SONY®

DVD Home Theatre System

Operating Instructions

DVD VIDEO™

COMPACT
disc
DIGITAL VIDEO

COMPACT
disc
DIGITAL AUDIO

MP3

DAV-BC150/BC250

©2004 Sony Corporation

WARNING

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

Caution – The use of optical instruments with this product will increase eye hazard.

For the customers in the U.S.A

| CAUTION |
| RISK OF ELECTRIC SHOCK DO NOT OPEN |

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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. DAV-BC150/BC250
Serial No._____

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 receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

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.

For the customers in Canada CAUTION

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

Except for North American models

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 news papers, 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.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT
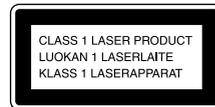
This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear of the unit.

Precautions

Safety

• 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 AC power source (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 DVD Home Theatre System 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.

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.

Welcome!

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

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.
- Do not block the ventilation slots by putting anything on the system. The system is equipped with a high power amplifier. If the ventilation slots 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, take out any disc. If you don't, the disc 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 suddenly 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 benzine.

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 colour

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

The nameplate is located on the rear of the unit.

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

When you carry the system, use the following procedure to protect the inner mechanism.

1 Make sure that all discs are removed from the system.

2 Press FUNCTION repeatedly to select "DVD."

3 Press ◄◄ , ►►I, and DISC 1 ⏏ simultaneously.
The front panel display is changed to "MECH LOCK."

4 Remove the AC power cord from the wall outlet.

Table of Contents

*continued*

Additional Information

About this Manual

- 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 following symbols are used in this manual.

Symbol	Meaning
DVD	Functions available for DVD VIDEOs and DVD-Rs/DVD-RWs in video mode or DVD+Rs/DVD+RWs
VIDEO CD	Functions available in VIDEO CD mode
CD	Functions available in CD mode
MP3	Functions available for MP3* audio tracks
JPEG	Functions available for JPEG files

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

This System Can Play the Following Discs

Format of discs	Disc logo
DVD VIDEO	DVD VIDEO
VIDEO CD	COMPACT disc DIGITAL VIDEO
Audio CD	COMPACT disc DIGITAL AUDIO

Format of discs	Disc logo	
CD-R/CD-RW (audio data) (MP3 files) (JPEG files)	COMPACT disc DIGITAL AUDIO Recordable	COMPACT disc DIGITAL AUDIO ReWritable
	COMPACT disc Recordable	COMPACT disc ReWritable

The "DVD VIDEO" logo is a trademark.

Terms for discs

- **Title**
  The longest section of a picture or music feature on a DVD, movie, etc., in video software, or the entire album in audio software.
- **Chapter**
  Section of a picture or a music piece that is 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**
  Section 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 or 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.

		Disc
DVD structure	Title / Chapter	

		Disc
VIDEO CD, or CD structure	Track / Index	

		Disc
MP3 structure	Album / Track	

		Disc
JPEG structure	Album / File	
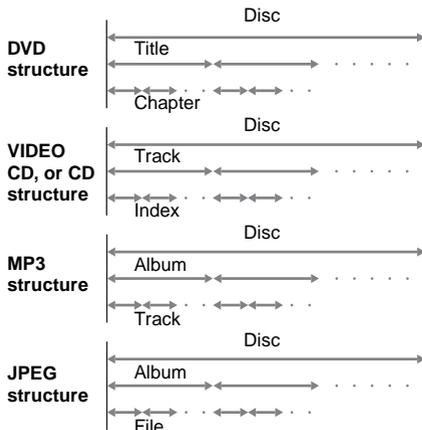
Note on PBC (Playback Control) (VIDEO CDs)

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 given 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
- Super Audio CD
- Data part of CD-Extras
- DVD-ROMs
- DVD Audio discs
- DVD-RAMs
- DVD-RWs in VR (Video Recording) mode
- Progressive JPEG file
* A logical format of files and folders on CD-ROMs, defined by ISO (International Organization for Standardization)

Do not load the following discs:
- A DVD with a different region code (page 8, 73).
- 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 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 play back 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 U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. 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.

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 centre out.

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

This system can only play back 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.

Note on DVD 5-DISC Changer

Disc changer system
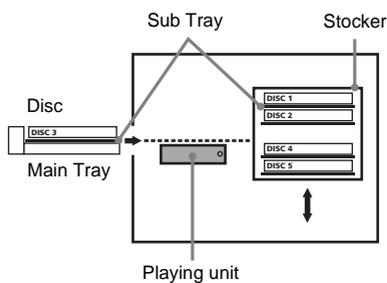
The disc changer consists of a playing unit, trays which hold the discs and a stocker which transports the discs to the disc tray and the playing unit.

For example, if you press DISC 3, the stocker moves until the DISC 3 comes to the position of the playing unit and then moves the DISC 3 over the playing unit.

Note

Noise may come from the disc changer when changing discs or turning the system on and off.

However, this is just noise produced by the operation of the internal mechanisms and does not indicate a malfunction.

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 ⊙ DISPLAY button is pressed. For details, refer to the page in parentheses.

Currently playing title number (Video CD/ CD: track number)

Total number of titles or tracks recorded

Currently playing title number

Total number of chapters or indexes recorded

Playback status (►Playback, ‖Pause, ■Stop, etc.)

Currently playing chapter number (Video CD/CD: index number)

Playing time

Icon of selected Control Menu item

Control Menu items

```
1 2 ( 2 7 ) TITLE12          ►
1 8 ( 3 4 )                  DVD
T    1 : 3 2 : 5 5
● 1: ENGLISH
  2: FRENCH
  3: SPANISH



AUDIO
Select: ⬅ ⬆ ⬇ ➡ ENTER
```

Type of disc being played back

Current setting

Options

Function name of selected Control Menu item

Operation message

List of Control Menu Items

🎬 TITLE (DVD only) (page 39)/ SCENE (only VIDEO CD in PBC playback) / TRACK (VIDEO CD only) (page 39)	Selects the title (DVD), or the track (VIDEO CD) to be played. Displays the scene (VIDEO CD in PBC playback).
🎬 CHAPTER (DVD only) (page 40)/ INDEX (VIDEO CD only) (page 40)	Selects the chapter (DVD) or the index (VIDEO CD) to be played.
🎵 ALBUM (MP3 only) (page 34, 39)	Selects the album (MP3) to be played.
🎵 TRACK (CD/MP3 only) (page 34, 39)	Selects the track (CD/MP3) to be played.
🚩 INDEX (CD only)	Displays the index to be played.
🕐 TIME (page 40)	Checks the elapsed time and the remaining playback time. Inputs the time code for picture and music searching.
🔊 AUDIO (DVD only) (page 46)	Changes the audio setting.
🖼 ALBUM (JPEG only) (page 35)	Selects the album (JPEG) to be played.
⬛ FILE (JPEG only) (page 35)	Selects the file (JPEG) to be played
🗓 DATE (JPEG only) (page 45)	Displays the date information.
🔁 REPEAT (page 37)	Plays the entire disc (all titles/all tracks), one title/chapter/ track.

	SETUP (page 52, 63)	Sets various adjustments, such as picture and sound.

Tips

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

Control Menu display
↓
Control Menu display off
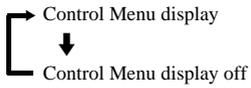
The Control Menu items vary depending on the disc.

• The Control Menu icon indicator lights up in green → unless you set the [REPEAT] setting to [OFF].

Unpacking

Check that you have the following items:
- Speakers (5)
- Subwoofer (1)
- AM loop antenna (1)
- FM wire antenna (1)
- Speaker cords (3.5 m × 3, 10 m × 2)
  (11.5 ft. × 3, 33 ft. × 2)
- Video Cord (1)
- Remote Commander (remote) RM-SS250 (1)
- Size AA (R6) batteries (2)
- Foot pads
  DAV-BC150 (15)
  DAV-BC250 (10)
- Operating Instructions
- Speakers-connection and Installation (card)
  (1)

Inserting Batteries into the Remote

You can control the system using the supplied remote. Insert two Size AA (R6) 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.
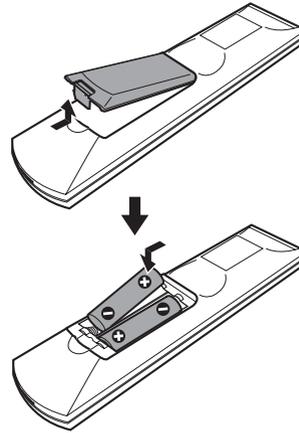
Notes
- Do not leave the remote in an extremely hot or humid place.
- Do not use a new battery with an old one.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct light from the sun or lighting apparatus. Doing so may cause a malfunction.
- If you do not intend to 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

Connect the supplied speaker system using the supplied speaker cords by matching the colours of the jacks 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 24.

Required cords

Speaker cords

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


colour tube

To attach the foot pads

To prevent speaker vibration or movement while listening, attach the supplied foot pads to the speaker, as shown.

■ **BC150 Front/Center/ Surround**

BC250 Surround
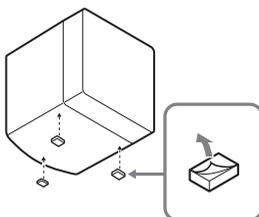
■ **BC250 Center**
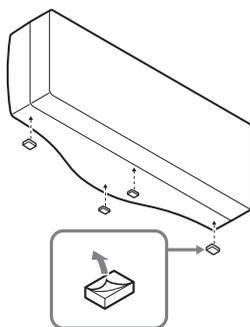
Terminals for connecting the speakers

| Connect the	To the
Front speakers	SPEAKER FRONT L (white) and R (red) jacks
Surround speakers	SPEAKER SURR L (blue) and R (grey) jacks
Center speaker	SPEAKER CENTER (green) jack
Subwoofer	SPEAKER WOOFER (purple) jack

DAV-BC150

Front speaker (R)   Center speaker   Front speaker (L)

colour label

Surround speaker (R)   Subwoofer   Surround speaker (L)

DAV-BC250

Front speaker (R)

Front speaker (L)

Center speaker

colour label

colour label

Surround speaker (R)   Subwoofer   Surround speaker (L)
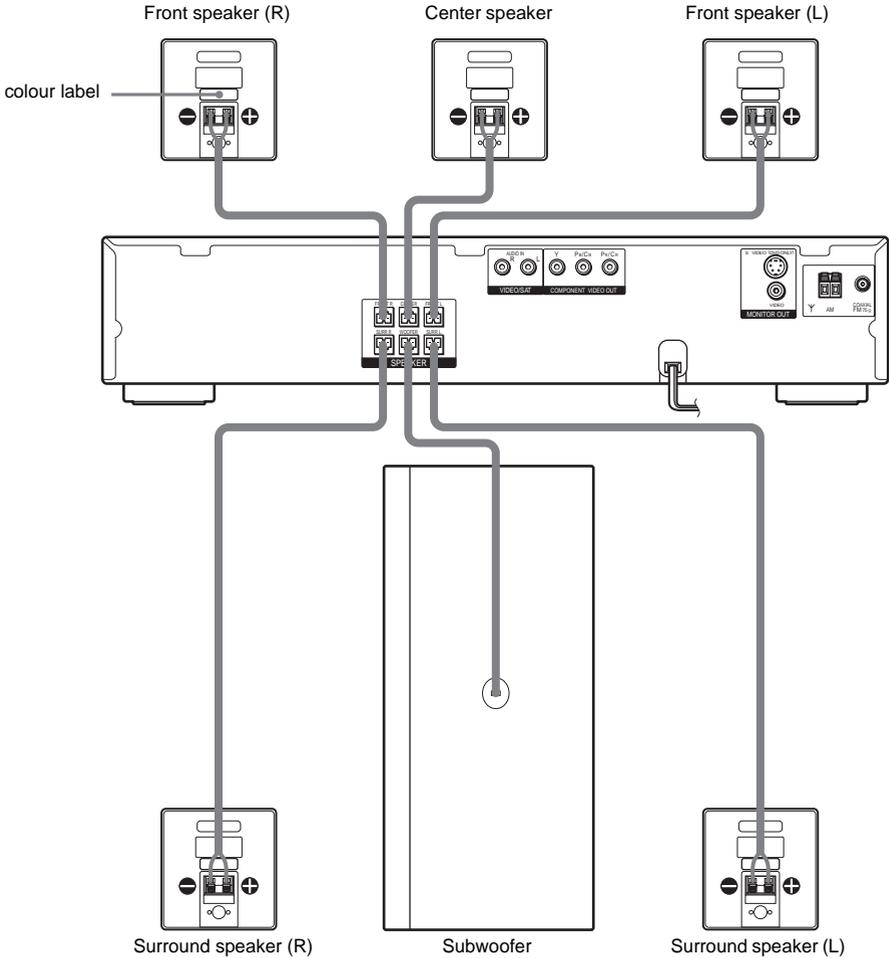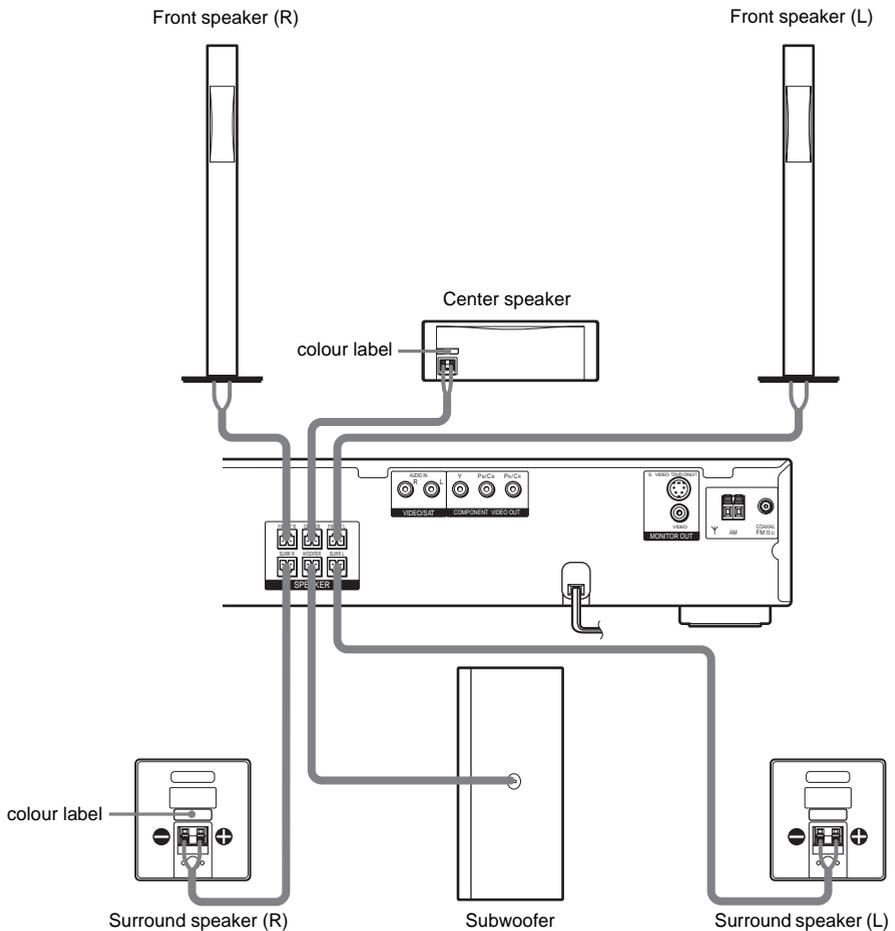
Notes on placing speakers

• Do not set the speakers in an inclined position.

