

# *Home Theater System*

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Operating Instructions



*HT-C800DP*

# WARNING

## To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

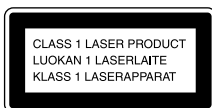
To prevent fire, do not cover the ventilation of the apparatus with newspapers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.



Don't throw away the battery with general house waste, dispose of it correctly as chemical waste.

## Except for customers in the United States and Canada



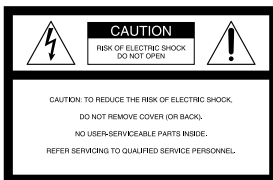
This appliance is classified as a CLASS 1 LASER product. The label is located on the rear panel.

## For the customers in Europe

The following caution label is located inside the apparatus.



## For the customers in the United States



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## Owner's Record

The model and serial numbers are located at the rear of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. \_\_\_\_\_  
Serial No. \_\_\_\_\_

## CAUTION

Use of this appliance with some systems may present a shock or fire hazard. Do not use with any units which have the following marking located near output.

"WARNING! HAZARDOUS ENERGY!..."

## CAUTION

As the laser beam used in this unit is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.



This label is located on the rear panel.

## WARNING

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

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

## CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

## Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

# Welcome!

Thank you for purchasing this Sony Home Theater System. Before operating this system, please read this manual thoroughly and retain it for future reference.

## For the customers in Canada

### CAUTION

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

### CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

## Precautions

### Safety

- Caution – The use of optical instruments with this product will increase eye hazard.
- If anything falls into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- The unit is not disconnected from the mains as long as it is connected to the mains outlet, even if the unit itself has been turned off.
- Unplug the unit from the wall outlet if you do not intend to use it for an extended period of time. To disconnect the cord, pull it out by the plug, never by the cord.

### Installing

- Allow adequate air circulation to prevent internal heat buildup.
- Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots.
- Do not install the unit near heat sources such as radiators, or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Do not install the unit in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the unit and discs away from equipment with strong magnets, such as microwave ovens, or large loudspeakers.
- Do not place heavy objects on the unit.
- If the unit is brought directly from a cold to a warm location, moisture may condense inside the unit and cause damage to the lenses. When you first install the unit, or when you move it from a cold to a warm location, wait for about 30 minutes before operating the unit.

## Except for customers in Europe



ENERGY STAR® is a U.S. registered mark. As an ENERGY STAR® partner, Sony Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

# Precautions

## On power sources

AC power cord must be changed only at the qualified service shop.

## On placement

- Place the system in a location with adequate ventilation to prevent heat build-up in the system.
- At high volume, over long periods of time, the cabinet becomes hot to the touch. This is not a malfunction. However, touching the cabinet should be avoided. Do not place the unit in a confined space where ventilation is poor as this may cause overheating.
- The system is equipped with a high power amplifier. If the ventilation slots on the bottom are blocked, the unit can overheat and malfunction.
- Do not place the system on a soft surface such as a rug that might block the ventilation holes on the bottom.
- Do not place the system in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.

## On operation

- If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the system. Should this occur, the system may not operate properly. In this case, remove the disc and leave the system turned on for about half an hour until the moisture evaporates.
- When you move the system, make sure that you take out all discs. Otherwise, the discs may be damaged.

## On adjusting volume

Do not turn up the volume while listening to a section with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level section is played.

## On cleaning

Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzene.

If you have any questions or problems concerning your system, please consult your nearest Sony dealer.

## On cleaning discs

Do not use a commercially available CD/DVD cleaning disc. It may cause a malfunction.

## On your TV's color

If the speakers should cause the TV screen to have color irregularity, turn off the TV at once then turn it on after 15 to 30 minutes. If color irregularity should persist, place the speakers further away from the set.

### IMPORTANT NOTICE

Caution: This system is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

## On moving the system

Before you move the system, remove all discs.

Press ■ and DISC SELECT 4 on the system simultaneously until "MECH LOCK" appears on the front panel display. You can then turn off the system and unplug the AC power cord.

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# About this Manual

- The HT-C800DP consists of:
  - DVD receiver AVD-K800P
  - Front/Surround speakers
    - For customers in Europe SS-MSP2
    - For other customers SS-MSP75
  - Center speaker
    - For customers in Europe SS-CNP2
    - For other customers SS-CNP75
  - Sub woofer SS-WMSP80
- The instructions in this manual describe the controls on the remote. You can also use the controls on the system if they have the same or similar names as those on the remote.
- The symbols used in this manual are explained below:

Symbol	Meaning	Symbol	Meaning
	Functions available in DVD video mode		Functions available for MP3* audio tracks
	Functions available in VIDEO CD mode		Functions available for JPEG files
	Functions available in CD mode		More convenient features

\* MP3 (MPEG1 Audio Layer 3) is a standard format defined by ISO/MPEG which compress audio data.

# This System Can Play the Following Discs

Format of discs	
DVD VIDEO	
VIDEO CD	
Audio CD	

The “DVD VIDEO” logo is a trademark.

## Terms for discs

### • Title

The longest sections of a picture or music feature on a DVD, movie, etc., in video software, or the entire album in audio software.

### • Chapter

Sections of a picture or a music piece that are smaller than titles. A title is composed of several chapters. Depending on the disc, no chapters may be recorded.

### • Album

Section of a music piece or an image on a data CD containing MP3 audio tracks or JPEG files.

### • Track

Sections of a picture or a music piece on a VIDEO CD, CD, or MP3.

### • Index (CD) / Video Index (VIDEO CD)

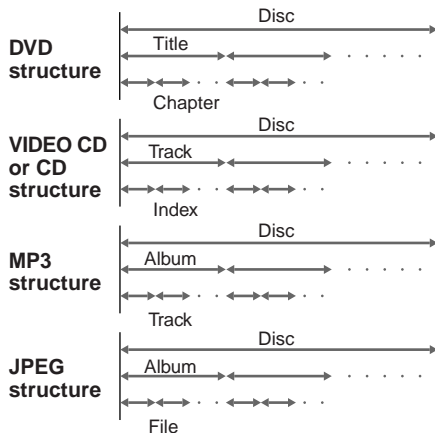
A number that divides a track into sections to easily locate the point you want on a VIDEO CD. Depending on the disc, no indexes may be recorded.

### • Scene

On a VIDEO CD with PBC functions (page 32), the menu screens, moving pictures and still pictures are divided into sections called “scenes”.

### • File

Section of a picture on a data CD containing JPEG image files.



continued

## Note on PBC (Playback Control) (VIDEO CDs)

This system conforms to Ver. 1.1 and Ver. 2.0 of VIDEO CD standards. You can enjoy two kinds of playback depending on the disc type.


Disc type	You can
VIDEO CDs without PBC functions (Ver. 1.1 discs)	Enjoy video playback (moving pictures) as well as music.
VIDEO CDs with PBC functions (Ver. 2.0 discs)	Play interactive software using menu screens displayed on the TV screen (PBC Playback), in addition to the video playback functions of Ver. 1.1 discs. Moreover, you can play high-resolution still pictures, if they are included on the disc.

## About Multi Session CD

- This system can play Multi Session CDs when an MP3 audio track is contained in the first session. Any subsequent MP3 audio tracks recorded in later sessions can also be played back.
- This system can play Multi Session CDs when a JPEG image file is contained in the first session. Any subsequent JPEG image files recorded in later sessions can also be played back.
- If audio tracks and images in music CD format or video CD format are recorded in the first session, only the first session will be played back.

## Region code

Your system has a region code printed on the back of the unit and will only play DVDs labelled with the same region code.

DVDs labelled  will also play on this system. If you try to play any other DVD, the message "Playback prohibited by area limitations." will appear on the TV screen. Depending on the DVD, no region code indication may be labelled even though playing the DVD is prohibited by area restrictions.

## Examples of discs that the system cannot play

The system cannot play the following discs:

- CD-ROMs (except for extension ".MP3", ".JPG" or ".JPEG")
  - CD-Rs/CD-RWs other than those recorded in the following formats:
    - music CD format
    - video CD format
    - MP3/JPEG format that conforms to ISO9660\* Level 1/Level 2, or its extended format, Joliet
  - Data part of CD-Extras
  - DVD-ROMs
  - DVD Audio discs
- \* A logical format of files and folders on CD-ROMs, defined by ISO (International Standard Organization)

Do not load the following discs:

- A DVD with a different region code (page 8, 77).
- A disc that is neither standard nor circular (e.g., card, heart, or star shape).
- A disc with paper or stickers on it.
- A disc that has adhesive or cellophane tape still left on it.



## Notes

- **Notes about CD-R/CD-RW/DVD-R/DVD-RW (Video mode)**

In some cases, CD-R/CD-RW/DVD-R/DVD-RW (Video mode) cannot be played on this player due to the recording quality or physical condition of the disc, or the characteristics of the recording device and authoring software.

The disc will not play if it has not been correctly finalized. For more information, see the operating instructions for the recording device.

Note that discs created in the Packet Write format cannot be played.

- **Music discs encoded with copyright protection technologies**

This product is designed to playback discs that conform to the Compact Disc (CD) standard.

Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

## Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally set by software producers. Since this system plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also, refer to the instructions supplied with the DVDs or VIDEO CDs.

## Copyrights

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

This system incorporates with Dolby\* Digital and Dolby Pro Logic (II) adaptive matrix surround decoder and the DTS\*\* Digital Surround System.

\* Manufactured under license from Dolby Laboratories.

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

\*\* Manufactured under license from Digital Theater Systems, Inc.

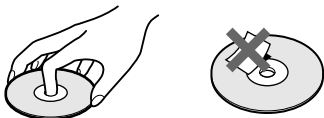
“DTS” and “DTS Digital Surround” are trademarks of Digital Theater Systems, Inc.

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## Notes about the Discs

### On handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.

### On cleaning

- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.



- Do not use solvents such as benzene, thinner, commercially available cleaners, or anti-static spray intended for vinyl LPs.

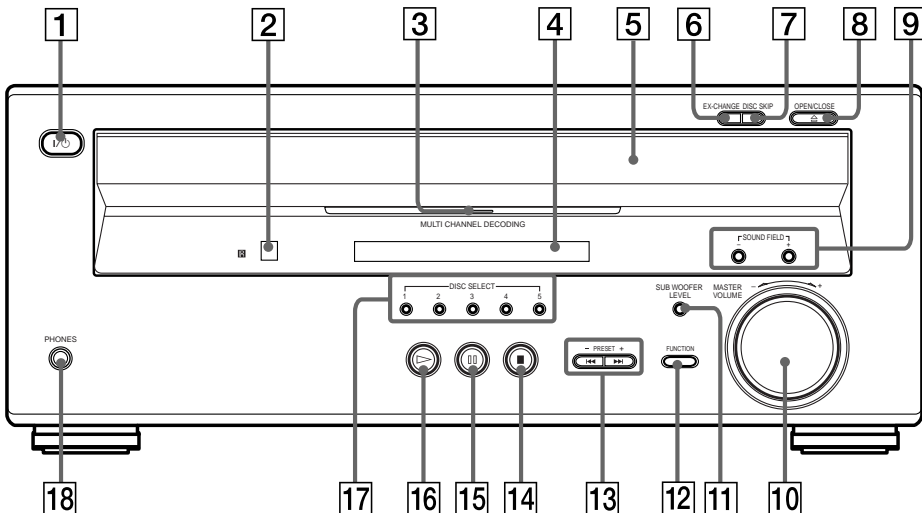
### On playback

- This system can only playback a standard circular disc. Using neither standard nor circular discs (e.g., card, heart, or star shape) may cause a malfunction.
- Do not use a disc that has a commercially available accessory attached, such as a label or ring.

# Index to Parts and Controls

For more information, refer to the pages indicated in parentheses.

## Front Panel



**1** I/O (power switch) (29)

**2** IR (remote sensor) (18)

**3** MULTI CHANNEL DECODING indicator (49)

**4** Front panel display (12)

**5** Disc tray (29)

**6** EX-CHANGE (30)

**7** DISC SKIP (29)

**8** OPEN/CLOSE (29)

**9** SOUND FIELD +/- (50)

**10** MASTER VOLUME control (29, 70)

**11** SUB WOOFER LEVEL (69)

**12** FUNCTION (29)

**13** PRESET +/-, ◀▶ (27, 30)

**14** ■ (stop) (30)

**15** ◻◻ (pause) (30)

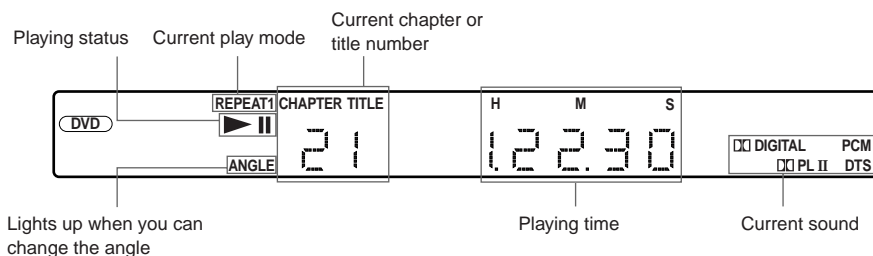
**16** ▷ (play) (29)

**17** DISC SELECT 1 – 5 (29)

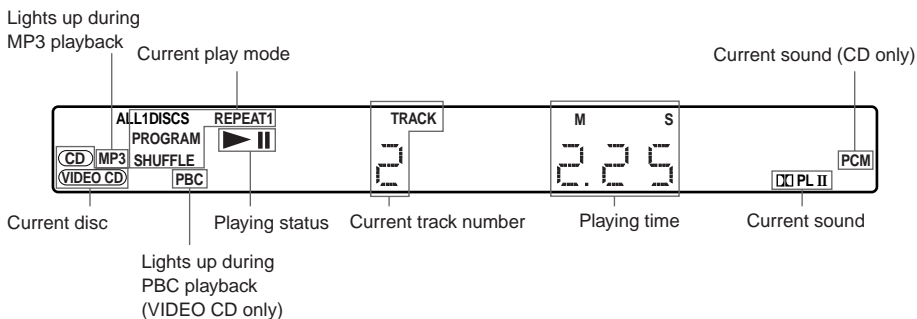
**18** PHONES jack (29)

## Front Panel Display

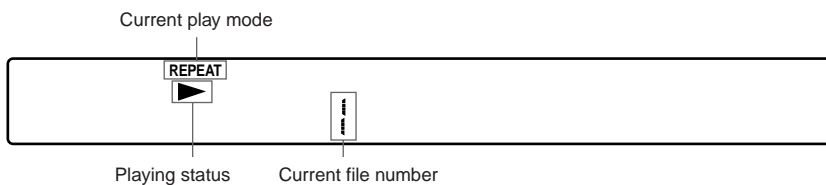
### When playing back a DVD



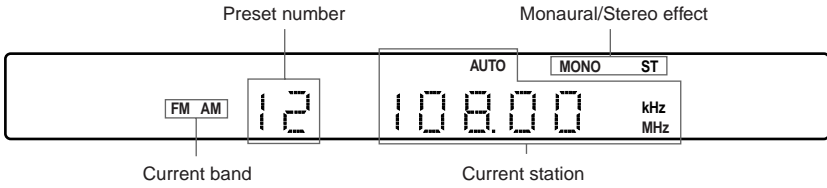
### When playing back a CD, VIDEO CD, or MP3



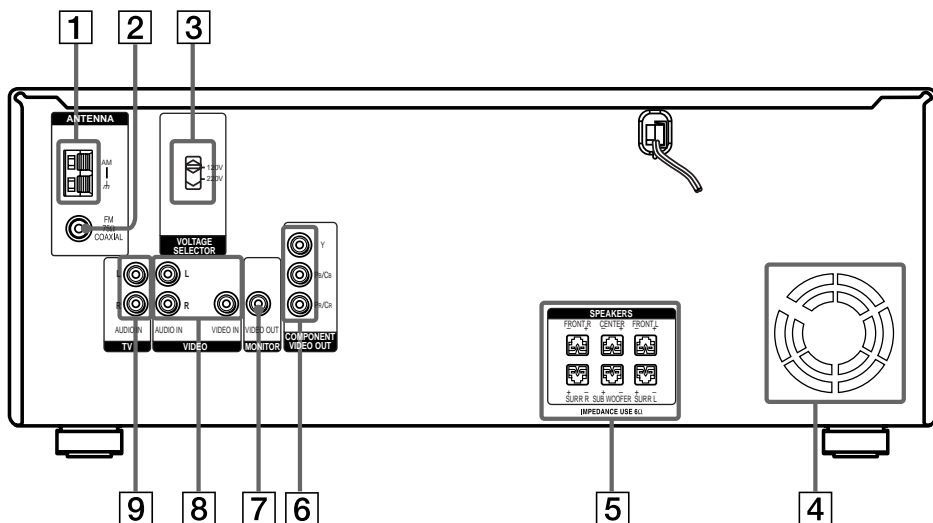
### When playing back a JPEG



## When listening to the radio

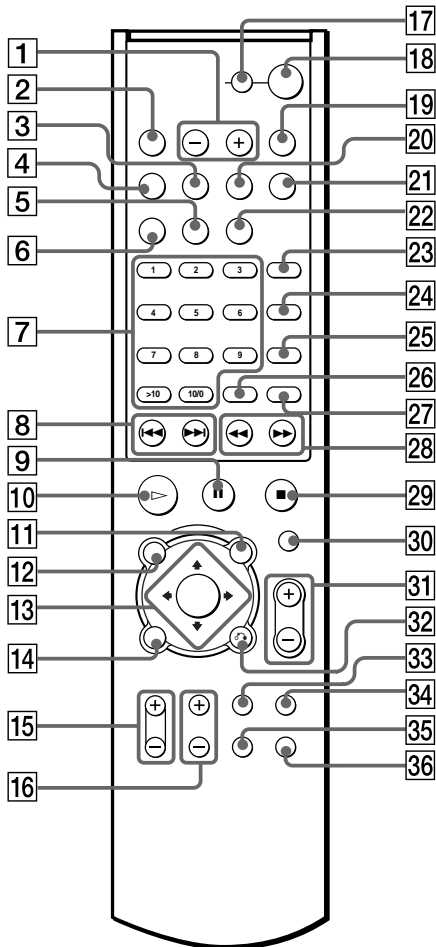


## Rear Panel



- 1** AM antenna terminals (22)
- 2** FM 75Ω COAXIAL antenna jack (22)
- 3** VOLTAGE SELECTOR (only for equipped models) (25)
- 4** Ventilation holes (fan) (74)
- 5** SPEAKERS jacks (20)
- 6** COMPONENT VIDEO OUT jacks (24)
- 7** MONITOR (VIDEO OUT) jack (24)
- 8** VIDEO (AUDIO L/R IN/VIDEO IN) jacks (24)
- 9** TV (AUDIO L/R IN) jacks (24)

## Remote

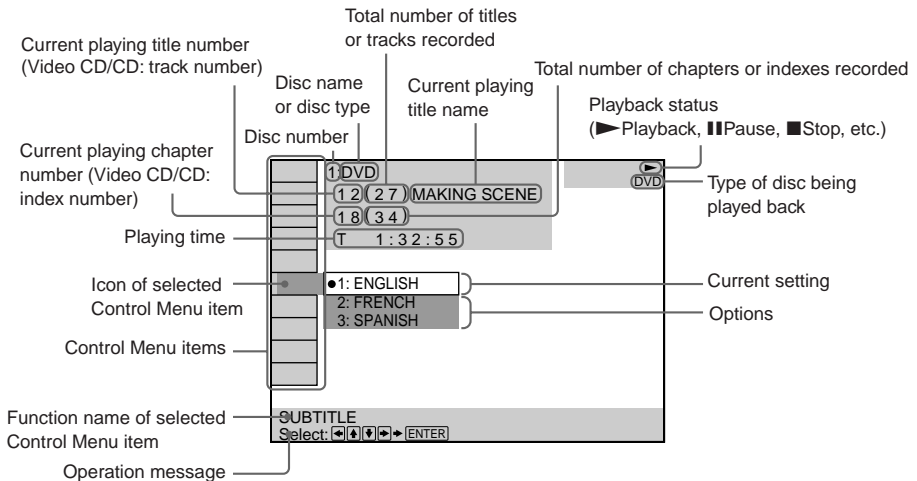


- 1** SOUND FIELD +/- (50)
- 2** FUNCTION (29)
- 3** ST/MONO (62)
- 4** BAND (27)
- 5** REPEAT (39)
- 6** PLAY MODE (36)
  
- 7** Number buttons (31)
- 8** ◀▶, PRESET +/- (27, 30)
- 9** ⏸ (pause) (30)
- 10** ▷ (play) (30)
- 11** DVD MENU/ALBUM + (31)
- 12** DVD TOP MENU/ALBUM - (31)
  
- 13** ←/↑/↓/→/ENTER (31)
- 14** DVD DISPLAY (33)
- 15** TV VOL +/- (61)
- 16** TV CH +/- (61)
- 17** TV I/⏻ (on/standby) (61)
- 18** I/⏻ (on/standby) (29)
  
- 19** OPEN/CLOSE (29)
- 20** MEMORY (27)
- 21** D.SKIP (29)
- 22** TIME (43)
- 23** AUDIO (49)
- 24** ANGLE (53)
  
- 25** SUBTITLE (54)
- 26** ENTER (31)
- 27** CLEAR (37)
- 28** ◀▶, TUNING +/-,  
SLOW ◀▶ (27, 40)
- 29** ■ (stop) (30)
- 30** MUTING (30)
  
- 31** VOLUME +/- (30, 70)
- 32** ↶ RETURN (32)
- 33** TV/VIDEO (61)
- 34** BASS BOOST (61)
- 35** DVD SETUP (57)
- 36** DIMMER (61)








# Guide to the Control Menu Display

Use the Control Menu to select a function that you would like to use. The Control Menu display appears when the DVD DISPLAY button is pressed. For details, refer to the page in parentheses.










