



BD/DVD Home Theatre System

Operating Instructions

BDV-Z7

The software of this player may be updated in the future. To find out details on any available updates, please visit: <http://support.sony-europe.com>



* 4 1 3 6 8 9 1 1 1 * (1)



WARNING

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

To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc. Do not place the naked flame sources such as lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

Do not expose batteries or apparatus with battery-installed to excessive heat such as sunshine, fire or the like.

Indoor use only.

CAUTION

The use of optical instruments with this product will increase eye hazard. As the laser beam used in this BD/DVD Home Theatre System is harmful to eyes, do not attempt to disassemble the cabinet.

Refer servicing to qualified personnel only.



This label is located on the laser protective housing inside the enclosure of the control unit.



This appliance is classified as a CLASS 1 LASER product. This marking is located on the laser protective housing inside the enclosure of the control unit.

About the control unit

- The nameplate is located on the bottom exterior.



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that

this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.



Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources. In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment. For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries. For more detailed information about recycling of this product or battery,

please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Notice for customers: the following information is only applicable to equipment sold in countries applying EU directives.

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters, please refer to the addresses given in separate service or guarantee documents.

Precautions

This equipment has been tested and found to comply with the limits set out in the EMC Directive using a connection cable shorter than 3 metres.

On power sources

- The system is not disconnected from the mains as long as it is connected to the AC outlet, even if the system itself has been turned off.
- As the main plug is used to disconnect the system from the mains, connect the system to an easily accessible AC outlet. Should you notice an abnormality in the system, disconnect the main plug from the AC outlet immediately.

Copyrights and Trademarks

- 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 the DTS® Digital Surround System.

* Manufactured under license from Dolby Laboratories.

Dolby and the double-D symbol are trademarks of Dolby Laboratories.

** Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,226,616; 6,487,535; 7,392,195; 7,272,567; 7,333,929; 7,212,872 & other U.S. and worldwide patents issued & pending. DTS is a registered trademark and the DTS logos, Symbol, DTS-HD and DTS-HD Master Audio | Essential are trademarks of DTS, Inc. © 1996-2008 DTS, Inc. All Rights Reserved.

- This system incorporates High-Definition Multimedia Interface (HDMI™) technology. HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc.
- “BD-Live” and “BonusView” are trademarks of Blu-ray Disc Association.
- “Blu-ray Disc” is a trademark.
- “Blu-ray Disc,” “DVD+RW,” “DVD-RW,” “DVD+R,” “DVD-R,” “DVD VIDEO,” and “CD” logos are trademarks.
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- “PLAYSTATION” is a trademark of Sony Computer Entertainment Inc.
- “x.v.Colour” and “x.v.Colour” logo are trademarks of Sony Corporation.
- “PhotoTV HD” and the “PhotoTV HD” logo are trademarks of Sony Corporation.
- Other system and product names are generally trademarks or registered trademarks of the manufacturers. ™ and ® marks are not indicated in this document.

About These Operating Instructions

- The instructions in these Operating Instructions describe the controls on the remote. You can also use the controls on the control unit if they have the same or similar names as those on the remote.
- Icons, such as , listed at the top of each explanation indicate what kind of media can be used with the function being explained. For details, see “Playable Discs” (page 88).
- In this manual, “disc” is used as a general reference for the BDs, DVDs, or CDs unless otherwise specified by the text or illustrations.
- The Control Menu items may vary depending on the area.
- The default setting is underlined.

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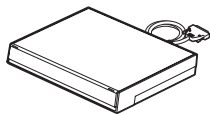
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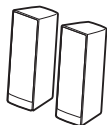
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Unpacking

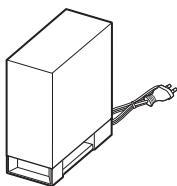
- Control unit (1)



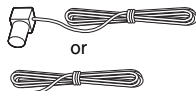
- Front speakers (2)



- Subwoofer (1)



- FM wire antenna (aerial) (1)



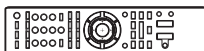
- Speaker cords (2, white/red)



- Video cord (1)



- Remote commander (remote) (1)



- R6 (size AA) batteries (2)



- Cleaning cloth (1)



- Operating Instructions (this manual)
- Speaker and TV connections
- Software Licence Information

For United Kingdom models

- DIGITAL MEDIA PORT adapter (TDM-iP20) (1)

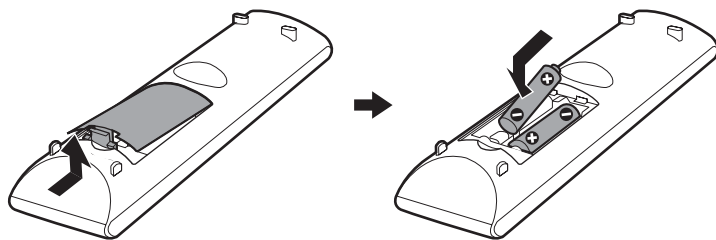


- Operating Instructions for the DIGITAL MEDIA PORT adapter (TDM-iP20)

Preparing the remote

Inserting batteries into the remote

Insert two R6 (size AA) batteries (supplied) by matching the $\oplus$ and $\ominus$ ends on the batteries to the markings inside the compartment.



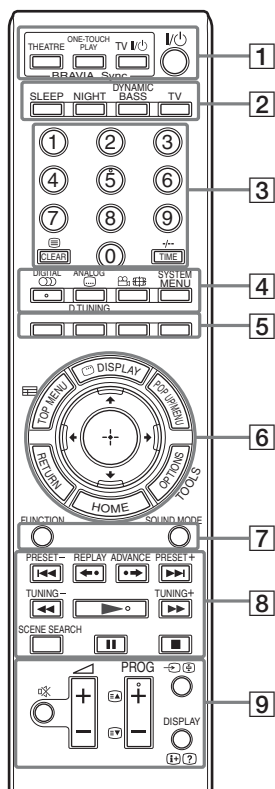
Note

- 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.
- 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.

