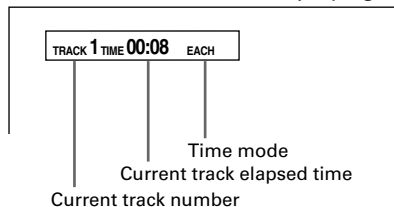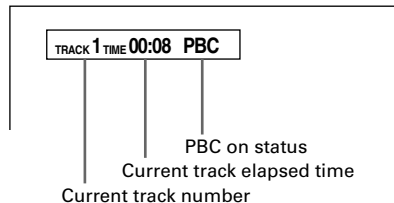
• **To turn off the disc/time display**
Press DISPLAY.

Advanced operations

## To view the DVD function status  `DVD VIDEO`

You can view the DVD function status on the TV screen.
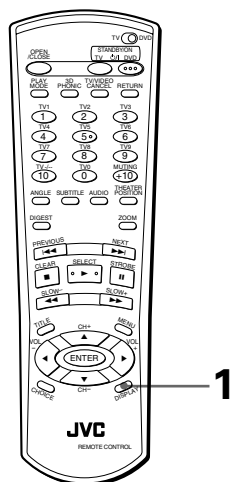


● During DVD VIDEO playback

### 1 Press DISPLAY.

The DVD function status display appears on the TV screen.
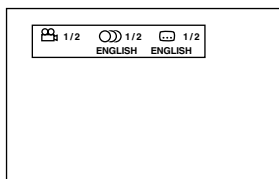


The current selections of the camera angle, audio language and subtitle language are shown.

• **To turn off the DVD function status display**
Press DISPLAY twice.

## Dimming the brightness of the display window

You can select the brightness of the display window.
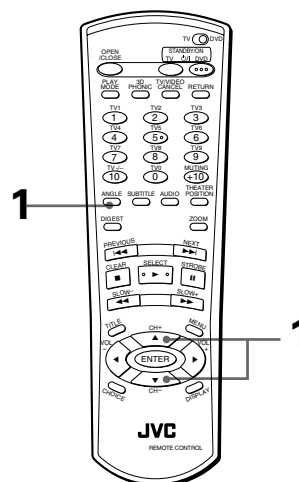


● When no disc is inserted or while stopped

### 1 Press CURSOR ▼ while holding down ANGLE.

The display window gets darker.
To restore the display window brighter, press CURSOR ▲ while holding down ANGLE.

# Selecting preferences

You can set various preferences for playback via the preference displays.

## How to set preferences

Note that you cannot bring up a preference display during playback or when an Audio CD is loaded in the tray.

**3**
**1**
**2**
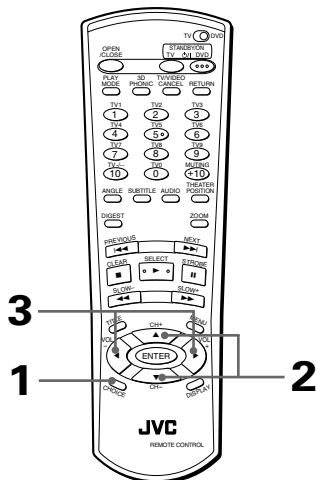
● When no disc is inserted in the tray, or when a DVD VIDEO or Video CD is inserted and stopped

### 1 Press CHOICE.

One of the preference pages appears on the TV screen. There are four preference pages: LANGUAGE, AUDIO, DISPLAY and SYSTEM. To select the page, move ↖ to the desired tab using CURSOR ◄/►.

LANGUAGE

| LANGUAGE | AUDIO | DISPLAY | SYSTEM |
|---|---|---|---|
| MENU LANGUAGE | ◁ | ENGLISH | ▷ |
| AUDIO LANGUAGE | ◁ | ENGLISH | ▷ |
| SUBTITLE | ◁ | ENGLISH | ▷ |
| ON SCREEN LANGUAGE | ◁ | ENGLISH | ▷ |

‹ EXIT ›

PRESS ◄► KEY

AUDIO

| LANGUAGE | AUDIO | DISPLAY | SYSTEM |
|---|---|---|---|
| DIGITAL AUDIO OUTPUT | ◁ | STREAM / PCM | ▷ |
| DOWN MIX | ◁ | Lo / Ro | ▷ |
| COMPRESSION | ◁ | ON | ▷ |
| SPEAKER SETTING | ◁ | 5.1 CHANNEL | ▷ |

‹ EXIT ›

PRESS ◄► KEY

DISPLAY

| LANGUAGE | AUDIO | DISPLAY | SYSTEM |
|---|---|---|---|
| MONITOR TYPE | ◁ | 4:3 LB ▭ | ▷ |
| SCREEN SAVER | ◁ | MODE 2 | ▷ |
| ON SCREEN GUIDE | ◁ | ON | ▷ |

‹ EXIT ›

PRESS ◄► KEY

SYSTEM

| LANGUAGE | AUDIO | DISPLAY | SYSTEM |
|---|---|---|---|
| AUTO STANDBY | ◁ | OFF | ▷ |
| RESUME | ◁ | OFF | ▷ |
| AV COMPULINK MODE | ◁ | DVD 1 | ▷ |

‹ EXIT ›

PRESS ◄► KEY

### 2 Move ← to select the item you want to set by using CURSOR ▲/▼.

| LANGUAGE | AUDIO | DISPLAY | SYSTEM |
|---|---|---|---|
| MENU LANGUAGE | ◁ | ENGLISH | ▷ |
| AUDIO LANGUAGE | ◁ | ENGLISH | ▷ |
| SUBTITLE | ◁ | ENGLISH | ▷ |
| ON SCREEN LANGUAGE | ◁ | ENGLISH | ▷ |

‹ EXIT ›

PRESS ◄► KEY
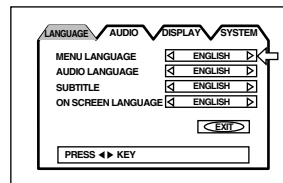
### 3 Press CURSOR ◄/► to select the desired option.

• For details about each setting, see the following.

---

**NOTES**

• **To Turn off the preference display**

Press CHOICE or move ← to [EXIT] and press ENTER.

• **When selecting "EXPERT" for SPEAKER SETTING in the AUDIO page of the preference display, pressing ENTER on the remote control unit brings up the EXPERT SPEAKER SETTING sub-page, which is different from the other preference pages (see pages 45 and 47).**

---

## LANGUAGE page

### MENU LANGUAGE

You can select the default "display" language to be displayed if it is contained on the disc.

Each time you press CURSOR ►, the language setting changes in the following order:

| LANGUAGE | AUDIO | DISPLAY | SYSTEM |
|---|---|---|---|
| MENU LANGUAGE | ◁ | ENGLISH | ▷ |
| AUDIO LANGUAGE | ◁ | ENGLISH | ▷ |
| SUBTITLE | ◁ | ENGLISH | ▷ |
| ON SCREEN LANGUAGE | ◁ | ENGLISH | ▷ |

‹ EXIT ›

PRESS ◄► KEY
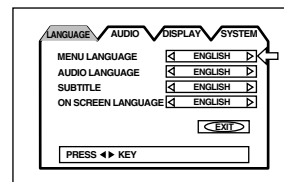
**ENGLISH → SPANISH → FRENCH → CHINESE → GERMAN → ITALIAN → JAPANESE → language code from AA to ZU**
(See "Appendix A: Table of languages and their abbreviations" at the end of this manual.)

Pressing CURSOR ◄ changes the language setting in the reverse order of the above.

\* If the selected language is not recorded, the disc's default display language will be displayed.

## AUDIO LANGUAGE

You can select the default audio language to be played if it is contained on the disc.

Each time you press CURSOR ►, the language setting changes in the following order :
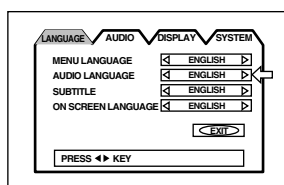
ENGLISH → SPANISH → FRENCH → CHINESE → GERMAN → ITALIAN → JAPANESE → language code from AA to ZU
(See "Appendix A: Table of languages and their abbreviations" at the end of this manual.)

Pressing CURSOR ◄ changes the language setting in the reverse order of the above.