• Do not place the speakers in locations that are:
  – Extremely hot or cold
  – Dusty or dirty
  – Very humid
  – Subject to vibrations
  – Subject to direct sunlight

• Use caution when placing the subwoofer or a speaker stand (not supplied) that is attached with the front/surround speakers on a specially treated (waxed, oiled, polished, etc.) floor, as staining or discolouration may result.

• Do not lean or hang on the speaker, as the speaker may fall down.
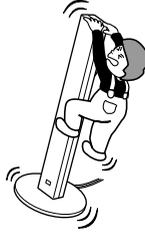
Note

Do not catch the speaker cable insulation in the SPEAKER jack.

Tip

Connect the speaker cable after bending the speaker wire at the end of the insulation. This prevents the speaker cable from being caught in the SPEAKER jack.
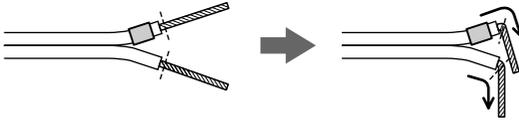
To avoid short-circuiting the speakers

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 jack or the bare wire of another speaker cord.

Examples of poor conditions of the speaker cord

Stripped speaker cord is touching another speaker terminal.
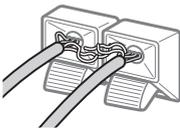
Stripped cords are touching each other due to excessive removal of insulation.
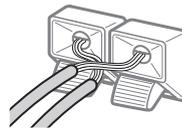
After connecting all the components, speakers, and AC power cord, output a test tone to check that all the speakers are connected correctly. For details on outputting a test tone, see page 27.
If no sound is heard from a speaker while outputting a test tone, or a test tone is output from a speaker other than the one currently displayed in the front panel display, 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: ⊕ to ⊕, and ⊖ to ⊖. If the cords are reversed, the sound will lack bass and may be distorted.

To change the speaker cables

If you want to use a different speaker cable, you can detach the plug for attachment to another cable.

Detaching
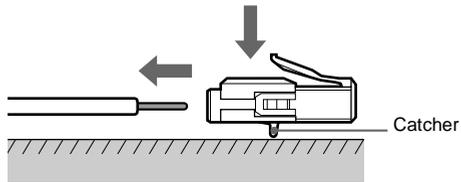
Catcher

With the catcher facing down, press and hold the plug down against a flat surface and remove the cords from the plug.

Attaching
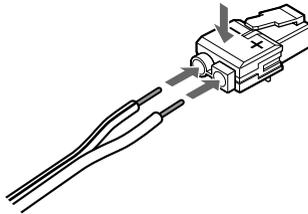
While pressing the plug down against a flat surface, insert the new speaker cords.
Note that the cord marked with a line should be attached to the minus (-) side of the plug.

Note
Be careful not to damage the surface you use (desk, etc.) when attaching/detaching the speaker cords.

Tips
• You can use any commercially sold speaker cable of gauge cord AWG #18 - AWG #24.
• Before attaching a new cable, strip off 10 mm (13/32 in.) of its insulation and twist the bare wires of both cords.

10 mm

Step 2: Antenna Hookups

Connect the supplied AM/FM antennas for listening to the radio.

Terminals for connecting the antennas

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

AM loop antenna
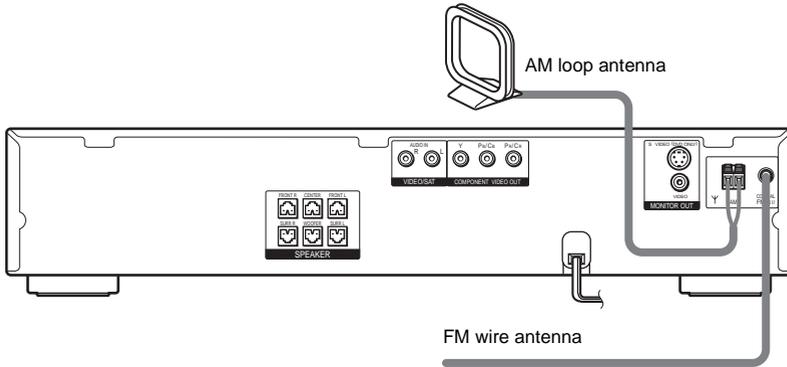
FM wire antenna

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.

• When you connect the supplied AM loop antenna, cord (A) or cord (B) can be connected to either terminal.
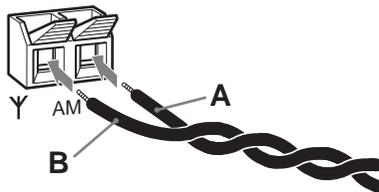
Tip

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.

System   Outdoor FM antenna

19^{GB}
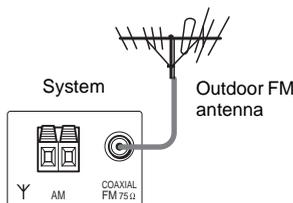
Step 3: TV and Audio Component Hookups

Required cords

Video cord for connecting a TV

Audio cords (not supplied)

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

White (L/audio)
Red (R/audio)
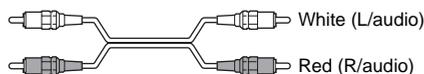
Terminals for connecting video and audio components

| Connect the	To the
TV	MONITOR OUT jacks
VCR/Digital satellite receiver	VIDEO/SAT jacks

Notes
- When the system is set to "DVD" mode, the signal is output from the S VIDEO OUT jack or COMPONENT VIDEO OUT jacks.
- When the system is set to "DVD," and progressive format is selected, the signal is output only from the COMPONENT VIDEO OUT jacks.
- When you connect a VCR or digital satellite receiver to the VIDEO/SAT jacks of this system, change the function to VIDEO (page 57).

Tips
- When using the S video jack instead of the video jack, your TV monitor must also be connected via an S video jack. S video signals are on a separate bus from the video signals and will not be output through the video jacks.
- When using the COMPONENT VIDEO OUT jacks (Y, P_B/C_B, P_R/C_R) instead of the video jacks, your TV monitor must also be connected via COMPONENT VIDEO OUT jacks (Y, P_B/C_B, P_R/C_R). If your TV accepts progressive format signals, use this connection and set to progressive format (page 55).

VCR or Digital satellite receiver

TV with COMPONENT VIDEO IN jacks

TV with S VIDEO jack

TV
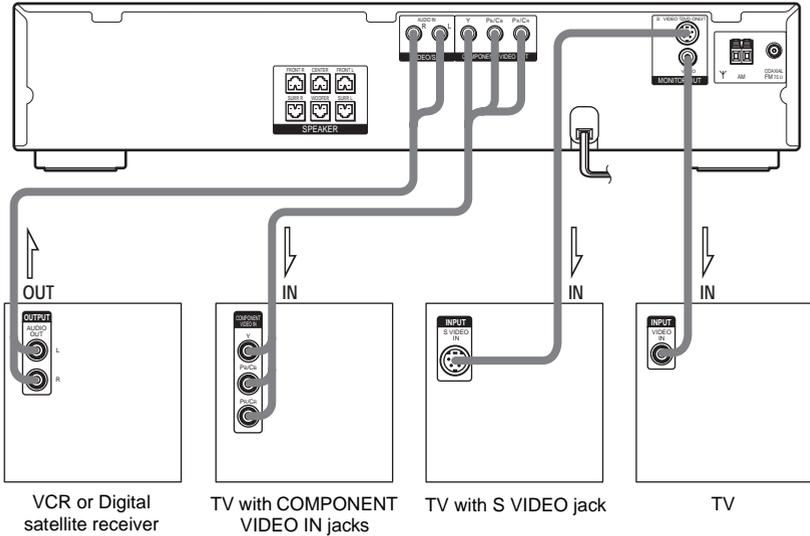
Notes

• Make connections securely to prevent unwanted noise.

• Refer to the instructions supplied with the TV.

• The system cannot output an audio signal to the connected TV. Only the audio signal of the TV is output from the system speakers.

Setup for the system (for Asian, Australian, and Saudi Arabian models)

Setup is necessary for the system, depending on the TV to be connected.
The factory setting for Australian and Saudi Arabian models are PAL.
The factory setting for Asian models is NTSC.

If the colour system of the TV is NTSC*

To set the system to NTSC, turn on the system by pressing I/$\circlearrowleft$ while pressing the II button on the system. You need to hold the II button until "HELLO" appears on the display. To reset to PAL, turn off the system and then turn on again using the remote while press and hold the II button on the system, and turn the system off and then on again.

* If the colour system of the TV is PAL, do the same operation above to set the system to PAL.

When connecting to a standard 4:3 screen TV

Depending on the disc, the image may not fit your TV screen.
If you want to change the aspect ratio, please refer to page 65.

Does your TV accept progressive signals?

Progressive is the method for displaying TV images which reduces flickering, and sharpens the image. To display using this method, you need to connect to a TV that accepts progressive signals.
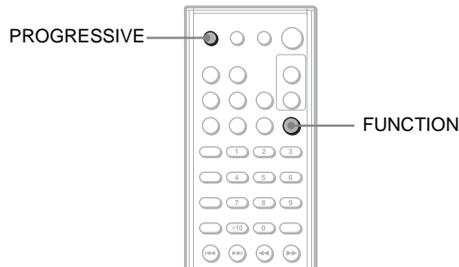
1 Press FUNCTION repeatedly to select "DVD."

2 Press PROGRESSIVE.

The current output signal "-NORMAL-" appears in the front panel display.
When "-PROGRE-" appears in the front panel display, the output signal is already set to progressive format.

3 Press PROGRESSIVE again while "-NORMAL-" appears in the front panel display.

The output signal is changed to progressive format and "PROGRE" appears in the front panel display.

Tip

To return the setting to interlace format repeat the procedure above. When the output signal is changed to interlace format, "NORMAL" appears in the front panel display.

See page 73 for more information about the different signal types.

Notes

- If your TV does not accept progressive signals and progressive format is set by mistake, the image may not appear, or will appear distorted. In this case, return the setting to interlace format (the default setting).
- If your TV accepts progressive signals, connect COMPONENT VIDEO OUT of the system to the TV using a component video cord (not supplied), and set progressive format.

Output the TV or VCR sound from the speakers

1 Connect audio cords.

Connect the AUDIO OUT (L/R) jacks of TV or VCR to the VIDEO/SAT jacks (AUDIO IN L/R) of this system with audio cords.

TV
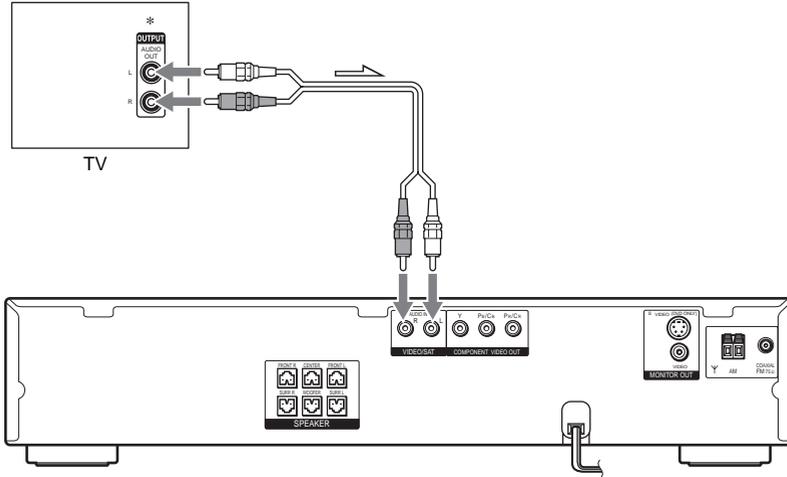
* AUDIO OUT (L/R) jacks

If your TV does not have AUDIO OUT (L/R) jacks, you cannot output the TV sound from the speakers of this system.

2 Change the mode of this system.

Press FUNCTION repeatedly to select "VIDEO" or "SAT," (When you select "ATT ON," SAT appears in the front panel display instead of "VIDEO." (page 58))

Tip

When you want to output the TV sound or stereo sound of a 2 channel source from the 6 speakers, select any sound field other than "AUTO FORMAT DIRECT AUTO" or "2CH STEREO" (page 48).

Step 4: Connecting the AC Power Cord

Before connecting the AC power cord of this system to a wall outlet, connect the speakers to the system (page 14).

Speaker Setup

Positioning the speakers

For the best possible surround sound, all the speakers other than the subwoofer should be the same distance from the listening position (Ⓐ). However, this system allows you to place the center speaker up to 1.6 metres[a] closer (Ⓑ) and the surround speakers up to 4.6 metres[b] closer (Ⓒ) to the listening position.
The front speakers can be placed from 1.0 to 7.0 metres[c] (Ⓐ) from the listening position.

North American numerical equivalents:
a) 5 feet (1.5 metres)
b) 15 feet (4.5 metres)
c) 3 to 23 feet (0.9 to 6.9 metres)

Place speakers as illustrated below
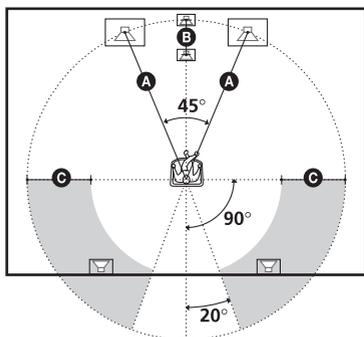
Note
Do not place the center and surround speakers farther away from the listening position than the front speakers.

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

The subwoofer in this system is magnetically shielded to prevent magnetic leakage. However, some leakage may occur, as a high-strength magnet is employed. If the subwoofer is used with a CRT-based TV or projector, install the subwoofer at least 0.3 metre (1.0 foot) from the TV set. 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 subwoofer farther away from the TV set. If colour irregularity still occurs after performing the above, make sure that no magnetic object is placed near the subwoofer. Colour irregularity may occur as a result of interaction between the subwoofer and the magnetic object.
Examples of possible sources of magnetic interference include: magnetic latches on a TV stand, etc., healthcare devices, toys, etc.

Adjusting the speaker settings by using the front panel display on the system

You can set speaker settings using the AMP menu displayed in the front panel.

AMP menu List

SP SETUP

CENTER SP ─┬─ CENTER Y
           └─ CENTER N
SURR SP ───┬─ SURR Y
           └─ SURR N
F DIST ──────── 1.0 m - 7.0 m/3ft - 23ft
CEN DIST ────── 1.0 m - 7.0 m/3ft - 23ft
SURR DIST ───── 1.0 m - 7.0 m/3ft - 23ft

LEVEL

T.TONE ─────┬─ T.TONE OFF
            └─ T.TONE ON
F BALANCE ─── 6 steps left or right
CEN LEVEL ─── –6 dB - +6 dB
SL LEVEL ──── –6 dB - +6 dB
SR LEVEL ──── –6 dB - +6 dB
SW LEVEL ──── –6 dB - +6 dB
AUDIO DRC ──┬─ DRC OFF
            ├─ DRC STD
            └─ DRC MAX

CUSTOMIZE

DIMMER ──────┬─ DIM OFF
             └─ DIM ON
ATTENUATE ───┬─ ATT OFF
             └─ ATT ON

AMP MENU
ENTER
←/↑/↓/→

1 Press AMP MENU.

2 Press ↑/↓ until the item you want to set appears in the front panel display, then press ENTER or →.

■ **SP SETUP**
Sets the speaker size and distance.

■ **LEVEL**
Sets the balance and level of each speaker, sets AUDIO DRC and the test tone (on or off).

3 Press ↑/↓ to select the desired item, then press ENTER or → to select the desired setting.

4 Press ↑/↓ to select each setting of the desired item.

You can set the following items. The default settings are underlined.

Note
You can set the item of "SP SETUP" and "LEVEL," only when the system is set to "DVD" and in the stop mode or the tray is opened.