Index to Parts and Control

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

Remote control



Number 5, /DIGITAL, PROG +, and buttons have a tactile dot. Use the tactile dot as a reference when operating the remote.

- : For system operations
- : For TV operations
(For details, see “Controlling the TV with the Supplied Remote” (page 62).)

1 THEATRE (page 59)

Switches to the optimum video mode for watching movies automatically.

ONE-TOUCH PLAY (pages 35, 59)

By only pressing the button, the TV turns on, the TV is set for BD/DVD input selector, and the system starts playing a disc automatically.

TV I/⏻ (on/standby) (page 62)

Turns on the TV or sets it to standby mode.

I/⏻ (on/standby) (pages 28, 29, 35, 52)

Turns on the system or sets it to standby mode.

2 SLEEP (page 63)

Sets the sleep timer.

NIGHT (page 50)

Activates the night mode function.

DYNAMIC BASS (page 50)

Reinforces bass frequencies.

TV (page 62)

Changes to the TV operation mode for the remote.

3 Number buttons (pages 35, 53, 62)

Enters the title/chapter numbers, radio frequencies, etc.

CLEAR (pages 40, 54)

Clears the entry field.

(text) (page 62)

Accesses text.

TIME (page 40)

Displays the elapsed/remaining playback time in the front panel display.

-/-- (page 62)

-/-- is for selecting a channel number greater than 10.

4 (audio) (pages 49, 50)

Selects the audio format/track.

(subtitle) (page 38)

Selects the subtitle language when multi-lingual subtitles are recorded on a BD-ROM/DVD VIDEO.

D.TUNING (page 53) BD

Selects the radio frequencies.

 (angle) (page 38) BD

Switches to other viewing angles when multi-angles are recorded on a BD-ROM/DVD VIDEO.

SYSTEM MENU (pages 33, 42, 50, 54, 63, 64) BD

Enters the system menu.

DIGITAL (page 62) TV

Switches to digital mode.

ANALOG (page 62) TV

Switches to analogue mode.

 (wide) (page 62) TV

Changes the aspect ratio of the connected TV.

[5] Color buttons (red/green/yellow/blue) (pages 52, 75) BD TV

Short cut keys for selecting items on some BD's menus (can also be used for BD's Java interactive operations).

[6] TOP MENU (page 39) BD

Opens or closes the BD's or DVD's Top Menu.

 DISPLAY (page 40) BD

Displays the playback information on the TV screen.

POP UP/MENU (page 39) BD

Opens or closes the BD-ROM's Pop-up Menu, or the DVD's menu.

OPTIONS (pages 35, 44, 45, 52) BD

Displays the options menu on the TV screen.

HOME (pages 29, 35, 44, 45, 52, 66)

BD TV

Enters or exits the system's home menu.

RETURN (pages 62, 75) BD TV

Returns to the previous display.

←/↑/↶/→ (pages 29, 33, 35, 42, 44, 45, 50, 52, 54, 63, 64, 66) BD TV

Moves the highlight to a displayed item.

⊕ (ENTER) (pages 29, 33, 35, 42, 44, 45, 50, 52, 54, 63, 64, 66) BD TV

Enters the selected item.

 (guide) (page 62) TV

Displays the Digital Electronic Programme Guide (EPG).

TOOLS (page 62) TV

Displays the operation menu for the current display.

[7] FUNCTION (pages 32, 35, 44, 45, 52, 57) BD

Selects the playback source.

SOUND MODE (page 48) BD

Selects a suitable sound mode for movies or music, etc.

[8] ◀◀/▶▶ (previous/next) (pages 35, 44, 45) BD

Skips to the previous/next chapter, track, or file. To go to the beginning of the previous track, press ◀◀ twice.

PRESET +/- (page 52) BD

Selects the preset radio station.

◀•/•▶ REPLAY/ADVANCE (page 35) BD

Replays the scene/briefly fast forwards the scene.

◀◀/▶▶ (fast reverse/fast forward) (pages 35, 44) BD

Fast reverses/fast forwards the disc when pressed during playback.

Each time you press the button, search speed changes.

To resume normal speed, press ▶.

TUNING +/- (page 52) BD

Searches for radio stations.

▶ (play) (pages 35, 44, 45) BD

Starts or re-starts playback.

Plays a slideshow when a disc containing JPEG image files is inserted.

⏸ (pause) (pages 35, 44, 45) BD

Pauses or re-starts playback.

■ (stop) (pages 35, 44, 45) BD

Stops playback and remembers the stop point (resume point).

The resume point for a title/track is the last point you played or the last photo for a photo folder.

SCENE SEARCH (page 39) BD

Switches to Scene Search mode that lets you move quickly between scenes within the title currently being played back.

9 **(muting) (pages 35, 44, 62)** BD
TV

Turns off the sound temporarily.

 (volume) +/- (pages 35, 62) BD
TV

Adjusts the volume.

PROG +/- (page 62) TV

Selects the channels up and down.

 (page 62) TV

After pressing , you can select the next () or previous () text page.

 (TV input) (page 62) TV

Switches the TV's input source between the TV and other input sources.

DISPLAY (page 52) BD

Changes the radio information in the front panel display between radio frequency and station name.