\* If the selected language is not recorded, the disc's default audio language will be played.

## SUBTITLE

You can select the default subtitle language to be displayed if it is contained on the disc.

Each time you press CURSOR ►, the language setting changes in the following order:
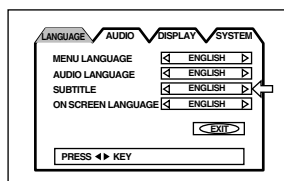
ENGLISH → SPANISH → FRENCH → CHINESE → GERMAN → ITALIAN → JAPANESE → language code from AA to ZU
(See "Appendix A: Table of languages and their abbreviations" at the end of this manual.)

Pressing CURSOR ◄ changes the language setting in the reverse order of the above.

\* If the selected language is not recorded, the disc's default subtitle language will be displayed.

## ON SCREEN LANGUAGE

You can select the on-screen display language to be displayed.

Each time you press CURSOR ►, the language setting changes as follows:

ENGLISH
↓
DEUTSCH (German)
↓
FRANCAIS (French)
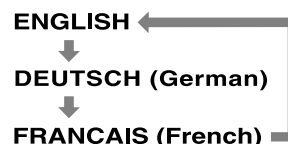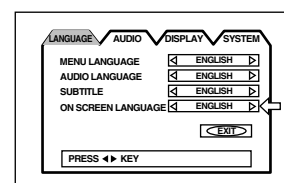
English    ON SCREEN LANGUAGE ◁ **ENGLISH** ▷

German    BILDSCHIRMMENUE-SPRACHE ◁ **DEUTSCH** ▷

French    LANGUE D'ECRAN ◁ **FRANCAIS** ▷

Pressing CURSOR ◄ changes the language setting in the reverse order of the above.

# AUDIO page

## DIGITAL AUDIO OUTPUT

To connect the unit's digital output to an external device equipped with a digital input, this item must be set correctly.
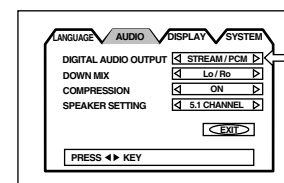
- **PCM ONLY**

  When you connect the DIGITAL OUT jack of the unit to the linear PCM digital input of other audio equipment.

- **STREAM/PCM**

  When you connect to the digital input of an amplifier with a built-in DTS, Dolby Digital, or MPEG multichannel decoder.

- **DOLBY DIGITAL/PCM**

  When you connect to the digital input of a Dolby Digital decoder, or an amplifier with a built-in Dolby Digital decoder.

The following chart shows the relationship between types of playback discs and output signals.

| Playback discs | Output | | |
|---|---|---|---|
| | STREAM/PCM | DOLBY DIGITAL/PCM | PCM ONLY |
| DVD with 48/44.1 kHz, 16 bit linear PCM | 48/44.1 kHz, 16 bit, stereo linear PCM | ← | ← |
| DVD with 48/44.1 kHz, 20/24 bit linear PCM | 48/44.1 kHz, 16 bit, stereo linear PCM* | ← | ← |
| DVD with 96 kHz, linear PCM | No output | ← | ← |
| DVD with DTS | DTS bitstream | No ouput | ← |
| DVD with Dolby Digital | Dolby Digital bitstream | ← | 48 kHz, 16 bit, stereo linear PCM* |
| DVD with MPEG multichannel | MPEG bitstream | 48 kHz, 16 bit, stereo linear PCM | ← |
| Video CD | 44.1 kHz, 16 bit, stereo linear PCM | ← | ← |
| Audio CD | 48 kHz,16 bit, stereo linear PCM | ← | ← |
| Audio CD with DTS | DTS bitstream | ← | ← |

\*    With some DVD VIDEO discs that are not fully copy-protected, a 20 or 24 bit digital signal may be output.

**NOTES**
- **The unit does not provide the DTS decoding function.**
- **When playing a DVD VIDEO or Audio CD disc with DTS, use a DTS decoder to get correct signals from your speakers. Never use the unit's analog output jacks, which output incorrect signals that may damage your speakers.**
- **If you connect the analog outputs and digital outputs simultaneously, be sure to select the source of the amplifier correctly, or set the level control of the amplifier connected to the analog outputs to minimum.**

## DOWN MIX

To playback a DVD VIDEO disc recorded with surround multichannel audio correctly, the DOWN MIX setting must be properly made according to your audio system. Note that this setting affects the output signal from the AUDIO (both DIGITAL and ANALOG) output jacks when playing back a DVD VIDEO disc recorded with surround multichannel audio.
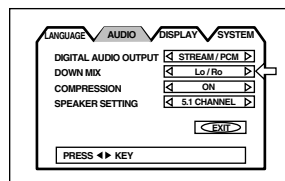
- **Lt/Rt**
  Select this option when you enjoy multichannel surround audio by connecting the unit's AUDIO output (normally, the DIGITAL output) to a surround decoder.

- **Lo/Ro**
  Select this option when you enjoy conventional 2-channel stereo audio by connecting the unit's AUDIO output to a stereo amplifier/receiver or television set, or when you duplicate audio of a DVD VIDEO disc recorded with surround audio to your MD, cassette, etc.

- **OFF**
  Select this option when you enjoy multichannel surround audio by connecting the unit to a surround amplifier via the multichannel AUDIO outputs.

**NOTES**
- **The DOWN MIX function does not work when the 3D PHONIC function is activated.**
- **The DOWN MIX setting does not affect an MPEG or Dolby Digital bitstream signal from DIGITAL OUT.**
  To enjoy the DOWN MIX effect from DIGITAL OUT when playing back a disc recorded with the MPEG multichannel or Dolby Digital format, set "DIGITAL AUDIO OUTPUT" to "PCM ONLY" (see page 43).
- **When playing back a disc recorded with DTS, you cannot get the DOWN MIX effect from both DIGITAL and ANALOG outputs.**

## COMPRESSION

To enjoy a disc with dynamic sound at low or middle volume, setting COMPRESSION to ON makes you hear sound comfortably.
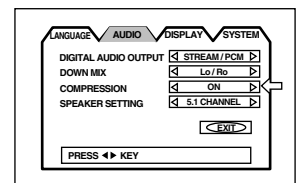
- **ON**
  Audio is played back with the dynamic range compressed.

- **OFF**
  Audio is played back as it was recorded.

**NOTES**
- **The Compression function works only when playing back a disc recorded with DOLBY DIGITAL 1CH or 2CH. The setting is not effective for other discs.**
- **The Compression function does not work when the 3D PHONIC function is activated.**

## SPEAKER SETTING

Select the speaker setting option. Normally, simply select "5.1 CHANNEL" or "2 CHANNEL" according to your speaker system. However, if you want to make fine tuning, select "EXPERT".

```
LANGUAGE  AUDIO  DISPLAY  SYSTEM

DIGITAL AUDIO OUTPUT   ◁ STREAM / PCM ▷
DOWN MIX               ◁    Lo / Ro    ▷
COMPRESSION            ◁      ON       ▷
SPEAKER SETTING        ◁  5.1 CHANNEL  ▷

                       ◁ EXIT ▷

PRESS ◀▶ KEY
```
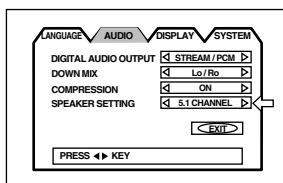
- **2 CHANNEL**

   Select this option when you connect the unit to a stereo amplifier or TV.

- **5.1 CHANNEL**

   Select this option when you connect the unit to a surround amplifier and use the front, rear, center and sub-woofer speakers.

- **EXPERT**

   Select this option if you want to make fine tuning to match your speaker system.
   When selecting "EXPERT", pressing ENTER brings up the "EXPERT SPEAKER SETTING" display on the remote control unit shown below, in which you can make fine tuning for speaker settings.