■ SP SETUP

If you do not connect center or surround speakers, or move the surround speakers, set the parameters for CENTER and SURROUND.

CENTER SP (center speaker)	<u>CENTER Y</u>: Select this if you use a center speaker. CENTER N: Select this if no center speaker is used.
SURR SP (surround speaker)	<u>SURR Y</u>: Select this if you use surround speakers. SURR N: Select this if no surround speaker is used.
F DIST (front distance) <u>**F D 3.0 M**</u> **F D 10F***	Front speaker distance from the listening position can be set in 0.2 metre (1 ft) increments from 1.0 to 7.0 metres (3 to 23 ft).
CEN DIST (center distance) <u>**C D 3.0 M**</u> **C D 10F***	Center speaker distance can be set up to 1.6 metres (5 ft) forward closer to the listening position, in 0.2 metre (1 ft) increments.
SURR DIST (surround distance) <u>**S D 3.0 M**</u> **S D 10F***	Surround speaker distance can be set up to 4.6 metres (15 ft) closer to your listening position from the front speaker position, in 0.2 metre (1 ft) increments.

* Only for North American models.

Notes
- In SP SETUP, the North American model's OSD displays both metric and imperial measurements. The other model displays metric measurements only. The manual shows both.
- When you set the distance, the sound cuts off for a moment.
- If all front and 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.
- Depending on the settings of other speakers, the subwoofer may output excessive sound.

■ LEVEL

The speakers will emit a test tone to adjust "LEVEL" items.

T.TONE (test tone)	<u>T.TONE OFF</u>: The test tone is not emitted from the speakers. T.TONE ON: The test tone is emitted from both left and right speakers simultaneously while adjusting balance. When you select one of the "LEVEL" items, the test tone is emitted from each speaker in sequence.

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

F BALANCE (front balance) <u>**F BAL 0**</u>	Adjusts the balance between the front left and right speakers. (You can adjust from the center 6 steps left (F BAL L6) or right (F BAL R6).)

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

CEN LEVEL (center level)	Adjusts the level of the center speaker (–6 dB to +6 dB, 1 dB increments).
SL LEVEL (surround left level)	Adjusts the left level of the surround speakers (–6 dB to +6 dB, 1 dB increments).
SR LEVEL (surround right level)	Adjusts the right level of the surround speakers (–6 dB to +6 dB, 1 dB increments).
SW LEVEL (subwoofer level)	Adjusts the level of subwoofer (–6 dB to +6 dB, 1 dB increments).

Narrows the DYNAMIC range of the sound track.
Useful for watching movies at low volume late at night.

AUDIO DRC	DRC OFF: No compression of DYNAMIC range.
	DRC STD: Reproduces the sound track with the kind of DYNAMIC range that the recording engineer intended.
	DRC MAX: Fully narrows the DYNAMIC range.

Note
DYNAMIC range compression only applies to Dolby Digital sources.

Adjusting the speaker balance and level by using the test tone

1 Press AMP MENU.

2 Press ↑/↓ until "LEVEL" appears in the front panel display, then press ENTER or →.

The system enters the Level Menu mode.

3 Press ↑/↓ repeatedly to select "T.TONE" in the front panel display, then ENTER or →.

4 Press ↑ or ↓ to select "T.TONE ON" in the front panel display.

You will hear the test tone from each speaker in sequence.
When you select "T.TONE OFF," this operation will be cancelled.

5 Press ← to return "T.TONE".

6 Press ↑/↓ to select the item you want to set, then press ENTER or →.

7 Press ↑/↓ to adjust the speaker setting value.

Press ← to return step 6 and follow steps 6 and 7 to adjust other speaker setting values.

8 Set "T.TONE" to "T. TONE OFF" to cancel the test tone function.

Test tone sound stops emitting.

9 Press AMP MENU when you have finished making adjustments.

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

Playing Discs

DVD VIDEO CD CD MP3 JPEG

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

I/⏻   Disc tray   DISC 1-5 ⏏   FUNCTION   Adjust the volume

STANDBY indicator   ▷   Connect headphone

DISC SKIP

I/⏻

FUNCTION

▷
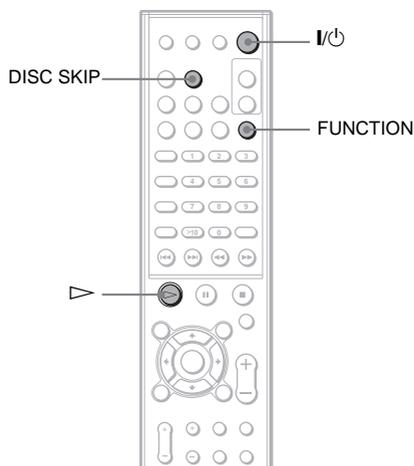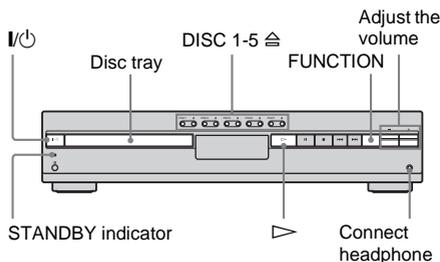
1 **Turn on your TV.**

2 **Switch the input selector on the TV to this system.**

3 **Press I/⏻.**

The system turns on.
Unless the system is set to "DVD," press FUNCTION to select "DVD."

4 **Press DISC 1-5 ⏏.**

Press the button of the disc number you want.

5 **Load a disc.**

Place one disc on the tray, and then press ⏏.
The disc is drawn into the selected disc stocker automatically and "READING" appears in the front panel display.

When you play an 8 cm disc, place it on the inner circle of the tray. Be careful that the disc is not skewed on the inner circle of the tray.

To load other discs, press DISC 1-5 ⏏ (that is not loaded with a disc) and load the disc.

Note

Do not place more than two discs on the tray.

6 **Press ▷.**

The system starts playback (continuous play) of the disc whose DISC indicator is green.
To play back other discs, press DISC SKIP on the remote or DISC 1-DISC 5 of the system. 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 32), (VIDEO CD: page 32).

To remove the disc

Press DISC 1-5 ⏏ on the system. Remove the disc after it is ejected from the system. "OPEN" appears in the front panel display.

To turn on the system

Press I/ᶜ.

To turn off the system

Press I/ᶜ. The system enters standby mode and the STANDBY indicator lights up in red. To turn off the system completely, remove the AC power cord from a wall outlet.
While playing a disc, do not turn off the system by pressing I/ᶜ. Doing so may cancel the menu settings. When you turn off the system, first press ■ to stop playback and then press I/ᶜ.

Tip
The DISC 1-5 indicators change colour as follows:
- – green: the disc is selected, or the disc is being played back.
- – off: there is no disc.
- – orange: a disc is loaded in the disc stocker but not selected.

Saving power in standby mode

Press I/ᶜ.

Tip
While the system is in standby mode, the STANDBY indicator on the system lights up.

To cancel standby mode
Press I/ᶜ.

Playing Discs

Additional operations

MUTING
DISC SKIP

$\blacktriangleright\blacktriangleleft$ / $\blacktriangleright\blacktriangleright$I

$\triangleright$

II

■

VOLUME +/–

To	Press
Stop	■
Pause*	II
Resume play after pause	II or $\triangleright$
Go to the next chapter, track, scene, or file	$\blacktriangleright\blacktriangleright$I
Go back to the preceding chapter, track, scene, or file	I$\blacktriangleleft\blacktriangleleft$
Mute the sound	MUTING. To cancel muting, press it again or VOLUME + to adjust the sound volume.
Change a disc while playing another disc	DISC SKIP
Play the desired disc directly	DISC 1-5 on the system.
Stop play and remove the desired disc	DISC 1-5 ▲ on the system.

* You cannot pause during JPEG playback.

Notes
• If there is no disc in the system, "NO DISC" appears in the front panel display.
• If DVD playback is paused for approximately one hour, the system automatically turns off.

Resuming Playback from the Point Where You Stopped the Disc

(Resume Play)

DVD VIDEO CD CD MP3

When you stop the disc, the system remembers the point where you pressed ■ and "RESUME" appears in the front panel display. Providing you do not remove the disc or change other disc pressing DISC SKIP on the remote or DISC 1 – DISC 5 of the system, Resume Play will work even if the system enters standby mode by pressing I/⏻ (except MP3).
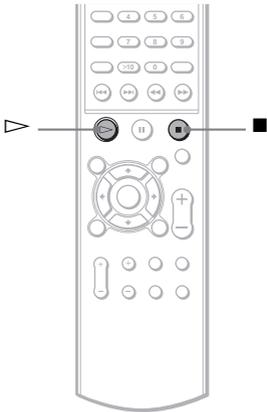
1 While playing a disc, press ■ to stop playback.

"RESUME" appears in 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.

Notes
- Depending on where you stop the disc, the system may not resume playback from exactly the same point.
- The point where you stopped playing is cleared if you change the setting on the Setup Menu.

Tip
To play from the beginning of the disc, press ■ twice, then press ▷.

Using the DVD's Menu

DVD

A DVD is divided into a lot of sections, which make up a picture or music feature. These sections are called "titles." When you play a DVD which contains several titles, you can select the title you want using TOP MENU. 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 MENU.

Number buttons

TOP MENU

MENU

ENTER

←/↑/↓/→
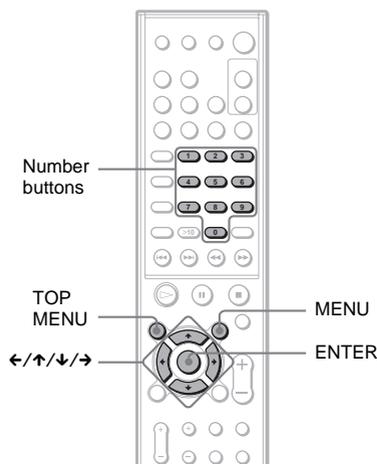
1 Press TOP MENU or MENU.

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

If the DVD top menu or a DVD menu is displayed during DVD playback for approximately one hour, the system automatically turns off.

Playing VIDEO CDs with PBC Functions (Ver.2.0)

(PBC Playback)

VIDEO CD

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.

Number buttons

|◀◀ /▶▶|

▷

ENTER

↑/↓

RETURN

■
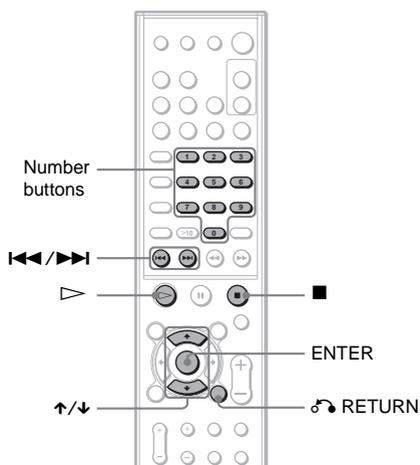
1 Start playing a VIDEO CD with PBC functions.

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 operation details supplied with the disc, as the operating procedure may differ depending on the VIDEO CD.

To go back to the menu

Press RETURN.

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 ⊳.

Tip
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 ⊳.

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.
- If 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 66) and insert the disc again.
- The system can play to a depth of 8 directories, including a ROOT directory.

Selecting an album and track

← / ↑ / ↓ / →   ENTER

⊡ DISPLAY   ♪ RETURN
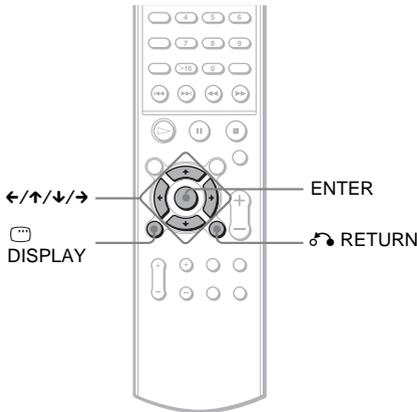
1 Press ⊡ DISPLAY.

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

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

The list of albums contained on the disc appears.


```
● ROCK BEST HIT          ►
  KARAOKE                MP3
  JAZZ
  R&B
  MY FAVORITE SONGS
  CLASSICAL
  SALSA OF CUBA
  BOSSANOVA
```

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

4 Select ♫ (TRACK) using ↑/↓ and press ENTER.

The list of tracks contained in the current album appears.
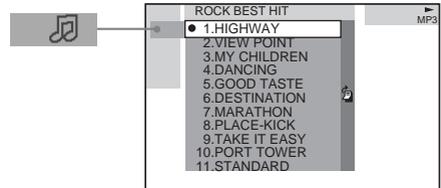

```
ROCK BEST HIT            ►
● 1.HIGHWAY              MP3
  2.VIEW POINT
  3.MY CHILDREN
  4.DANCING
  5.GOOD TASTE
  6.DESTINATION
  7.MARATHON
  8.PLACE-KICK
  9.TAKE IT EASY
  10.PORT TOWER
  11.STANDARD
```

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.

5 Select a track using ↑/↓ and press ENTER.

The selected track starts playing.

To return to the previous display

Press ♪ RETURN or ←.

To turn off the display

Press ⊡ DISPLAY.

Notes

- Only alphabetical letters and numbers can be used for album or track names. Anything else is displayed as " ".
- If an MP3 file of VBR (variable bit rate) is played, indicated elapsed time may be different from the actual time.
- Until playing the disc or selecting an album in step 2, album name is displayed as "**Album" (** refers to a number) in the Control Menu, after which the album name is displayed.

Playing JPEG Image Files

⬭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 ▷.**

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."
- The system can play Multi Session CDs.
- Maximum number of albums on a disc: 99 (The maximum number of JPEG image files that can be contained on an album is 250.)
- An album that does not include a JPEG file is skipped.
- If the system cannot play JPEG, remove the disc and select [CUSTOM SETUP] from the setup items. Then select [DATA CD PRIORITY] and set to [JPEG] (page 66) and insert the disc again.
- A JPEG image file of a length or width of more than 4,720 dots cannot be played.
- A JEPG image file with a high width to length ratio cannot be displayed.
- 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.
- Progressive JPEG image files cannot be played on this system.

Tip
When you go to the next file or to go back to the previous file, press ⏮ or ⏭.

Selecting an album and file

←/↑/↓/→
⬭ DISPLAY
ENTER
⤺ RETURN
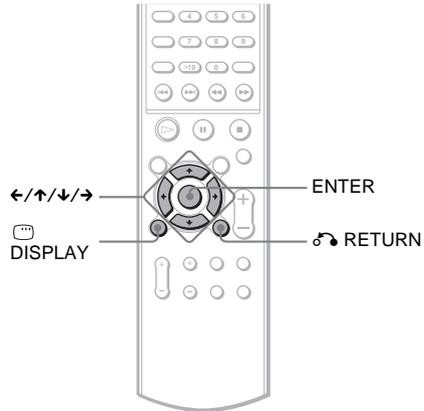
1 **Press ⬭ DISPLAY.**

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

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

The list of albums contained in the disc appears.
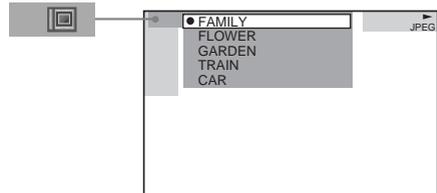
3 **Select an album you want to play using ↑/↓ and press ENTER.**

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

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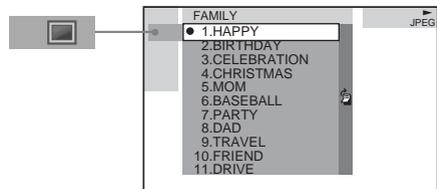
When the list of all files or albums cannot be displayed on the window, the jump bar appears. Press → to select the jump bar icon, and then scroll the jump bar to display the rest of the list using ↑/↓. Press ← or ⟲ RETURN to return to the file or the album list.