## Control Menu



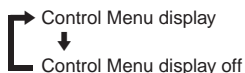
## List of Control Menu Items

 <b>DISC</b>	Displays the disc name or the disc type inserted into the system.
 <b>TITLE (DVD only) (page 42) /SCENE (only VIDEO CD in PBC playback)/TRACK (VIDEO CD only) (page 42)</b>	Selects the title (DVD), the scene (VIDEO CD in PBC playback), or the track (VIDEO CD) to be played.
 <b>CHAPTER (DVD only) (page 43)/INDEX (VIDEO CD only) (page 43)</b>	Selects the chapter (DVD) or the index (VIDEO CD) to be played.
 <b>ALBUM (MP3 only) (page 33)</b>	Selects the album (MP3) to be played.
 <b>TRACK (CD/MP3 only) (page 34)</b>	Selects the track (CD/MP3) to be played.
 <b>INDEX (CD only)</b>	Displays the index (CD).
 <b>TIME (page 43)</b>	Checks the elapsed time and the remaining playback time. Inputs the time code for picture and music searching.






 <b>AUDIO (DVD/VIDEO CD/ CD/MP3 only) (page 48)</b>	Changes the audio setting.
 <b>SUBTITLE (DVD only) (page 54)</b>	Displays the subtitles. Changes the subtitle language.
 <b>ALBUM (JPEG only) (page 35)</b>	Select the album (JPEG) to be played.
 <b>FILE (JPEG only) (page 35)</b>	Select the file (JPEG) to be played.
 <b>DATE (JPEG only) (page 47)</b>	Display the date information.
 <b>ANGLE (DVD only) (page 53)</b>	Changes the angle.
 <b>PLAYMODE (VIDEO CD/CD/ MP3/JPEG only) (page 38)</b>	Selects the play mode.
 <b>REPEAT (page 39)</b>	Plays the entire disc (all titles/all tracks), one title/chapter/track/album, or contents of program repeatedly.
 <b>CUSTOM PARENTAL CONTROL (page 55)</b>	Sets the disc to prohibit playing.

 Each time you press DVD DISPLAY, the Control Menu display changes as follows:



The Control Menu items are different depending on the disc.

 The Control Menu icon indicator lights up in green  →  unless you set the REPEAT setting to “OFF”. The “ANGLE” indicator lights up in green only when multiple angles are recorded on the disc.

## Quick Overview


This chapter presents a quick overview so you can begin enjoying your new system right away. For selecting a language used in the on-screen display, refer to the page 64. For selecting the aspect ratio of the TV to be connected, refer to the page 65.

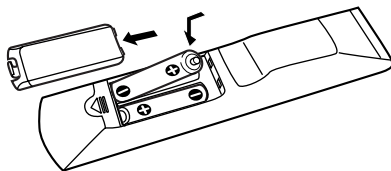
## Unpacking

Check that you have the following items:

- Speakers (5)
- Sub woofer (1)
- AM loop antenna (1)
- FM wire antenna (1)
- Speaker cords (3.5 m × 3, 5 m × 1, 10 m × 2) (12 ft. × 3, 17 ft. × 1, 33 ft. × 2)
- Video cord (1)
- Remote Commander (remote) RM-U800 (1)
- R6 (size AA) batteries (2)
- Foot pads (24)
- Color labels for speakers (5)
- SCART adapter (for the customers in Europe only) (1)
- Speakers – Connection and Installation (card) (1)

## Inserting Batteries into the Remote

You can control the system using the supplied remote. Insert two R6 (size AA) batteries by matching the ⊕ and ⊖ ends on the batteries to the markings inside the compartment. When using the remote, point it at the remote sensor  on the system.



### Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not use a new battery with an old one.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct light from the sun or lighting apparatus. Doing so may cause a malfunction.
- If you do not use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

## Step 1: Speaker System Hookup

Before connecting the speakers, attach the color labels onto the rear panel of the speakers so that you can identify the speakers to be connected. For details on the color, refer to “Jacks for connecting the speakers” on page 20.

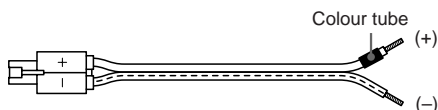
Connect the supplied speaker system using the supplied speaker cords by matching the colours of the terminals to those of the cords. Do not connect any speakers other than those supplied with this system.

To obtain the best possible surround sound, specify the speaker parameters (distance, level, etc.) on page 68.

### Required cords

#### Speaker cords

The connector and the colour tube of the speaker cords are the same colour as the jacks to be connected.

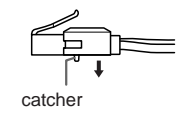


### To change the speaker cord

If you want to change the speaker cord, you can detach the supplied speaker cord from the connector.

#### 1 Press the connector onto a flat surface.

Make sure that the catcher is at the bottom.

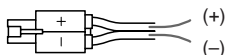


#### 2 Pull the speaker cord from the connector.



#### 3 Twist the stripped ends of the speaker cord you want about 10 mm (3/8 inches) and insert the speaker cord into the connector.

Make sure that the speaker cord is inserted according to its polarity: + to + and - to -.



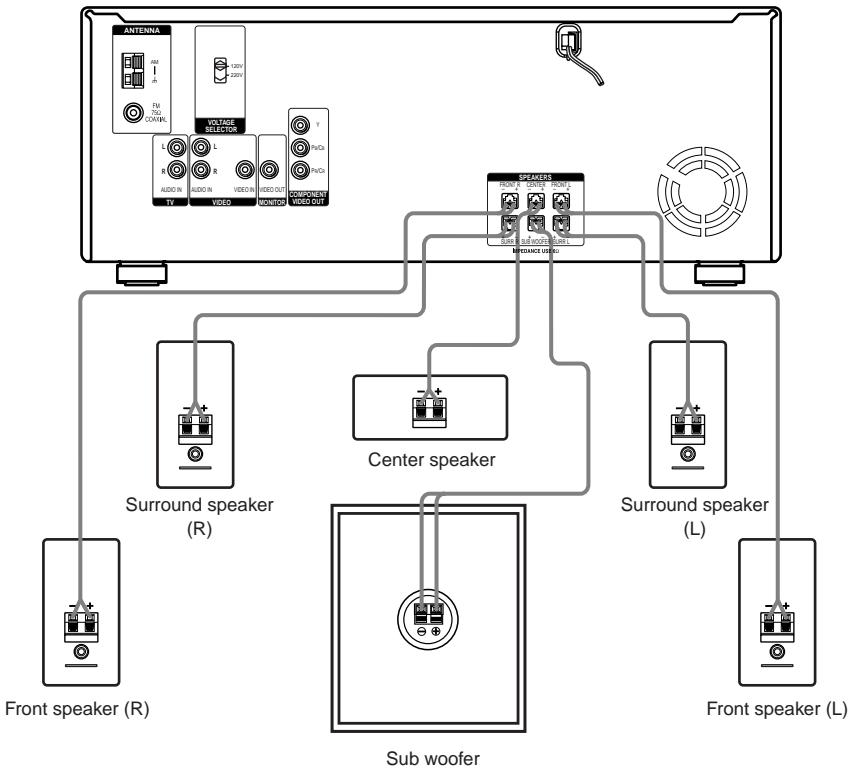
#### 4 Remove the connector from the flat surface.

#### Note

You can only use the AWG24 to AWG18 speaker cords. Other speaker cord size will not fit the supplied connector.

### Jacks for connecting the speakers

Connect the	To the
Front speakers	SPEAKERS FRONT L (white) and R (red) jacks
Surround speakers	SPEAKERS SURR L (blue) and R (grey) jacks
Center speaker	SPEAKERS CENTER (green) jack
Sub woofer	SPEAKERS SUB WOOFER (purple) jack



## Note on placing speakers

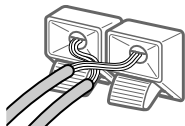
Use caution when placing the unit or speakers on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

## To avoid short-circuiting the speakers

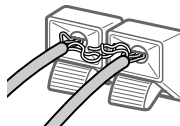
Short-circuiting of the speakers may damage the system. To prevent this, be sure to follow these precautions when connecting the speakers. Make sure the bare wire of each speaker cord does not touch another speaker terminal or the bare wire of another speaker cord.

### Examples of poor conditions of the speaker cord

Stripped speaker cord is touching another speaker terminal.



Stripped cords are touching each other due to excessive removal of insulation.



After connecting all the components, speakers, and AC power cord (mains lead), output a test tone to check that all the speakers are connected correctly. For details on outputting a test tone, see page 70.

If no sound is heard from a speaker while outputting a test tone, or a test tone is output from a speaker other than the one currently displayed on the TV display (OSD), the speaker may be short-circuited. If this happens, check the speaker connection again.

### Note

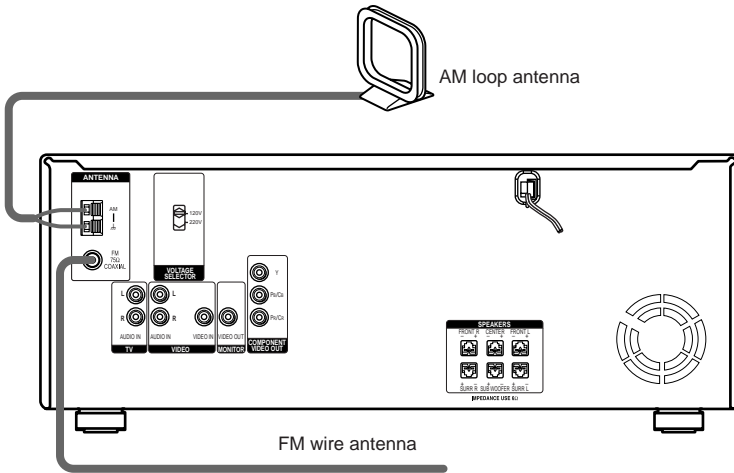
Be sure to match the speaker cord to the appropriate terminal on the components:  $\oplus$  to  $\oplus$ , and  $\ominus$  to  $\ominus$ . If the cords are reversed, the sound will be distorted and will lack bass.

## Step 2: Antenna Hookups

Connect the supplied AM and FM antennas to listen to the radio.

### Terminals for connecting the antennas

Connect the	To the
AM loop antenna	AM terminals
FM wire antenna	FM 75Ω COAXIAL jack

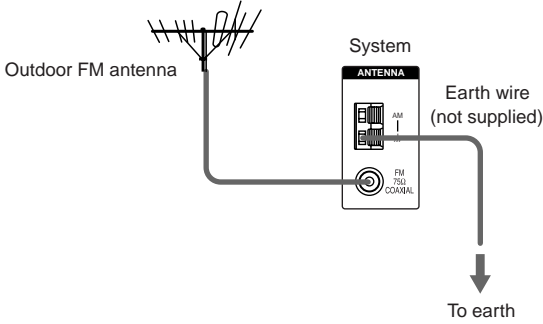


### Notes

- To prevent noise pickup, keep the AM loop antenna away from the system and other components.
- Be sure to fully extend the FM wire antenna.
- After connecting the FM wire antenna, keep it as horizontal as possible.

**💡 If you have poor FM reception**

Use a 75-ohms coaxial cable (not supplied) to connect the system to an outdoor FM antenna as shown below.



**Note**

If you connect the system to an outdoor antenna, ground it to protect against lightning. To prevent a gas explosion, do not connect the earth wire to a gas pipe.

## Step 3: TV and Video Component Hookups

### Required cords

#### Video cord for connecting a TV monitor (supplied)



#### Audio cords (not supplied)

When connecting a cord, be sure to match the color-coded pins to the appropriate jacks on the components.



### Jacks for connecting video components

Connect a	To the
TV monitor	MONITOR (VIDEO OUT) jack
VCR	VIDEO (AUDIO L/R IN/VIDEO IN) jacks
TV	TV (AUDIO L/R IN) jacks

#### Connecting the system to a TV (for the customers in Europe only)

Connect the system to your TV using the SCART adapter.

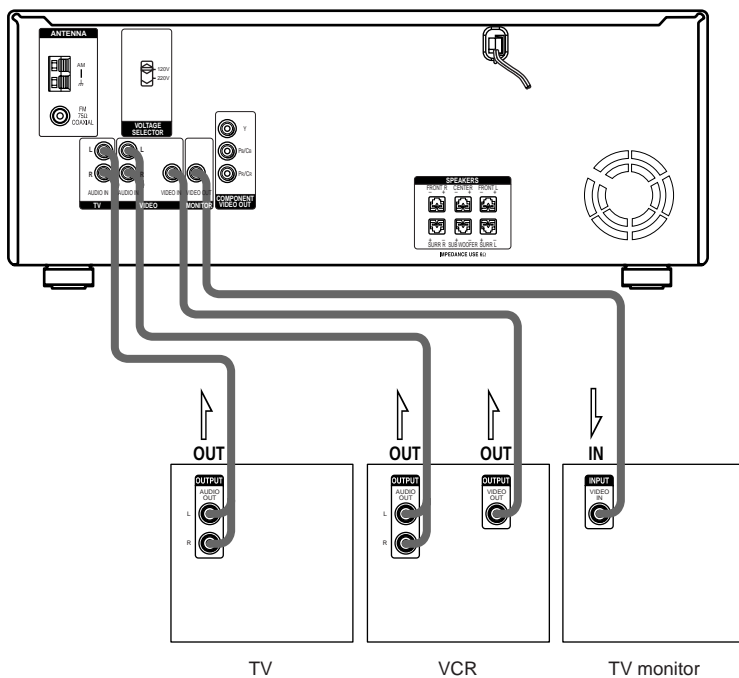
#### When using the COMPONENT VIDEO OUT jacks (Y, P<sub>B</sub>/C<sub>B</sub>, P<sub>R</sub>/C<sub>R</sub>) instead of the VIDEO jacks

Your TV monitor must also be connected via COMPONENT VIDEO OUT jacks (Y, P<sub>B</sub>/C<sub>B</sub>, P<sub>R</sub>/C<sub>R</sub>). If your TV accept progressive format signals, you must use this connection and set "COMPONENT OUT" to "PROGRESSIVE" in "SCREEN SETUP" (page 66).

### Notes

- When the mode of the system is not set to "DVD", no signal is output from the COMPONENT VIDEO OUT jacks.
- When the mode of the system is set to "DVD" and "INTERLACE" is selected in "SCREEN SETUP", the signal is output from the MONITOR and COMPONENT VIDEO OUT jacks.
- When the mode of the system is set to "DVD" and "PROGRESSIVE" is selected in "SCREEN SETUP", the signal is output only from the COMPONENT VIDEO OUT jacks.





### Selecting the voltage selector

If your unit has a voltage selector on the rear panel, check that the voltage selector is set to the local power supply voltage. If not, use a screwdriver to set the selector to the correct position before connecting the AC power cord to a wall outlet.

### Connecting the AC Power Cord (mains lead)

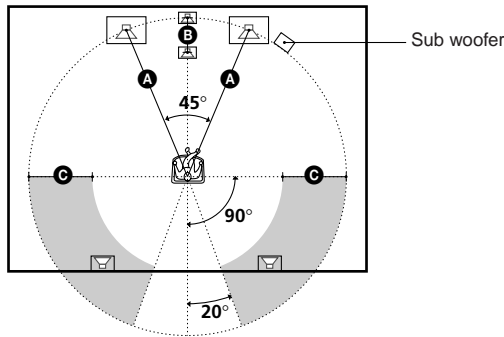
Before connecting the AC power cord (mains lead) of this system to a wall outlet (mains), connect the speakers to the system (see page 19).

Connect the AC power cord (mains lead) of your TV/video components to a wall outlet (mains).

# Speaker Setup

For the best possible surround sound, all the speakers other than the sub woofer should be the same distance from the listening position (A). However, this system allows you to place the center speaker up to 1.6 meters (5 feet) closer (B) and the surround speakers up to 4.6 meters (15 feet) closer (C) to the listening position. The front speakers can be placed from 1.0 to 7.0 meters (3 to 23 feet) (A) from the listening position.

Place the speakers as illustrated below. You can place the sub woofer in any position.



## Note

Do not place the center and surround speakers further away from the listening position than the front speakers.

## About magnetically shielded speaker (to prevent colour irregularity occurring on the TV screen)

The speakers in this system are magnetically shielded to prevent magnetic leakage. However, some leakage may occur, as a high-strength magnet is employed. If the speakers is used with a CRT-based TV or projector, install the speakers at least 0.3 meters (1 ft) from the TV set, etc. If it is installed too close, colour irregularity may occur on the screen. If colour irregularity occurs, turn off the TV set once, then turn it on after 15 to 30 minutes. If colour irregularity occurs again, place the speakers further away from the TV set. If colour irregularity still occurs after performing the above, make sure that no magnetic object is nearby the speakers. Colour irregularity may occur as a result of interaction between the speakers and the magnetic object. Examples of possible sources of magnetic interference include: magnetic latches on a TV stand, etc., healthcare devices, toys, etc.