EXPERT SPEAKER SETTING

```
EXPERT SPEAKER SETTING
              SIZE        LEVEL      DELAY
F.SPK    ◁ Large ▷
C.SPK    ◁ Small ▷    ◁  0 dB  ▷  ◁ 0 ms ▷
R.SPK    ◁ Small ▷    ◁  0 dB  ▷  ◁ 0 ms ▷
SUB WOOFER           ◁  0 dB  ▷
BASS     ◁ S.woofer ▷     ◁ TEST TONE ▷
                          ◁ EXIT ▷
```
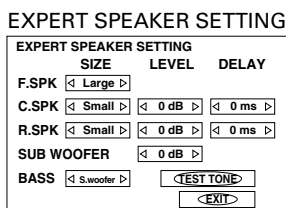
See "EXPERT SPEAKER SETTING" on page 47 for details.

---

**NOTES**

- **When selecting "5.1 CHANNEL" or "EXPERT", set "DOWN MIX" to "OFF" (see page 44).**
- **The Dolby Digital LFE (Low Frequency Effect) signal is always fed from the SUBWOOFER output on the rear panel of the unit regardless of speaker setting.**
- **If you connect the unit's digital output to an external Dolby Digital or DTS decoder (and set the "DIGITAL AUDIO OUTPUT" to "STREAM/PCM"), the speaker setting above is not effective. Make the speaker setting of the external decoder appropriately.**

---

## DISPLAY page

### MONITOR TYPE

You can select the monitor type to match your TV when you playback DVD VIDEO discs recorded for wide screen televisions.

```
LANGUAGE  AUDIO  DISPLAY  SYSTEM

MONITOR TYPE       ◁   4:3 LB    ▷
SCREEN SAVER       ◁    MODE 2   ▷
ON SCREEN GUIDE    ◁      ON      ▷

                   ◁ EXIT ▷

PRESS ◀▶ KEY
```
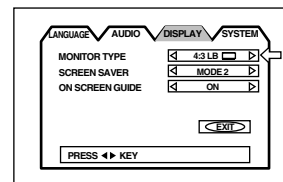
- **4:3 LB ⬜ (Letter Box Conversion)**

   Select this option when you connect a normal TV to the unit.
   When you play a wide picture recorded on a DVD VIDEO disc, the picture is displayed with bands across the upper and lower portions of the screen.

- **4:3 PS ⬜ (Pan Scan Conversion)**

   Select this option when you connect a normal TV to the unit. When you play a wide picture recorded on a DVD VIDEO disc, a portion of the picture is automatically cut off from the left and right sides of the image. Depending on the disc, it may not be possible to playback in this mode. In that case, the picture is played back as in 4:3 LB ⬜ mode.
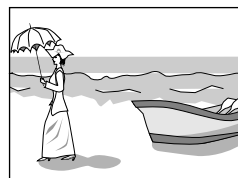
- **16:9 WIDE (Wide Television screen)**

   Select this option when you connect a wide-screen TV to the unit.
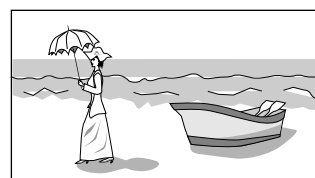
### SCREEN SAVER

A television monitor screen may be burned out if a static picture is displayed for a long time. To prevent this, the unit automatically activates the screen saver function if a static picture, such as an on-screen display or menu, is displayed for over 5 minutes.

- **MODE 1**

   The current picture gets dark.

- **MODE 2**

   The "screen saver" picture appears and its brightness changes.

```
LANGUAGE  AUDIO  DISPLAY  SYSTEM

MONITOR TYPE       ◁   4:3 LB    ▷
SCREEN SAVER       ◁    MODE 2   ▷
ON SCREEN GUIDE    ◁      ON      ▷

                   ◁ EXIT ▷

PRESS ◀▶ KEY
```

- **OFF**

   The screen saver function is off.
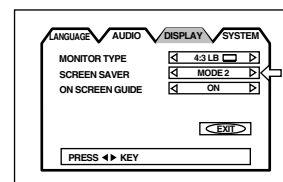
## NOTES

- **The monitor screen of a projector or projection TV is easily burned out if the screen saver mode is set to OFF and a static picture is displayed for a long time.**
- **The screen saver function is not activated when loading an Audio CD.**

## ON SCREEN GUIDE

The unit can display "on-screen guide" icons or characters on the picture, which show what is happening to the disc or the unit.
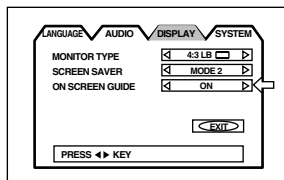
- **ON**

  The on-screen guide will be displayed.

- **OFF**

  The on-screen guide will not be displayed.
  Examples of "on-screen guide" icons or characters:

# SYSTEM page

## AUTO STANDBY

When the unit is stopped for more than 30 minutes or 60 minutes, the unit enters standby mode automatically.
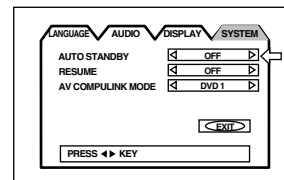
- **60**

  Time is set to 60 minutes.

- **30**

  Time is set to 30 minutes.

- **OFF**

  The auto standby function is off.

## RESUME

You can select the resume function to be on or off. See page 26.
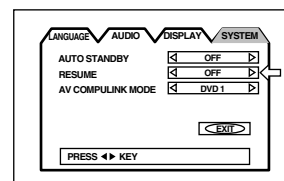
- **ON**

  Pressing ► while stopped or on standby starts playback from the resume point if it is memorized.

- **OFF**

  Pressing ► while stopped or on standby starts playback from the beginning of the disc.

## AV COMPULINK MODE

This item is provided for use in the future. Leave it as the default setting ("DVD1").
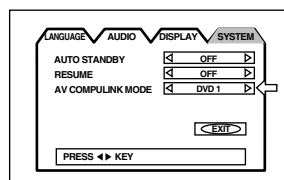
# EXPERT SPEAKER SETTING
## (available only when "EXPERT" is selected for SPEAKER SETTING)

When selecting "EXPERT" for "SPEAKER SETTING in the AUDIO page of the preference display (see page 45)", pressing ENTER on the remote control unit brings up the EXPERT SPEAKER SETTING sub-page shown below, in which you can make fine tuning for speaker settings.
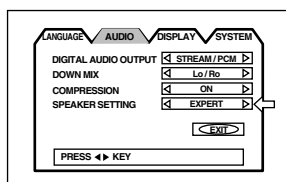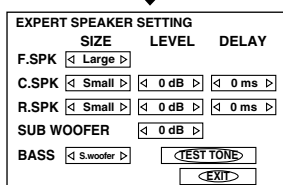


Note that the operations in the "EXPERT SPEAKER SETTING" sub-page differ from the other preference pages.

## How to make speaker settings

You can make speaker settings according to the following procedure.
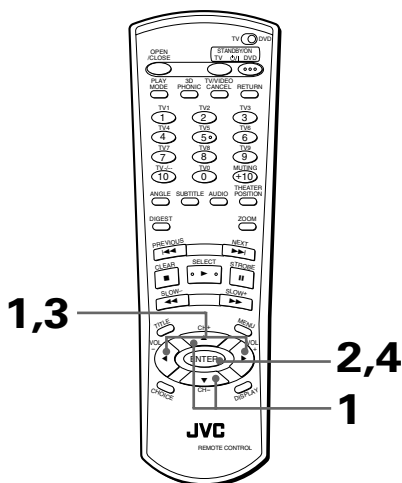


● While the EXPERT SPEAKER SETTING display is shown

**1** Select the desired item by moving ⇦ using CURSOR ▲/▼/◄/►.

**2** Press ENTER.

The left and right allows of the selected item are highlighted, showing that you can now edit the item.

**3** Select the option by using CURSOR ◄/►.

**4** Press ENTER.

You can now select the next item to be edited. Repeat above steps 1 through 4 until all settings are made.

## Setting items

### F.SPK (Front speakers) setting

● **SIZE**

Selects the front speaker size between "Large" and "Small".
If your front speakers fully reproduce the low-frequency range, select "Large". If they do not fully reproduce the low-frequency range, select "Small".
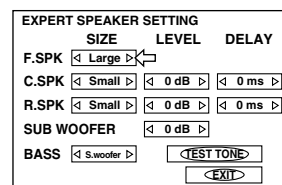


### C.SPK (Center speaker) settings

● **SIZE**

Selects the center speaker size among "Large", "Small" and "None".
If your center speaker fully reproduces the low-frequency range, select "Large". If it does not fully reproduce the low-frequency range, select "Small". If you do not use a center speaker, select "None".
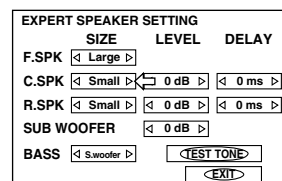


● **LEVEL**

Cuts or boosts audio signals from the center speaker between –6 dB and +6 dB in 1 dB steps.