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 ▭ DISPLAY.

Notes
- Only alphabetical letters and numbers can be used for album or file names. Anything else is displayed as " ".
- Until playing the disc or selecting an album in step 2, album name is displayed as "**Album" (** refers to a number) in the Control Menu, after which the album name is displayed.

To rotate the current image

←/→
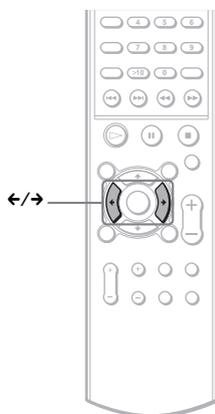
Rotate the current image using ←/→

Each time you press →, the image turns clockwise by 90º.
Each time you press ←, the image turns counterclockwise by 90º.

Playing Repeatedly

(Repeat Play)

DVD **VIDEO CD** **CD** **MP3**

You can play all the titles/tracks/files or a single
title/chapter/track on a disc.
You cannot perform Repeat Play during PBC
playback of VIDEO CDs (page 32).

REPEAT/
FM MODE

$\triangleright$

←/↑/↓/→

ⅢDISPLAY

ENTER

1 Press Ⅲ DISPLAY.

The Control Menu appears.

2 Press ↑/↓ to select ☐ ⤵ (REPEAT), then press ENTER.

If you do not select [OFF], the [REPEAT]
indicator lights in green.

3 Select the Repeat Play setting, then press ENTER.

```
12(27) TITLE12          ►
18(34)                  DVD
T  1:32:55

●OFF
 ALL
 TITLE
 CHAPTER
```
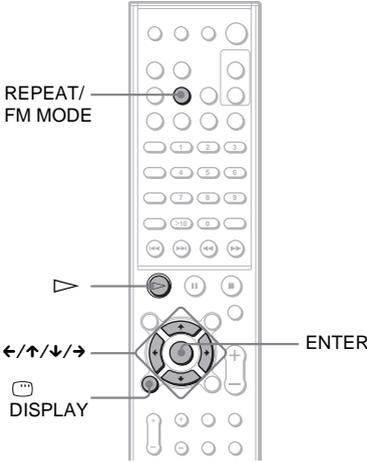
■ **When playing a DVD**
- OFF: does not play repeatedly.
- ALL: repeats all titles of all discs.
- TITLE: repeats the current title on a
  disc.
- CHAPTER: repeats the current
  chapter.

■ **When playing a VIDEO CD/CD/MP3**
- OFF: does not play repeatedly.
- ALL: repeats all track of all discs.
- TRACK: repeats the current track.

Notes
- Depending on the DVD disc, Repeat Play does not
  work.
- If [ALL] is selected, Repeat Play is limited to 5 times.

Tips
- You can set Repeat Play during stop mode.
  After selecting the [REPEAT] item, press ⊳.
  The system starts Repeat Play.
- You can quickly display the [REPEAT] status.
  Press REPEAT/FM MODE on the remote.
- You can perform Repeat Play for DVD titles that
  contain chapters.
- Repeat Play is not available for JPEG, but its setting
  cannot be changed.

Searching for a Particular Point on a Disc

(Scan, Slow-motion Play)

DVD **VIDEO CD** **CD**

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

SLOW ◄❙/❙► ◄◄/►►

▷
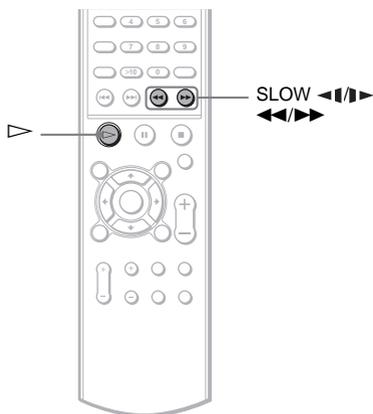
Notes
- Depending on the DVD/VIDEO CD, you may not be able to perform some of the operations described.
- During Scan or Slow-motion Play, no sound is output.

Locating a point quickly by playing a disc in fast forward or fast reverse (Scan)

1 **Press ◄◄ or ►► while playing a disc.**

**2** **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
FF1►► → FF2►►
└──────────┘

Opposite direction
FR1◄◄ → FR2◄◄
└──────────┘

The FF2►►/FR2◄◄ playback speed is faster than FF1►►/FR1◄◄.

Watching frame by frame (Slow-motion Play) (DVD/VIDEO CD only)

Press ◄❙ or ❙► when the system is in the pause mode.

To return to normal speed, press ▷.

To change the speed of Slow-motion play

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
SLOW 2❙► → SLOW 1❙►
└──────────┘

Opposite direction (DVD only)
SLOW 2◄❙ → SLOW 1◄❙
└──────────┘

The SLOW 2❙►/SLOW 2◄❙ playback speed is slower than SLOW 1❙►/SLOW 1◄❙.

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

DVD VIDEO CD CD MP3 JPEG

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) (DVD only).

Number buttons

←/↑/↓/→

ENTER

DISPLAY

RETURN

CLEAR
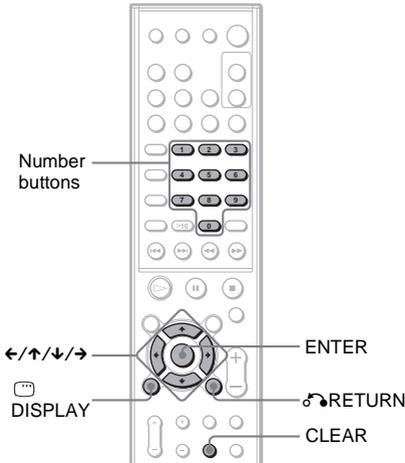
Searching for a title/track/album/file

1 Press ⚏ DISPLAY.

The Control Menu appears.

2 Press ↑/↓ to select the search method, then press ENTER.

■ **When playing a DVD**

(TITLE)

■ **When playing a VIDEO CD**

(TRACK)

■ **When playing a CD**

(TRACK)

■ **When playing an MP3**

(ALBUM) or (TRACK)
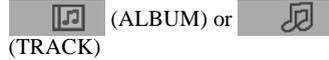
■ **When displaying a JPEG file**

(ALBUM) or (FILE)
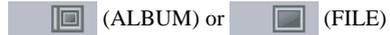
Example: when you select (TRACK)

The list of tracks contained on the disc appears.

```
ROCK BEST HIT                    ►
                                 MP3
● 1.HIGHWAY
  2.VIEW POINT
  3.MY CHILDREN
  4.DANCING
  5.GOOD TASTE
  6.DESTINATION
  7.MARATHON
  8.PLACE-KICK
  9.TAKE IT EASY
 10.PORT TOWER
 11.STANDARD
 12.LADY
```

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.

```
ROCK BEST HIT                    ►
                                 MP3
 13.STAY
 14.BAD
 15.BEAUTIFUL
 16.HOLD.ME
 17.FIRST TIME
 18.BLUE SKY
 19.OUR EARTH
 20.NO NAME
 21.SWEETEST
 22.KISS ME
 23.FIRE
 24.ANGEL
```
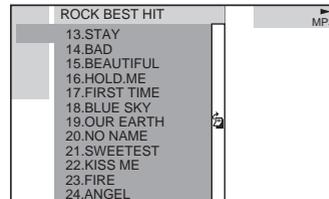
3 Press ↑/↓ to select the desired track, then press ENTER.

The system starts playback from the selected track.

Searching for a chapter/index

1 Press ⊡ DISPLAY.

The Control Menu appears.

2 Press ↑/↓ to select the search method.

■ **When playing a DVD**

   🎬 (CHAPTER)

■ **When playing a VIDEO CD (Without PBC functions)**

   🎬 (INDEX)

Example: when you select 🎬 (CHAPTER)

"** (**)" is selected (** refers to a number).

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

```
      1 2 ( 2 7 ) TITLE12          ▶
□     1 8 ( 3 4 )                  DVD
      T   1 : 3 2 : 5 5
```
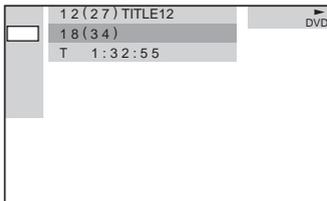
3 Press ENTER or →.

"** (**)" changes to "-- (**)."

```
      1 2 ( 2 7 ) TITLE12          ▶
      — — ( 3 4 )                  DVD
      T   1 : 3 2 : 5 5
```
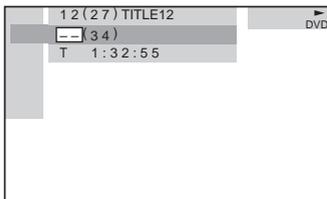
4 Press ↑/↓ or the number buttons to select the chapter or index number you want to search.

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.

Note

When you play a VIDEO CD with PBC functions, the index search function does not work.

To turn off the Control Menu

Press ⊡ DISPLAY repeatedly until the Control Menu is turned off.

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

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) is selected.

2 Press ENTER or →.

"T--:--:--" appears above "T**:**:**."

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

For example, to find a desired point at 2 hours, 10 minutes, and 20 seconds after the beginning, just enter "2:10:20."

Note

The title, chapter or track number displayed is the same number recorded on the disc.

Tip

You can change the display to show playing time or remaining time. For details, see "Checking the Playing Time and Remaining Time" (page 44).

Viewing Information in the Front Panel Display

DVD   VIDEO CD   CD   MP3   JPEG

Viewing the Playing Time and Remaining Time in the Front Panel Display

You can check disc information, such as the remaining time, total number of titles in a DVD, tracks in a VIDEO CD, CD or MP3, or files in a JPEG using the front panel display (page 75).
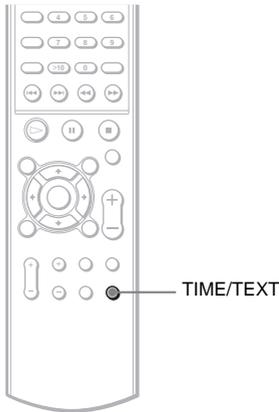
TIME/TEXT

Press TIME/TEXT.

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

When playing a DVD

Playing time and number of the current title


```
TITLE
    1       0.00.10
```

Remaining time of the current title


```
TITLE
    1    -- 2.00.40
```

Playing time and number of the current chapter


```
CHAP
    1       0.00.10
```

Remaining time of the current chapter


```
CHAP
    1    -- 0.01.28
```

Disc name


```
SONY
```

Playing Discs

41^{GB}

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

Playing time and current track number
(when playing a CD)
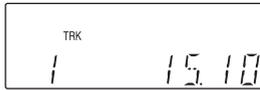
TRK

1   15.10

Remaining time of the
current track

TRK

1   ‑0.40

Playing time of the disc

26.20

Remaining time of the
disc

‑43.50

Disc name

SONY

When playing an MP3

Playing time and current track number

TRK

3   3.01

Track (file) name

TRK

POINT
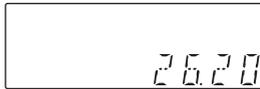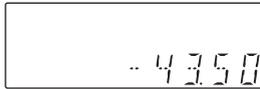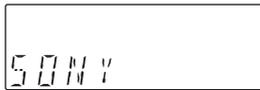
When playing a JPEG

Current file number

2

File name

POINT

Notes
• Depending on the type of disc being played and the playing mode, the disc information may not be displayed.
• Only alphabetical letters and numbers can be used for file names. Anything else is displayed as " ".
• In the following cases, elapsed playing time and current track remaining time may not be displayed accurately.
  – during fast-forward/reverse.

Tips
• 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 details on how to read this information.

Viewing the Sound Field, Volume Level, or Frequency in the front panel display

You can check the current sound field, volume level, frequency, or station name using the front panel display.
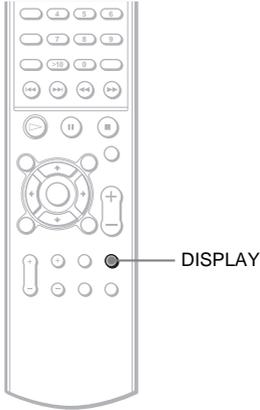
DISPLAY

Press DISPLAY.

Each time you press DISPLAY, the display changes as shown in the charts.

When the system is set to "DVD" or "VIDEO"

Current sound field*[1]
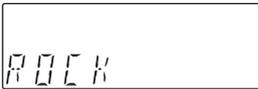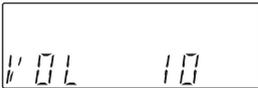
Volume*[1]

Current function display, before pressing DISPLAY

*[2]
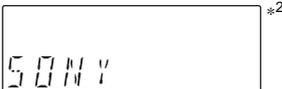
When the system is set to "TUNER AM" or "TUNER FM"

Station name*[3]

Frequency*[1]

Current sound field*[1]

Volume*[1]

*[1] Returns to the original display when indicated time has elapsed.

*[2] When the disc name is displayed in "DVD" mode.

*[3] This is displayed if you have entered a name for a preset station (page 60).

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 text and MP3 folder name/file name recorded on the disc.

DISPLAY

TIME/TEXT

1 Press ⬚ DISPLAY during playback.

The Control Menu appears.


```
1 2 ( 2 7 ) TITLE12
1 8 ( 3 4 )
T   1 : 3 2 : 5 5
```
DVD

Disc type
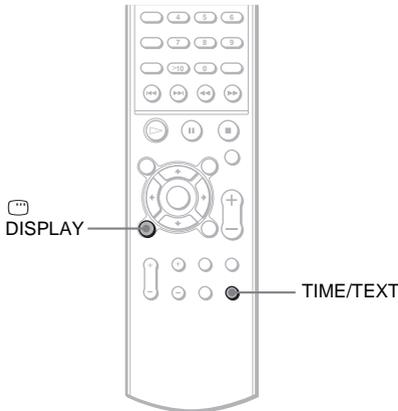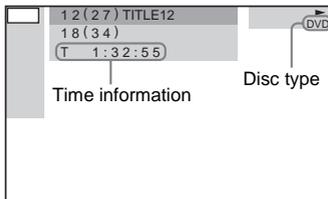
Time information

2 Press TIME/TEXT repeatedly to change the time information.

The display and the kinds of time that you can check 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

To turn off the Control Menu

Press ⬚ DISPLAY.

Notes

- Only alphabetical letters and numbers 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 (JPEG only)

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

⊙
DISPLAY

Press ⊙ DISPLAY during playback.

The Control Menu appears.

```
┌──┐ FAMILY                          ►
│  │ 1 ( 2 0 ) BIRTHDAY           JPEG
└──┘ ┌───────────┐
     │01/ 01/ 2003│
     └───────────┘
          │
     Date information
```
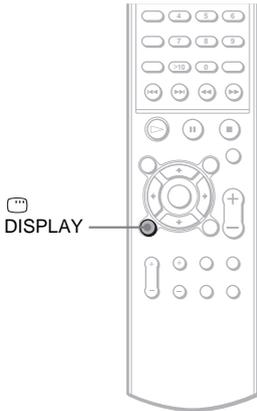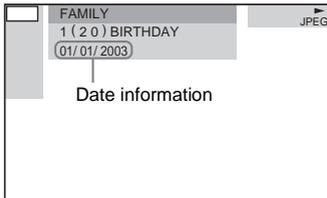
* "Exchangeable Image File Format" is a digital camera image format defined by the Japan Electronics and Information Technology Industries Association (JEITA).

Tip

Date information is "MM/DD/YYYY."

MM: Month

DD: Day

YYYY: Year

Note

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

Sound Adjustments

Changing the Sound

DVD **VIDEO CD** **CD** **MP3**

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.