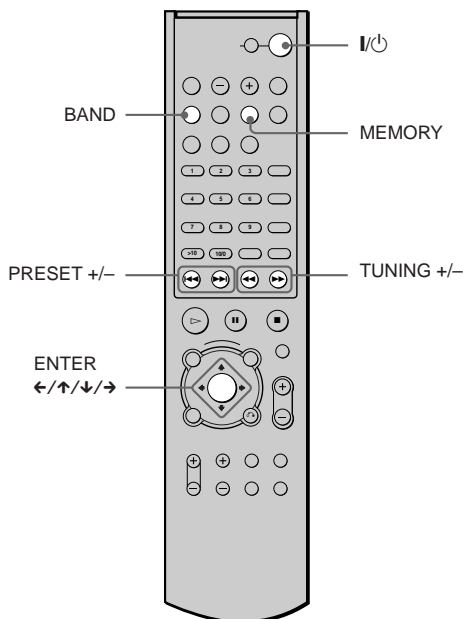
## Specifying the speaker parameters

To obtain the best possible surround sound, first specify the distance of the speakers from your listening position, then set the balance and level. Use the test tone to adjust the speaker volumes to the same level.

Select “SPEAKER SETUP” in the setup display. For details, see “Settings for the Speakers” (page 68).

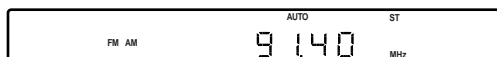
## Presetting Radio Stations

You can preset 20 stations for FM and 10 stations for AM.  
Before tuning, make sure to turn down the volume to minimum.



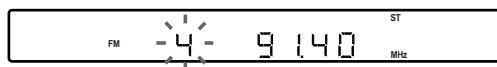
- 1 Press **BAND** repeatedly to select FM or AM band.
- 2 Hold down **TUNING +/-** until the frequency indication starts to change, then release.

Scanning stops when the system tunes in a station. “ST” (for stereo program) appears on the front panel display.

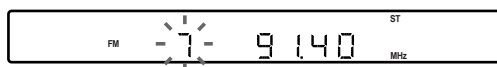


- 3 Press **MEMORY**.

A preset number appears on the front panel display.



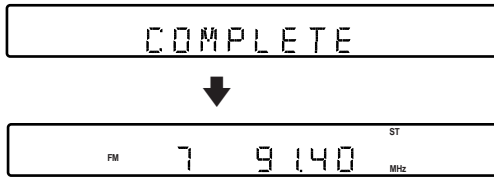
- 4 Press **PRESET +/-** to select the preset number you want.



continued

**5 Press ENTER.**

The station is stored.



**6 Repeat 1 to 5 to store other stations.**

**To tune in a station with a weak signal**




Press TUNING +/- repeatedly in 2 to tune in the station manually.

**To change the preset number**

Start over from 1.

**To change the AM tuning interval (Except for European and Mexican models)**

The AM tuning interval is factory set to 9 kHz (10 kHz in some areas).

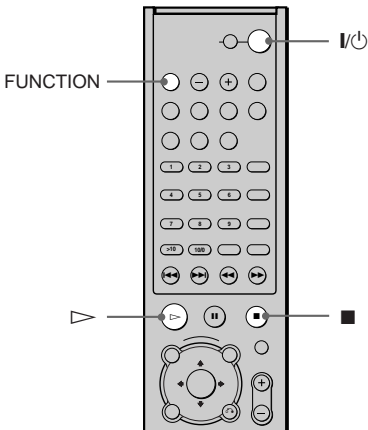
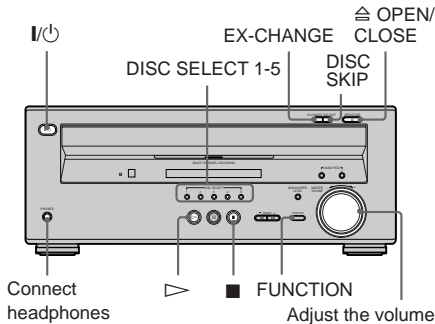
To change the AM tuning interval, tune in any AM station first, then turn off the system by pressing  on the remote or on the system. While holding down  on the system, turn on the power by pressing  on the remote or on the system. When you change the interval, AM preset stations will be erased.

To reset the interval, repeat the same procedure.

# Playing Discs

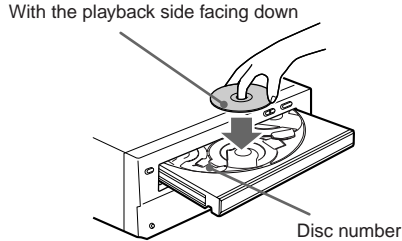


Depending on the DVD or VIDEO CD, some operations may be different or restricted. Refer to the operating instructions supplied with your disc.



- 1 Turn on your TV.**
- 2 Switch the input selector on the TV to this system.**
- 3 Press I/⏻ on the system.**  
The system turns on. Press FUNCTION to select "DVD".

- 4 Press  $\triangle$  OPEN/CLOSE on the system, and place a disc on the disc tray.**  
Press  $\triangle$  OPEN/CLOSE again to close the disc tray.



- 5 To place other discs, press DISC SKIP and place the discs in the order you want to play.**  
Each time you press the button, the disc tray turns and you can place the discs in the empty disc compartments. The system plays the disc in front of you first.

- 6 Press  $\triangle$ .**  
The disc tray closes, and the system starts playback (continuous play). To playback other discs, press DISC SKIP or DISC SELECT 1-5. Adjust the volume on the system.

**After following Step 6**  
Depending on the disc, a menu may appear on the TV screen. You can play the disc interactively by following the instructions on the menu. DVD (page 31), VIDEO CD (page 32).

**To turn on the system**  
Press I/⏻ on the remote or on the system.

## To turn off the system

Press **I/⏻** on the remote or on the system. The system enters standby mode. In standby mode, you can reduce the power consumption to minimum (Power Saving mode) and save energy in standby mode. To turn off the system completely, unplug the AC power cord from mains. While playing a disc, do not turn off the system by pressing **I/⏻**. Doing so may cancel the menu settings. When you turn off the system, first press **■** to stop playback and then press **I/⏻**.

## 💡 On Auto-Function

If a disc is already inserted to any disc tray, you can play it back simply by pressing the **▷** or its corresponding DISC SELECT 1-5, even if the previous music source was not a DVD. The function changes to DVD and playback starts (Auto-Function). However, if Program Play is on, you can only start playback by pressing the **▷**.

## 💡 On the DISC indicators

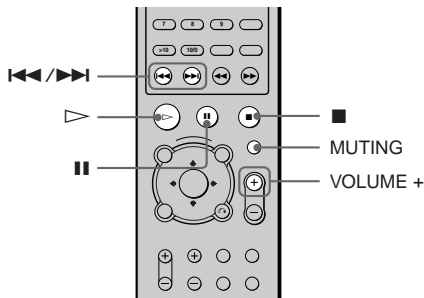
The DISC indicators change as follows:

- green: the disc tray is chosen, or the disc is being played back.
- off: there is no disc.
- amber: a disc is placed on the disc tray, however, the disc tray is not chosen. Before the disc existence is checked, the indicators are in amber.

## 💡 On Auto Power Off

In DVD function, you can set the system to turn off automatically if the disc is not played back for 30 minutes. To activate the Auto Power Off function, press **■** and DISC SELECT 5 on the system simultaneously until “AUTO.OFF Y” appears on the front panel. To deactivate the function, do the same procedure above until “AUTO.OFF N” appears on the front panel. Even though Auto Power Off function is deactivated, the system turns off automatically when you playback a DVD and the system is in pause mode or is displaying the DVD’s menu for about one hour.

## Additional operations



To	Operation
Stop	Press <b>■</b> .
Pause*	Press <b>II</b> .
Resume play after pause	Press <b>II</b> or <b>▷</b> .
Go to the next chapter, track, scene or file in continuous play mode	Press <b>▶▶</b> .
Go back to the preceding chapter, track, scene or file in continuous play mode	Press <b>◀◀</b> .
Mute the sound	Press <b>MUTING</b> . To cancel muting, press it again, turn the power on or turn the <b>MASTER VOLUME</b> clockwise to turn the volume up.
Change a disc while playing another disc	Press <b>EX-CHANGE</b> on the system.
Play the desired disc directly	Press <b>DISC SELECT 1-5</b> on the system.

\* You cannot pause during JPEG playback.

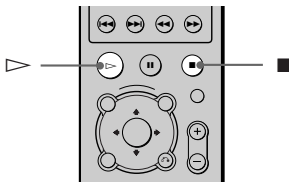
## Notes

- Do not push the disc tray when closing it. Press **OPEN/CLOSE** on the system to close the disc tray.
- If there is no disc in any disc tray, “NO DISC” appears on the front display.

## Resuming Playback from the Point Where You Stopped the Disc (Resume Play)



When you stop the disc, the system remembers the point where you pressed ■ and “RESUME” appears on the front panel display. As long as you do not remove the disc, Resume Play will work even if the system enters standby mode by pressing I/⏻.



### 1 While playing a disc, press ■ to stop playback.

“RESUME” appears on the front panel display, so you can restart the disc from the point where you stopped the disc. If “RESUME” does not appear, Resume Play is not available.

### 2 Press ▶.

The system starts playback from the point where you stopped the disc in Step 1.

💡 To play from the beginning of the disc, press ■ twice, then press ▶.

#### Notes

- Depending on where you stopped the disc, the system may not resume playback from exactly the same point.
- The point where you stopped playing is cleared when:
  - you change the play mode.
  - you change the setting on the Setup Menu.

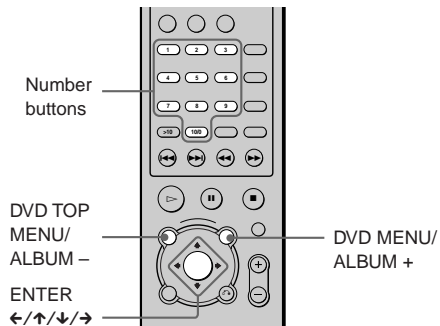
## Using the DVD’s Menu



A DVD is divided into long sections of a picture or a music feature called “titles”.

When you play a DVD which contains several titles, you can select the title you want using DVD TOP MENU/ALBUM –.

When you play DVDs that allow you to select items such as the language for the subtitles and the language for the sound, select these items using DVD MENU/ALBUM +.



### 1 Press DVD TOP MENU/ALBUM – or DVD MENU/ALBUM +.

The disc’s menu appears on the TV screen.

The contents of the menu vary from disc to disc.

### 2 Press ←/↑/↓/→ or the number buttons to select the item you want to play or change.

### 3 Press ENTER.

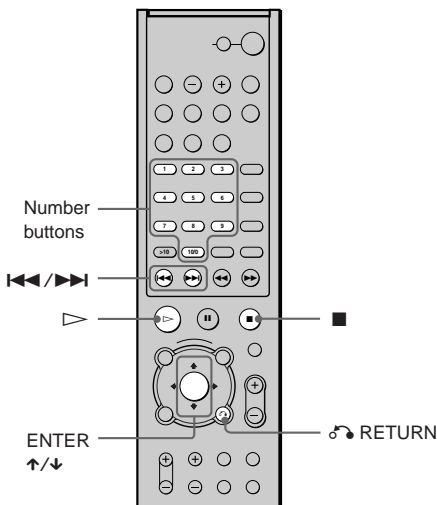
#### Note

The system turns off automatically when you playback a DVD and the system is displaying the DVD’s menu for about one hour.

# Playing VIDEO CDs with PBC Functions (PBC Playback)



With PBC (Playback Control) functions, you can enjoy simple interactive operations, search functions, and other such operations. PBC playback allows you to play VIDEO CDs interactively by following the menu on the TV screen.



## To go back to the menu

Press RETURN.

To play without using PBC, press or the number buttons while the system is stopped to select a track, then press or ENTER. “Play without PBC” appears on the TV screen and the system starts continuous play. You cannot play still pictures such as a menu. To return to PBC playback, press twice, then press .

## Notes

- Depending on the VIDEO CD, the menu does not appear in Step 1.
- Depending on the VIDEO CD, “Press ENTER” in Step 3 may appear as “Press SELECT” in the instructions supplied with the disc. In this case, press .

### 1 Start playing a VIDEO CD with PBC functions.

The menu for your selection appears.

### 2 Select the item number you want by pressing or the number buttons.

### 3 Press ENTER.

### 4 Follow the instructions in the menu for interactive operations.

Refer to the instructions supplied with the disc, as the operating procedure may differ according to the VIDEO CD.



# Playing an MP3 Audio Track

## MP3

You can play MP3 audio tracks on CD-ROMs, CD-Rs, or CD-RWs. However, the discs must be recorded according to ISO9660 level 1, level 2, or Joliet format for the system to recognize the tracks. You can also play discs recorded in Multi Session. See the instructions of the CD-R/RW device or recording software (not supplied) for details on the recording format.

**1 Load a data disc recorded in MP3 into the system.**

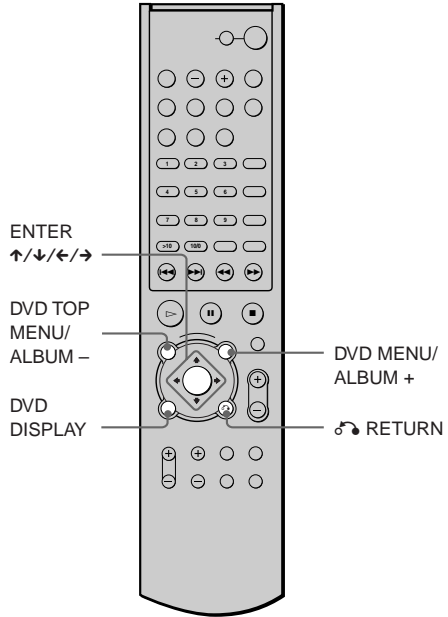
**2 Press .**

The system starts to play the first MP3 audio track in the first album on the disc.

### Notes

- The system can play MP3 (MPEG1 Audio Layer3) audio. The system cannot play audio tracks in MP3PRO format.
- This system can play Multi Session CDs when an MP3 audio track is located in the first session. Any subsequent MP3 audio tracks, recorded in the later sessions, can also be played back.
- Maximum number of albums on a disc: 99 (The maximum number of MP3 audio tracks that can be contained on an album is 250).
- An album that does not include an MP3 audio track is skipped.
- If you put the extension “.MP3” to data not in MP3 format, the system cannot recognize the data properly and will generate a loud noise which could damage your speaker system.
- When the system cannot play MP3, remove the disc and select “CUSTOM SETUP” from the setup items. Then select “DATA CD PRIORITY” and set to “MP3” (page 68) and insert the disc again.
- The system can play to a depth of 8 directories, including a ROOT directory.

## Selecting an album and track

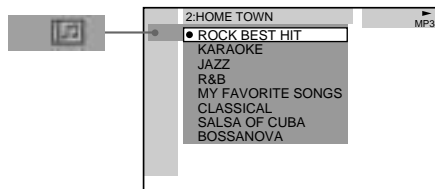


**1 Press DVD DISPLAY.**

The Control Menu and disc name of MP3 data disc appear.

**2 Press  to select (ALBUM), then press ENTER or .**

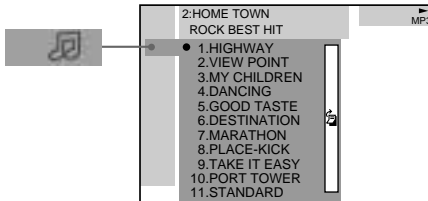
The list of albums contained in the disc appears.



**3 Select an album you want to play using /↓ and press ENTER.**

## 4 Select (TRACK) using $\uparrow/\downarrow$ and press ENTER.

The list of tracks contained in the current album appears.



When the list of all tracks or albums cannot be displayed on the window, the jump bar appears. Press  $\rightarrow$  to select the jump bar icon, and then scroll the jump bar to display the rest of the list using  $\uparrow/\downarrow$ . Press  $\leftarrow$  or  $\rightarrow$  RETURN to return to the track or the album list.

## 5 Select a track using $\uparrow/\downarrow$ and press ENTER.


The selected track starts playing.

### To return to the previous display

Press  $\rightarrow$  RETURN or  $\leftarrow$ .

### To turn off the display

Press DVD DISPLAY.

 When an MP3 data disc is inserted, you can select an album using DVD TOP MENU/ALBUM - or DVD MENU/ALBUM + on the remote.

### Notes

- Only the letters in the alphabet and numbers can be used for album or track names. Anything else is displayed as “ ”.
- If the MP3 file you play back has an ID3 tag, the ID3 tag information is displayed as a track name.
- ID3 tag applies only to version 1.

## Playing JPEG Image File

### JPEG

You can play JPEG image files on CD-ROMs, CD-Rs, or CD-RWs. However, the discs must be recorded according to ISO9660 level 1, level 2 or Joliet format for the system to recognize the files. You can also play discs recorded in Multi Session. See the instructions of the CD-R/RW device or recording software (not supplied) for details on the recording format.

## 1 Load a data disc recorded in JPEG into the system.

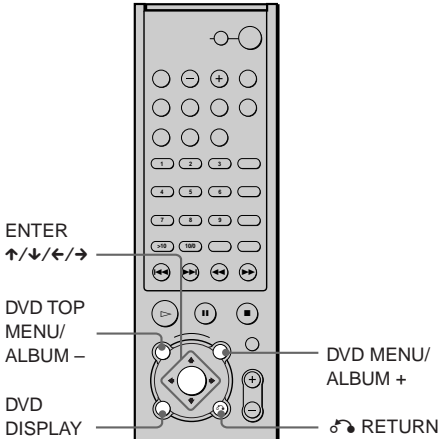
## 2 Press $\triangleright$ .

The system starts to play the first JPEG image file in the first album on the disc.

### Notes

- The system can play the extension “.JPG” or “.JPEG”.
- Some CD-Rs or CD-RWs cannot be played on this system depending on file format.
- The system can play to a depth of 8 directories, including a ROOT directory.

## Selecting an album and file

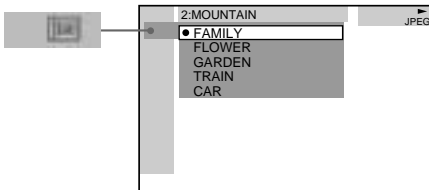


### 1 Press DVD DISPLAY.

The Control Menu and disc name of JPEG data disc appears.

### 2 Press ↑/↓ to select (ALBUM), then press ENTER or →.

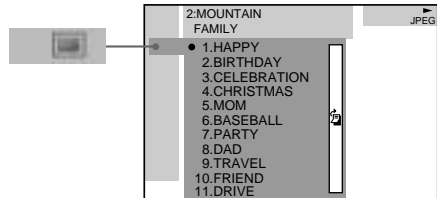
The list of albums contained in the disc appears.



### 3 Select an album you want to play using ↑/↓ and press ENTER.

### 4 Select (FILE) using ↑/↓ and press ENTER.

The list of tracks contained in the album appears.



When the list of all files or albums cannot be displayed on the window, the jump bar appears. Press → to select the jump bar icon, and then scroll the list using ↑/↓. Press ← or RETURN to return to the file or album list.

### 5 Select a file using ↑/↓ and press ENTER.

The selected file starts playing.

#### To return to the previous display

Press RETURN or ←.