 (info./text reveal) (page 62)
TV

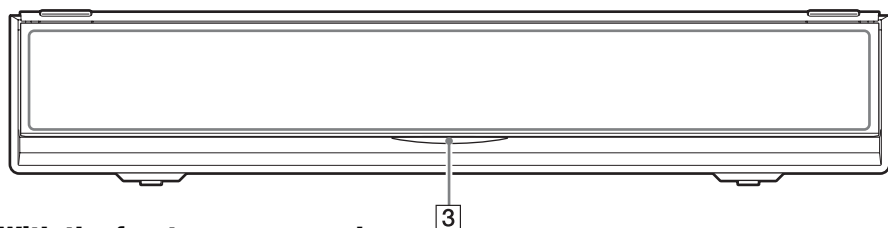
Displays the information.

Control unit

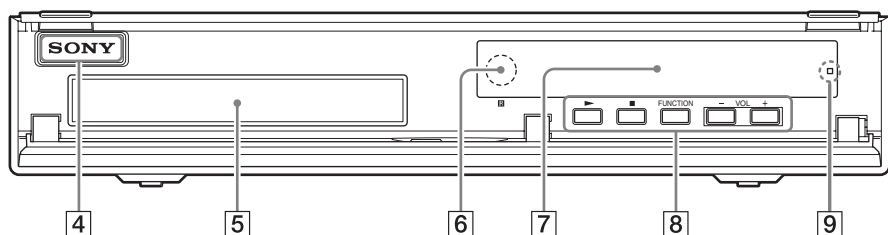
Top view



With the front cover closed



With the front cover opened



1 I/⏻ (on/standby) (page 35)

Turns on the system, or sets to standby mode.

2 ▲ (open/close)

Opens or closes the disc tray.

3 Illumination LED (page 64)

4 Logo illumination LED (page 64)

5 Disc tray (page 35)

6 [R] (remote sensor) (page 7)

7 Front panel display

8 Play operation buttons (page 35)

▶ (play)

Starts or re-starts playback.

Plays a slideshow when a disc containing JPEG image files is inserted.

■ (stop)

Stops playback and remembers the stop point (resume point).

The resume point for a title/track is the last point you played or the last photo for a photo folder.

FUNCTION

Selects the playback source.

VOL +/-

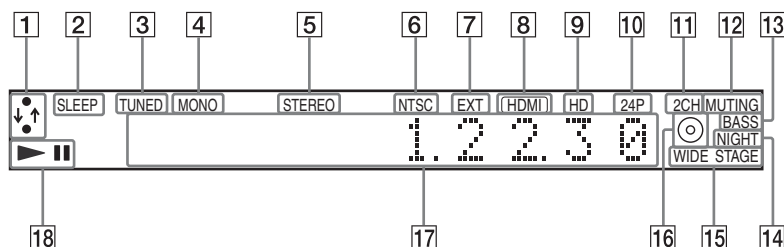
Adjusts the system's volume.

9 [P] Protect indicator (page 81)

Lights up red when a power error, etc., is detected.

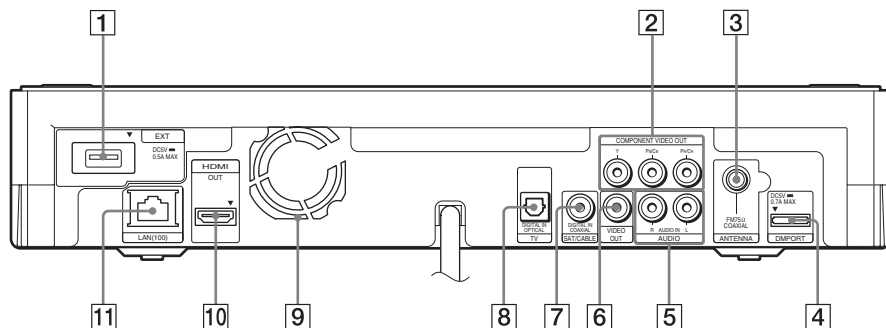
Front panel display

About the indications in the front panel display



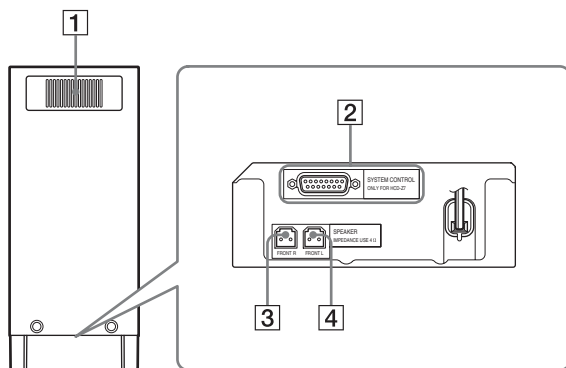
- 1 Lights up when the system is accessing the network.
- 2 Flashes when the sleep timer is set. (page 63)
- 3 Lights up when a station is received. (Radio only) (page 52)
- 4 Lights up when [FM Mode] is set to [Monaural]. (Radio only) (page 52)
- 5 Lights up when stereo sound is received. (Radio only) (page 52)
- 6 Lights up when outputting a video signal with the NTSC color system.
- 7 Lights up when the external memory is recognized. (page 26)
- 8 Lights up when the HDMI OUT jack is correctly connected to an HDCP (High-bandwidth Digital Content Protection)-compliant device with HDMI or DVI (Digital Visual Interface) input.
- 9 Lights up when outputting 720p/1080i/1080p video signals from the HDMI OUT jack or 720p/1080i video signals from the COMPONENT VIDEO OUT jacks.
- 10 Lights up when outputting 1920 x 1080p/24 Hz video signals.
- 11 2CH: Lights up during playback with "2CH STEREO."
- 12 Lights up when the sound of the system is muted. (page 35, 44)
- 13 Lights up when the DYNAMIC BASS function is on. (page 50)
- 14 Lights up when the night mode is on. (page 50)
- 15 WIDE STAGE: Lights up during playback with "WIDE STAGE" surround sound effect.
- 16 Lights up when a disc is loaded.
- 17 Displays system's status such as chapter, title, or track number, time information, radio frequency, playing status, etc.
- 18 Displays system's playing status.