AUDIO ——

←/↑/↓/→ ——
DISPLAY ——

ENTER ——
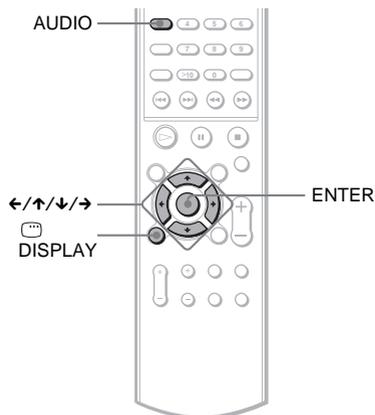
■ When playing a DVD

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 78 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.

1 **Press ⊡ DISPLAY during playback.**

The Control Menu is displayed.

2 **Press ↑/↓ to select** ⊙⊙⊙ **(AUDIO), then press ENTER.**

The options for [AUDIO] appear.

```
11 2 ( 2 7 ) TITLE12          ►
1 8 ( 3 4 )                   DVD
T   1 : 3 2 : 5 5
● 1: ENGLISH
  2: FRENCH
  3: SPANISH
```
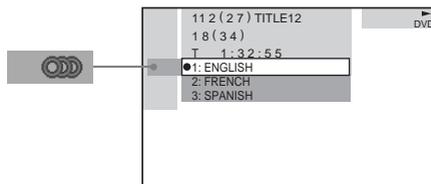
3 **Press ↑/↓ to select the desired audio signal.**

4 **Press ENTER.**

To turn off the Control Menu

Press ⊡ DISPLAY repeatedly until the Control Menu is turned off.

■ When playing a VIDEO CD, CD, or MP3

Press AUDIO repeatedly.

The default setting is underlined.

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

Notes

- • If you insert a DVD disc, the [AUDIO] icon appears in the Control Menu Display and you can select the audio format using the Control Menu. You can also select [AUDIO] directly by pressing AUDIO. Each time you press the button, the item changes.
- • When you insert any other format disc, such as VIDEO CD, CD, or MP3, you can only select [AUDIO] by pressing AUDIO.
- • 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 (DVD only)

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.

Current audio format*

```
12(27)TITLE12          ▶
18(34)                DVD
T  1:32:55
1: ENGLISH


        PROGRAM FORMAT
        DOLBY DIGITAL 3/2.1
```

* [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:

Surround component 2

DOLBY DIGITAL ③ / ② . ①

Front component 2 + Center component 1

LFE (Low Frequency Effect) component 1
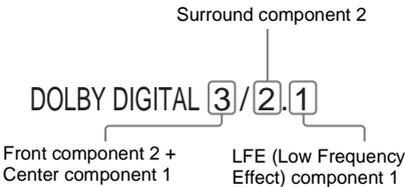
The display examples are as follows:

• 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
```

Tips

• 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.

Sound Adjustments

Enjoying Surround Sound

DVD VIDEO CD CD MP3

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 theatres into your home.

To select sound field, press AUTO FORMAT DIRECT or MODE on the remote repeatedly until the sound field you want appears in the front panel display.

Automatic decoding of the audio input signal (AUTO FORMAT DIRECT AUTO)

The auto decoding 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 subwoofer.
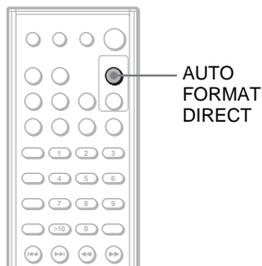
AUTO FORMAT DIRECT

Press AUTO FORMAT DIRECT on the remote repeatedly until "A.F.D. AUTO" appears in the front panel display.

Sound field	Display
AUTO FORMAT DIRECT AUTO	A.F.D. AUTO

Using only the front speakers and subwoofer (2 CHANNEL STEREO)

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

This allows you to play any source using only the front left and right speakers and subwoofer.
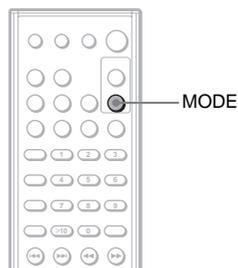
MODE

Press MODE on the remote repeatedly until "2CH ST" appears in the front panel display.

Sound field	Display
2CHANNEL STEREO	2CH ST

Selecting a sound field (AUTO FORMAT DIRECT button)
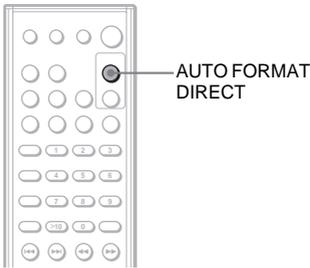
AUTO FORMAT DIRECT

Press AUTO FORMAT DIRECT on the remote repeatedly until the sound field you want appears in the front panel display.

Sound field	Display
AUTO FORMAT DIRECT AUTO	A.F.D. AUTO
AUTO FORMAT DIRECT PRO LOGIC	DOLBY PL
AUTO FORMAT DIRECT PRO LOGICII MOVIE	PLII MOVIE
AUTO FORMAT DIRECT PRO LOGICII MUSIC	PLII MUSIC

■ AUTO FORMAT DIRECT PRO LOGIC

Dolby Pro Logic produces five output channels from two-channel sources. This mode performs Pro Logic decoding to the input signal and output to front, center, and surround speakers. Meanwhile, the surround channel becomes monaural.

■ AUTO FORMAT DIRECT PRO LOGICII MOVIE/MUSIC

Dolby Pro LogicII produces 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.

Selecting a sound field (MODE button)
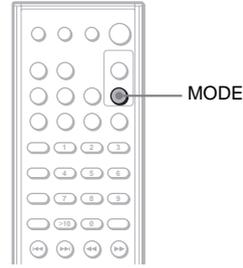
MODE

Press MODE on the remote repeatedly until the sound field you want appears in the front panel display.

Sound field	Display
2CHANNEL STEREO	2CH ST
ROCK	ROCK
POP	POP
JAZZ	JAZZ
CLASSIC	CLASSIC
NEWS	NEWS
SPORTS	SPORTS
MOVIE	MOVIE

■ ROCK, POP, JAZZ, CLASSIC, NEWS, SPORTS, MOVIE

The each mode provided sound to suit the source.

When using the headphones

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

■ HEADPHONE 2CHANNEL STEREO

This mode outputs the sound from the headphone L/R. Standard 2 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 AUTO FORMAT DIRECT on the remote repeatedly until "A.F.D. AUTO" appears in the front panel display, or press MODE on the remote to display "2CH ST."

Note

When the input signal is multi channel source, AUTO FORMAT DIRECT PRO LOGIC, AUTO FORMAT DIRECT PRO LOGICII MOVIE/MUSIC are cancelled and the multi channel source is output directly.

Using the Sound Effect

DVD **VIDEO CD** **CD** **MP3**

This system provides you with 2 types of sound effect, simply by pressing a button. Choose the sound to suit your needs.
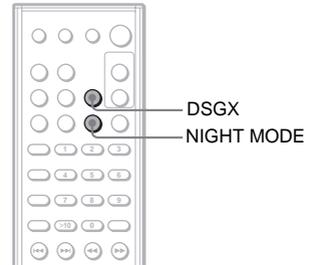
DSGX
NIGHT MODE

Press NIGHT MODE or DSGX on the remote.

The sound effect is activated.

■ NIGHT MODE

In this mode, you can enjoy sound effects or dialogue, as you would in a movie theatre, even at low volume. It is useful for watching movies at night.

■ DSGX

With DSGX on, bass frequencies are effectively reinforced.

To turn off the sound effect

Press NIGHT MODE or DSGX on the remote again.

Note

These two types of sound effect cannot be activated at the same time.

Changing the Angles

DVD

If various angles (multi-angles) for a scene are recorded on a DVD, 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.
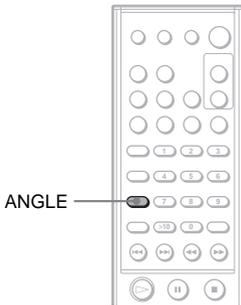
ANGLE

Press ANGLE.

Each time you press ANGLE, the angle changes.

Note

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

Displaying the Subtitles

DVD

If subtitles are recorded on a disc, you can turn the subtitles on or 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. You can select a language you are learning, for example, and turn on the subtitles for better understanding.
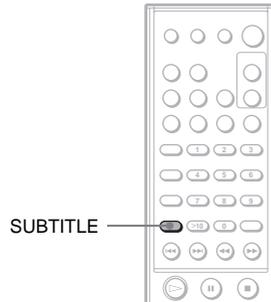
SUBTITLE

Press SUBTITLE.

Each time you press SUBTITLE, the subtitle language changes.

Note

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

Using Various Additional Functions

Locking Discs

(PARENTAL CONTROL)

DVD

You can set a playback restriction for a disc.

Parental Control
You can set a playback limit some DVDs according to a predetermined level, such as the age of the viewer.

Limiting playback for children (Parental Control) (DVD only)

Playback of some DVDs can be limited according to a predetermined level, such as the age of the viewer. 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.
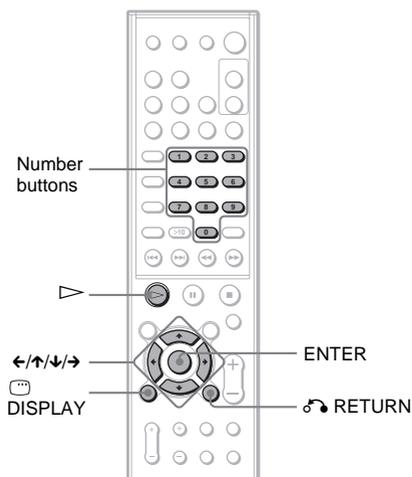
Number buttons

$\triangleright$

$\leftarrow$/$\uparrow$/$\downarrow$/$\rightarrow$

DISPLAY

ENTER

RETURN

1 **In stop mode, press ⌷ DISPLAY.**
The Control Menu appears.

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

```
1 2 ( 2 7 ) TITLE12          ■
1 8 ( 3 4 )                  DVD
T    1 : 3 2 : 5 5

●CUSTOM
```
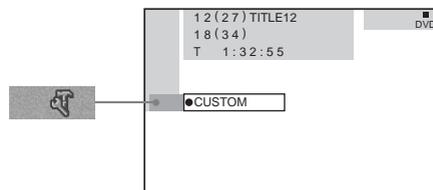
3 **Press ENTER.**
The Setup Display appears.

4 **Press $\uparrow$/$\downarrow$ to select [CUSTOM SETUP], then press ENTER or $\rightarrow$.**
[CUSTOM SETUP] is displayed.

```
CUSTOM SETUP
PARENTAL CONTROL        →
TRACK SELECTION        OFF
DATA CD PRIORITY:      MP3
```
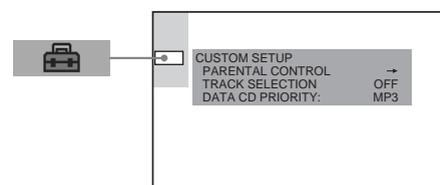
5 **Press $\uparrow$/$\downarrow$ to select [PARENTAL CONTROL →], then press ENTER or $\rightarrow$.**

■ **If you have not entered a password**
The display for registering a new password appears.

```
CUSTOM SETUP
PARENTAL CONTROL
Enter a new 4-digit password,
then press ENTER .

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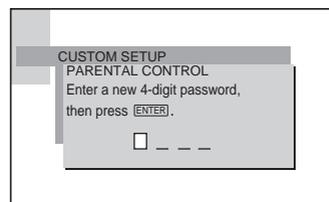
Enter a 4-digit password using the number buttons, then press ENTER.
The display for confirming the password appears.

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

The display for entering the password appears.

```
CUSTOM SETUP
PARENTAL CONTROL
  Enter password, then press ENTER.
        □ _ _ _
```
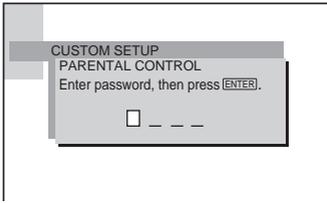
6 Enter your password using the number buttons, then press ENTER.

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

```
CUSTOM SETUP
PARENTAL CONTROL
  LEVEL:                      OFF
  STANDARD:                   USA
  CHANGE PASSWORD              →
```
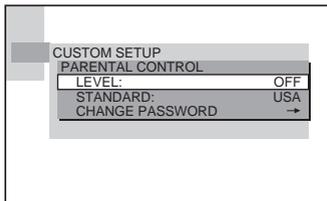
7 Press ↑/↓ to select [STANDARD], then press ENTER or →.

The selection items for [STANDARD] are displayed.

```
CUSTOM SETUP
PARENTAL CONTROL
  LEVEL:                      OFF
  STANDARD:                   USA
  CHANGE PASSWORD      OTHERS→
```
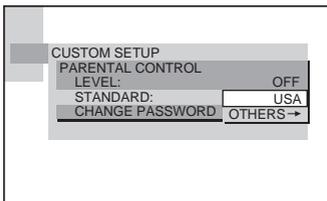
8 Press ↑/↓ to select a geographic area as the playback limitation level, then press ENTER.

The area is selected.

If you select [OTHERS →], select and enter the standard code in the table on page 54 using the number buttons.

9 Press ↑/↓ to select [LEVEL], then press ENTER or →.

The selection items for [LEVEL] are displayed.

```
CUSTOM SETUP
PARENTAL CONTROL
  LEVEL:                      OFF
  STANDARD:           8:
  CHANGE PASSWORD     7:    NC17
                      6:       R
                      5:
                      4:    PG13
                      3:      PG
                      2:
                      1:       G
```
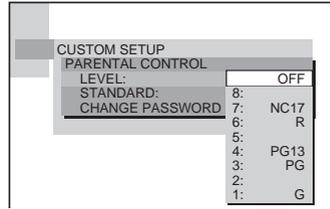
10 Select the level you want using ↑/↓, then press ENTER.

The Parental Control setting is complete.

```
CUSTOM SETUP
PARENTAL CONTROL
  LEVEL:              4:    PG13
  STANDARD:                  USA
  CHANGE PASSWORD             →
```
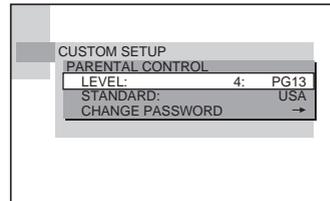
The lower the value, the more strict the limitation.

If you make a mistake

Press ⟳ RETURN or ← to go back to the previous screen.

To turn off the Setup Display

Press ⊡ DISPLAY repeatedly until the Setup Display is turned off.

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

Set [LEVEL] to [OFF] in Step 10.

To change the password

1 In Step 7, select [CHANGE PASSWORD →] using ↓, then press ENTER.
  The display for entering the password appears.

2 Follow Step 7 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.

Notes

• If you play a DVD which does 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.

Tip

If you forget your password, remove the disc and repeat Step 1 to 5 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 5, replace the disc in the system and press ▷. When the [PARENTAL CONTROL] display appears, enter your new password.

Area Code

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

Controlling the TV with the Supplied Remote

You can control your TV (SONY only) with the supplied remote.

Controlling TVs with the remote
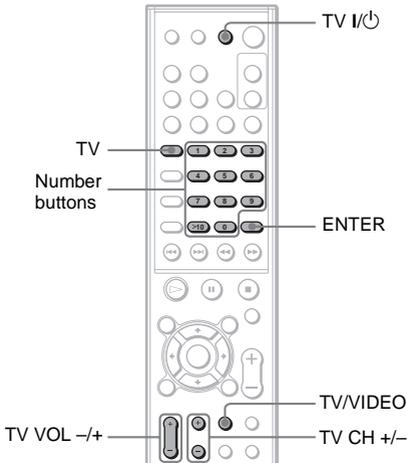
Controlling the TV

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 +/–	Select the TV channel.