#### To turn off the display

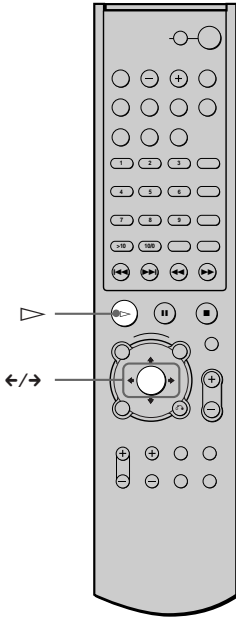
Press DVD DISPLAY.

💡 When a JPEG data disc is inserted, you can select an album using DVD TOP MENU/ALBUM - or DVD MENU/ALBUM + on the remote.

#### Notes

- Only the letters in the alphabet and numbers can be used for album or file names. Anything else is displayed as “ ”.
- Maximum number of albums on a disc: 99 (The maximum number of JPEG image files that can be contained on an album is 250).

## To rotate the current image **JPEG**



### Rotate the current image using **←/→**.

Each time you press **→**, the image turns clockwise by 90°.

Each time you press **←**, the image turns counterclockwise by 90°.

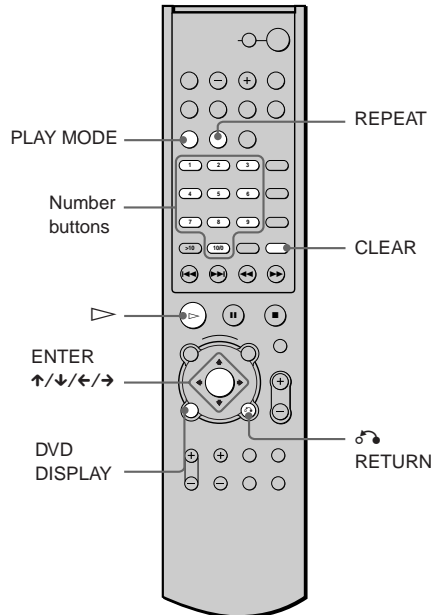
### Note

You cannot rotate the image during Slide show. Press **▷** to return to normal play before this operation.

## Creating Your Own Program (Program Play)

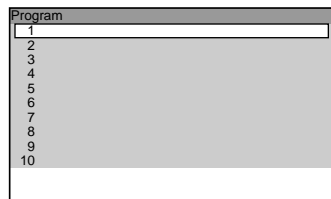


You can play the contents of a disc in the order you want by arranging the order of the tracks on the disc to create your own program. You can program up to 25 tracks.

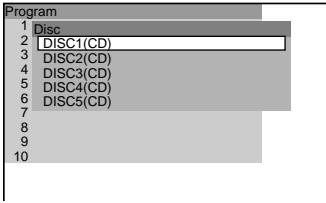


### 1 In stop mode, press **PLAY MODE** repeatedly until **“PROGRAM”** appears on the front panel display.

The program menu appears on the TV screen.

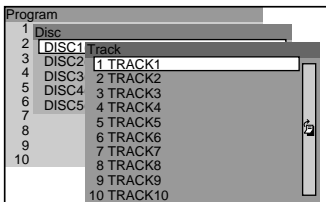


- 2** Press **→**, then press **↑/↓** to select the disc.



- 3** Press **→**.

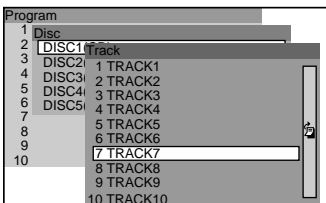
The cursor moves to the track (in this case, “DISC1(CD)”). Before programming the MP3 tracks, it is required to select the album.



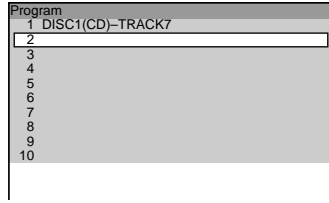
When the list of all tracks or albums cannot be displayed on the window, the jump bar appears. Press **→** to select the jump bar icon, and then scroll the jump bar to display the rest of the list using **↑/↓**. Press **←** or **↶** RETURN to return to the track or the album list.

- 4** Select the track you want to program.

For example, select track “7”.



- 5** Press **↑/↓** or the number buttons to select “7”, then press **ENTER**.



- 6** To program other tracks, repeat **Steps 2 to 5**.

The programmed tracks are displayed in the selected order.

- 7** Press **▷** to start Program Play.

Program Play begins.

When the program ends, you can restart the same program again by pressing **▷**.

### To cancel Program Play

Press **CLEAR** during playback.

### To turn off the program menu

In stop mode, press **PLAY MODE** to turn off the program menu.

### To cancel the programmed order

Press **CLEAR** in step 6, and the last program is canceled one by one.

**💡** You can do Repeat Play of the programmed tracks. Press **REPEAT** or set “REPEAT” to “ALL” in the Control Menu display during Program Play.

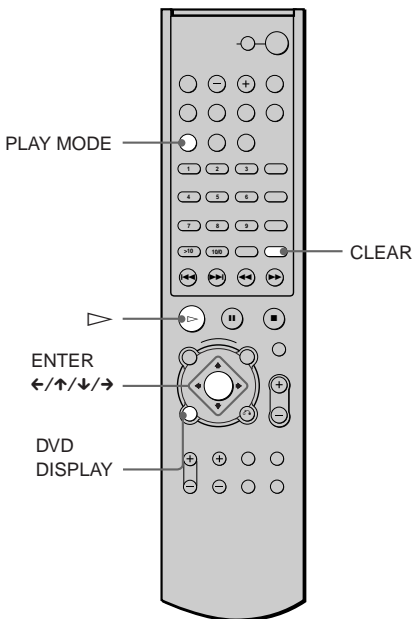
### Notes

- The number and name of tracks displayed on the TV screen are the recorded data on a disc.
- This Program Play function is not available for DVDs and JPEG.

# Playing in random order

(Shuffle Play)   

You can have the system “shuffle” tracks and play them in random order. Subsequent “shuffling” may produce a different playing order. You can also select the all discs shuffle, one disc shuffle, or album shuffle (MP3 only).



**3** Select “SHUFFLE (ALL)”, “SHUFFLE (ONE)”, or “SHUFFLE (ALBUM)” using  $\uparrow/\downarrow$  and press ENTER.


**4** Press  $\triangleright$ .  
The selected Shuffle Play begins.

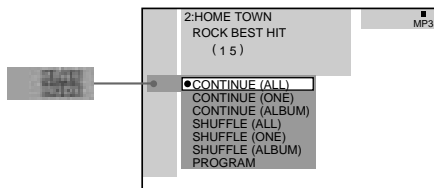
**To cancel Shuffle Play**  
Press CLEAR during playback.

**To turn off the display**  
Press DVD DISPLAY.

**To select the Shuffle Play mode directly**  
Press PLAY MODE repeatedly to select “SHUFFLE (ALL)”, “SHUFFLE (ONE)” or “SHUFFLE (ALBUM)”.

**1** Press DVD DISPLAY.  
The Control Menu appears.

**2** Press  $\uparrow/\downarrow$  to select  (PLAY MODE), then press ENTER or  $\rightarrow$ .

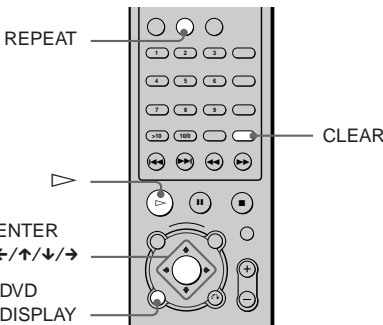


# Playing repeatedly (Repeat Play)



You can play all the titles/tracks/files or a single title/chapter/track on a disc. In Shuffle or Program Play mode, the system repeats tracks in the shuffled or programmed order.

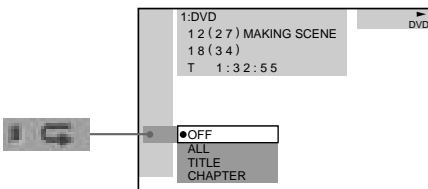
You cannot perform Repeat Play during PBC playback of VIDEO CDs (page 32).



**1 Press DVD DISPLAY.**  
The Control Menu appears.

**2 Press  $\uparrow/\downarrow$  to select **REPEAT**, then press ENTER.**  
If you do not select "OFF", the indicator of the "REPEAT" lights in green.

**3 Select the Repeat Play setting, then press ENTER.**



## When playing a DVD

- **OFF**: does not play repeatedly.
- **ALL**: repeats all the titles (except SHUFFLE (ALL)).
- **TITLE**: repeats the current title on a disc.
- **CHAPTER**: repeats the current chapter (except SHUFFLE (ALL)).

## When playing a VIDEO CD/CD/MP3 and when Program Play is set to OFF

- **OFF**: does not play repeatedly.
- **ALL**: repeats all the tracks on the disc, or repeats the current album (MP3 only) (except SHUFFLE (ALL)).
- **TRACK**: repeats the current track.

## When playing a JPEG

- **OFF**: does not play repeatedly.
- **ALL**: repeats all the files on the disc, or repeats the current album.

## When Program Play is set to ON

- **OFF**: does not play repeatedly.
- **ALL**: repeats Program Play.

## To cancel Repeat Play

Press CLEAR.

## To turn off the display

Press DVD DISPLAY.

## To select the Repeat Play mode directly

Press REPEAT.

## You can set Repeat Play during stop mode

After selecting the "REPEAT" item, press  $\triangleright$ . The system starts Repeat Play.

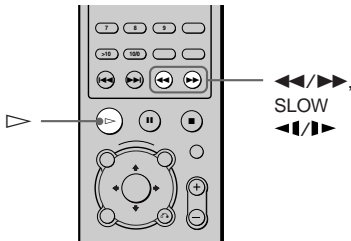
## Notes

- You can perform Repeat Play for DVD titles that contain chapters.
- Depending on the DVD disc, Repeat Play does not work.
- If "ALL" is selected, Repeat Play is limited to 5 times.

## Searching for a Particular Point on a Disc (Scan, slow-motion Play)



You can locate a particular point on a disc quickly by monitoring the picture or playing back slowly.



### Notes

- Depending on the DVD/VIDEO CD, you may not be able to do some of the operations described.
- During scan or slow-motion play, no sound is output.

### Locating a point quickly by playing a disc in fast forward or fast reverse (Scan) (except for JPEG)

Press **◀◀** or **▶▶** while playing a disc. When you find the point you want, press **▷** to return to normal speed.

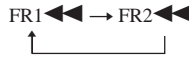
### To change the scan speed (DVD/VIDEO CD only)

Each time you press **◀◀** or **▶▶** during scan, the playback speed changes. Two speeds are available. With each press, the indication changes as follows:

Playback direction



Opposite direction



The **FF2▶▶**/**FR2◀◀** playback speed is faster than **FF1▶▶**/**FR1◀◀**.

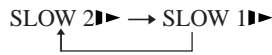
### Watching frame by frame (Slow-motion play) DVD VIDEO CD

Press **◀◀** or **▶▶** when the system is in the pause mode. To return to normal speed, press **▷**.

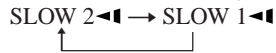
### To change the scan speed (DVD/VIDEO CD only)

Each time you press **◀◀** or **▶▶** during Slow-motion play, the playback speed changes. Two speeds are available. With each press, the indication changes as follows:

Playback direction



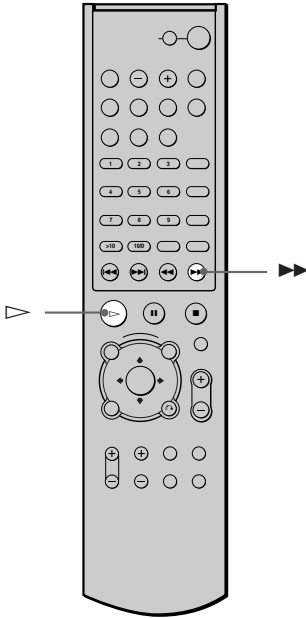
Opposite direction (DVD only)




The **SLOW 2▶▶**/**SLOW 2◀◀** playback speed is slower than **SLOW 1▶▶**/**SLOW 1◀◀**.





## Enjoying the Slide show on JPEG data disc



### To change the interval time of Slide show

Each time you press  during Slide show, the interval time changes. With each press, the indication changes as follows:



The FF3  interval time is faster than FF2 .

#### **Note**

Slide show can play in only one direction.

### **1** Press while displaying a JPEG image.

Slide down starts from the current image.

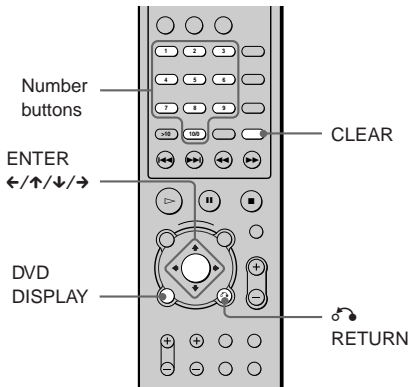
### **2** Press when you want to exit Slide show.

Return to normal play from the current image.

# Searching for a Title/ Chapter/Track/Index/ Album/File



You can search a title (DVD), chapter (DVD), track (CD, VIDEO CD, MP3), index (VIDEO CD), album (MP3, JPEG) and file (JPEG). As titles, tracks, albums and files are assigned unique names on the disc, you can select the desired one from the Control Menu. Also chapters and indexes are assigned unique numbers on the disc, so you select the desired one by entering its number. Or you can search a particular point using the time code (TIME SEARCH).



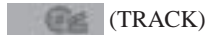
## Searching for a title/track/album/ file

- 1** Press **DVD DISPLAY**.  
The Control Menu appears.
- 2** Press **↑/↓** to select the search method, then press **ENTER**.

### ■ When playing a DVD



### ■ When playing a VIDEO CD



### ■ When playing a CD



### ■ When playing an MP3

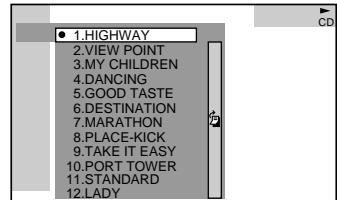


### ■ When displaying a JPEG file



Example: when you select (TRACK)

The list of tracks contained in the disc appears.



When the list of all tracks or albums cannot be displayed on the window, the jump bar appears. Press **→** to select the jump bar icon, and then scroll the jump bar to display the rest of the list using **↑/↓**. Press **←** or **RETURN** to return to the track or the album list.



- 3** Press **↑/↓** to select the desired track, then press **ENTER**.

The system starts playback from the selected track.

## Searching for a chapter/index

**1 Press DVD DISPLAY.**  
The Control Menu appears.


**2 Press  $\uparrow/\downarrow$  to select the search method.**

■ **When playing a DVD**

 (CHAPTER)

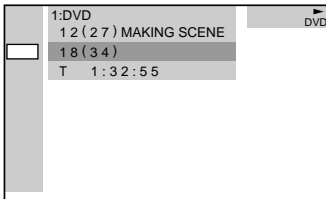
■ **When playing a VIDEO CD**

 (INDEX)

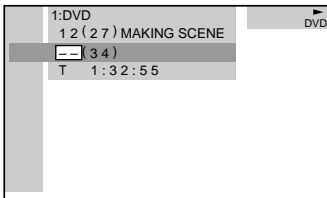
Example: when you select  (CHAPTER)

“\*\* (\*\*\*)” is selected (\*\* refers to a number).

The number in parentheses indicates the total number of titles, chapters, tracks, or indexes.



**3 Press ENTER.**  
“\*\* (\*\*\*)” changes to “-- (\*\*\*)”.



**4 Press  $\uparrow/\downarrow$  or the number buttons to select the chapter or index number you want to search.**


If you make a mistake, cancel the number by pressing CLEAR. Then, select another number.

**5 Press ENTER.**  
The system starts playback from the selected number.

**To turn off the Control Menu**  
Press DVD DISPLAY.

### To search for a particular point using the time code (TIME SEARCH)


Example: If you search for the playing time of the current title on a DVD.

**1 In Step 2, select  (TIME).**  
“T \*\*: \*\*: :” (playing time of the current title or track) is selected.

**2 Press ENTER.**  
“T --: -: :” appears above “T \*\*: \*\*: :”.

**3 Input the time code using the number buttons, then press ENTER.**

Example: To find the desired point at 2 hours, 10 minutes, and 20 seconds after the beginning just enter “2:10:20”.

 You can change the display to show playing time or remaining time. For details, see “Checking the Playing Time and Remaining Time” (page 46).

### Notes

- The title, chapter or track number displayed on the TV screen is the recorded data on the disc.
- You cannot search a scene of a VIDEO CD.
- If you play a DVD, input the playing time of the current title using the time code. If you play a CD, VIDEO CD or MP3, input the playing time of the current track using the time code.

# Viewing the Playing Time and Remaining Time on the Front Panel Display

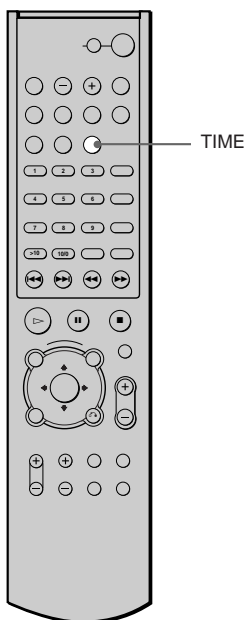
DVD

VIDEO CD

CD

MP3

You can check information about the disc, such as the remaining time, total number of titles of a DVD, or tracks of a CD, VIDEO CD, or MP3 using the front panel display (page 12).



## Press TIME.

Each time you press TIME while playing the disc, the display changes as shown in the following charts.

## When playing a DVD

Playing time and number of the current title

TITLE	H	M	S
1	10	32	4

Remaining time of the current title

TITLE	H	M	S
1	-	15	36

Playing time and number of the current chapter

CHAPTER	H	M	S
2	02	23	0

Remaining time of the current chapter

CHAPTER	H	M	S
2	-0	13	20

Title name<sup>a)</sup>

SONYHITS/
-----------

## When playing a VIDEO CD (without PBC functions), or CD

Playing time and current track number

TRACK	M	S
2	2	25

Remaining time of the current track

TRACK	M	S
2	-	150

Playing time of the disc

M	S
32	12

Remaining time of the disc

M	S
-20	18

Track name<sup>a)</sup>

SONYHITS/
-----------

## When playing an MP3

Playing time and current track number

TRACK	M	S
2	2	25

Remaining time of the current track

TRACK	M	S
2	-	150

Track (file) name<sup>a)</sup>

VIEWPOINT
-----------

Album (folder) name<sup>a)</sup>

SONYHITS/
-----------

## When playing a JPEG

Current file number

2
---

File name

POINT
-------

Album (folder) name<sup>a)</sup>

SONY
------

💡 When playing VIDEO CDs with PBC functions, only the playing time of the scene is displayed.

💡 The playing time and remaining time of the current chapter, title, track, scene, or disc will also appear on your TV screen. See the following section “Checking the Playing Time and Remaining Time” for instructions on how to read this information.

### Notes

- Depending on the type of disc being played and the playing mode, the disc information may not be displayed.
- ID3 tag applies only to version 1.
- If the MP3 file you play back has an ID3 tag, the ID3 tag information is displayed as a track (file) name.
- Only the letters in the alphabet and numbers can be used for album or file names. Anything else is displayed as “ ”.
- In the following cases, elapsed playing time and time of the track remaining may not be displayed accurately.
  - when an MP3 file of VBR (variable bit rate) is played.
  - during fast-forward/reverse.