Rear of the control unit



- 1** EXT slot (page 26)
- 2** COMPONENT VIDEO OUT jacks (page 20)
- 3** ANTENNA (FM 75Ω COAXIAL) jack (page 25)
- 4** DMPORT (DIGITAL MEDIA PORT) jack (page 23)
- 5** AUDIO (AUDIO IN L/R) jacks (page 23)
- 6** VIDEO OUT jack (page 20)
- 7** SAT/CABLE (DIGITAL IN COAXIAL) jack (page 23)
- 8** TV (DIGITAL IN OPTICAL) jack (page 22)
- 9** Ventilation slots
- 10** HDMI OUT jack (page 20)
- 11** LAN (100) terminal (page 27)

Subwoofer



- 1** Ventilation slots
- 2** SYSTEM CONTROL jack (page 18)
- 3** SPEAKER R jack (page 19)
- 4** SPEAKER L jack (page 19)

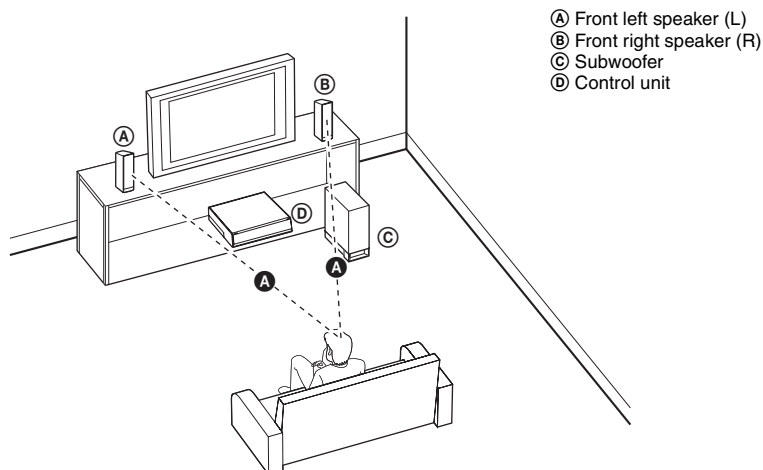
Getting Started

Step 1: Installing the System

Positioning the speakers

For the best possible sound, place all speakers at the same distance from the listening position (A).

Place the system as illustrated below.



Note

- Use caution when placing the speakers and/or speaker stands attached to the speakers on a specially treated (waxed, oiled, polished, etc.) floor, as staining or discoloration may result.
- Do not lean or hang on a speaker, as it may fall down.
- Image distortion on the TV screen may occur depending on the location of the subwoofer. In this case, place the subwoofer away from the TV.
- Do not block the ventilation slots of the control unit and the subwoofer.
- Place both front speakers the same distance apart as they are from the listening position (to form an isosceles triangle).
- The front speakers should be placed at least 0.6 m apart.
- Place the front speakers forward of the TV. Make sure there are no reflecting obstacles in front of the speakers.

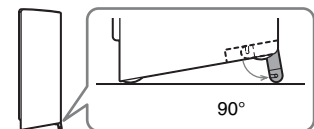
To place the front speakers

An adjustable support is stored inside the bottom of the speaker.

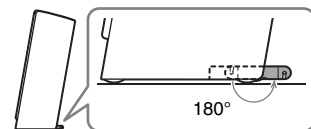
Turn the adjustable support 90° or 180° when placing the speaker to prevent it from falling down.

Select the angle according to your preference.

When placing the speakers vertically



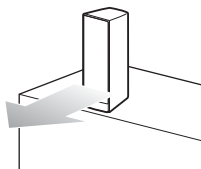
When placing the speakers at the same angle as the control unit



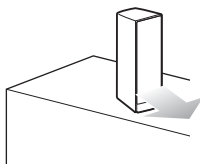
Note

- Both front speakers should be pointed straight forward. Do not place the speakers at an angle.

Correct

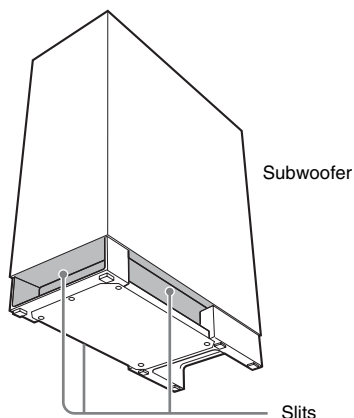


Incorrect



Note on handling the subwoofer

Do not place your hand into the slit of the subwoofer when lifting it. The speaker driver may be damaged. When lifting, hold the bottom of the subwoofer.



Tip

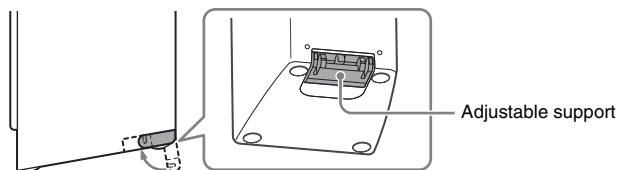
- It is recommended to place the subwoofer on a hard floor.
- You can also place the subwoofer either side, facing the listening position.