Using the number buttons for controlling the TV

When you set the remote to the TV mode, you can use the number buttons for controlling the TV.

Press the TV button.

The TV button turns red and the remote is set to the TV mode. You can select the TV channels by using the number buttons.

>10 is for selecting a channel number greater than 10.

To cancel the TV mode, press the TV button again.

Notes

- The TV button turns off when you do not operate the remote for 10 seconds.
- Depending on the TV, you may not be able to control your TV or to use some of the buttons above.

Tip

Depending on the TV manufacturer, the following method also works. Press >10, then the number. (For example, for channel 25, press >10, then 2 and 5.)

Changing the type of signal output

This will change the type of signal output from the COMPONENT VIDEO OUT jacks on the system. See page 73 for more information about the different signal types.

1 **Press FUNCTION repeatedly to select "DVD."**

2 Press PROGRESSIVE.

The current output signal "-NORMAL-" appears in the front panel display.

When "-PROGRE-" appears in the front panel display, the output signal is already set to progressive format.

3 Press PROGRESSIVE again while "-NORMAL-" appears in the front panel display.

The output signal is changed to progressive format and "PROGRE" appears in the front panel display.

Tip

To return the setting to interlace format repeat the procedure above. When the output signal is changed to interlace format, "NORMAL" appears in the front panel display.

Notes

• When progressive format is selected, no signal is output from the MONITOR OUT (VIDEO/S VIDEO) jacks.
• Progressive format does not work for PAL signals. Even if you set progressive format, the output signal is automatically switched to interlace format for PAL signal.
• If you set progressive format, but your TV cannot accept the signal in progressive format. In this case, return the setting to interlace format (the default setting).

Using the SONY TV DIRECT Function

SONY TV DIRECT allow you to turn on your SONY TV and this system, change the system mode to "DVD," and then switch the TV's input source you set with one button push.

SONY TV DIRECT

Number buttons

TV CH +

TV/VIDEO

Preparation

Register the TV's input source connected to this system.

1 Press and hold TV/VIDEO while entering the code for the TV's input source connected to this system (see following table) using the number buttons.

The TV's input source is selected.

If you successfully set the TV's input source code, the TV button flashes twice slowly. If the setting is unsuccessful, the TV button flashes five times quickly.

By pressing	Number	TV's input source
TV/VIDEO	0	No input source (Default)
	1	VIDEO1
	2	VIDEO2
	3	VIDEO3
	4	VIDEO4
	5	VIDEO5
	6	VIDEO6
	7*	COMPONENT 1 INPUT
	8*	COMPONENT 2 INPUT

* Except for North American models.

2 Press and hold TV CH + while entering the code for transmit time (see table below) using the number buttons.

The transmit time from the remote is selected.

If you successfully set the transmit time code, the TV button flashes twice slowly. If the setting is unsuccessful, the TV button flashes five times quickly.

By pressing	Number	Transmit time
TV CH +	1	0.5 (Default)
	2	1
	3	1.5
	4	2
	5	2.5
	6	3
	7	3.5
	8	4

Operation

Point the remote to the direction of TV and this system, then press SONY TV DIRECT once.

While transmitting the code from the remote, the TV button flashes.

Notes

- This function is only for the SONY TV series, however, some TV products may also not work.
- If this function does not work, change the transmit time. The transmit time varies depending on the TV.
- If distance between the TV and this system is too far, this function may not work. Install the system near the TV.
- Keep the remote pointed in the direction of the TV and this system while the TV button is flashing.

Using the Video or Other Unit

You can use a VCR or other unit(s) connected to the VIDEO/SAT jacks. Refer to the operation manual supplied with the unit for further information on the operation.
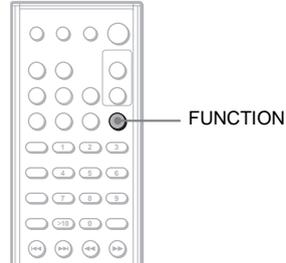
FUNCTION

Press FUNCTION repeatedly until "VIDEO" appears in the front panel display.

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

When "ATTENUATE" is set to "ATT OFF."

TUNER FM → TUNER AM → VIDEO → DVD → TUNER FM → ...

When "ATTENUATE" is set to "ATT ON."

TUNER FM → TUNER AM → SAT → DVD → TUNER FM → …

For details on "ATTENUATE", see 58 page.

To use a digital satellite receiver or other components with a high audio output level

Connect the satellite receiver to the VIDEO/SAT jacks of this system. You can also connect the components with a high audio output level (including 2V r.m.s components, such as MD, etc.) to the VIDEO/SAT jacks, and perform the following to prevent distortion occurring.

FUNCTION

AMP MENU

←/↑/↓/→ — ENTER

1 **Press FUNCTION repeatedly until VIDEO appears in the front panel display.**

2 **Press AMP MENU.**

3 **Press ↑ or ↓ until "CUSTOMIZE" appears in the front panel display, then press ENTER or →.**

   The system enters the Customize Menu mode.

4 **Press ↑ or ↓ repeatedly to select "ATTENUATE" in the front panel display, then press ENTER or →.**

5 **Press ↑ or ↓ to select "ATT ON" in the front panel display.**

   The output level is changed.
   When you select "ATT OFF" and press ↓, this operation will be cancelled.

6 **Press ENTER or AMP MENU.**

   Turns off the AMP menu.
   The function name in the front panel display changes to "SAT."

Tip
To return to the VIDEO function, select "ATT OFF" at step 5.

Enjoying the Radio

Presetting Radio Stations

You can preset 20 FM stations, and 10 AM stations. Before tuning, make sure to turn down the volume to minimum.
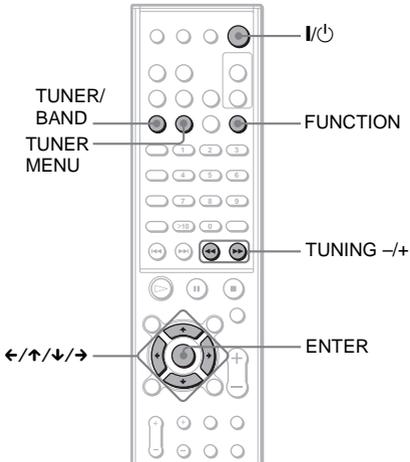
1 **Press TUNER/BAND repeatedly until the band you want appears in the front panel display.**

Each time you press TUNER/BAND, the band toggles between FM and AM.

2 **Press and hold TUNING + or – until the auto scanning starts.**

Scanning stops when the system tunes in a station. "TUNED" and "ST" (for stereo program) appear in the front panel display.

3 **Press TUNER MENU.**

4 **Press ←/→ or ↑/↓ repeatedly until "MEMORY" appears in the front panel display.**

5 **Press ENTER.**

A preset number appears in the front panel display.
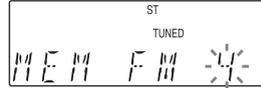
6 **Press ↑/↓ to select the preset number you want.**
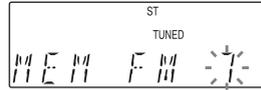
7 **Press ENTER.**

The station is stored.

8 **Repeat 1 to 7 to store other stations.**

To change the preset number

Restart from step 1.

To change the AM tuning interval (except for Austlarian and Middle Eastern model)

The AM tuning interval can be set to either 9 kHz (default) or 10 kHz (for some areas). To change the AM tuning interval, first tune in any AM station, then turn off the system by pressing I/⏻ on the remote, or press I/⏻ on the system. While holding down VOLUME – (on the system), press I/⏻ on the system to turn on the power. If you change the interval, AM preset stations will be erased.
To reset the interval, repeat the same procedure.

Listening to the Radio

Preset radio stations in the system's memory first (see "Presetting Radio Stations" on page 59).
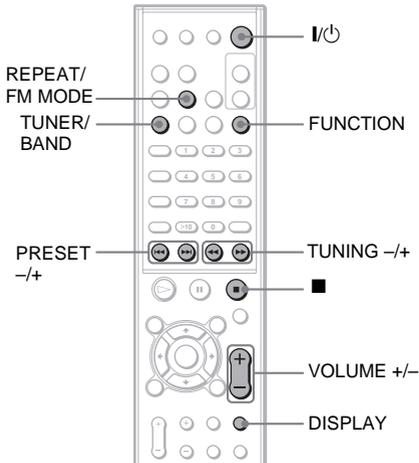
1 **Press FUNCTION repeatedly until FM or AM appears in the front panel display.**

The last received station is tuned in.
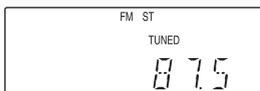
2 **Press PRESET + or – repeatedly to select the preset station you want.**

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

Every time you press TUNER/BAND, the band toggles between FM and AM.

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

To turn off the radio

Press I/(¹).

To listen to non-preset radio stations

Use manual or automatic tuning in Step 2.
For manual tuning, press TUNING + or – on the remote repeatedly.

For automatic tuning, press and hold TUNING + or – on the remote. Press ■ when you stop the automatic tuning.

Tips
- If an FM program is noisy, press REPEAT/ FM MODE on the remote so that "MONO" appears in the front panel display. There will be no stereo effect, but the reception will improve. Press the button again to restore the stereo effect.
- To improve reception, reorient the supplied antennas.

To check the frequency or sound field

Press DISPLAY repeatedly.
Each time you press DISPLAY, the front panel display changes as follows:
index name of the station* → frequency → sound field → volume → index name of the station...

* This is displayed if you have entered a name for a preset station (page 60).

Naming Preset Stations

You can enter a name of up to 9 characters for preset stations. These names (for example, "XYZ") appear in the system's front panel display when a station is selected.
Note that no more than one name can be entered for each preset station.
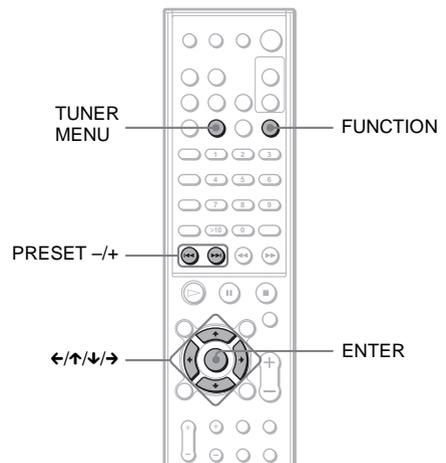
1 **Press FUNCTION repeatedly until FM or AM appears in the front panel display.**

The last station you received is tuned in.

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

TUNER FM → TUNER AM → VIDEO (SAT) → DVD → TUNER FM…

2 **Press PRESET+ or – repeatedly to select the preset station you want to create an index name for.**

3 **Press TUNER MENU.**

4 **Press ← or → repeatedly until "NAME IN" appears.**

```
           ST
         TUNED

 N A M E    I N
```

5 **Press ENTER.**

6 **Create an index name by using the cursor buttons:**

Press ↑/↓ to select a character, then press → to move the cursor to the next position.

If you make a mistake

Press ← or → repeatedly until the character to be changed flashes, then press ↑/↓ to select the desired character. Capital letters, numbers, and 9 symbols (' - / , + < > _ blank space) can be input for a radio station name.

7 **Press ENTER.**

The station name is stored.

Using the Sleep Timer

You can set the system to turn off at a preset time, so you can fall asleep listening to music. You can preset the time in 10 minutes decrements.
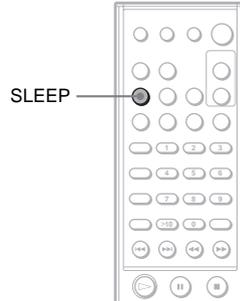
SLEEP

Press SLEEP.

Each time you press this button, the minutes display (the remaining time) changes as follows:

```
 ┌─→ SLEEP 90M
 │       ↓
 │    SLEEP 80M
 │       ↓
 │    SLEEP 70M
 │       ⋮
 │    SLEEP 10M
 │       ↓
 └─── SLEEP OFF
```
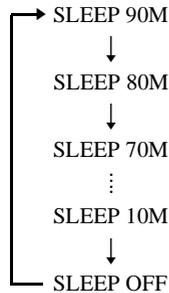
To check the remaining time

Press SLEEP once.

To change the remaining time

Press SLEEP repeatedly to select the desired time.

To cancel the Sleep Timer function

Press SLEEP repeatedly until "SLEEP OFF" appears in the display.

Other Operations

Changing the Brightness of the Front Panel Display

The brightness of the front panel display can be set to either of two levels.

AMP MENU

ENTER

←/↑/↓/→
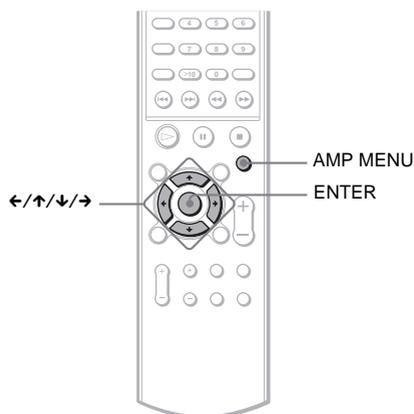
1 **Press AMP MENU.**

2 **Press ↑ or ↓ until "CUSTOMIZE" appears in the front panel display, then press ENTER or →.**

The system enters the Customize Menu mode.

3 **Press ↑ or ↓ repeatedly to select "DIMMER" in the front panel display, then press ENTER or →.**

4 **Press ↑ or ↓ to select the brightness of the front panel display.**

5 **Press AMP MENU.**

Turns off the AMP menu.

Returning to the Default Settings

You can return the system parameters, such as speaker settings and preset stations, to the default settings.
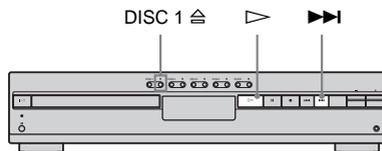
DISC 1 ⏏   ▷   ▶▶I

Press ▶▶I, ▷ and DISC 1 ⏏ on the system at the same time.

"ColdRESET" appears in the front panel display and the default settings are returned.

Settings and Adjustments

Using the Setup Display

DVD | VIDEO CD | CD | MP3 | JPEG

By using the Setup Display, you can make various adjustments to items, such as picture and sound. You can also set the subtitle language and the Setup Display, among other things. For details on each Setup Display item, see page 64-66. For an overall list of Setup Display items, see page 79.

How to use the Setup Display

← / ↑ / ↓ / →

⊡ DISPLAY

ENTER

⟲ RETURN
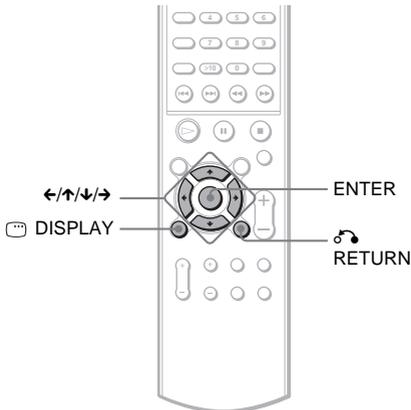
1 In stop mode, press ⊡ DISPLAY.

The Control Menu appears.