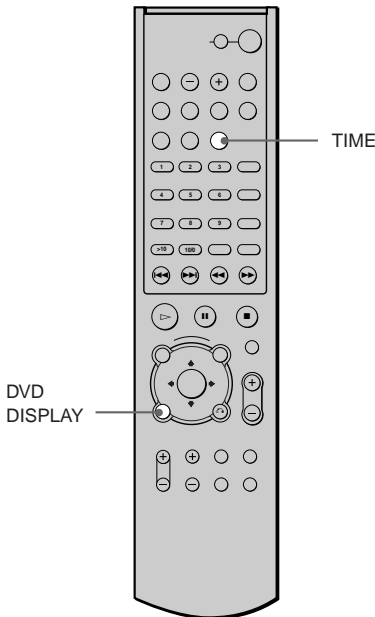
a) “NO TEXT” appears if name information does not exist.

Returns to the first information when the text scrolling is finished.

# Checking the Playing Time and Remaining Time

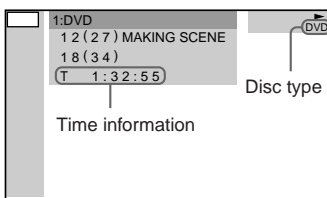


You can check the playing time and remaining time of the current title, chapter, or track, and the total playing time or remaining time of the disc. You can also check the DVD/CD text and MP3 folder name/file name/ID3 tag (only song title) recorded on the disc.



## 1 Press DVD DISPLAY during playback.

The Control Menu appears.



## 2 Press TIME repeatedly to change the time information.

The display and the kinds of time that you can change depend on the disc you are playing.

### ■ When playing a DVD

- T \*\*:\*\*:\*\*  
Playing time of the current title
- T- \*\*:\*\*:\*\*  
Remaining time of the current title
- C \*\*:\*\*:\*\*  
Playing time of the current chapter
- C- \*\*:\*\*:\*\*  
Remaining time of the current chapter
- \*\*:\*\*:\*\*  
Playing time of the menu or current title without a chapter

### ■ When playing a VIDEO CD (with PBC functions)

- \*\*:\*\*:\*\*  
Playing time of the current scene

### ■ When playing a VIDEO CD (without PBC functions), or CD

- T \*\*:\*\*:\*\*  
Playing time of the current track
- T- \*\*:\*\*:\*\*  
Remaining time of the current track
- D \*\*:\*\*:\*\*  
Playing time of the current disc
- D- \*\*:\*\*:\*\*  
Remaining time of the current disc

### ■ When playing an MP3

- T \*\*:\*\*:\*\*  
Playing time of the current track
- T- \*\*:\*\*:\*\*  
Remaining time of the current track

## To turn off the Control Menu

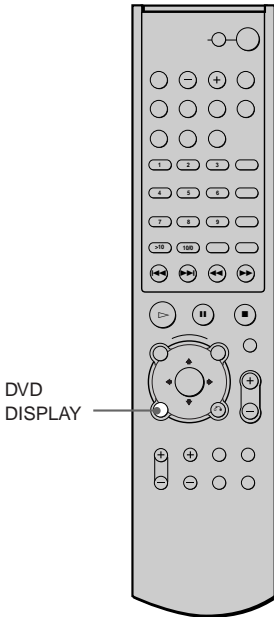
Press DVD DISPLAY.

### Notes

- Only letters of the alphabet can be displayed.
- Depending on the type of disc being played, the system can only display a limited number of characters. Also, depending on the disc, not all text characters will be displayed.

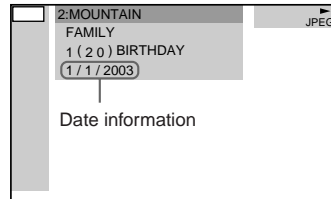
### Checking the date information

You can check the date information during playback when the Exif\* tag is recorded in the JPEG image data.




## Press DVD DISPLAY during playback.

The Control Menu appears.



\* “Exchangeable Image File Format” is a digital camera image format defined by the Japan Electronics & Information technology Industries Association.

 You can change the date information order in JPEG DATE of CUSTOM SETUP (page 68).

### Note

If there is no date information or data is damaged on the disc, the system cannot display the date information.

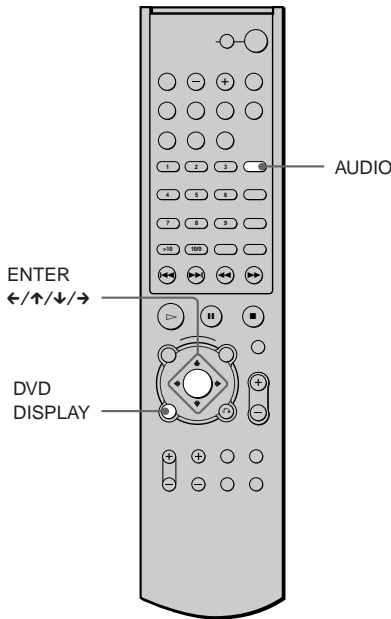
## Changing the Sound



If a DVD is recorded with multilingual tracks, you can select the language you want while playing the DVD.

If the DVD is recorded in multiple audio formats (PCM, Dolby Digital, MPEG audio, or DTS), you can select the audio format you want while playing the DVD.

With stereo CDs, VIDEO CDs or MP3, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers. (In this case, the sound loses its stereo effect.) For example, when playing a disc containing a song with the vocals on the right channel and the instruments on the left channel, you can select the left channel and hear only the instruments from both speakers.

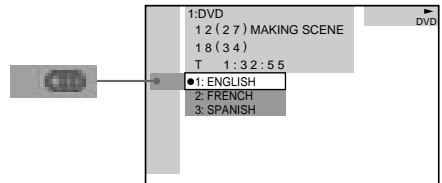


### 1 Press DVD DISPLAY during playback.

The Control Menu is displayed.

### 2 Press $\uparrow/\downarrow$ to select (AUDIO), then press ENTER.

The options for AUDIO appear.



### 3 Press $\uparrow/\downarrow$ to select the desired audio signal.

#### ■ When playing a DVD

Depending on the DVD, the choice of language varies.

When 4 digits are displayed, they represent the language code. Refer to the language code list on page 81 to see which language the code represents. When the same language is displayed two or more times, the DVD is recorded in multiple audio formats.

#### ■ When playing a VIDEO CD, CD or MP3

The default setting is underlined.

- STEREO: The standard stereo sound
- 1/L: The sound of the left channel (monaural)
- 2/R: The sound of the right channel (monaural)

### 4 Press ENTER.

#### To turn off the Control Menu

Press DVD DISPLAY.



### To select the audio mode directly

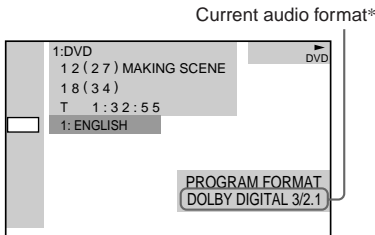
Press AUDIO. Each time you press the button, the item changes.

#### Notes

- For discs not in multiple audio format, you cannot change the sound.
- During DVD playback, the sound may change automatically.

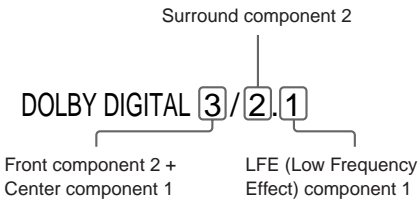
### Displaying the audio information of the disc

When you select “AUDIO”, the channels being played are displayed on the screen. For example, in Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD. Depending on the DVD, the number of recorded channels may differ.



\*“PCM”, “MPEG”, “DTS”, or “DOLBY DIGITAL” is displayed. For “DOLBY DIGITAL”, the channels in the playing track are displayed numerically as follows:

For Dolby Digital 5.1 ch:



### The display examples are as follows:

- PCM (stereo)

PROGRAM FORMAT  
PCM 48kHz 24bit

- Dolby Surround

PROGRAM FORMAT  
DOLBY DIGITAL 2/0  
DOLBY SURROUND

- Dolby Digital 5.1ch

PROGRAM FORMAT  
DOLBY DIGITAL 3/2.1

- DTS

PROGRAM FORMAT  
DTS 3/2.1

#### Notes

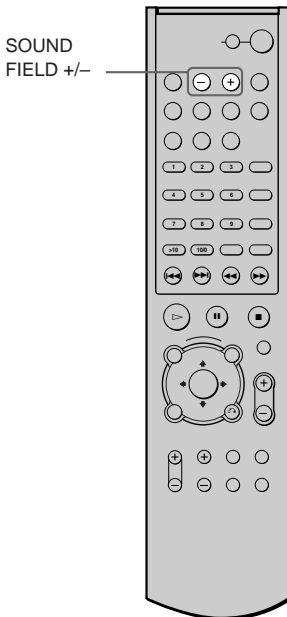
- When the signal contains surround signal components such as LS, RS, or S, the surround effect is enhanced.
- If you play MPEG AUDIO sound tracks, the system outputs PCM (stereo) signals.
- The MULTI CHANNEL DECODING indicator lights up when the system is decoding signals recorded in multi channel format.

# Automatic decoding of the audio input signal

## (AUTO FORMAT DIRECT AUTO)



The Auto Format Direct Auto function automatically detects the type of audio signal being input (Dolby Digital, DTS, or standard 2 channel stereo) and performs the proper decoding if necessary. This mode presents the sound as it was recorded/encoded, without adding any effects (e.g. reverberation). However, if there are no low frequency signals (Dolby Digital LFE, etc.), it will generate a low frequency signal for output to the sub woofer.



**Press SOUND FIELD +/- on the remote repeatedly until “A.F.D. AUTO” appears on the front panel display.**

The Auto Format Direct Auto function is activated.

# Enjoying Surround Sound



You can take advantage of surround sound simply by selecting one of the system’s pre-programmed sound fields. They bring the exciting and powerful sound of movie theaters and concert halls into your home. To select the sound field, press SOUND FIELD +/- repeatedly until the sound field you want appears on the front panel display.

Sound field	Display
AUTO FORMAT DIRECT	PRO LOGIC
PRO LOGIC	
AUTO FORMAT DIRECT	PLII MOV
PRO LOGIC II MOVIE	
AUTO FORMAT DIRECT	PLII MUS
PRO LOGIC II MUSIC	
ROCK	ROCK
POP	POP
JAZZ	JAZZ
CLASSIC	CLASSIC
DANCE	DANCE
NEWS	NEWS
SPORTS	SPORTS
MOVIE	MOVIE

## When using the headphones

Sound field	Display
HEADPHONE 2 CHANNEL	HP. 2CH
STEREO	
HEADPHONE SURROUND	HP. SURR

## Selecting other sound fields

**Press SOUND FIELD +/- repeatedly until the sound field you want appears on the front panel display.**

The current sound field appears on the front panel display.

### ■ AUTO FORMAT DIRECT PRO LOGIC

This mode performs the Pro Logic decoding. Software with multi channel surround audio signals is played back according to the way it was recorded. Software with 2 channel audio signals is decoded with Dolby Pro Logic to create surround effects.

### ■ AUTO FORMAT DIRECT PRO LOGIC II MOVIE

This mode performs the Pro Logic II movie mode decoding. This setting is ideal for the movies encoded in Dolby Surround. Besides, this mode can reproduce the sound in 5.1 channel when watching the videos of old movies or in the dubbed language.

### ■ AUTO FORMAT DIRECT PRO LOGIC II MUSIC

This mode performs the Pro Logic II music mode decoding. This setting is ideal for the normal stereo sources, such as CDs.

### ■ ROCK, POP, JAZZ, CLASSIC, DANCE

Each mode provides sound to suit music sources.

### ■ NEWS, SPORTS, MOVIE

Each mode provides sound to suit the source.

### ■ HEADPHONE 2 CHANNEL STEREO

This mode outputs the sound from the headphone L/R. Standard two channel (stereo) sources completely bypass the sound field processing. Multi channel surround formats are downmixed to two channels.

### ■ HEADPHONE SURROUND

This mode outputs the sound as surround from headphone L/R.

### To turn the surround effect off

Press SOUND FIELD +/- until "A.F.D. AUTO" or "2CH ST." appears on the front panel display.



### When connecting the headphones to the PHONES jack

Press SOUND FIELD +/- on the remote until "HP. 2CH" appears in the front panel display.

### 💡 The system memorizes the last sound field selected for each function mode (Sound Field Link)

Whenever you select a function such as DVD or TUNER, the sound field that was last applied to the function is automatically applied again. For example, if you listen to DVD with "JAZZ" as the sound field, then change to another function, and then return to DVD, "JAZZ" will be applied again. With the tuner, sound fields are memorized separately for all preset stations.

### 💡 You can identify the encoding format of program software by looking at its packaging

- Dolby Digital discs are labelled with the  logo.
- Dolby Surround encoded programs are labelled with the  logo.
- DTS Digital Surround discs are marked with DTS.

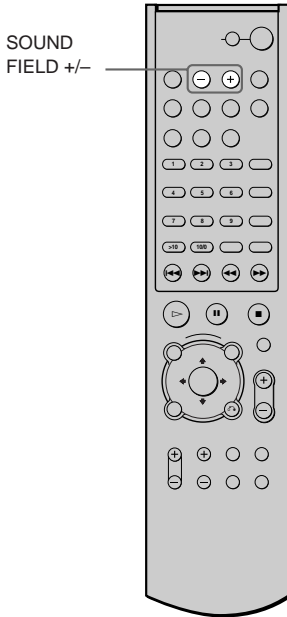
### Note

When you play sound tracks with 96 kHz sampling frequency, the output signals will be converted to 48 kHz (sampling frequency).

---

# Using only the front speakers and sub woofer

(2 CHANNEL STEREO)



---

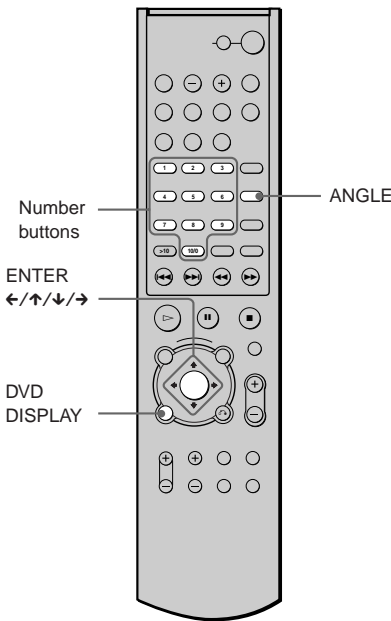
**Press SOUND FIELD +/- on the remote repeatedly until “2CH ST.” appears on the front panel display.**

This mode outputs the sound from the front left and right speakers and sub woofer. Standard 2 channel (stereo) sources completely bypass the sound field processing. Multi channel surround formats are downmixed to 2 channel.

---

# Changing the Angles

If various angles (multi-angles) for a scene are recorded on the DVD, “ANGLE” appears in the front panel display. This means that you can change the viewing angle. For example, while playing a scene of a train in motion, you can display the view from either the front of the train, the left window of the train, or from the right window without having the train’s movement interrupted.

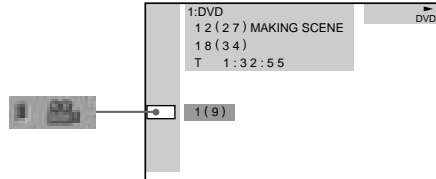


## 1 Press DVD DISPLAY during playback.

The Control Menu appears.

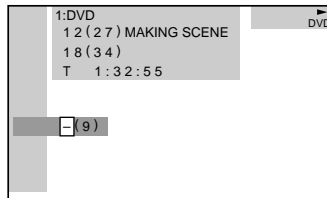
## 2 Press $\uparrow/\downarrow$ to select (ANGLE).

The angle number appears. The number in parentheses indicates the total number of angles. The “ANGLE” indicator lights up in green when angles are recorded on the disc.



## 3 Press $\rightarrow$ or ENTER.

The angle number changes to “-”.



## 4 Select the angle number using $\uparrow/\downarrow$ or the number buttons, then press ENTER.

The angle is changed to the selected angle.

### To turn off the Control Menu

Press DVD DISPLAY.

### To select the angle directly

Press ANGLE. Each time you press the button, the angle changes.

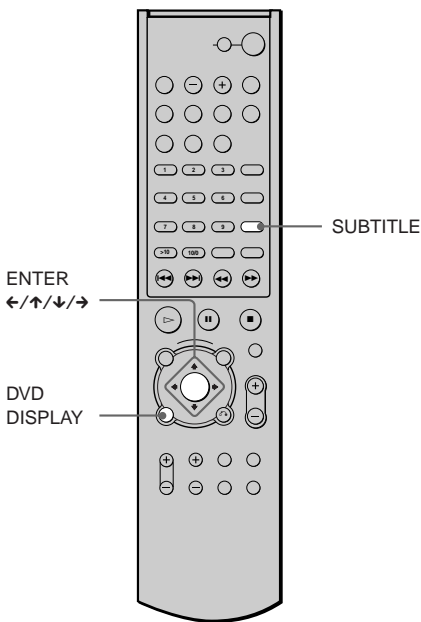
#### Note

Depending on the DVD, you may not be able to change the angles, even if multi-angles are recorded on the DVD.

# Displaying the Subtitles



If subtitles are recorded on the discs, you can turn the subtitles on and off while playing. If multilingual subtitles are recorded on the disc, you can change the subtitle language while playing, or turn the subtitles on or off whenever you want. For example, you can select the language you want to practice and turn the subtitles on for better understanding.

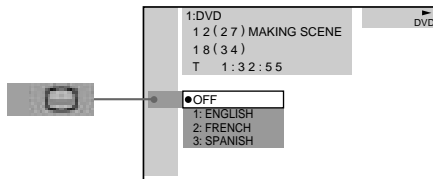


## 1 Press DVD DISPLAY during playback.

The Control Menu appears.

## 2 Press $\uparrow/\downarrow$ to select (SUBTITLE), then press ENTER.

The options for SUBTITLE appear.



## 3 Press $\uparrow/\downarrow$ to select the language.

Depending on the DVD, the choice of language varies.

When 4 digits are displayed, they indicate the language code. Refer to the language code list on page 81 to see which language the code represents.

## 4 Press ENTER.

### To cancel the SUBTITLE setting

Select "OFF" in Step 3.

### To turn off the Control Menu

Press DVD DISPLAY.

### To select the language directly

Press SUBTITLE. Each time you press the button, the item changes.

### Note

Depending on the DVD, you may not be able to change the subtitles even if multilingual subtitles are recorded on it.

## Locking Discs (CUSTOM PARENTAL CONTROL, PARENTAL CONTROL)

DVD VIDEO CD CD MP3 JPEG

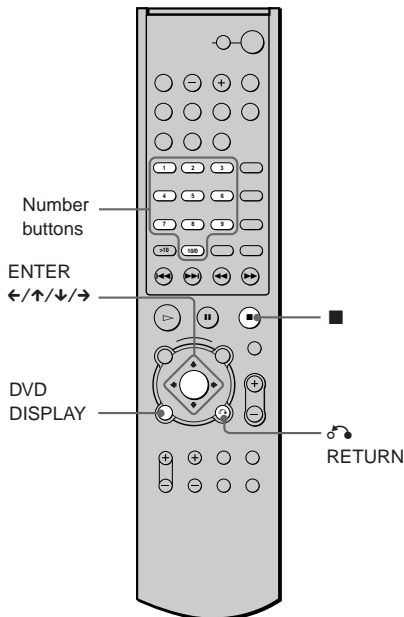
You can set two kinds of playback restrictions for a disc.