If you install the speakers on the wall

Caution

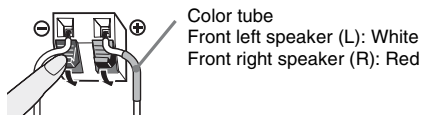
- Contact a screw shop or installer regarding the wall material or screws to be used.
- Use screws that are suitable for the wall material and strength. As a plaster board wall is especially fragile, attach the screws securely to a beam and fasten them to the wall. Install the speakers on a vertical and flat wall where reinforcement is applied.
- Sony is not responsible for accidents or damage caused by improper installation, insufficient wall strength or improper screw installation, natural calamity, etc.

- 1 Before installing the speakers on a wall, check that the adjustable support is returned to its original position on the bottom of the speakers.



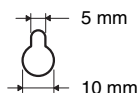
- 2 Connect the speaker cord to the speaker.

Be sure to match the speaker cords to the appropriate terminals on the speakers: the speaker cord with the color tube to $\oplus$, and the speaker cord without the color tube to $\ominus$.

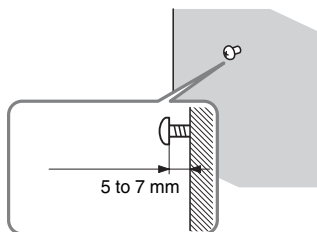


- 3 Prepare screws (not supplied) that are suitable for the hole on the rear of each speaker. See the illustrations below.

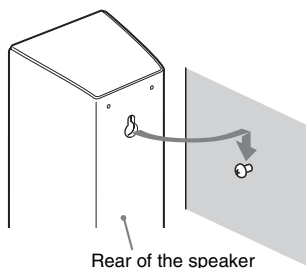
Hole on the rear of the speaker



- 4 Fasten the screws to the wall.

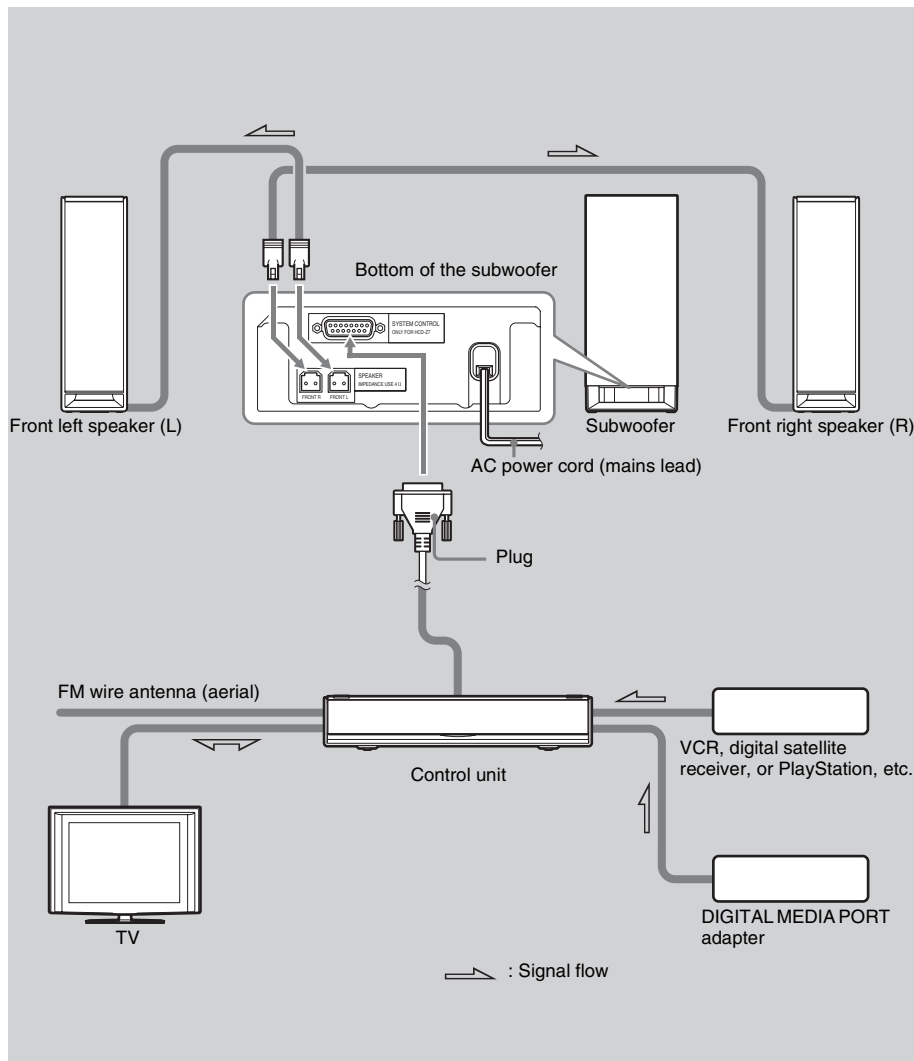


- 5 Hang the speakers on the screws.