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

```
1 2 ( 2 7 ) TITLE12              ■
1 8 ( 3 4 )                    DVD
T   1 : 3 2 : 5 5

●CUSTOM
```

3 Press ENTER.

The Setup Display appears.

```
              LANGUAGE SETUP
Main          OSD :              ENGLISH
item          DVD MENU :         ENGLISH
              AUDIO :            ENGLISH
              SUBTITLE :         ENGLISH
```
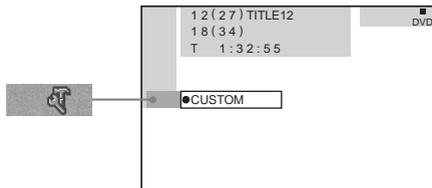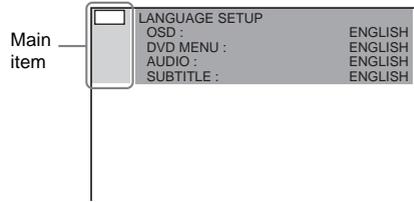
4 Press ↑/↓ to select the setup item from the displayed list: [LANGUAGE SETUP], [SCREEN SETUP], [CUSTOM SETUP] and [RESET]*. Then press ENTER or →.

The selected Setup item appears.
Example: [SCREEN SETUP]

```
              SCREEN SETUP
              TV TYPE:        4:3 LETTER BOX
              SCREEN SAVER:              ON
              BACKGROUND:    JACKET PICTURE
```
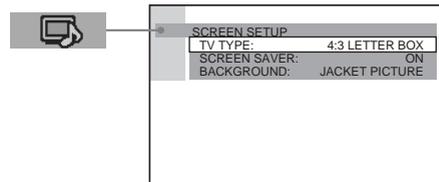
5 Select an item using ↑/↓, then press ENTER or →.

The options for the selected item appear.
Example: [TV TYPE]

```
SCREEN SETUP
TV TYPE:        4:3 LETTER BOX
SCREEN SAVER:   4:3 PAN SCAN
BACKGROUND:            16:9
```
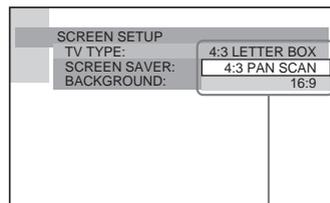
Options

Press ← or ⟲ RETURN to return to setup items.

Settings and Adjustments

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

The setting is selected and setup is complete.
Example: [4:3 PAN SCAN]
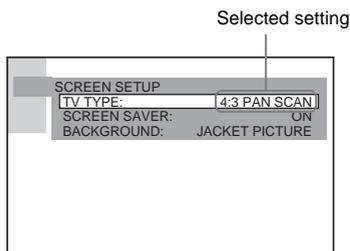
Selected setting

```
SCREEN SETUP
TV TYPE:              [4:3 PAN SCAN]
SCREEN SAVER:                   ON
BACKGROUND:       JACKET PICTURE
```

To turn off the Setup Display

Press ⊙ DISPLAY repeatedly until the Setup Display is turned off.

* When you select [RESET]   ⇨✕⇦   in step 4, the following items are returned to the default settings.
• Setup Menu (except for [PARENTAL CONTROL]) (page 79)

After you select [RESET] and press ENTER, select [YES] to reset the settings (it takes a few seconds to complete). Select [NO] and press ENTER to cancel. Do not press I/⏻ on the system, when resetting the system.

Setting the Display or Sound Track Language

(LANGUAGE SETUP)

DVD   VIDEO CD   CD   MP3   JPEG

[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).

```
LANGUAGE SETUP
OSD :                    ENGLISH
DVD MENU :               ENGLISH
AUDIO :                  ENGLISH
SUBTITLE :               ENGLISH
```
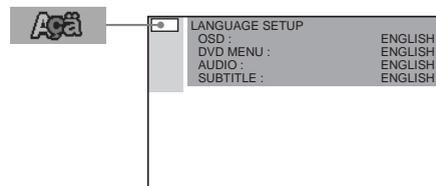
■ OSD (On-Screen Display)
Selects the display language on the screen.
Selects the language from the displayed list.

■ DVD MENU (DVD only)
Selects the desired language for the DVD menu.
Selects the language from the displayed list.

■ AUDIO (DVD only)
Selects the language of the sound track.
Selects the language from the displayed list.

■ SUBTITLE (DVD only)
Selects the language of the subtitle.
Selects the language from the displayed list.

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

Tip
If you select [OTHERS →] in [DVD MENU], [AUDIO], or [SUBTITLE], select and enter the language code from the list using the number buttons (page 78).
After you have made a selection, the language code (4 digits) is displayed the next time you select [OTHERS →].

Settings for the Display

(SCREEN SETUP)

DVD   VIDEO CD   CD   MP3   JPEG

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.

```
SCREEN SETUP
TV TYPE:              4:3 LETTER BOX
SCREEN SAVER:                    ON
BACKGROUND:          JACKET PICTURE
```
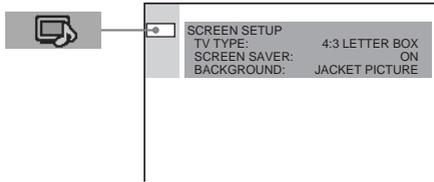
■ TV TYPE (DVD only)

Selects the aspect ratio of the connected TV (4:3 standard or wide).
The default settings vary, depending on the country model.

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	Select this when you connect a wide-screen TV or a TV with a wide mode function.

4:3 LETTER BOX

4:3 PAN SCAN

16:9

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, an MP3, or a JPEG for more than 15 minutes. The screen saver will help prevent your display device from becoming damaged (afterimage). Press ▷ to turn off the screen saver.

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

■ BACKGROUND

Selects the background colour 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 colour is blue.
BLACK	The background colour is black.

Custom Settings

(CUSTOM SETUP)

DVD **VIDEO CD** **CD** **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.

```
            CUSTOM SETUP
            PARENTAL CONTROL      →
            TRACK SELECTION       OFF
            DATA CD PRIORITY:     MP3
```
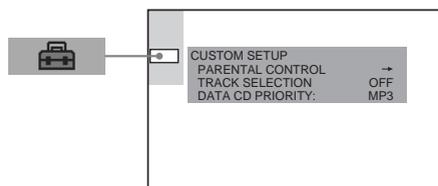
■ VCD COLOR SYSTEM (Asian, Australian, and Saudi Arabian models only)

Select the colour system when you play a VIDEO CD.

AUTO	Outputs the video signal in the system of the disc, either PAL or NTSC. If your TV uses a DUAL system, select AUTO.
PAL	Changes the video signal of an NTSC disc and outputs it in the PAL system.
NTSC	Changes the video signal of a PAL disc and outputs it in the NTSC system.

Notes

• You cannot change the colour system of the disc itself.
• On Asian, Australian, and Saudi Arabian models, you can change the colour system of this unit according to the connected TV (page 21).

■ 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 52).

■ 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.

OFF	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].

■ DATA CD PRIORITY (MP3, JPEG only)

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

MP3	If an MP3 file exists on a 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."

Notes

• When you play multi session CDs, the system decides a target to play for the last session or session linked with the last session.
• If you change this setting, reinsert the disc.

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 is connected securely.

If the STANDBY indicator flashes.

Immediately unplug the power cord and check the following items.
- Are the + and – speaker cords short-circuited?
- Are you using only the specified speakers?
- Is anything blocking the ventilation holes of the system?

After checking the above items and fixing any problems, connect the AC power cord again and turn on the system. If the indicator still flashes, or if the cause of the problem cannot be found even after checking all the above items, consult your nearest Sony dealer.

Picture

There is no picture.
- The video connecting cords are not connected securely.
- The video connecting cords are damaged.
- The system is not connected to the correct TV input jack (page 20).
- The video input on the TV is not set so that you can view pictures from the system.
- You have set progressive format but your TV cannot accept the signal in progressive format. In this case, return the setting to interlace format (the default setting) (page 22).
- Even if your TV is compatible with progressive format (480p) signals, the image may be affected when you set progressive format. In this case, return the setting to interlace format (the default setting) (page 22).
- When progressive format is selected, the signal is output only from the COMPONENT VIDEO OUT jacks.

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. If you still experience problems even when you connect your system directly to your TV, try connecting your system to your TV's S video input (page 20).

Even though you set the aspect ratio in [TV TYPE] of [SCREEN SETUP], the picture does not fill the screen.
- The aspect ratio on the disc is fixed.

Sound

There is no sound.
- The speaker cord is not connected securely.
- Press MUTING on the remote if "MUTING ON" is displayed in the front panel display.
- The system is in pause mode or in Slow-motion Play mode. Press $\triangleright$ to return to normal play mode.
- Fast forward or fast reverse is performed. Press $\triangleright$ to return to normal play mode.
- Check the speaker settings (pages 24, 25).

The left and right sounds are unbalanced or reversed.
- Check that the speakers and components are connected correctly and securely.
- Adjust the balance parameter using the AMP MENU (page 25).

There is no sound from the subwoofer.
- Check the speaker connections and settings (page 24, 25).
- Set the sound field to "AUTO FORMAT DIRECT AUTO" (page 48).

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 metres (10 ft) away from your TV set or a 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" by pressing AUDIO in the front panel display.
- Make sure the system is connected properly.

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 48).
- Check the speaker connections and settings (pages 24, 25).
- 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 48).
- Depending on the source, the effect of the surround speakers may be less noticeable.

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 48).
- Depending on the source, the effect of the surround speakers may be less noticeable.

Operation

Radio stations cannot be tuned in.

- Check that the antenna is connected securely. Adjust the antenna or connect an external antenna if necessary.
- The signal strength of the stations is too weak (when tuning in with automatic tuning). Use direct tuning.
- No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 59).
- Press DISPLAY so that the frequency appears in the front panel display.

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 inserted.
- The disc is upside down.
  Insert the disc with the playback side facing down on the disc tray.
- The disc is skewed on the disc tray.
- 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 3).

The MP3 audio track cannot be played.

- The DATA CD is not recorded in an 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 only play 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.
- The album contains more than 250 MP3 audio tracks.
- Directory level is more than 8.

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

- The system can only display alphabetical letters and numbers. Other characters are displayed as " ".

The JPEG image file cannot be played.

- The DATA CD is not recorded in a JPEG format that conforms to ISO9660 Level 1/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 length or width is more than 4720 dots.
- A JEPG image file with a high width to length ratio cannot be displayed.
- 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 album contains more than 250 JPEG image files.
- You cannot play the Progressive JPEG files.

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

- The system can only display alphabetical letters and numbers. Other characters are displayed as " ".

A disc does not start playing from the beginning.

- Repeat Play has been selected (pages 37). Cancel Repeat Play 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.

The system turns off during DVD playback.

- If approximately one hour passes with DVD playback paused or with the DVD top menu or a DVD menu displayed during DVD playback, the system automatically turns off.

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

- Depending on the disc, you may not be able to perform some of the operations above. See the operating manual that came 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 (51 page).
- The DVD prohibits changing the angles.

A disc cannot be ejected and "LOCKED" appears in the front panel display.

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

The system does not work normally.

- If the system's operation becomes effected, press I/⏻ on the system to turn off the power, then turn on the power again.

Additional Information

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND
TOTAL HARMONIC
DISTORTION:

With 4 ohm loads, both channels driven, from 200 – 20,000 Hz; rated 65 watts per channel minimum RMS power, with no more than 0.7 % total harmonic distortion from 250 milli watts to rated output.

Amplifier section

BC150

Stereo mode (rated)	65W + 65W (4 ohms at 1 kHz, DIN)
Surround mode (reference)	
North American models:	Front: 108 W + 108 W (with SS-TS10) Center*: 108 W (with SS-TS10) Surround*: 108 W + 108 W (with SS-TS10) Subwoofer*: 110 W (with SS-WS10)
Other models:	Front: 85 W + 85 W (with SS-TS10) Center*: 85 W (with SS-TS10) Surround*: 85 W + 85 W (with SS-TS10) Subwoofer*: 85 W (with SS-WS10)

BC250

Stereo mode (rated)	65 W + 65 W (4 ohms at 1 kHz, DIN)
Surround mode (reference)	Front: 113 W + 113 W (with SS-TS11) Center*: 113 W (with SS-CT11) Surround*: 113 W + 113 W (with SS-TS10) Subwoofer*: 115 W (with SS-WS10)

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

Inputs	VIDEO/SAT (AUDIO IN): Sensitivity: 250/400 mV Impedance: 50 kilohms
Phones	Accepts low-and high-impedance headphones.

DVD system

Laser	Semiconductor laser (DVD: λ = 650 nm) (CD: λ = 780 nm) Emission duration: continuous
Signal format system	NTSC (North American models) NTSC/PAL (Other models)
Frequency response (at 2 CH STEREO mode)	
	DVD (PCM): 2 Hz to 22 kHz (±1.0 dB) CD: 2 Hz to 20 kHz (±1.0 dB)

Tuner section

System	PLL quartz-locked digital synthesizer system
FM tuner section	
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	
Tuning range	
North American models:	531 – 1,710 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
Middle Easten models:	531 – 1,602 kHz (with the interval set at 9 kHz)
Other models:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
antenna	AM loop antenna
Intermediate frequency	450 kHz

Video section

Outputs	Video: 1 Vp-p 75 ohms
	S video:
	Y: 1 Vp-p 75 ohms
	C: 0.286 Vp-p 75 ohms
	COMPONENT:
	Y: 1 Vp-p 75 ohms
	P_B/C_B, P_R/C_R: 0.7 Vp-p
	75 ohms

Speakers (DAV-BC150)
Front/Center/Surround

Speaker system	Bass reflex
Speaker unit	70 mm (2 $^7/8$ inches) dia.
	cone type
Rated impedance	4 ohms
Dimensions (approx.)	$97 \times 100 \times 105$ mm
	(3 $^7/8 \times 4 \times 4$ $^1/4$ inches)
	(w/h/d)
Mass (approx.)	0.6 kg (1 lb 6 oz)

Speakers (DAV-BC250)
Front

Speaker system	Bass reflex
Speaker unit	70 mm (2 $^7/8$ inches) dia.
	cone type
Rated impedance	4 ohms
Dimensions (approx.)	$260 \times 1107 \times 78$ mm
	(10 $^1/4 \times 43$ $^5/8 \times 3$ $^1/8$
	inches)
	(w/h/d)
Mass (approx.)	3.5 kg (7 lb 12 oz)

Center

Speaker system	Bass reflex
Speaker unit	70 mm (2 $^7/8$ inches) dia.
	cone type
Rated impedance	4 ohms
Dimensions (approx.)	$291 \times 97 \times 78$ mm
	(11 $^1/2 \times 3$ $^7/8 \times 3$ $^1/8$ inches)
	(w/h/d)
Mass (approx.)	0.8 kg (1 lb 13 oz)

Surround

Speaker system	Bass reflex
Speaker unit	70 mm (2 $^7/8$ inches) dia.
	cone type
Rated impedance	4 ohms
Dimensions (approx.)	$97 \times 100 \times 105$ mm
	(3 $^7/8 \times 4 \times 4$ $^1/4$ inches)
	(w/h/d)
Mass (approx.)	0.6 kg (1 lb 6 oz)

Subwoofer (DAV-BC150/BC250)

Speaker system	Bass reflex
Speaker unit	160 mm (6 $^3/8$ inches) dia.
	cone type
Rated impedance	4 ohms
Dimensions (approx.)	$177 \times 380 \times 402$ mm
	(7 $\times 15 \times 15$ $^7/8$ inches)
	(w/h/d)
Mass (approx.)	6.7 kg (14 lb 13 oz)

General

Power requirements
North American and Mexican models:

	120 V AC, 60 Hz
Taiwan model:	120V AC, 50/60 Hz
Other models:	220 – 240 V AC, 50/60 Hz
Power consumption	100 W
	0.3 W (at the Power Saving
	Mode)
Dimensions (approx.)	$430 \times 90 \times 403$ mm
	(17 $\times 3$ $^5/8 \times 15$ $^7/8$ inches)
	(w/h/d) incl. projecting
	parts incl. projecting parts
Mass (approx.)	5.5 kg (12 lb 3 oz)
Supplied accessories	See page 13.