● **DELAY**

Adjusts the delay time of the center speaker between –5 ms and 0 ms in 1 ms steps.

## R.SPK (Rear speaker) settings

- **SIZE**

  Selects the rear speaker size among "Large", "Small" and "None". If your rear speakers fully reproduce the low-frequency range, select "Large". If they do not fully reproduce the low-frequency range, select "Small".
  If you do not use rear speakers, select "None".

  ```
  EXPERT SPEAKER SETTING
            SIZE        LEVEL      DELAY
  F.SPK  ◁ Large ▷
  C.SPK  ◁ Small ▷   ◁ 0 dB ▷   ◁ 0 ms ▷
  R.SPK  ◁ Small ▷   ◁ 0 dB ▷   ◁ 0 ms ▷
  SUB WOOFER         ◁ 0 dB ▷
  BASS   ◁ S.woofer ▷      ◁TEST TONE▷
                             ◁EXIT▷
  ```
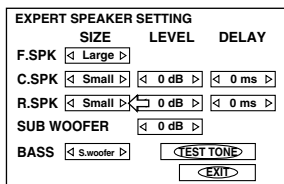
- **LEVEL**

  Cuts or boosts audio signals from the rear speakers between –6 dB and +6 dB in 1 dB steps.

- **DELAY**

  Adjusts the delay time of the rear speakers between –15 ms and 0 ms in 5 ms steps.

## SUB WOOFER settings

- **LEVEL**

  Cuts or boosts the audio signal from the subwoofer between –6 dB and +6 dB in 1 dB steps.

  ```
  EXPERT SPEAKER SETTING
            SIZE        LEVEL      DELAY
  F.SPK  ◁ Large ▷
  C.SPK  ◁ Small ▷   ◁ 0 dB ▷   ◁ 0 ms ▷
  R.SPK  ◁ Small ▷   ◁ 0 dB ▷   ◁ 0 ms ▷
  SUB WOOFER         ◁ 0 dB ▷
  BASS   ◁ S.woofer ▷      ◁TEST TONE▷
                             ◁EXIT▷
  ```
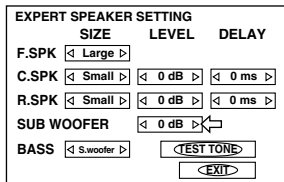
## BASS

When your sub-woofer or front speakers do not fully reproduce the low-frequency range, you can boost up the low-frequency signal using the "BASS" setting.

```
EXPERT SPEAKER SETTING
          SIZE        LEVEL      DELAY
F.SPK  ◁ Large ▷
C.SPK  ◁ Small ▷   ◁ 0 dB ▷   ◁ 0 ms ▷
R.SPK  ◁ Small ▷   ◁ 0 dB ▷   ◁ 0 ms ▷
SUB WOOFER         ◁ 0 dB ▷
BASS   ◁ S.woofer ▷      ◁TEST TONE▷
                           ◁EXIT▷
```

Selects between "S.woofer" and "L/R" according to your speaker system.
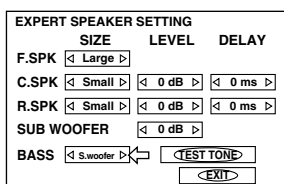
- **S.woofer:** The low-frequency signal fed from the sub-woofer output is boosted up.

- **L/R:** The low-frequency signals fed from the front speaker outputs are boosted up.

The "BASS" setting is effective only when at least any one of the speaker sizes is set to "Small". If none of them is set to "Small", "None" appears in the setting field and you cannot change it.
Please note that the "L/R" setting is effective only when playing back a Dolby Digital encoded DVD VIDEO disc. If the front speaker size is set to "Small", the BASS setting is fixed to "S.woofer".

## TEST TONE

You can check the level setting by monitoring the test tone.

```
EXPERT SPEAKER SETTING
          SIZE        LEVEL      DELAY
F.SPK  ◁ Large ▷
C.SPK  ◁ Small ▷   ◁ 0 dB ▷   ◁ 0 ms ▷
R.SPK  ◁ Small ▷   ◁ 0 dB ▷   ◁ 0 ms ▷
SUB WOOFER         ◁ 0 dB ▷
BASS   ◁ S.woofer ▷      ◁TEST TONE▷
                           ◁EXIT▷
```
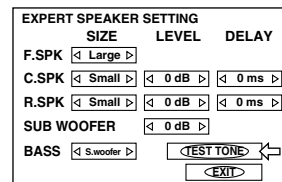
**1** Make sure that none of the speaker setting item is selected (i.e. none of left and right allows are highlighted).

If any item is selected, press ENTER.

**2** Select [TEST TONE] using CURSOR ▲/▼, then press ENTER.

The color of "TEST TONE" changes.

**3** Select the desired speaker(s) by moving ⇦ using CURSOR ▲/▼/◄/►, then press ENTER.

The test tone is output from the selected speaker(s).
While the test tone is being output, the indication shown above [TEST TONE] tells you the speaker from which the test tone is being output.
The following table shows the relations between the indications and speakers.

| Indication | Speaker |
|---|---|
| L | Front-left speaker |
| R | Front-right speaker |
| C | Center speaker |
| SL | Rear-left speaker |
| SR | Rear-right speaker |

**4** Repeat step 3 above to select the speaker(s).

- **To exit the test tone mode**

  Press ENTER while ⇦ points "TEST TONE".

**Hints**

- When "TEST TONE" is active, you hear pink noise, which includes all frequencies in the audible range, from the speakers. This is not a malfunction.

- If you do not move the cursor after step 2 above, the test tone is output from each speaker one by one.

- The test tone is not output from the SUBWOOFER output.

---

**NOTE**

- **To dismiss the "EXPERT SPEAKER SETTING" sub-page**

  Move ⇦ to "EXIT" and press ENTER.

  The display returns to the AUDIO page.

---

Initial settings

# Example: Making speaker settings according to speaker and room conditions

The following shows an example of how to make speaker settings according to speaker and room conditions.
We assume the surround system with the following speaker conditions.

- Front speakers: Large ones that can fully reproduce the low-frequency range
- Rear and center speakers: Small ones
- Super-woofer: A small one but the signal derives from the SUB WOOFER output
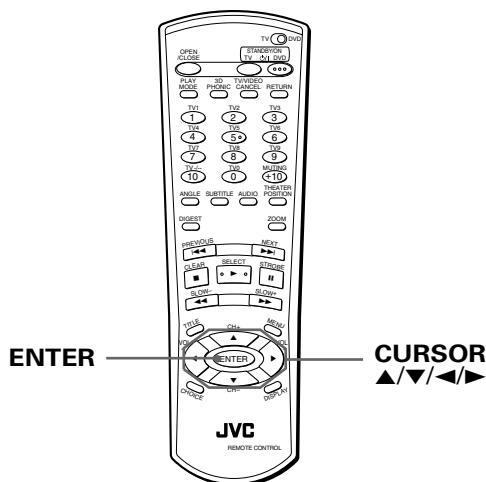


ENTER

CURSOR ▲/▼/◄/►

## Basic speaker settings

● While the EXPERT SPEAKER SETTING display is shown

**1** Move ⇦ to [SIZE] of [F.SPK] using the CURSOR ▲/▼ and press ENTER.

**2** Use CURSOR ◄/► to show "Large" in the [F.SPK] field and press ENTER.

The front speaker size is set to "Large".
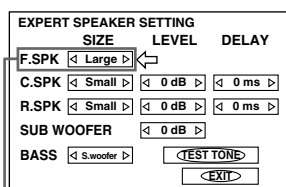