Step 2: Connecting the System

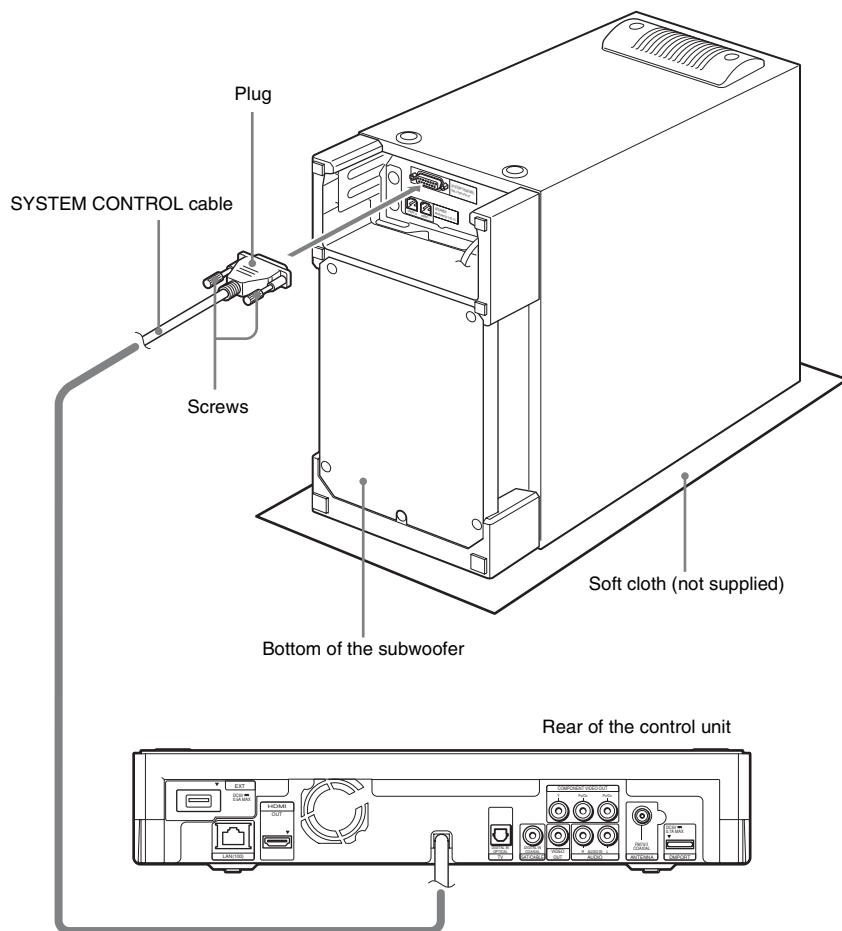
Do not connect the AC power cord (mains lead) of the subwoofer to a wall outlet (mains) until all the other connections are made.



Connecting the Control unit

Connect the system connector of the control unit to the SYSTEM CONTROL jack on the bottom of the subwoofer.

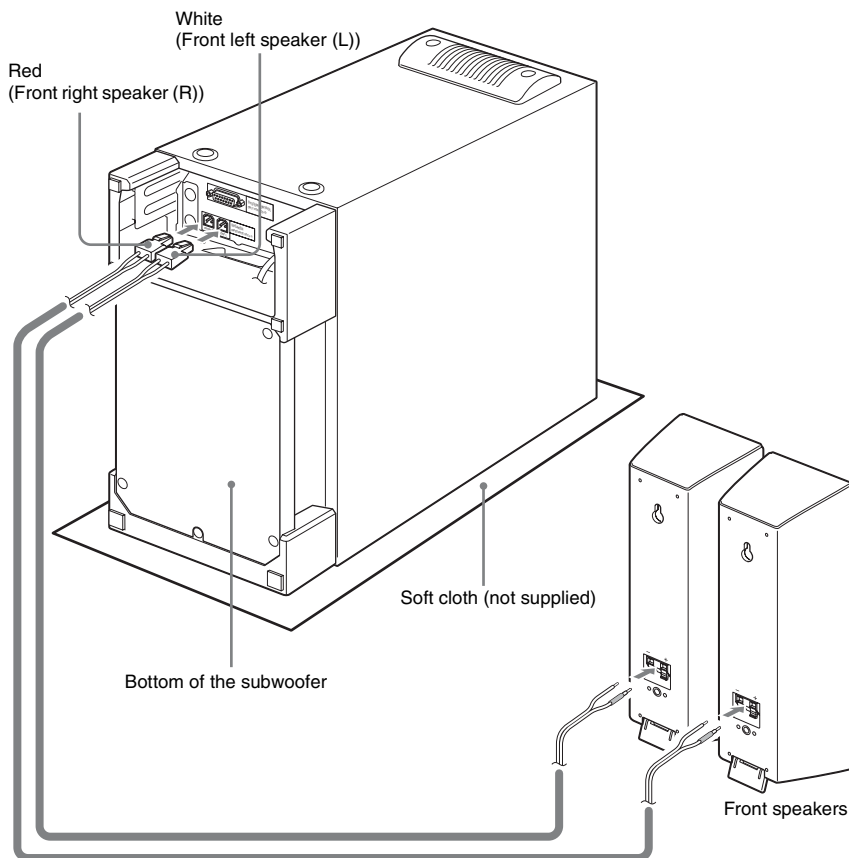
Insert the plug of the SYSTEM CONTROL connector, then secure the screws of the plug.



Connecting the speakers

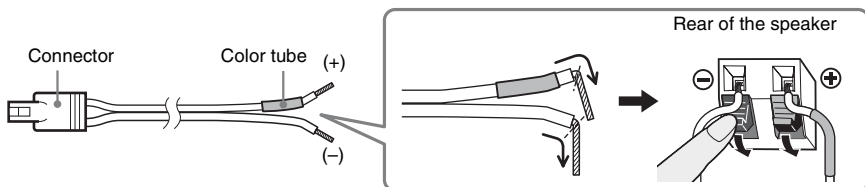
To connect speaker cords to the subwoofer

The connector of the speaker cords and the color tube are color-coded depending on the type of speaker. Connect the speaker cords to match the color of the **SPEAKER** jacks of the subwoofer. When connecting to the subwoofer, insert the connector until it clicks.



To connect speaker cords to the speaker

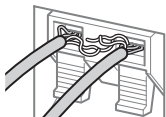
Be sure to match the speaker cords to the appropriate terminals on the speakers: the speaker cord with the color tube to $\oplus$, and the speaker cord without the color tube to $\ominus$. Do not catch the speaker cord insulation (rubber covering) in the speaker terminals.



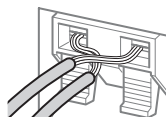
To avoid short-circuiting the speakers

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

Stripped speaker cord is touching another speaker terminal.