- Custom Parental Control  
You can set the playback restrictions so that the system will not play inappropriate discs.
- Parental Control  
Playback of some DVDs can be limited according to a predetermined level such as the age of the users.

The same password is used for both Parental Control and Custom Parental Control.


### Custom Parental Control

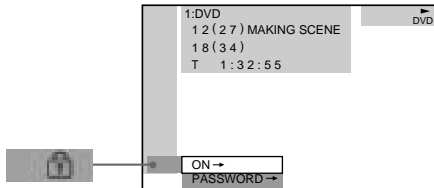
You can set the same Custom Parental Control password for up to 25 discs. When you set the 26th disc, the playback restriction of the disc for which you first set the password is canceled.



**1** Insert the disc you want to lock.  
If the disc is playing, press ■ to stop playback.

**2** In stop mode, press DVD DISPLAY.  
The Control Menu appears.

**3** Press ↑/↓ to select , then press ENTER.  
“CUSTOM PARENTAL CONTROL” is selected.

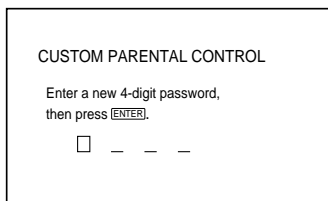


---

## 4 Press **↑/↓** to select “ON →”, then press **ENTER**.

### ■ When you have not entered a password

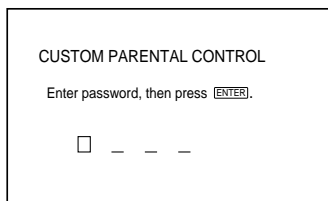
The display for registering a new password appears.



Enter a 4-digit password by using the number buttons, then press **ENTER**. The display for confirming the password appears.

### ■ When you have already registered a password

The display for entering the password appears.



---

## 5 Enter or re-enter your 4-digit password by using the number buttons, then press **ENTER**.

“Custom parental control is set.” appears and the screen returns to the Control Menu display.

### If you make a mistake entering your password

Press **←** before you press **ENTER** and input the correct number.

### If you make a mistake

Press **↶** RETURN, then start from Step 3 again.

### To turn off the Control Menu

Press **DVD DISPLAY**.

### To turn off the Custom Parental Control function

- 1 In Step 4, select “OFF →”, then press **ENTER**.
- 2 Enter your 4-digit password using the number buttons, then press **ENTER**.

### To change the password

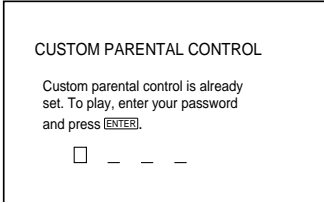
- 1 In Step 4, press **↑/↓** to select “PASSWORD →”, then press **ENTER**. The display for entering the password appears.
- 2 Enter your 4-digit password using the number buttons, then press **ENTER**.
- 3 Enter a new 4-digit password using the number buttons, then press **ENTER**.
- 4 To confirm your password, re-enter it using the number buttons, then press **ENTER**.



## Playing the disc for which Custom Parental Control is set


### 1 Insert the disc for which Custom Parental Control is set.

The CUSTOM PARENTAL CONTROL display appears.



### 2 Enter your 4-digit password using the number buttons, then press ENTER.

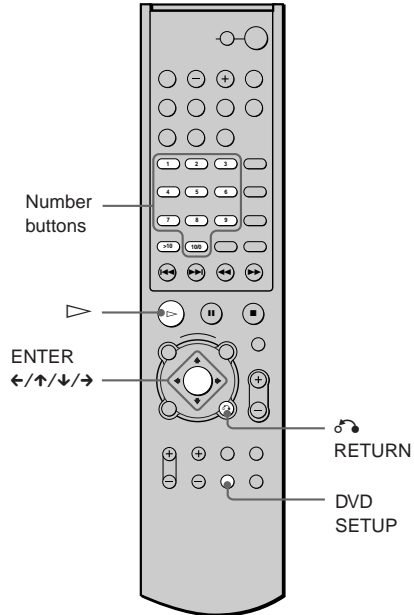
The system is ready for playback.

 If you forget your password, enter the 6-digit number "199703" using the number buttons when the CUSTOM PARENTAL CONTROL display asks you for your password, then press ENTER. The display will ask you to enter a new 4-digit password.

## Limiting playback for children (Parental Control)

Playback of some DVDs can be limited according to a predetermined level such as the age of the users. The "Parental Control" function allows you to set a playback limitation level.

A scene that is limited is not played, or it is replaced by a different scene.

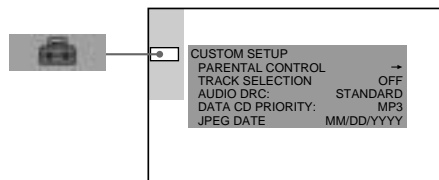


### 1 In stop mode, press DVD SETUP.

The Setup Display appears.

### 2 Press to select "CUSTOM SETUP", then press ENTER.

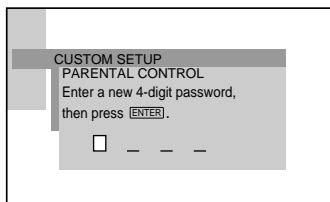
"CUSTOM SETUP" is displayed.



### 3 Press $\uparrow/\downarrow$ to select “PARENTAL CONTROL $\rightarrow$ ”, then press ENTER.

#### ■ If you have not entered a password

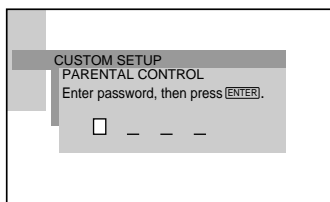
The display for registering a new password appears.



Enter a 4-digit password using the number buttons, then press ENTER. The display for confirming the password appears.

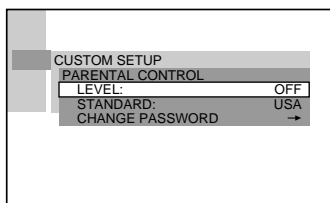
#### ■ When you have already registered a password

The display for entering the password appears.



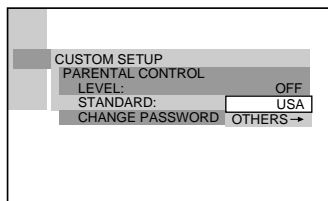
### 4 Enter or re-enter your password by using the number buttons, then press ENTER.

The display for setting the playback limitation level and changing the password appears.



### 5 Press $\uparrow/\downarrow$ to select “STANDARD”, then press ENTER.

The selection items for “STANDARD” are displayed.



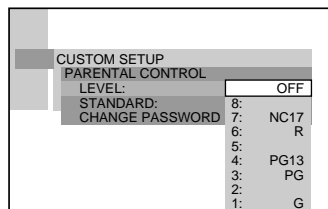
### 6 Press $\uparrow/\downarrow$ to select a geographic area as the playback limitation level, then press ENTER.

The area is selected.

If you select “OTHERS  $\rightarrow$ ”, select and enter the standard code in the table on page 60 using the number buttons.

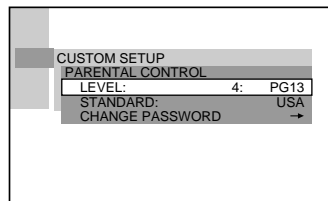
### 7 Press $\uparrow/\downarrow$ to select “LEVEL”, then press ENTER.

The selection items for “LEVEL” are displayed.




### 8 Select the level you want using $\uparrow/\downarrow$ , then press ENTER.

Parental Control setting is complete.



The lower the value, the more strict the limitation.

### If you make a mistake

Press  RETURN to go back to the previous screen.


### To turn off the Setup Display

Press DVD SETUP.


### To turn off the Parental Control function and play the DVD after entering your password

Set “LEVEL” to “OFF” in Step 8.



### To change the password

- 1 In Step 5, select “CHANGE PASSWORD →” using , then press ENTER.  
The display for entering the password appears.
- 2 Follow Step 3 to enter a new password.

## Playing the disc for which Parental Control is set

- 1 Insert the disc and press .  
The PARENTAL CONTROL display appears.

- 2 Enter your 4-digit password using the number buttons, then press ENTER.  
The system starts playback.

 If you forget your password, remove the disc and repeat Step 1 to 3 of “Limiting playback for children”. When you are asked to enter your password, enter “199703” using the number buttons, then press ENTER. The display will ask you to enter a new 4-digit password. After you enter a new 4-digit password in Step 3, replace the disc in the system and press . When the PARENTAL CONTROL display appears, enter your new password.

### Notes

- When you play DVDs which do not have the Parental Control function, playback cannot be limited on this system.
- Depending on the DVD, you may be asked to change the parental control level while playing the disc. In this case, enter your password, then change the level. If the Resume Play mode is cancelled, the level returns to the original level.

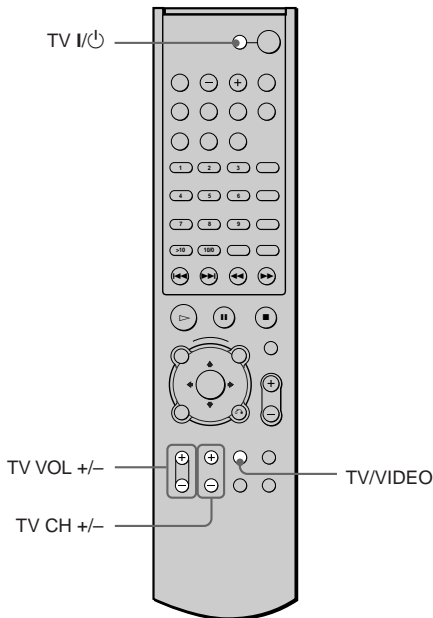
## Area Code

<b>Standard</b>	<b>Code number</b>	<b>Standard</b>	<b>Code number</b>
Argentina	2044	Korea	2304
Australia	2047	Malaysia	2363
Austria	2046	Mexico	2362
Belgium	2057	Netherlands	2376
Brazil	2070	New Zealand	2390
Canada	2079	Norway	2379
Chile	2090	Pakistan	2427
China	2092	Philippines	2424
Denmark	2115	Portugal	2436
Finland	2165	Russia	2489
France	2174	Singapore	2501
Germany	2109	Spain	2149
Hong Kong	2219	Sweden	2499
India	2248	Switzerland	2086
Indonesia	2238	Taiwan	2543
Italy	2254	Thailand	2528
Japan	2276	United Kingdom	2184

## Controlling the TV with the Supplied Remote

You can control your Sony TV with the supplied remote.

### Controlling TVs with the remote



### Controlling the TV

You can control your TV using the buttons below.

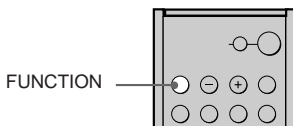
By pressing	You can
TV I/⏻	Turn the TV on or off.
TV/VIDEO	Switch the TV's input source between the TV and other input sources.
TV VOL +/-	Adjust the TV volume.
TV CH +/-	Change the TV channel.

#### Note

Depending on the TV, you may not be able to control your TV or to use some of the buttons above.

## Using the Video or other Unit

You can use VCRs or other units connected to the VIDEO or TV jacks. Refer to the operation manual supplied with the unit for further information on the operation.

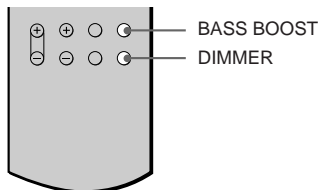


Press **FUNCTION** repeatedly until the desired source that you connected to the system appears on the front panel display.

Each time you press **FUNCTION**, the mode of the system changes in the following sequence.

DVD → VIDEO → TV → TUNER → DVD...

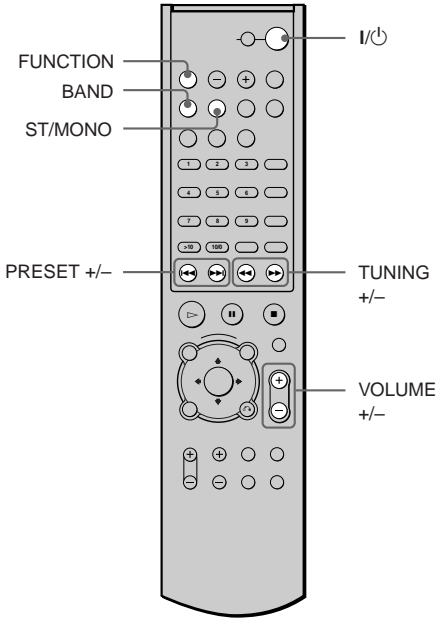
### Additional operations



To	Operation
Adjust the bass	Press BASS BOOST.
Change the brightness of the display (2 steps)	Press DIMMER.

# Listening to the Radio

Preset radio stations in the system's memory first (see "Presetting Radio Stations" on page 27).



## To turn off the radio

Press I/⏻.

## To listen to non-preset radio stations

Use manual or automatic tuning in Step 2.

For manual tuning, press TUNING +/- on the remote repeatedly.

For automatic tuning, press and hold TUNING +/- on the remote.

### 💡 If an FM program is noisy

Press ST/MONO repeatedly so that "MONO" appears on the front panel display. There will be no stereo effect, but the reception will improve. Press ST/MONO again to restore the stereo effect.

### 💡 To improve reception

Reorient the supplied antennas.

- 1 Press FUNCTION repeatedly until the band you want appears on the front panel display.**

The last received station is tuned in.

- 2 Press PRESET + or - repeatedly to select the preset station you want.**

Each time you press the button, the system tunes in one preset station.

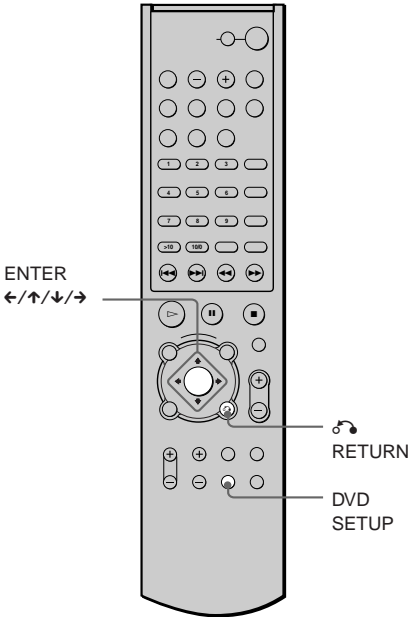
- 3 Adjust the volume by pressing VOLUME +/-.**

# Using the Setup Display



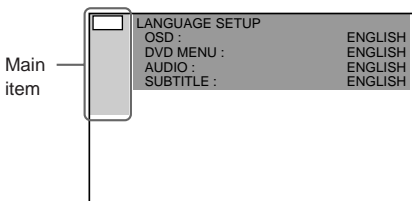
By using the Setup Display, you can make various adjustments to items such as picture and sound. You can also set a language for the subtitles and the Setup Display, among other things. For details on each Setup Display item, see page 64–70. For an overall list of Setup Display items, see page 82.

## How to use the Setup Display



### 1 In stop mode, press DVD SETUP.

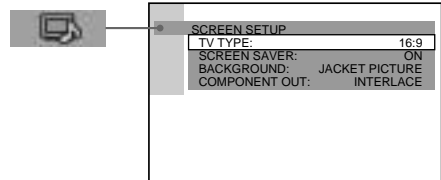
The Setup Display appears.



### 2 Press ↑/↓ to select the setup item from the displayed list: “LANGUAGE SETUP”, “SCREEN SETUP”, “CUSTOM SETUP”, “SPEAKER SETUP”, and “RESET”. Then press ENTER or →.

The selected Setup item appears.

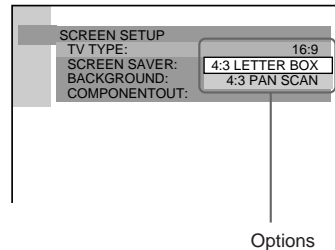
Example: “SCREEN SETUP”



### 3 Select an item using ↑/↓, then press ENTER or →.

The options for the selected item appear.

Example: “TV TYPE”

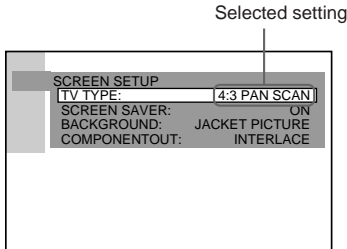


Press ← or RETURN to return to setup items.

## 4 Select a setting using ↑/↓, then press ENTER.


The setting is selected and setup is complete.

Example: “4:3 PAN SCAN”




## To turn off the Setup Display

Press DVD SETUP.

 If you select “RESET” in Step 2, all of the following items are reset or cleared.

- All of the “SETUP” settings on page 82 (except for PARENTAL CONTROL).
- All preset stations are reset or cleared.
- The sound field memorized for each program source and preset station are cleared.
- The master volume is set to “VOL MIN”.
- DIMMER is set to default.

After you select “RESET” and press ENTER, select “YES” to reset the setting (it takes a few seconds to complete) or select “NO” and press ENTER to return to the Control Menu. Do not press  when resetting the system.

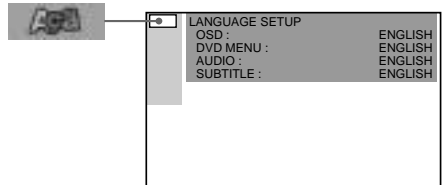
## Setting the Display or Sound Track Language

### (LANGUAGE SETUP)



“LANGUAGE SETUP” allows you to set various languages for the on-screen display or sound track.

Select “LANGUAGE SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 63).



### ■ OSD (On-Screen Display)

Switches the display language on the screen. Selects the language from the displayed list.

### ■ DVD MENU (DVD only)

Selects the desired language for the DVD menu.


### ■ AUDIO (DVD only)

Switches the language of the sound track. Selects the language from the displayed list.

### ■ SUBTITLE (DVD only)

Switches the language of the subtitle. Selects the language from the displayed list.



 If you select “OTHERS →” in “DVD MENU”, “SUBTITLE”, or “AUDIO”, select and enter the language code from the list using the number buttons (page 81).

After you have made a selection, the language code (4 digits) is displayed the next time you select “OTHERS →”.

**Note**

If you select a language that is not recorded on the DVD, one of the recorded languages will be automatically selected (except for the “OSD”).

# Settings for the Display

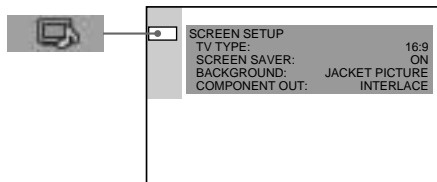
## (SCREEN SETUP)



Choose settings according to the TV to be connected.

Select “SCREEN SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 63).

The default settings are underlined.



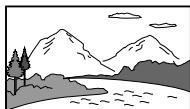
### ■ TV TYPE (DVD only)

Selects the aspect ratio of the connected TV (4:3 standard or wide).

The default settings vary, depending on the country model.

16:9	Select this when you connect a wide-screen TV or a TV with a wide mode function.
4:3 LETTER BOX	Select this when you connect a 4:3 screen TV. Displays a wide picture with bands on the upper and lower portions of the screen.
4:3 PAN SCAN	Select this when you connect a 4:3 screen TV. Automatically displays the wide picture on the entire screen and cuts off the portions that do not fit.