**Front speaker size**

**3** Move ⇦ to [SIZE] of [C.SPK] using the CURSOR ▲/▼ and press ENTER.

**4** Use CURSOR ◄/► to show "Small" in the [C.SPK] field and press ENTER.

The center speaker size is set to "Small".
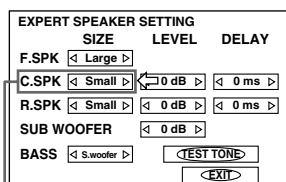


**Center speaker size**

**5** Move ⇦ to [SIZE] of [R.SPK] using the CURSOR ▲/▼ and press ENTER.

**6** Use CURSOR ◄/► to show "Small" in the [R.SPK] field and press ENTER.

The rear speaker size is set to "Small".
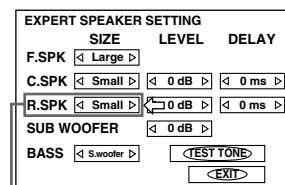


**Rear speaker size**

**7** Move ⇦ to [BASS] using the CURSOR ▲/▼ and press ENTER.

**8** Use CURSOR ◄/► to show "S.woofer" in the [BASS] field and press ENTER.

The destination of the LFE (low-frequency effect) signal is set to a sub-woofer, allowing enhancing the low frequency range of a sub-woofer.
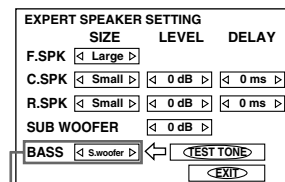


**LFE signal destination**

# Fine tuning of each speaker type

● While the EXPERT SPEAKER SETTING display is shown after completing the basic speaker settings

## Tuning the center speaker

**1** Move ⇦ to [LEVEL] of [C.SPK] using CURSOR ▲/▼/◄/► and press ENTER.

**2** Adjust the output level of the center speaker using CURSOR ◄/►.

You can adjust the level between –6 dB and +6 dB in 1 dB steps.

EXPERT SPEAKER SETTING

|  | SIZE | LEVEL | DELAY |
|---|---|---|---|
| F.SPK | ◁ Large ▷ | | |
| C.SPK | ◁ Small ▷ | ◁ + 3 dB ▷ | ⇦ 0 ms ▷ |
| R.SPK | ◁ Small ▷ | ◁ 0 dB ▷ | ◁ 0 ms ▷ |
| SUB WOOFER | ◁ 0 dB ▷ | | |
| BASS | ◁ S.woofer ▷ | TEST TONE | |
| | | EXIT | |
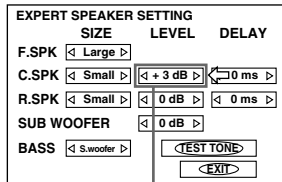
**Center speaker level**

**3** Press ENTER.

The output level of the center speaker is set.

**4** Move ⇦ to [DELAY] of [C.SPK] using CURSOR ◄/► and press ENTER.

**5** Adjust the delay time of the center speaker using CURSOR ◄/►.

You can adjust the delay time between 0 ms (no delay) and –5 ms in 1 ms steps.

EXPERT SPEAKER SETTING

|  | SIZE | LEVEL | DELAY |
|---|---|---|---|
| F.SPK | ◁ Large ▷ | | |
| C.SPK | ◁ Small ▷ | ◁ + 3 dB ▷ | ◁ – 2 ms ▷ ⇦ |
| R.SPK | ◁ Small ▷ | ◁ 0 dB ▷ | ◁ 0 ms ▷ |
| SUB WOOFER | ◁ 0 dB ▷ | | |
| BASS | ◁ S.woofer ▷ | TEST TONE | |
| | | EXIT | |
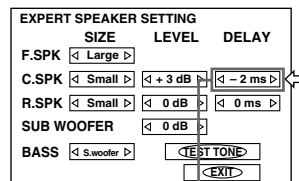
**Center speaker delay time**

**6** Press ENTER.

The delay time of the center speaker is set.

**7** Repeat the steps 1 through 6 until you are satisfied.

## Tuning the rear speakers

**1** Move ⇦ to [LEVEL] of [R.SPK] using CURSOR ▲/▼/◄/► and press ENTER.

**2** Adjust the output level of the rear speakers using CURSOR ◄/►.

You can adjust the level between –6 dB and +6 dB in 1 dB steps.

EXPERT SPEAKER SETTING

|  | SIZE | LEVEL | DELAY |
|---|---|---|---|
| F.SPK | ◁ Large ▷ | | |
| C.SPK | ◁ Small ▷ | ◁ + 3 dB ▷ | ◁ – 2 ms ▷ |
| R.SPK | ◁ Small ▷ | ◁ + 2 dB ▷ | ⇦ 0 ms ▷ |
| SUB WOOFER | ◁ 0 dB ▷ | | |
| BASS | ◁ S.woofer ▷ | TEST TONE | |
| | | EXIT | |
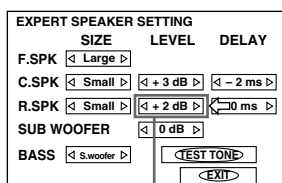
**Rear speaker level**

**3** Press ENTER.

The output level of the rear speakers is set.

**4** Move ⇦ to [DELAY] of [R.SPK] using CURSOR ◄/► and press ENTER.

**5** Adjust the delay time of the rear speakers using CURSOR ◄/►.

You can adjust the delay time between 0 ms (no delay) and –15 ms in 5 ms steps.

EXPERT SPEAKER SETTING

|  | SIZE | LEVEL | DELAY |
|---|---|---|---|
| F.SPK | ◁ Large ▷ | | |
| C.SPK | ◁ Small ▷ | ◁ + 3 dB ▷ | ◁ – 2 ms ▷ |
| R.SPK | ◁ Small ▷ | ◁ + 2 dB ▷ | ◁– 10 ms ▷ ⇦ |
| SUB WOOFER | ◁ 0 dB ▷ | | |
| BASS | ◁ S.woofer ▷ | TEST TONE | |
| | | EXIT | |
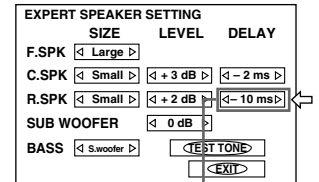
**Rear speaker delay time**

**6** Press ENTER.

The delay time of the rear speakers is set.

**7** Repeat the steps 1 through 6 until you are satisfied.

## Tuning the sub-woofer

**1** Move ⇦ to [LEVEL] of [SUB WOOFER] using CURSOR ▲/▼/◄/► and press ENTER.

**2** Adjust the output level of the sub-woofer using CURSOR ◄/►.

You can adjust the level between –6 dB and +6 dB in 1 dB steps.

EXPERT SPEAKER SETTING

|  | SIZE | LEVEL | DELAY |
|---|---|---|---|
| F.SPK | ◁ Large ▷ | | |
| C.SPK | ◁ Small ▷ | ◁ + 3 dB ▷ | ◁ – 2 ms ▷ |
| R.SPK | ◁ Small ▷ | ◁ + 2 dB ▷ | ◁– 10 ms▷ |
| SUB WOOFER | ◁ + 5 dB ▷ ⇦ | | |
| BASS | ◁ S.woofer ▷ | TEST TONE | |
| | | EXIT | |
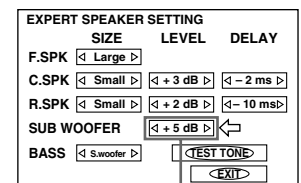
**Sub-woofer level**

**3** Press ENTER.

The output level of the sub-woofer is set.

**4** Repeat the steps 1 through 3 until you are satisfied.

---

**NOTES**

- **Depending on setting conditions, some items may not be set manually. See page 47 for details.**
- **You cannot set the level and delay for front speakers.**
- **You cannot set the delay for a sub-woofer.**

# Limiting playback by children

This function restricts playback of DVD VIDEO discs which contain violent (and other) scenes according to the level set by the user. For example, if a movie which includes violent scenes supports the parental lock feature, such scenes which you do not want to let children view can be cut or replaced with other scenes.