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



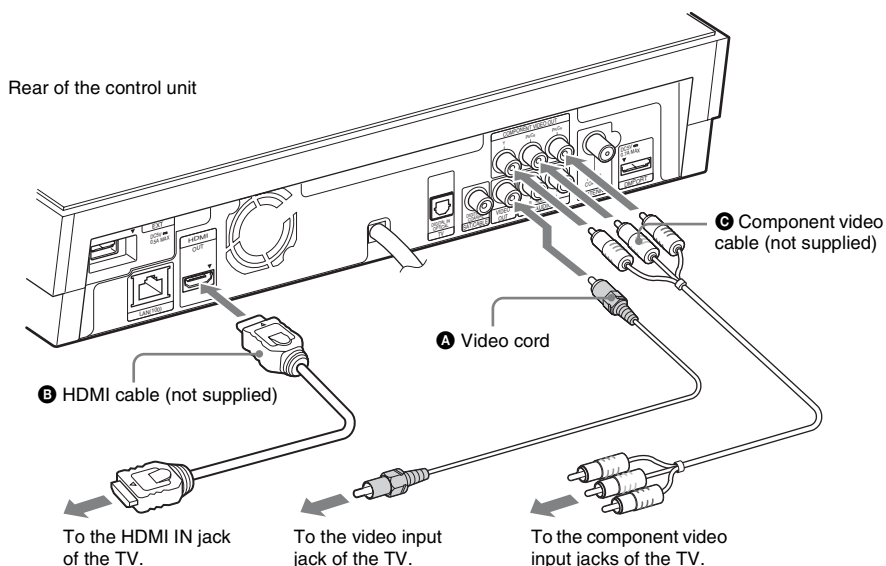
Note

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

Connecting the TV (Video connection)

This connection sends a video signal to the TV.

Depending on the jacks on your TV, select the connection method.



Method 1: Video cord (A) connection

This is the basic connection.

Method 2: HDMI* cable (B) and video cord (A) connection

If your TV has an HDMI jack, connect to the TV both with an HDMI cable and video cord. Picture quality will be improved compared to using only the video cord connection.

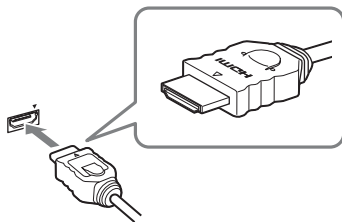
When connecting with the HDMI cable, you need to select the type of output signal (pages 29, 69).

To view images from the DIGITAL MEDIA PORT adapter, you need to connect to the TV with the video cord. Video signals from the DIGITAL MEDIA PORT adapter are not output via the HDMI OUT jack.

* HDMI (High-Definition Multimedia Interface)

Note

- Check that the shape of the HDMI jack on the control unit matches the orientation of the terminal of the HDMI cable, and then connect the HDMI cable.



Method 3: Component video cable (C) and video cord (A) connection

If your TV does not have an HDMI jack, but has component video input jacks, connect to the TV both with a component video cable and video cord. Picture quality will be improved compared to using only the video cord connection.

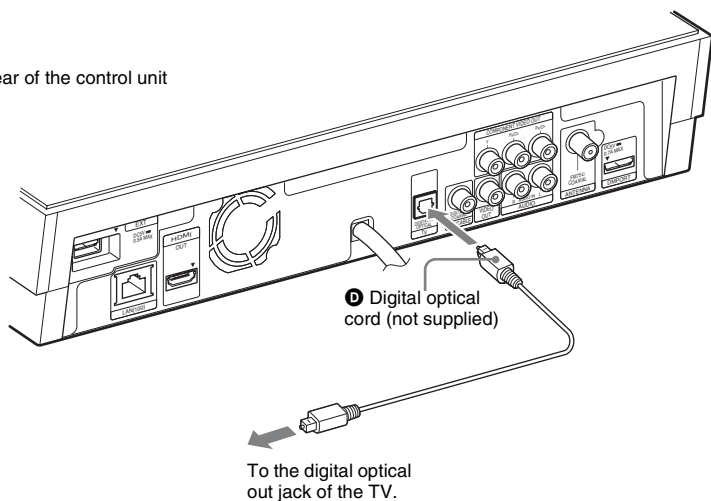
When connecting with the component video cable, you need to set the type of output signal to progressive format (pages 29, 69).

To view images from the DIGITAL MEDIA PORT adapter, you need to connect to the TV with the video cord. Video signals from the DIGITAL MEDIA PORT adapter are not output via the COMPONENT VIDEO OUT jack.

Connecting the TV (Audio connection)

This connection sends an audio signal to the system from the TV. To listen to TV sound via the system, perform this connection.

Rear of the control unit



Digital optical cord (D) connection

With a digital audio connection, the system receives a Dolby Digital multiplex broadcast signal and you can enjoy multiplex broadcast sound.