16:9



4:3 LETTER BOX



4:3 PAN SCAN



### Note

Depending on the DVD, “4:3 LETTER BOX” may be selected automatically instead of “4:3 PAN SCAN” or vice versa.

### SCREEN SAVER

Turns the screen saver on and off so that the screen saver image appears when you leave the system in pause or stop mode for 15 minutes, or when you playback a CD or MP3 for more than 15 minutes. The screen saver will help prevent your display device from becoming damaged (ghosting). Press  $\blacktriangleright$  to turn off the screen saver.

ON	Turns on the screen saver.
OFF	Turns off the screen saver.

### BACKGROUND

Selects the background color or picture on the TV screen in stop mode or while playing a CD.

JACKET PICTURE	The jacket picture (still picture) appears in the background, but only when the jacket picture is already recorded on the disc (CD-EXTRA, etc.). If the disc does not contain a jacket picture, the “GRAPHICS” picture appears.
GRAPHICS	A preset picture stored in the system appears in the background.
BLUE	The background color is blue.
BLACK	The background color is black.

### COMPONENT OUT

This will change the type of signal output from the COMPONENT VIDEO OUT jacks on the system. See pages 71 for more information about the different types.

INTERLACE	Select this when you are connected to a standard (interlace format) TV.
PROGRESSIVE	Select this when you have a TV that can accept progressive signals.

### Notes

- When “PROGRESSIVE” is selected in “SCREEN SETUP”, no signal is output from the MONITOR jack.
- For European models only**  
“PROGRESSIVE” does not work for PAL signals. Even if you set “COMPONENT OUT” to “PROGRESSIVE”, the output signal is automatically switched to “INTERLACE” format for PAL signals.

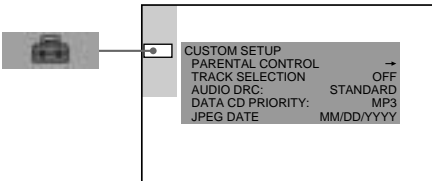
# Custom Settings (CUSTOM

SETUP) **DVD** **MP3** **JPEG**

Allows setting up Parental Control and other settings.

Select “CUSTOM SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 63).

The default settings are underlined.



## ■ PARENTAL CONTROL → (DVD only)

Sets a password and playback limitation level for DVDs with playback limitation for children. For details, see “Limiting playback for children (Parental Control)” (page 57).

## ■ TRACK SELECTION (DVD only)

Gives the sound track having the highest number of channels priority when you play a DVD on which multiple audio formats (PCM, MPEG audio, DTS, or Dolby Digital format) are recorded.

<u>OFF</u>	No priority given.
AUTO	Priority given.

## Notes

- When you set the item to “AUTO”, the language may change. The “TRACK SELECTION” setting has higher priority than the “AUDIO” settings in “LANGUAGE SETUP” (page 64).
- If PCM, DTS, MPEG audio, and Dolby Digital sound tracks have the same number of channels, the system selects PCM, DTS, Dolby Digital, and MPEG audio sound tracks in this order.
- Depending on the DVD, the audio channel with priority may be predetermined. In this case, you cannot give priority to the DTS, Dolby Digital, or MPEG audio format by selecting “AUTO”.

## ■ AUDIO DRC

Narrows the DYNAMIC range of the sound track.

Useful for watching movies at low volume late at night.

OFF	No compression of DYNAMIC range.
<u>STANDARD</u>	Reproduces the sound track with the kind of DYNAMIC range that the recording engineer intended.
MAX	Narrows the DYNAMIC range fully.

## Note

DYNAMIC range compression only works for Dolby Digital sources.

## ■ DATA CD PRIORITY (MP3, JPEG only)

Set priority data you want to play, when you play the data disc (CD-ROM/CD-R/CD-RW) contained MP3 audio tracks and JPEG image files.

MP3	If an MP3 file exists on the disc, the system recognises the disc as an “MP3 Disc”. If only JPEG files exist on the disc, the system recognises the disc as a “JPEG Disc”.
JPEG	If a JPEG file exists on the disc, the system recognises the disc as a “JPEG Disc”. If only MP3 files exist on the disc, the system recognises the disc as an “MP3 Disc”.

### Note

When you play Multi Session CDs, the system decides a target to play for last session or session linked with last session.

## ■ JPEG DATE

Change the date information order of a JPEG image in the Control Menu. The default setting is “MM/DD/YYYY”.

YYYY: Year

MM: Month

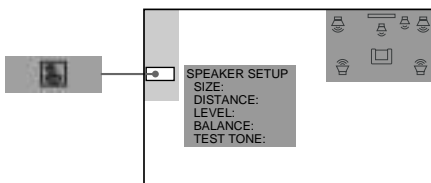
DD: Day

## Settings for the Speakers (SPEAKER SETUP)

To obtain the best possible surround sound, set the size of the speakers you have connected and their distance from your listening position. Then use the test tone to adjust the level and the balance of the speakers to the same level.

Select “SPEAKER SETUP” in the setup display. For details, see “Using the Setup Display” (page 63).

The default settings are underlined.



### To return to the default setting when changing a setting

Select the item, then press CLEAR.

### ■ SIZE

When you do not connect center or surround speakers, or move the surround speakers, set the parameters for CENTER and SURROUND. Since the front speaker and sub woofer settings are fixed, you cannot change them. The default settings are underlined.

- FRONT
  - YES
- CENTER
  - YES: Normally select this.
  - NONE: Select this if no center speaker is used.

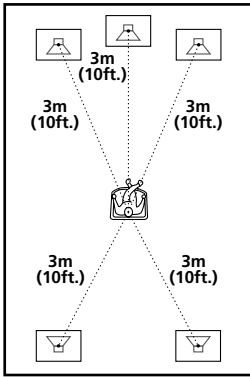
- **SURROUND**
  - **YES**: Normally select this.
  - **NONE**: Select this if no surround speaker is used.
- **SUB WOOFER**
  - **YES**

### Notes

- When you select an item, the sound cuts off for a moment.
- Depending on the settings of other speakers, the sub woofer may output excessive sound.

### DISTANCE

The default distance setting for the speakers in relation to the listening position is shown below.



Be sure to change the value in the Setup Display when you move the speakers. The default settings are underlined.

<b>FRONT</b> <u>3.0 m/</u> <u>10 ft.</u>	Front speaker distance from the listening position can be set in 0.2 meter (1 ft.) steps from 1.0 to 7.0 meters (3 to 23 ft.).
<b>CENTER</b> <u>3.0 m/</u> <u>10 ft.</u>	Center speaker distance can be moved up to 1.6 meters (5 ft.) forward closer to the listening position from the front speaker position, in 0.2 meter (1 ft.) steps.
<b>SURROUND</b> <u>3.0 m/</u> <u>10 ft.</u>	Surround speaker distance can be moved up to 4.6 meters (15 ft.) closer to your listening position from the front speaker position, in 0.2 meter (1 ft.) steps.

### Notes

- In **SPEAKER SETUP**, the North American model's OSD displays both metric and imperial measurements. The other model's displays metric measurements only. The manual shows both.
- When you set the distance, the sound cuts off for a moment.
- If each of the front or surround speakers are not placed at an equal distance from your listening position, set the distance according to the closest speaker.
- Do not place the surround speakers farther away from your listening position than the front speakers.

### LEVEL

You can vary the level of each speaker as follows. Be sure to set "TEST TONE" to "ON" for easy adjustment.

The default settings are underlined.

<b>CENTER</b> <u>0 dB</u>	Adjusts the level of the center speaker (-10 dB to +10 dB, 1 dB steps).
<b>SURROUND-LEFT</b> <u>0 dB</u> <b>SURROUND-RIGHT</b> <u>0 dB</u>	Adjusts the level of the surround speakers (-10 dB to +10 dB, 1 dB steps).
<b>SUB WOOFER</b> <u>0 dB</u>	Adjusts the level of the sub woofer (-10 dB to +10 dB, 1 dB steps).

You can directly increase the sub woofer level by pressing **SUB WOOFER LEVEL** on the system.

## ■ BALANCE

You can vary the balance of the left and right speakers as follows. Be sure to set “TEST TONE” to “ON” for easy adjustment.

The default settings are underlined.

<u>FRONT</u> <u>CENTER</u>	Adjust the balance between the front left and right speakers (You can adjust from center 6 steps left or right).
-------------------------------	--

## To adjust the volume of all the speakers at one time

Use the MASTER VOLUME control on the system or press VOLUME +/-.

## ■ TEST TONE

The speakers will emit a test tone to adjust “LEVEL” and “BALANCE”.

The default settings are underlined.

<u>OFF</u>	The test tone is not emitted from the speakers.
<u>ON</u>	The test tone is emitted from each speaker in sequence while adjusting balance or level. When you select “BALANCE”, the test tone is emitted from both left and right speakers simultaneously.

## Adjusting the speaker volume and level

- 1** After you stop playback, select “SPEAKER SETUP” after pressing DVD SETUP in the Setup Display.
- 2** Select “TEST TONE” and set “TEST TONE” to “ON”.  
You will hear the test tone from each speaker in sequence.
- 3** From your listening position, select “BALANCE” or “LEVEL” and adjust the value of “BALANCE” and “LEVEL” using  $\uparrow/\downarrow$ .  
When you select “BALANCE”, the test tone is emitted from both left and right speakers simultaneously.
- 4** Select “TEST TONE” and set “TEST TONE” to “OFF” to turn off the test tone.

### Note

When you adjust the speaker settings, the sound cuts off for a moment.

## Troubleshooting

If you experience any of the following difficulties while using the system, use this troubleshooting guide to help remedy the problem before requesting repairs. Should any problem persist, consult your nearest Sony dealer.

### Power

#### The power is not turned on.

- ➔ Check that the AC power cord (mains lead) is connected securely.

### Picture

#### There is no picture.

- ➔ The connecting cords are not connected securely.
- ➔ The connecting cords are damaged.
- ➔ The system is not connected to the correct TV input jack (page 24).
- ➔ The video input on the TV is not set so that you can view pictures from the system.
- ➔ You have set "COMPONENT OUT" in "SCREEN SETUP" to "PROGRESSIVE" even though your TV cannot accept the signal in progressive format. In this case, press ■ and PRESET – on the system simultaneously until "PROGRESSIVE" disappears from the front panel display. The system is reset back to "INTERLACE".
- ➔ Even if your TV is compatible with progressive format signals, the image may be affected when you set "COMPONENT OUT" to "PROGRESSIVE". In this case, set "COMPONENT OUT" to "INTERLACE".
- ➔ When "PROGRESSIVE" is selected in "SCREEN SETUP", no signal is output from the MONITOR jack.

#### Picture noise appears.

- ➔ The disc is dirty or flawed.
- ➔ If the picture output from your system goes through your VCR to get to your TV, the copy-protection signal applied to some DVD programs could affect picture quality.

#### Even though you set the aspect ratio in "TV TYPE" of "SCREEN SETUP", the picture does not fill the screen.

- ➔ The aspect ratio of the disc is fixed on your DVD.

#### The picture is black and white.

- ➔ Depending on the TV, the picture on the screen becomes black and white when you play a disc recorded in the NTSC color system.

### Sound

#### There is no sound.

- ➔ The connecting cord is not connected securely.
- ➔ The connecting cord is damaged. Replace it with a new one.
- ➔ Press MUTING on the remote if "MUTING" is displayed on the front panel display.
- ➔ The protective device on the system has been activated because of a short circuit. Turn off the system, eliminate the short-circuit problem and turn on the power again.
- ➔ The system is in pause mode or in Slow-motion Play mode. Press ▷ to return to normal play mode.
- ➔ Fast forward or fast reverse is performed. Press ▷ to return to normal play mode.
- ➔ Check the speaker settings (page 68).

---

**The left and right sounds are unbalanced or reversed.**

- ➔ Check that the speakers and components are connected correctly and securely.
- ➔ Adjust the balance parameter in the BALANCE menu (page 70).

---

**Severe hum or noise is heard.**

- ➔ Check that the speakers and components are connected securely.
- ➔ Check that the connecting cords are away from a transformer or motor, and at least 3 meters (10 feet) away from a TV set or fluorescent light.
- ➔ Move your TV away from the audio components.
- ➔ The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.
- ➔ Clean the disc.

---

**The sound loses stereo effect when you play a VIDEO CD, a CD or an MP3.**

- ➔ Set "AUDIO" to "STEREO" in the Control Menu display (page 48).
- ➔ Make sure you connect the system appropriately.

---

**The surround effect is difficult to hear when you are playing a Dolby Digital, DTS, or MPEG audio sound track.**

- ➔ Make sure the sound field function is on (page 50).
- ➔ Check the speaker connections and settings (pages 19, 68).
- ➔ Depending on the DVD, the output signal may not be the entire 5.1 channel. It may be monaural or stereo even if the sound track is recorded in Dolby Digital or MPEG audio format.

---

**The sound comes from the center speaker only.**

- ➔ Depending on the disc, the sound may come from the center speaker only.

---

**No sound is heard from the center speaker.**

- ➔ Check the speaker connections and settings.
- ➔ Make sure the sound field function is on (page 50).

---

**No sound or only a very low-level sound is heard from the surround speakers.**

- ➔ Check the speaker connections and settings.
- ➔ Make sure the sound field function is on (page 50).

## Operation

**Radio stations cannot be tuned in.**

- ➔ Check that the antennas are connected securely. Adjust the antennas and connect an external antenna if necessary.
- ➔ The signal strength of the stations is too weak (when tuning in with automatic tuning). Use manual tuning (page 62).
- ➔ No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 27).



---

### **The remote does not function.**

- ➔ There are obstacles between the remote and the system.
- ➔ The distance between the remote and the system is too far.
- ➔ The remote is not pointed at the remote sensor on the system.
- ➔ The batteries in the remote are weak.

---

### **The disc does not play.**

- ➔ There is no disc inside.
- ➔ The disc is turned over.  
Insert the disc with the playback side facing down on the disc tray.
- ➔ The disc is skewed.
- ➔ The system cannot play CD-ROMs, etc. (page 8).
- ➔ The region code on the DVD does not match the system.
- ➔ Moisture has condensed inside the system.  
Remove the disc and leave the system turned on for about half an hour (page 4).

---

### **The MP3 audio track cannot be played.**

- ➔ The DATA CD is not recorded in the MP3 format that conforms to ISO9660 Level 1/Level 2 or Joliet.
- ➔ The MP3 audio track does not have the extension “.MP3”.
- ➔ The data is not formatted in MP3 even though it has the extension “.MP3”.
- ➔ The system can play only MP3 (MPEG1 Audio Layer3) audio.
- ➔ Remove the disc and select “CUSTOM SETUP” from the setup items. Then select “DATA CD PRIORITY” and set to “MP3” again.
- ➔ Directory level is more than 8.

---

### **The title of the MP3 audio album or track is not correctly displayed.**

- ➔ The player can only display numbers and alphabet. Other characters are displayed as “ ”.

---

### **The JPEG image file cannot be played.**

- ➔ The DATA CD is not recorded in JPEG format that conforms to ISO9660 Level/Level 2 or Joliet.
- ➔ The JPEG image file does not have the extension “.JPG” or “.JPEG”.
- ➔ The data is not formatted in JPEG even though it has the extension “.JPG” or “.JPEG”.
- ➔ Image of length or width is more than 4720 dots.
- ➔ Remove the disc and select “CUSTOM SETUP” from the setup items. Then select “DATA CD PRIORITY” and set to “JPEG” again.
- ➔ Directory level is more than 8.

---

### **The title of the JPEG album or file is not correctly displayed.**

- ➔ The system can only display numbers and alphabet. Other characters are displayed as “ ”.

---

### **The disc does not start playing from the beginning.**

- ➔ Program Play, Shuffle Play, or Repeat Play has been selected (pages 36, 38, 39).  
Press CLEAR to cancel these functions before playing a disc.
- ➔ Resume Play has been selected.  
During stop, press ■ on the system or the remote and then start playback (page 31).
- ➔ The title, DVD or PBC menu automatically appears on the TV screen.

---

**The system starts playing the disc automatically.**

- ➔ The DVD features an auto playback function.

---

**Playback stops automatically.**

- ➔ Some discs may contain an auto pause signal. While playing such a disc, the system stops playback at the auto pause signal.

---

**You cannot perform some functions such as Stop, Search, Slow-motion Play, Repeat Play, Shuffle Play, or Program Play.**

- ➔ Depending on the disc, you may not be able to do some of the operations above. See the operating manual that comes with the disc.

---

**Messages do not appear on the screen in the language you want.**

- ➔ In the Setup Display, select the desired language for the on-screen display in “OSD” under “LANGUAGE SETUP” (page 64).

---

**The language for the sound track cannot be changed.**

- ➔ Multilingual tracks are not recorded on the DVD being played.
- ➔ The DVD prohibits changing the language for the sound track.

---

**The subtitle language cannot be changed.**

- ➔ Multilingual subtitles are not recorded on the DVD being played.
- ➔ The DVD prohibits changing the subtitles.

---

**The subtitle cannot be turned off.**

- ➔ The DVD prohibits turning off subtitles.

---

**The angles cannot be changed.**

- ➔ Multi-angles are not recorded on the DVD being played (page 53).
- ➔ The DVD prohibits changing the angles.

---

**The system does not operate properly.**

- ➔ If static electricity, etc., causes the system to operate abnormally, press I/⏻ on the system to turn the system off and then on again.

---

**The disc tray does not open and “LOCKED” appears on the front panel display.**

- ➔ Contact your Sony dealer or local authorized Sony service facility.

---

**“MECH LOCK” appears on the front panel display.**

- ➔ Turn off the system and unplug the AC power cord. Then connect the AC power cord again.

---

**“PROTECT” appears on the front panel display.**

- ➔ The speaker protection circuit is in function. Check the speaker connections.
- ➔ Check that the fan is working (page 14).

---

**“REMOVE” appears on the front panel display.**

- ➔ Remove the disc that is currently visible.

---

**The system turns off automatically.**

- ➔ Check the system if Auto Power Off function has been activated (page 30). Even though Auto Power Off function is deactivated, the system turns off automatically when you playback a DVD and the system is in pause mode or is displaying the DVD’s menu for about one hour.

---

# Glossary

## Album

Section of a music piece or an image on a data CD containing MP3 audio tracks.

---

## Chapter

Sections of a picture or a music piece on a DVD that are smaller than titles. A title is composed of several chapters.

---

## Dolby Digital

This sound format for movie theaters is more advanced than Dolby Pro Logic Surround. In this format, the surround speakers output stereo sound with an expanded frequency range and a sub woofer channel for deep bass is independently provided. This format is also called "5.1" because the sub woofer channel is counted as 0.1 channel (since it functions only when a deep bass effect is needed). All six channels in this format are recorded separately to realize superior channel separation. Furthermore, since all the signals are processed digitally, less signal degradation occurs.

---

## Dolby Pro Logic Surround

As one method of decoding Dolby Surround, Dolby Pro Logic Surround produces four channels from two-channel sound. Compared with the former Dolby Surround system, Dolby Pro Logic Surround reproduces left-to-right panning more naturally and localizes sounds more precisely.

To take full advantage of Dolby Pro Logic Surround, you should have one pair of surround speakers and a center speaker. The surround speakers output monaural sound.