## To set Parental Lock for the first time [PARENTAL LOCK]
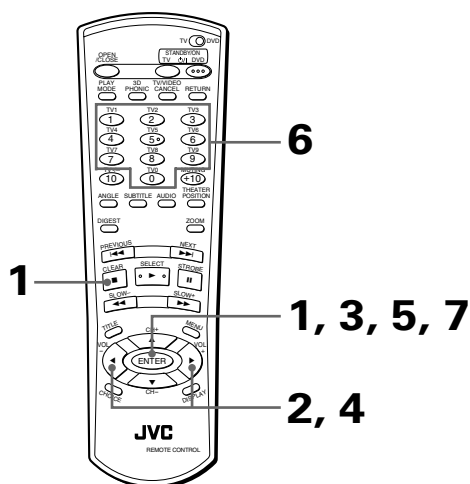
DVD
VIDEO

**1**

**6**

**1, 3, 5, 7**

**2, 4**

● While a DVD VIDEO disc is stopped or no disc is inserted

**1** Press ENTER while holding down ■ on the remote control unit.

The Parental Lock on-screen display appears on the TV screen.
⇦ points [Country Code].

**2** While ⇦ points [Country Code], use CURSOR ◄/► to select the country code.

The country code whose standards were applied to rate the DVD VIDEO disc should be selected.
See "Appendix B: Country code list for Parental Lock."

```
       🔒      PARENTAL LOCK
  Country Code       ◁   GB   ▷  ⇦
  Set Level          ◁   –    ▷
  PASSWORD               – – – –

                        ◁ EXIT ▷
  PRESS ◄ ► KEY → ENTER
```
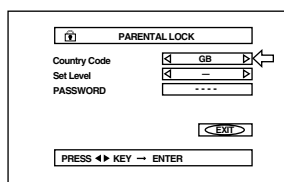
**3** Press ENTER.

⇦ moves to [Set Level].

**4** While ⇦ points [Set Level], use CURSOR ◄/► to select the parental lock level.

```
       🔒      PARENTAL LOCK
  Country Coce       ◁   GB   ▷
  Set Level          ◁   1    ▷ ⇦
  PASSWORD               – – – –

                        ◁ EXIT ▷
  PRESS ◄ ► KEY → ENTER
```
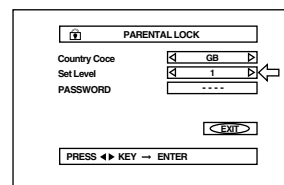
Each time you press CURSOR ◄/►, the parental level changes as follows:

```
    1  ⟵
    .
    .
    8
    –  ⟶
```

Hints
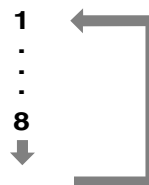
• "1" is the strictest level. "–" means no restriction. Discs rated higher than the selected level are restricted.

**5** Press ENTER.

⇦ moves to [PASSWORD].

**6** Enter your 4-digit password using the numeric buttons (0 to 9).

```
       🔒      PARENTAL LOCK
  Country Code       ◁   GB   ▷
  Set Level          ◁   8    ▷
  PASSWORD               – – – – ⇦

                        ◁ EXIT ▷
  NEW PASSWORD? ➟ PRESS 0–9 KEY.
```
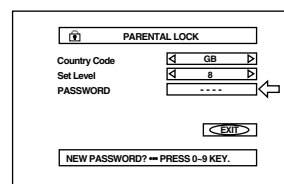
**7** Press ENTER.

The parental level and password are set.
⇦ moves to [EXIT].
Pressing ENTER again returns to the opening display.

Hints

• If you enter an undesired password in step 6 above, reenter the password before pressing ENTER.

Initial settings

## To change the settings [PARENTAL LOCK]

**DVD VIDEO**

You can change the Parental Lock settings later.
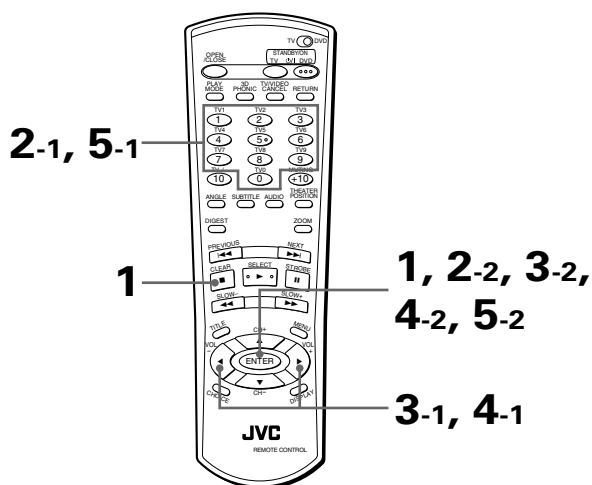


2-1, 5-1

1

1, 2-2, 3-2, 4-2, 5-2

3-1, 4-1

● While a DVD VIDEO disc is stopped or no disc is inserted

**1** Press ENTER while holding down ■ on the remote control unit.

The Parental Lock on-screen display appears on the TV screen.
⇦ points [PASSWORD].



| 🔒 | PARENTAL LOCK |
| Country Code | ◁ GB ▷ |
| Set Level | ◁ 8 ▷ |
| PASSWORD | - - - - |
| | ⟨ EXIT ⟩ |
| CURRENT PASSWORD? ➡ PRESS 0~9 KEY | |
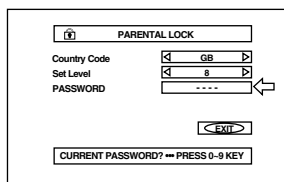
**2** Enter your current 4-digit password using the numeric buttons (0 to 9) and press ENTER.

⇦ moves to [Country Code] if you enter the correct password.
If you enter the wrong password, "WRONG! RETRY..." appears on the TV screen, and you cannot go to next step.

**3** To change the country code, use CURSOR ◄/► to select the desired country code and press ENTER.

⇦ moves to [Set Level].
When you change the country code, you must select the parental level.

**4** To change the set level, use CURSOR ◄/► to select the desired level while ⇦ points [Set Level], and then press ENTER.

⇦ moves to [PASSWORD].

**5** Enter the password using the numeric buttons (0 to 9) and press ENTER.

⇦ moves to [EXIT].
The password entered in the above step becomes the new password. If you do not change the password, enter the same password as in the step 2. Even if you want to change only the country code and/or parental level, do not forget to enter the password after changing the country code and/or parental level. Otherwise, the new country code and/or parental level will not become effective. Pressing ENTER again returns to the opening display.

---

**NOTES**

- **When you enter the wrong password more than 3 times in step 2 above, ⇦ moves to [EXIT] automatically and CURSOR ▲/▼ does not work.**

- **If you forget your password in step 2**
  Enter "8888."

---

## To temporarily release the Parental Lock [PARENTAL LOCK] <small>DVD VIDEO</small>

When you set the parental level strictly, some discs may not be played back at all. When you insert such a disc and try to play it, the following Parental Lock on-screen display appears on the TV screen, asking you whether you want the Parental Lock to be temporarily released or not.



**2**

**1-2**

**1-1**
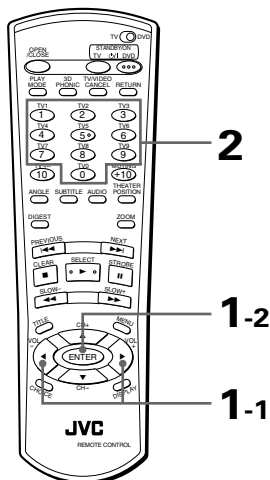
**1** Use the CURSOR ▲/▼ to move ⇦ to [YES], then press ENTER.

⇦ moves to the [PASSWORD] field. When selecting [NO], press ▲(OPEN/ CLOSE) to remove the disc.

```
🔒 PARENTAL LOCK
   This DISC can't play now!
Temporary            YES   ⇦
Level Change ?       NO
PASSWORD            - - - -
PRESS ENTER ➡ EXECUTE
```
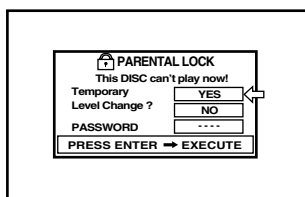
**2** Enter your 4-digit password using the numeric buttons (0 to 9).

If you enter the wrong password, "WRONG! RETRY..." appears on the TV screen.
Enter the correct password.
The Parental lock is released, and the unit starts playback.