Design and specifications are subject to change
without notice.

Glossary

Album

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

Chapter

Subdivision of a title on a DVD. A title is composed of several chapters.

Dolby Digital

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

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 colourations.

■ **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.

Dolby Surround Pro Logic

As one method of decoding Dolby Surround, Dolby Surround Pro Logic produces four channels from two-channel sound. Compared with the former Dolby Surround system, Dolby Surround Pro Logic reproduces left-to-right panning more naturally and localizes sounds more precisely. To take full advantage of Dolby Surround Pro Logic, you should have one pair of surround speakers and a center speaker. The surround speakers output monaural sound.

DTS

Digital audio compression technology developed by Digital Theater Systems, Inc. This technology conforms to 5.1-channel surround. This format comprises of stereo rear channel and there is discrete subwoofer channel in this format. DTS provides the same 5.1 discrete channels of high quality digital audio. The good channel separation is realized due to the all channel data being recorded discretely and processed in digitally.

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 a worldwide standard 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 processes allocated data 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 realistic 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 theatres. Video based DVDs, such as television dramas or sit-coms, displays images at 30 frames (or 60 fields) per second.

Interlace format (Interlaced scanning)

The Interlace format is the NTSC standard method for displaying TV images at 30 frames per second. Each frame is scanned twice - alternately between the even numbered scanning lines and then odd numbered scanning lines, at 60 times per second.

Multi-angle function

Various angles of a scene, or viewpoints of the video camera 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 (sequential scanning)

In contrast to the Interlace format, the progressive format can reproduce 60 frames per second by reproducing all scanning lines (525 lines for the NTSC system). The overall picture quality increases and still images, text and horizontal lines appear sharper. This format is compatible with the 525 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 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 apply.

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

Track

Section of a picture or a music piece on a VIDEO CD, 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 a worldwide standard 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 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.

Additional Information

Index to Parts and Controls

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

Front Panel
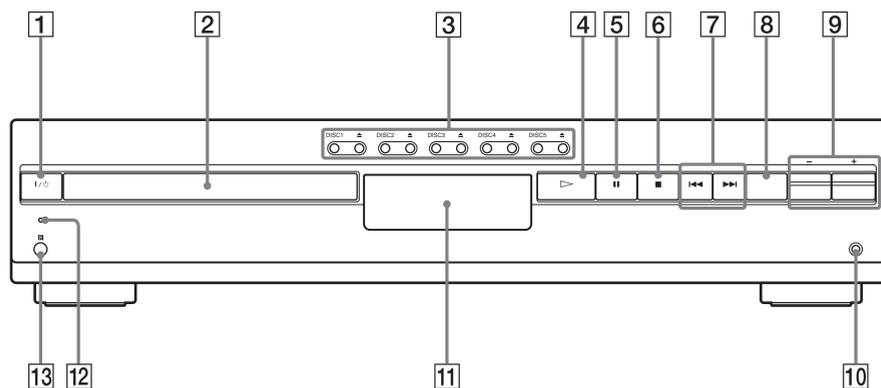
1 **I/↺ (power) (28)**

2 **Disc tray (28)**

3 **DISC 1-5 ⏏ (eject) indicators (28, 62)**

4 **▷ (play) (28, 62)**

5 **❚❚ (pause) (30)**

6 **■ (stop) (30)**

7 **I◀◀ /▶▶I, PRESET –/+ (30, 60, 62)**

8 **FUNCTION (28, 57, 60)**

9 **VOLUME +/– (28)**

10 **PHONES jack (28)**

11 **Front panel display (75)**

12 **STANDBY indicator (28)**

13 **⟦ (remote sensor) (13)**

Front Panel Display

When playing back a DVD

Playing status

Current mode

Lights up when title or chapter names are contained in the disc

Current title or chapter number

REP1 ▶ II

TITLE CHAP

DSGX dts
DOD DOPL II
NIGHT

1   1.22.30

Current surround format

Current sound effect
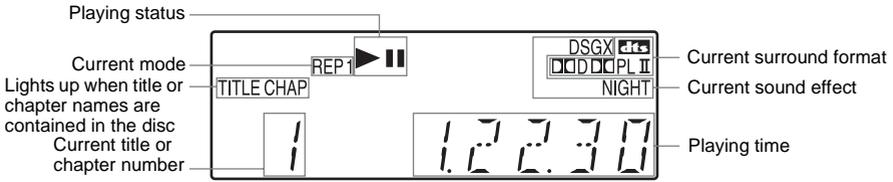
Playing time

When playing back a VIDEO CD, CD, or MP3
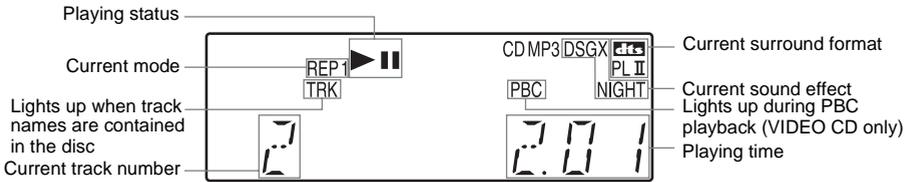
Playing status

Current mode

Lights up when track names are contained in the disc

Current track number

REP1 ▶ II

TRK

CD MP3 DSGX dts
PL II
PBC   NIGHT

2   2.01

Current surround format

Current sound effect

Lights up during PBC playback (VIDEO CD only)

Playing time

When listening to the radio

Current band

Preset number

FM ST
AM MONO
TUNED

DSGX

NIGHT

7   100.0

Monaural/Stereo effect

Current sound effect

Current station

When playing back a JPEG

Current mode

Current file number

REP ▶

11

Playing Status
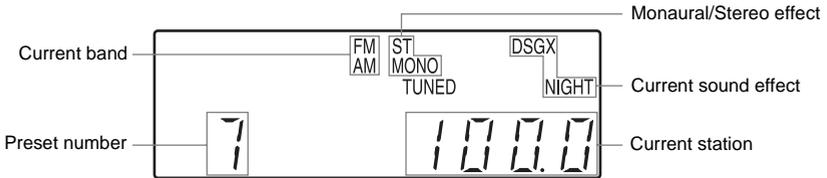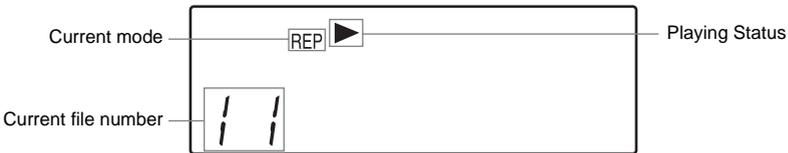
Rear Panel
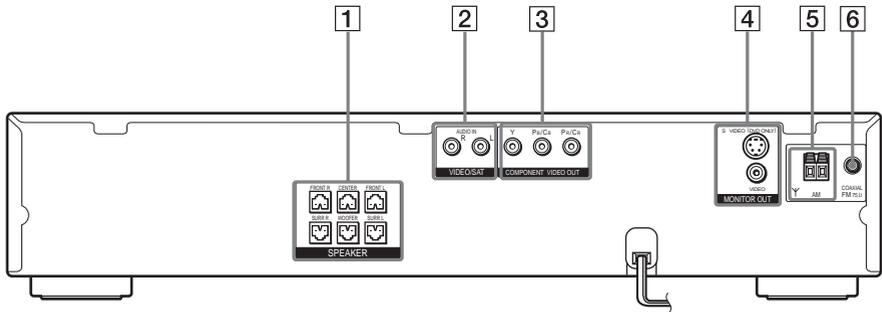
A **SPEAKER jacks (14)**

B **VIDEO/SAT AUDIO IN jacks (20, 58)**

C **COMPONENT VIDEO OUT jacks (20)**

D **MONITOR OUT (VIDEO / S VIDEO) jacks (20)**

E **AM terminal (19)**

F **FM 75Ω COAXIAL jack (19)**

Remote
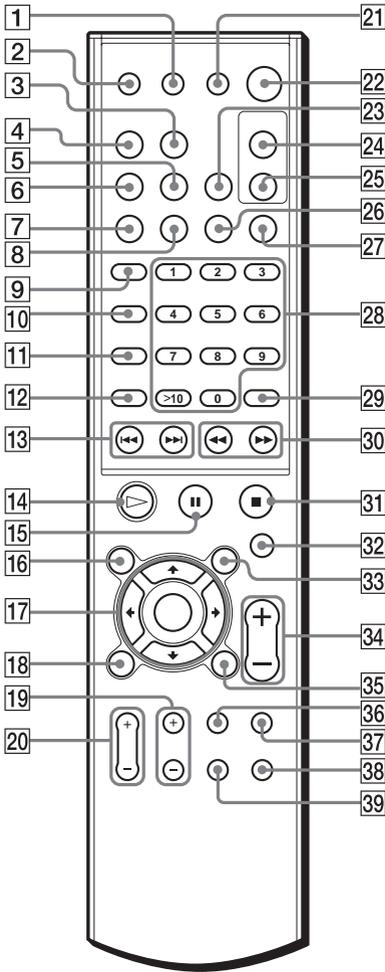
A **SONY TV DIRECT (56)**

B **PROGRESSIVE (22, 55)**

C **DISC SKIP (28, 30)**

D **MUTING (30)**

E **REPEAT/FM MODE (37, 60)**

F **SLEEP (61)**

G **TUNER/BAND (59, 60)**

H **TUNER MENU (59, 60)**

I **TV (55)**

J **AUDIO (46)**

K **ANGLE (51)**

L **SUBTITLE (51)**

M **I◄◄/►►I, PRESET –/+ (30, 32, 60)**

N **▷ PLAY (28, 30, 31, 32, 36, 37, 38)**

O **II PAUSE (30)**

P **TOP MENU (32)**

Q **←/↑/↓/→/ENTER (25, 32, 34, 35, 36, 37, 39, 46, 52, 58, 59, 60, 62, 63)**

R **DISPLAY (34, 35, 37, 39, 44, 45, 46, 52, 63)**

S **TV CH +/– (55, 56)**

T **TV VOL +/– (55)**

U **TV I/⏻ (on/standby) (55)**

V **I/⏻ (standby) (28, 59, 60)**

W **DSGX (50)**

X **AUTO FORMAT DIRECT (48, 49)**

Y **MODE (48, 49)**

Z **NIGHT MODE (50)**

27 **FUNCTION (22, 28, 55, 57, 58, 59, 60)**

28 **Number buttons (32, 39, 52, 55, 56)**

29 **ENTER (55)**

30 **◄◄/►►/◄I/I► SLOW, TUNING –/+ (38, 59, 60)**

31 **■ STOP (30, 31, 32)**

32 **AMP MENU (25, 58, 62)**

33 **MENU (32)**

34 **VOLUME +/– (30, 60)**

35 **⤾ RETURN (32, 34, 35, 39, 52, 63)**

36 **TV/VIDEO (55, 56)**

37 **DISPLAY (43, 60)**

38 **TIME/TEXT (41, 44)**

39 **CLEAR (39)**

Additional Information

77*GB*

Language code list

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

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

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.)

CUSTOM SETUP

- VCD COLOR SYSTEM[a)]
  - AUTO
  - PAL
  - NTSC

- 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

- DATA CD PRIORITY
  - MP3
  - JPEG

SCREEN SETUP

- TV TYPE[b)]
  - 4:3 LETTER BOX
  - 4:3 PAN SCAN
  - 16:9

- SCREEN SAVER
  - ON
  - OFF

- BACKGROUND
  - JACKET PICTURE
  - GRAPHICS
  - BLUE
  - BLACK

RESET
- YES
- NO

[a)] Only for Asian, Australian, and Saudi Arabian models.

[b)] The default setting varies, depending on the country model.

AMP Menu List

You can set the following items with AMP MENU on the remote.

SP SETUP

```
─ CENTER SP ┬ CENTER Y
            └ CENTER N
─ SURR SP ──┬ SURR Y
            └ SURR N
─ F DIST ───── 1.0m - 7.0m/3ft - 23ft
─ CEN DIST ─── 1.0m - 7.0m/3ft - 23ft
└ SURR DIST ── 1.0m - 7.0m/3ft - 23ft
```

LEVEL

```
─ T.TONE ────┬ T.TONE OFF
             └ T.TONE ON
─ F BALANCE ─ 6 steps left or right
─ CEN LEVEL ─ −6 dB - +6 dB
─ SL LEVEL ── −6 dB - +6 dB
─ SR LEVEL ── −6 dB - +6 dB
─ SW LEVEL ── −6 dB - +6 dB
└ AUDIO DRC ┬ DRC OFF
            ├ DRC STD
            └ DRC MAX
```

CUSTOMIZE

```
─ DIMMER ────┬ DIM OFF
             └ DIM ON
└ ATTENUATE ┬ ATT OFF
            └ ATT ON
```

Index

Additional Information

Quick reference for Remote Commander
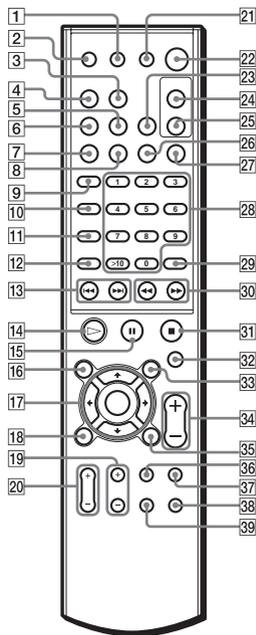
Note

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.

1. Turns a SONY TV and the system on and changes the TV's input source.
2. Selects the output signal, progressive format or interlace format.
3. Changes a disc while playing another disc.
4. Mutes the sound.
5. Disc: Displays the [REPEAT] display on the TV screen. Radio: Switches monaural or stereo of FM stereo reception.
6. Sets the system to turn off at a preset time.
7. Selects AM or FM band.
8. Stores a preset station.
9. Switches the TV's input source between TV and SYSTEM. Sets the remote to TV mode. Normal mode: turns off. TV mode: turns red.

10. Changes the sound while playing a DVD or VIDEO CD.
11. Changes the angles when playing a DVD.
12. Changes the subtitle language when playing a DVD.
13. ⏮/⏭: Press to go to the next chapter or track or to go back to the previous chapter or track. PRESET –/+: Scan all preset stations.
14. Plays a disc.
15. Pauses playing a disc.
16. Displays the title menu on the TV screen.
17. Selects and executes the items or settings.
18. Displays the Control Menu display on the TV screen to set or adjust the items.
19. Selects the TV Channel.
20. Adjusts the TV volume.
21. Turns the TV on and off.
22. Turns on and off the power of the system.
23. Reinforces bass sound.
24. Selects the sound field.
25. Selects the sound field.
26. Makes sound clear at low volume.
27. Selects the component you want to use.
28. Selects the items of settings. *TV: Selects channel numbers.**

29. Executes the items or settings. *TV: Press after selecting a channel number*
30. ◀◀/▶▶ (SCAN): Locates a point while monitoring the picture while playing disc. ◀❙/❙▶ SLOW: Plays a disc in slow motion in the pause mode. TUNING –/+: Scans all available radio stations.
31. Stops playing a disc.
32. Displays the setup in the front panel display to set or adjust items.
33. Displays the DVD menu on the TV screen.
34. Adjust the SYSTEM volume. *TV: Adjust the TV volume.*
35. Returns to the previously selected screen, etc.
36. Changes the input mode of the TV.
37. Displays the sound field and volume level.
38. Switches the item displayed on the front panel display.
39. Cancel the number you select.

* Depending on the TV manufacturer, the following method may also work. Press >10, then the number. (For example, for channel 25, press >10, then 2 and 5.)

http://www.sony.net/