---

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## Dolby Pro Logic II

Dolby Pro Logic II creates five full-bandwidth output channels from two-channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

## Movie mode

The Movie mode is for use with stereo television shows and all programs encoded in Dolby Surround. The result is enhanced soundfield directionality that approaches the quality of discrete 5.1-channel sound.

## Music mode

The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space.

---

## DTS

Digital audio compression technology that the Digital Theater Systems, Inc. developed. This technology conforms to 5.1-channel surround. The surround channel is stereo and there is discrete sub woofer channel in this format. DTS provides the same 5.1 discrete channels of high quality digital audio. The good channel separation is realized because the all channel data is recorded discrete and processed in digital.

---

## DVD

A disc that contains up to 8 hours of moving pictures even though its diameter is the same as a CD.

The data capacity of a single-layer and single-sided DVD, at 4.7 GB (Giga Byte), is 7 times that of a CD. Furthermore, the data capacity of a dual-layer and single-sided DVD is 8.5 GB, a single-layer and double-sided DVD 9.4 GB, and a dual-layer and double-sided DVD 17 GB.

---

The picture data uses the MPEG 2 format, one of the worldwide standards of digital compression technology. The picture data is compressed to about 1/40 of its original size. The DVD also uses the variable rate coding technology that changes the data to be allocated according to the status of the picture.

The audio data is recorded in Dolby Digital as well as in PCM, allowing you to enjoy more real audio presence.

Furthermore, various advanced functions such as the multi-angle, multilingual, and Parental Control functions are provided with the DVD.

---

## File

Section of a picture on a data CD containing JPEG image files.

---

## Film based software, Video based software

DVDs can be classified as Film based or Video based software. Film based DVDs contain the same images (24 frames per second) that are shown at movie theaters. Video based DVDs, such as television dramas or sit-coms, displays images at 30 frames (or 60 fields) per second.

---

## Interlace format

Interlace format shows every other line of an image as a single “field” and is the standard method for displaying images on television. The even number field shows the even numbered lines of an image, and the odd numbered field shows the odd numbered lines of an image.

---

## Multi-angle function

Various angles, or viewpoints of the video camera, for a scene are recorded on some DVDs.

---

## Multilingual function

Several languages for the sound or subtitles in a picture are recorded on some DVDs.

---

## Parental Control

A function of the DVD to limit playback of the disc by the age of the users according to the limitation level in each country. The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes and so on.

---

## Playback Control (PBC)

Signals encoded on VIDEO CDs (Version 2.0) to control playback.

By using menu screens recorded on VIDEO CDs with PBC functions, you can enjoy playing simple interactive programs, programs with search functions, and so on.


---

## Progressive format

Compared to the Interlace format that alternately shows every other line of an image (field) to create one frame, the Progressive format shows the entire image at once as a single frame. This means that while the Interlace format can show 30 frames (60 fields) in one second, the Progressive format can show 60 frames in one second. The overall picture quality increases and still images, text, and horizontal lines appear sharper. This player is compatible with the 480 progressive format.

---

## Region Code

This system is used to protect copyrights. A region number is allocated on each DVD system or DVD disc according to the sales region. Each region code is shown on the system as well as on the disc packaging. The system can play the discs that match its region code. The system can also play discs with the “” mark. Even when the region code is not shown on the DVD, the region limit may still be activated.

---

## Scene

On a VIDEO CD with PBC (playback control) functions, the menu screens, moving pictures and still pictures are divided into sections called “scenes”.

---

## Title

The longest sections of a picture or music feature on a DVD, movie, etc., in video software, or the entire album in audio software.

---

## Track

Sections of a picture or a music piece on a CD, VIDEO CD or MP3. An album is composed of several tracks (MP3 only).

---

## VIDEO CD

A compact disc that contains moving pictures.

The picture data uses the MPEG 1 format, one of the worldwide standards of digital compression technology. The picture data is compressed to about 1/140 of its original size. Consequently, a 12 cm VIDEO CD can contain up to 74 minutes of moving pictures. VIDEO CDs also contain compact audio data. Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed. VIDEO CDs can hold 6 times the audio information of conventional audio CDs.

There are 2 versions of VIDEO CDs.

- Version 1.1: You can play only moving pictures and sounds.
- Version 2.0: You can play high-resolution still pictures and enjoy PBC functions.

This system conforms to both versions.

---

# Specifications

## AUDIO POWER SPECIFICATIONS

### POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6 ohm loads, both channels driven, from 120 – 20,000 Hz; rated 60 watts per channel minimum RMS power, with no more than 0.7 % total harmonic distortion from 250 milliwatts to rated output (USA model only).

### Amplifier section

Rated Power Output at Stereo Mode 60 W + 60 W (6 ohms, at 1 kHz, THD 0.7 %)  
Reference Power Output Front: 100 W/ch (6 ohms at 1 kHz, THD 10 %)  
Center\*: 100 W (6 ohms at 1 kHz, THD 10 %)  
Surround\*: 100 W/ch (6 ohms at 1 kHz, THD 10 %)  
Sub woofer\*: 100 W (6 ohms at 100 Hz, THD 10 %)

\* Depending on the sound field settings and the source, there may be no sound output.

Inputs (Analog) ANALOG IN:  
Sensitivity: 500 mV  
Impedance: 50 kilohms  
Outputs (Analog) PHONES:  
Accepts low- and high-impedance headphones

### CD/DVD system

Laser Semiconductor laser  
(DVD:  $\lambda = 650 \text{ nm}$ )  
(CD:  $\lambda = 780 \text{ nm}$ )  
Emission duration: continuous  
Signal format system NTSC/PAL or NTSC  
Frequency response (at 2 CH STEREO mode)  
DVD (PCM): 2 Hz to 22 kHz ( $\pm 1.0 \text{ dB}$ )  
CD: 2 Hz to 20 kHz ( $\pm 1.0 \text{ dB}$ )  
Signal-to-noise ratio More than 80 dB  
Harmonic distortion Less than 0.03 %

## FM tuner section

System	PLL quartz-locked digital synthesizer system
Tuning range	
North American models:	87.5 – 108.0 MHz (100 kHz step)
Other models:	87.5 – 108.0 MHz (50 kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz

## AM tuner section

System	PLL quartz-locked digital synthesizer system
Tuning range	
North American models:	530 – 1,710 kHz (with the interval set at 10 kHz)* 531 – 1,710 kHz (with the interval set at 9 kHz)*
European models:	531 – 1,602 kHz (with the interval set at 9 kHz)
Mexican models:	530 – 1,610 kHz (with the interval set at 10 kHz)
Other models:	530 – 1,610 kHz (with the interval set at 10 kHz)* 531 – 1,602 kHz (with the interval set at 9 kHz)*
Antenna	AM loop antenna
Intermediate frequency	450 kHz

\* To change the AM tuning interval, see page 28.

## Video section

Inputs	Video: 1 Vp-p 75 ohms
Outputs	Video: 1 Vp-p 75 ohms Component: Y: 1 Vp-p 75 ohms P <sub>B</sub> /C <sub>B</sub> : 0.7 Vp-p 75 ohms P <sub>R</sub> /C <sub>R</sub> : 0.7 Vp-p 75 ohms

## Speakers

Front/Surround	
European models (SS-MSP2)	
Other models (SS-MSP75)	
Speaker system	Bass reflex
Speaker unit	70 × 100 mm cone type
Rated impedance	6 ohms
Dimensions (approx.)	SS-MSP2: 81 × 141 × 121 mm (3 1/4 × 5 5/8 × 4 7/8 inches) SS-MSP75: 90 × 150 × 124.5 mm (3 5/8 × 6 × 5 inches)
Mass (approx.)	0.8 kg (1 lb 13 oz.)
Center	
European models (SS-CNP2)	
Other models (SS-CNP75)	
Speaker system	Bass reflex
Speaker unit	70 × 100 mm cone type
Rated impedance	6 ohms
Dimensions (approx.)	SS-CNP2: 230 × 81 × 121 mm (9 1/8 × 3 1/4 × 4 7/8 inches) SS-CNP75: 230 × 90 × 127 mm (9 1/8 × 3 5/8 × 5 inches)
Mass (approx.)	1.0 kg (2 lb 4 oz.)

Sub woofer (SS-WMSP80)	
Speaker system	Bass reflex
Speaker unit	200 mm dia. cone type
Rated impedance	6 ohms
Dimensions (approx.)	270 × 325 × 333 mm (10 <sup>6</sup> / <sub>8</sub> × 12 <sup>7</sup> / <sub>8</sub> × 13 <sup>1</sup> / <sub>8</sub> inches)
Mass (approx.)	6.5 kg (14 lb 6 oz.)

## General

### Power requirements

North American and Mexican models:

120 V AC, 60 Hz

European models: 230 V AC, 50/60 Hz

Other models: 120/220 V AC, 50/60 Hz

### Power consumption

Canadian models: 240 VA

Other models: 190 W

Power consumption (at Power Saving Mode):

0.5 W

Dimensions (approx.) 430 × 170 × 450 mm (17 × 6 <sup>7</sup>/<sub>8</sub> × 17 <sup>7</sup>/<sub>8</sub> inches) (w/h/d) incl. projecting parts

Mass (approx.) 11.5 kg (25 lb 6 oz.)

Operating temperature 5°C to 35°C (41°F to 95°F)

Operating humidity 5 % to 90 %

Supplied accessories See page 18.

Design and specifications are subject to change without notice.



# Language Code List

For details, see pages 48, 54, 65.

The language spellings conform to the ISO 639: 1988 (E/F) standard.

Code Language	Code Language	Code Language	Code Language
1027 Afar	1183 Irish	1347 Maori	1507 Samoan
1028 Abkhazian	1186 Scots Gaelic	1349 Macedonian	1508 Shona
1032 Afrikaans	1194 Galician	1350 Malayalam	1509 Somali
1039 Amharic	1196 Guarani	1352 Mongolian	1511 Albanian
1044 Arabic	1203 Gujarati	1353 Moldavian	1512 Serbian
1045 Assamese	1209 Hausa	1356 Marathi	1513 Siswati
1051 Aymara	1217 Hindi	1357 Malay	1514 Sesotho
1052 Azerbaijani	1226 Croatian	1358 Maltese	1515 Sundanese
1053 Bashkir	1229 Hungarian	1363 Burmese	1516 Swedish
1057 Byelorussian	1233 Armenian	1365 Nauru	1517 Swahili
1059 Bulgarian	1235 Interlingua	1369 Nepali	1521 Tamil
1060 Bihari	1239 Interlingue	1376 Dutch	1525 Telugu
1061 Bislama	1245 Inupiak	1379 Norwegian	1527 Tajik
1066 Bengali;	1248 Indonesian	1393 Occitan	1528 Thai
Bangla	1253 Icelandic	1403 (Afan) Oromo	1529 Tigrinya
1067 Tibetan	1254 Italian	1408 Oriya	1531 Turkmen
1070 Breton	1257 Hebrew	1417 Punjabi	1532 Tagalog
1079 Catalan	1261 Japanese	1428 Polish	1534 Setswana
1093 Corsican	1269 Yiddish	1435 Pashto; Pushto	1535 Tonga
1097 Czech	1283 Javanese	1436 Portuguese	1538 Turkish
1103 Welsh	1287 Georgian	1463 Quechua	1539 Tsonga
1105 Danish	1297 Kazakh	1481 Rhaeto-	1540 Tatar
1109 German	1298 Greenlandic	Romance	1543 Twi
1130 Bhutani	1299 Cambodian	1482 Kirundi	1557 Ukrainian
1142 Greek	1300 Kannada	1483 Romanian	1564 Urdu
1144 English	1301 Korean	1489 Russian	1572 Uzbek
1145 Esperanto	1305 Kashmiri	1491 Kinyarwanda	1581 Vietnamese
1149 Spanish	1307 Kurdish	1495 Sanskrit	1587 Volapük
1150 Estonian	1311 Kirghiz	1498 Sindhi	1613 Wolof
1151 Basque	1313 Latin	1501 Sangho	1632 Xhosa
1157 Persian	1326 Lingala	1502 Serbo-Croatian	1665 Yoruba
1165 Finnish	1327 Laothian	1503 Singhalese	1684 Chinese
1166 Fiji	1332 Lithuanian	1505 Slovak	1697 Zulu
1171 Faroese	1334 Latvian; Lettish	1506 Slovenian	
1174 French	1345 Malagasy		
1181 Frisian			1703 Not specified

# DVD Setup Menu List

You can set the following items with the DVD setup menu.  
The order of the displayed items may be different from the actual display.

## LANGUAGE SETUP

- OSD — (Select the language you want to use from the displayed language list.)
- DVD MENU — (Select the language you want to use from the displayed language list.)
- AUDIO — (Select the language you want to use from the displayed language list.)
- SUBTITLE — (Select the language you want to use from the displayed language list.)

## SCREEN SETUP

- TV TYPE —
  - 16:9
  - 4:3 LETTER BOX
  - 4:3 PAN SCAN
- SCREEN SAVER —
  - ON
  - OFF
- BACKGROUND —
  - JACKET
  - PICTURE
  - GRAPHICS
  - BLUE
  - BLACK
- COMPONENT OUT —
  - INTERLACE
  - PROGRESSIVE

## CUSTOM SETUP

- PARENTAL CONTROL —
  - LEVEL —
    - OFF
    - 8.
    - 7. NC17
    - 6. R
    - 5.
    - 4. PG13
    - 3. PG
    - 2.
    - 1. G
  - STANDARD —
    - USA
    - OTHERS →
  - CHANGE PASSWORD
- TRACK SELECTION —
  - OFF
  - AUTO
- AUDIO DRC —
  - OFF
  - STANDARD
  - MAX
- DATA CD PRIORITY —
  - MP3
  - JPEG
- JPEG DATE —
  - MM/DD/YYYY
  - YYYY/MM/DD
  - DD/MM/YYYY
  - YYYY/DD/MM

## SPEAKER SETUP

- SIZE —
  - FRONT — YES
  - CENTER —
    - YES
    - NONE
  - SURROUND —
    - YES
    - NONE
  - SUB WOOFER — YES
- DISTANCE<sup>1)</sup> —
  - FRONT — 1.0m ~ 7.0m/  
3ft. ~ 23ft.
  - CENTER — 1.0m ~ 7.0m/  
3ft. ~ 23ft.
  - SURROUND — 1.0m ~ 7.0m/  
3ft. ~ 23ft.
- LEVEL —
  - CENTER — -10 dB ~ +10 dB
  - SURROUND — -10 dB ~ +10 dB
  - LEFT —
  - SURROUND — -10 dB ~ +10 dB
  - RIGHT —
  - SUB WOOFER — -10 dB ~ +10 dB
- BALANCE — FRONT — 6 steps left or right
- TEST TONE —
  - OFF
  - ON

<sup>1)</sup> In SPEAKER SETUP, the North American model's OSD displays both metric and imperial measurements. The other model's displays metric measurements only. This manual shows both.

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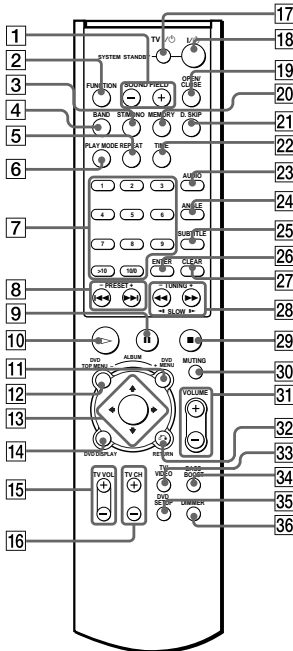
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# Quick reference for Remote Commander



## Note

The remote control of the unit employs command signals in common with other Sony DVD products. Thus, depending on the button, other Sony DVD products may respond.

- |  |  |
|--|--|
| <p>1 <b>SOUND FIELD +/-</b><br/>Selects the sound field.</p> <p>2 <b>FUNCTION</b><br/>Selects the component you want to use.</p> <p>3 <b>ST/MONO</b><br/>Switches monaural or stereo of FM stereo reception.</p> <p>4 <b>BAND</b><br/>Selects AM or FM band.</p> <p>5 <b>REPEAT</b><br/>Displays the "REPEAT" display on the TV screen.</p> <p>6 <b>PLAY MODE</b><br/>Selects program or shuffle play mode.</p> <p>7 <b>Number buttons</b><br/>Selects the items of settings.</p> <p>8 <b>◀◀▶▶, PRESET +/-</b><br/>◀◀▶▶: Press to go to the next chapter or track or to go back to the previous chapter or track.<br/>PRESET +/- : Scan all preset stations.</p> <p>9 <b>⏏ PAUSE</b><br/>Pauses playing a disc.</p> <p>10 <b>▶</b><br/>Plays a disc.</p> | <p>11 <b>DVD MENU/ALBUM +</b><br/>Displays the DVD menu on the TV screen.</p> <p>12 <b>DVD TOP MENU/ALBUM -</b><br/>Displays the title menu on the TV screen.</p> <p>13 <b>◀/▶/◀/▶/ENTER</b><br/>Selects and executes the items or settings.</p> <p>14 <b>DVD DISPLAY</b><br/>Displays the Control Menu display on the TV screen to set or adjust the items.</p> <p>15 <b>TV VOL +/-</b><br/>Adjust the volume of the TV.</p> <p>16 <b>TV CH +/-</b><br/>Select preset TV channels.</p> <p>17 <b>TV I/⏏ (on/standby)</b><br/>Turns the TV on and off.</p> <p>18 <b>I/⏏ (on/standby)</b><br/>Turns on and off the power of the system.</p> <p>19 <b>▲ OPEN/CLOSE</b><br/>Opens or closes the disc tray.</p> <p>20 <b>MEMORY</b><br/>Press to store a preset station.</p> <p>21 <b>D.SKIP</b><br/>Skips discs.</p> <p>22 <b>TIME</b><br/>Displays the playing time of the disc, etc., on the front panel display.</p> <p>23 <b>AUDIO</b><br/>Changes the sound while playing a DVD or VIDEO CD.</p> <p>24 <b>ANGLE</b><br/>Changes the angles when playing a DVD.</p> <p>25 <b>SUBTITLE</b><br/>Changes the subtitles when playing a DVD.</p> <p>26 <b>ENTER</b><br/>Executes the items or settings.</p> <p>27 <b>CLEAR</b><br/>Press to return to the Continuous play, etc.</p> <p>28 <b>◀◀▶▶, ◀/▶ SLOW, TUNING +/-</b><br/>◀◀▶▶, (SCAN) : Locate a point while monitoring the picture while playing disc.<br/>◀/▶ (SLOW) : Play a disc in slow motion in the pause mode.<br/>TUNING +/- : Scan all available radio stations.</p> <p>29 <b>■ STOP</b><br/>Stops playing a disc.</p> <p>30 <b>MUTING</b><br/>Mutes the sound.</p> <p>31 <b>VOLUME +/-</b><br/>Adjust the SYSTEM volume.</p> <p>32 <b>↶ RETURN</b><br/>Press to return to the previously selected screen, etc.</p> <p>33 <b>TV/VIDEO</b><br/>Changes the input mode of the TV.</p> <p>34 <b>BASS BOOST</b><br/>Adjust the bass tone.</p> <p>35 <b>DVD SETUP</b><br/>Displays the setup display on the TV screen to set or adjust the items.</p> <p>36 <b>DIMMER</b><br/>Changes the brightness of the front panel display by two steps.</p> |
|--|--|