---

**NOTE**

- **When you enter the wrong password more than 3 times in step 2 above, ⇦ moves to [NO] automatically and CURSOR ▲/▼ do not work.**

---

# Care and handling of discs

### How to handle discs

When handling a disc, do not touch the surface of the disc. Since discs are made of plastic, they are easily damaged. If a disc gets dirty, dusty, scratched or warped, the images and sound will not be picked up correctly, and such a disc may cause the player to malfunction.
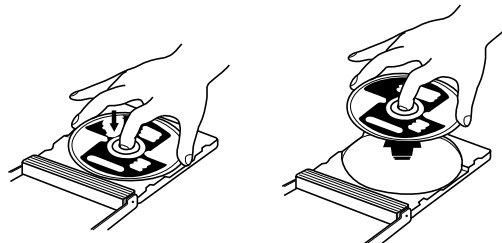


### Label side

Do not damage the label side, stick paper to or use any adhesive on its surface.

### Storage

Make sure that discs are kept in their cases. If discs are piled on top of one another without their protective cases, they can be damaged. Do not put discs in a location where they may be exposed to direct sunlight, or in a place where the humidity or temperature is high. Avoid leaving discs in your car!

### Maintenance of discs

If there are fingerprints or other dirt adhering to a disc, wipe with a soft dry cloth, moving from the center outwards.
If a disc is difficult to clean, wipe with a cloth moistened with water.
Never use record cleaners, petrol, alcohol or any anti-static agents.
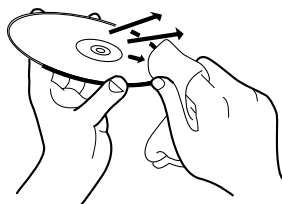
### CAUTION

Sometimes during play noise or images may be garbled. This is sometimes due to the disc. (It may not be up to industry standards.)
These symptoms are caused by the discs, not by the malfunction of the unit.

# Troubleshooting

What appears to be a malfunction may not always be serious. Please go through the following list before requesting service.

| Symptom | Possible case | Remedy |
|---|---|---|
| Power does not come on. | Power plug is not inserted securely. | Plug in securely. |
| Remote control does not work. | Too far from the unit. | More closer to the unit. |
| | The tip of the remote unit is not pointed in the right direction. | Point the infrared light- emitting window toward the  remote sensor on the front panel. |
| | Batteries are exhausted. | Replace the batteries with new ones. |
| | Battery polarity is incorrect. | Take out the batteries and insert them again in the correct  direction. |
| No picture is displayed on the monitor. | Connection of video cable is incorrect. | Connect the cable correctly. |
| | Input selection of TV is incorrect. | Select correctly. |
| | Disc is not playable. | Use a playable disc. (See page 12.) |
| Picture is not normal when using the S-VIDEO jack. | The unit is set to feed the RGB signals (instead of the S-video signals). | Make the unit feed the S-video signals (see page 15.) |
| Picture is not normal when using the VIDEO or S-VIDEO jack. | The Y/C - COMP. switch is not set correeetly. | Set the Y/C - COMP. switch correctly. (See page 14.) |
| Picture is noisy. | The unit is connected to a VCR directly and the copyguard function is activated. | Connect the unit so that the picture signal flows directly to the TV. |
| No audio is reproduced. | Connection is incorrect. | Check the connections. |
| | Input selection of amplifier is incorrect. | Select correctly. |
| No audio is reproduced when playing back a DVD disc recorded with 96 kHz, linear PCM audio. | The audio signal is not derived from the unit's DIGITAL OUT. | Use the AUDIO OUT when playing back such discs. |
| Sound is distorted or noise is generated. | Disc is dirty. | Wipe the disc surface. |
| Picture does not fit the television screen. | MONITOR TYPE is not correctly set. | Select monitor type correctly. (See page 45.) |
| | Television is not correctly set. | Set the television correctly. |
| Operation is not possible. | Microcomputer malfunction due to lightning or static electricity. | Turn off the power and unplug the power cord, then connect the power cord again. |
| | Moisture condensation caused by a sudden change of temperature or humidity. | Turn off the power, then turn it on a few hours later. |

# Specifications

## General

| | |
|---|---|
| Readable discs: | DVD VIDEO, Audio CD, Video CD |
| Video format: | PAL |

## Other

| | |
|---|---|
| Power requirements: | AC 230 V $\sim$, 50 Hz |
| Power consumption: | 16 W (POWER ON), 2.7 W (STANDBY mode) |
| Mass: | 2.6 kg |
| Dimensions (W x H x D): | 435 mm x 73 mm x 267.5 mm |

## Video outputs

| | | |
|---|---|---|
| VIDEO OUT (pin jack): | 1.0 Vp-p (75 $\Omega$) | |
| S-VIDEO OUT (S jack): | Y Output: | 1.0 Vp-p (75 $\Omega$) |
| | C Output: | 300 mVp-p (75 $\Omega$) |
| RGB out: | 0.7 Vp-p (75 $\Omega$) | |
| Horizontal resolution: | 500 Lines | |

## Audio outputs

| | |
|---|---|
| ANALOG OUT (pin jack): | 2.0 Vrms (10 k$\Omega$) |
| DIGITAL OUT: (COAXIAL): | 0.5 Vp-p (75 $\Omega$ termination) |
| (OPTICAL): | –21 dBm to –15 dBm (Peak) |

## Audio characteristics

| | | | |
|---|---|---|---|
| Frequency response: | CD | (sampling frequency 44.1 kHz): | 2 Hz to 20 kHz |
| | DVD | (sampling frequency 48 kHz): | 2 Hz to 22 kHz |
| | DVD | (sampling frequency 96 kHz): | 2 Hz to 44 kHz |
| Dynamic range: | 16 bit: More than 98 dB | | |
| | 20 bit: More than 106 dB | | |
| | 24 bit: More than 106 dB | | |
| Wow and flutter: | Unmeasurable (less than ± 0.002%) | | |
| Total harmonic distortion: | Less than 0.002% | | |

\* Specifications and appearance subject to change without prior notice.

# Appendix A:Table of languages and their abbreviations

When you select the subtitle language or sound, the languages shown below are displayed as abbreviations. To select the desired language, select the abbreviation corresponding the language you want to.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AA | Afar | FA | Persian | KM | Cambodian | OM | (Afan) Oromo | SU | Sundanese |
| AB | Abkhazian | FI | Finnish | KN | Kannada | OR | Oriya | SV | Swedish |
| AF | Afrikaans | FJ | Fiji | KO | Korean (KOR) | PA | Panjabi | SW | Swahili |
| AM | Ameharic | FO | Faroese | KS | Kashmiri | PL | Polish | TA | Tamil |
| AR | Arabic | FY | Frisian | KU | Kurdish | PS | Pashto, Pushto | TE | Telugu |
| AS | Assamese | GA | Irish | KY | Kirghiz | PT | Portuguese | TG | Tajik |
| AY | Aymara | GD | Scots Gaelic | LA | Latin | QU | Quechua | TH | Thai |
| AZ | Azerbaijani | GL | Galician | LN | Lingala | RM | Rhaeto-Romance | TI | Tigrinya |
| BA | Bashkir | GN | Guarani | LO | Laothian | RN | Kirundi | TK | Turkmen |
| BE | Byelorussian | GU | Gujarati | LT | Lithuanian | RO | Rumanian | TL | Tagalog |
| BG | Bulgarian | HA | Hausa | LV | Latvian, Lettish | RU | Russian | TN | Setswana |
| BH | Bihari | HI | Hindi | MG | Malagasy | RW | Kinyarwanda | TO | Tonga |
| BI | Bislama | HR | Croatian | MI | Maori | SA | Sanskrit | TR | Turkish |
| BN | Bengali, Bangla | HU | Hungarian | MK | Macedonian | SD | Sindhi | TS | Tsonga |
| BO | Tibetan | HY | Armenian | ML | Malayalam | SG | Sangho | TT | Tatar |
| BR | Breton | IA | Interlingua | MN | Mongolian | SH | Serbo-Croatian | TW | Twi |
| CA | Catalan | IE | Interlingue | MO | Moldavian | SI | Singhalese | UK | Ukrainian |
| CO | Corsican | IK | Inupiak | MR | Marathi | SK | Slovak | UR | Urdu |
| CS | Czech | IN | Indonesian | MS | Malay (MAY) | SL | Slovenian | UZ | Uzbek |
| CY | Welsh | IS | Icelandic | MT | Maltese | SM | Samoan | VI | Vietnamese |
| DA | Danish | IW | Hebrew | MY | Burmese | SN | Shona | VO | Volapuk |
| DZ | Bhutani | JI | Yiddish | NA | Nauru | SO | Somali | WO | Wolof |
| EL | Greek | JW | Javanese | NE | Nepali | SQ | Albanian | XH | Xhosa |
| EO | Esperanto | KA | Georgian | NL | Dutch | SR | Serbian | YO | Yoruba |
| ET | Estonian | KK | Kazakh | NO | Norwegian | SS | Siswati | ZU | Zulu |
| EU | Basque | KL | Greenlandic | OC | Occitan | ST | Sesotho | | |

# Appendix B:Country code list for Parental Lock

This list is used for the Parental Lock operation. For details, see page 51.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|
| AD | Andorra | ES | Spain | LB | Lebanon | SA | Saudi Arabia |
| AE | United Arab Emirates | ET | Ethiopia | LC | Saint Lucia | SB | Solomon Islands |
| AF | Afghanistan | FI | Finland | LI | Liechtenstein | SC | Seychelles |
| AG | Antigua and Barbuda | FJ | Fiji | LK | Sri Lanka | SD | Sudan |
| AI | Anguilla | FK | Falkland Islands | LR | Liberia | SE | Sweden |
| AL | Albania | FM | Micronesia (Federated States of) | LS | Lesotho | SG | Singapore |
| AM | Armenia | | | LT | Lithuania | SH | Saint Helena |
| AN | Netherlands Antilles | FO | Faroe Islands | LU | Luxembourg | SI | Slovenia |
| AO | Angola | FR | France | LV | Latvia | SJ | Svalbard and Jan Mayen |
| AQ | Antarctica | FX | France, Metropolitan | LY | Libyan Arab | | |
| AR | Argentina | GA | Gabon | MA | Morocco | SK | Slovakia |
| AS | American Samoa | GB | United Kingdom | MC | Monaco | SL | Sierra Leone |
| AT | Austria | GD | Grenada | MD | Moldova, Republic of | SM | San Marino |
| AU | Australia | GE | Georgia | MG | Madagascar | SN | Senegal |
| AW | Aruba | GF | French Guiana | MH | Marshall Islands | SO | Somalia |
| AZ | Azerbaijan | GH | Ghana | ML | Mali | SR | Suriname |
| BA | Bosnia and | GI | Gibraltar | MM | Myanmar | ST | Sao Tome and Principe |
| BB | Barbados | GL | Greenland | MN | Mongolia | SV | El Salvador |
| BD | Bangladesh | GM | Gambia | MO | Macau | SY | Syrian Arab Republic |
| BE | Belgium | GN | Guinea | MP | Northern Mariana Islands | SZ | Swaziland |
| BF | Burkina Faso | GP | Guadeloupe | | | TC | Turks and Caicos Islands |
| BG | Bulgaria | GQ | Equatorial Guinea | MQ | Martinique | | |
| BH | Bahrain | GR | Greece | MR | Mauritania | TD | Chad |
| BI | Burundi | GS | South Georgia and the South Sandwich | MS | Montserrat | TF | French Southern Territories |
| BJ | Benin | | | MT | Malta | | |
| BM | Bermuda | GT | Guatemala | MU | Mauritius | TG | Togo |
| BN | Brunei Darussalam | GU | Guam | MV | Maldives | TH | Thailand |
| BO | Bolivia | GW | Guinea-Bissau | MW | Malawi | TJ | Tajikistan |
| BR | Brazil | GY | Guyana | MX | Mexico | TK | Tokelau |
| BS | Bahamas | HK | Hong Kong | MY | Malaysia | TM | Turkmenistan |
| BT | Bhutan | HM | Heard Island and McDonald Islands | MZ | Mozambique | TN | Tunisia |
| BV | Bouvet Island | | | NA | Namibia | TO | Tonga |
| BW | Botswana | HN | Honduras | NC | New Caledonia | TP | East Timor |
| BY | Belarus | HR | Croatia | NE | Niger | TR | Turkey |
| BZ | Belize | HT | Haiti | NF | Norfolk Island | TT | Trinidad and Tobago |
| CA | Canada | HU | Hungary | NG | Nigeria | TV | Tuvalu |
| CC | Cocos (Keeling) Islands | ID | Indonesia | NI | Nicaragua | TW | Taiwan |
| CF | Central African Republic | IE | Ireland | NL | Netherlands | TZ | Tanzania, United Republic of |
| | | IL | Israel | NO | Norway | | |
| CG | Congo | IN | India | NP | Nepal | UA | Ukraine |
| CH | Switzerland | IO | British Indian Ocean Territory | NR | Nauru | UG | Uganda |
| CI | Cô te d'Ivoire | | | NU | Niue | UM | United States Minor Outlying Islands |
| CK | Cook Islands | IQ | Iraq | NZ | New Zealand | | |
| CL | Chile | IR | Iran (Islamic Republic of) | OM | Oman | US | United States |
| CM | Cameroon | | | PA | Panama | UY | Uruguay |
| CN | China | IS | Iceland | PE | Peru | UZ | Uzbekistan |
| CO | Colombia | IT | Italy | PF | French Polynesia | VA | Vatican City State (Holy See) |
| CR | Costa Rica | JM | Jamaica | PG | Papua New Guinea | | |
| CU | Cuba | JO | Jordan | PH | Philippines | VC | Saint Vincent and the Grenadines |
| CV | Cape Verde | JP | Japan | PK | Pakistan | | |
| CX | Christmas Island | KE | Kenya | PL | Poland | VE | Venezuela |
| CY | Cyprus | KG | Kyrgyzstan | PM | Saint Pierre and Miquelon | VG | Virgin Islands (British) |
| CZ | Czech Republic | KH | Cambodia | | | VI | Virgin Islands (U.S.) |
| DE | Germany | KI | Kiribati | PN | Pitcairn | VN | Vietnam |
| DJ | Djibouti | KM | Comoros | PR | Puerto Rico | VU | Vanuatu |
| DK | Denmark | KN | Saint Kitts and Nevis | PT | Portugal | WF | Wallis and Futuna Islands |
| DM | Dominica | KP | Korea, Democratic People's Republic of | PW | Palau | | |
| DO | Dominican Republic | | | PY | Paraguay | WS | Samoa |
| DZ | Algeria | KR | Korea, Republic of | QA | Qatar | YE | Yemen |
| EC | Ecuador | KW | Kuwait | RE | Réunion | YT | Mayotte |
| EE | Estonia | KY | Cayman Islands | RO | Romania | YU | Yugoslavia |
| EG | Egypt | KZ | Kazakhstan | RU | Russian Federation | ZA | South Africa |
| EH | Western Sahara | LA | Lao People's Democratic Republic | RW | Rwanda | ZM | Zambia |
| ER | Eritrea | | | | | ZR | Zaire |
| | | | | | | ZW | Zimbabwe |

# SAFETY INSTRUCTIONS
## "SOME DOS AND DON'TS ON THE SAFE USE OF EQUIPMENT"

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

Do read the operating instructions before you attempt to use the equipment.

Do ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

Do consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

Do be careful with glass panels or doors on equipment.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way–switch off, withdraw the mains plug and consult your dealer.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode.

Switch off using the  switch on the equipment and make sure that your family know how to do this.

Special arrangements may need to be made for infirm or handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T listen to headphones at high volume as such use can permanently damage your hearing.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishings.

Overheating will cause damage and shorten the life of the equipment.

DON'T use makeshift stands and NEVER fix legs with wood screws — to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL

—NEVER let anyone, especially children, push anything into holes, slots or any other opening in the case — this could result in a fatal electrical shock.;

—NEVER guess or take chances with electrical equipment of any kind — it is better to be safe than sorry!

# JVC
**VICTOR COMPANY OF JAPAN, LIMITED**

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