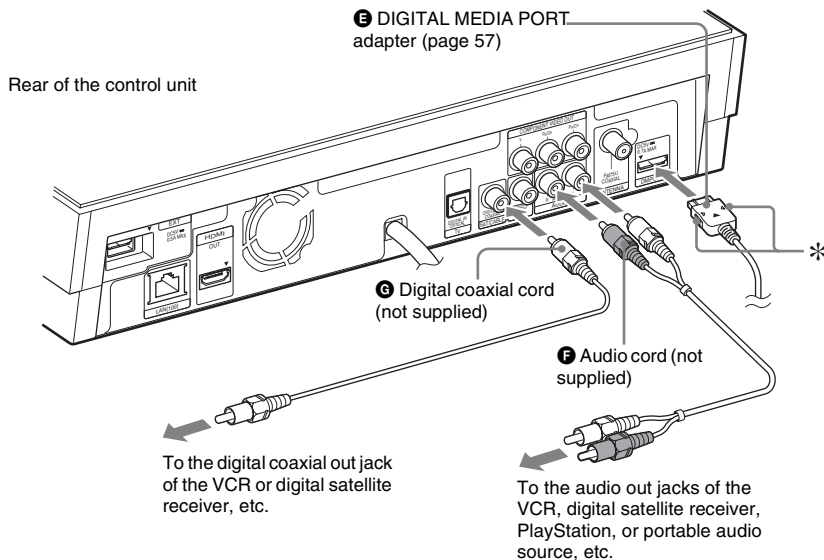
Note

- To achieve full use of the Control for HDMI function (page 58), connect the system and the TV with a digital optical cord (D).

Connecting the other components

You can enjoy connected components via the system's speakers.

- DIGITAL MEDIA PORT adapter: **E** (TDM-iP20 is supplied with United Kingdom models. You can also use other DIGITAL MEDIA PORT adapters.)
- VCR, digital satellite receiver, PlayStation, or portable audio source, etc. (not supplied): **F**
- VCR or digital satellite receiver, etc. (not supplied) which has a digital coaxial output jack: **G**

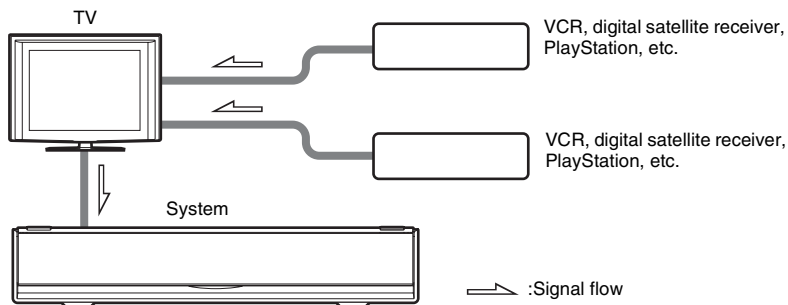


Note

- Connect the DIGITAL MEDIA PORT adapter so that the ▼ marks are aligned. When disconnecting, pull out while pressing *.
- When you connect the system and a component with an audio cord (**F**), select "AUDIO" to enjoy sound from the component with this system.

If your TV has multiple audio/video inputs

You can enjoy sound with the speakers of the system through the connected TV. Connect the components as follows.



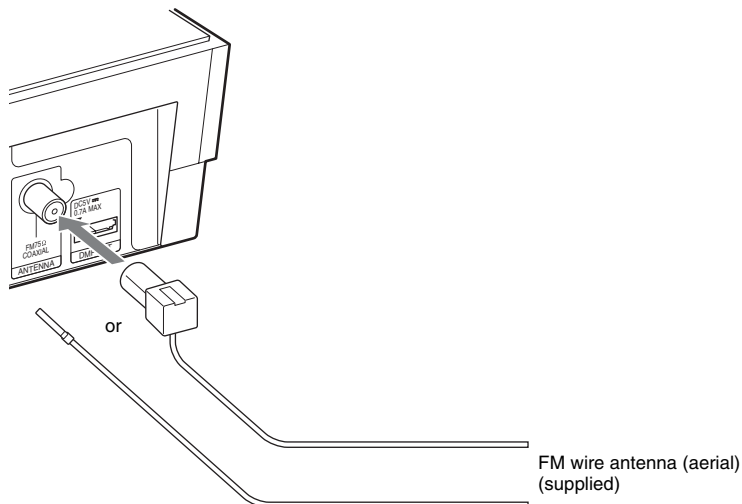
Select the component on the TV. For details, refer to the operating instructions of the TV.

If the TV does not have multiple audio/video inputs, a switcher will be necessary to receive sound from more than one component.

Connecting the antenna (aerial)

To connect the antenna (aerial)

Rear of the control unit

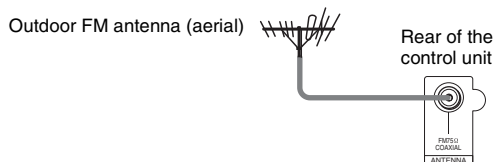


Note

- Be sure to fully extend the FM wire antenna (aerial).
- After connecting the FM wire antenna (aerial), keep it as horizontal as possible.

Tip

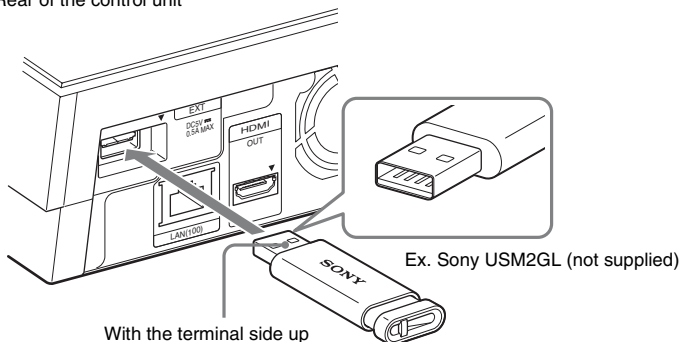
- If you have poor FM reception, use a 75-ohm coaxial cable (not supplied) to connect the control unit to an outdoor FM antenna (aerial) as shown below.



Inserting the external memory

Insert the external memory device (1 GB or larger USB flash memory, such as Sony USM2GL, or USM2GH, not supplied) into the EXT slot. Check that “EXT” lights up in the front panel display when turning the system on. By connecting an external memory, you can enjoy additional contents (BonusView/BD-Live) depending on the disc (page 43).

Rear of the control unit



Note

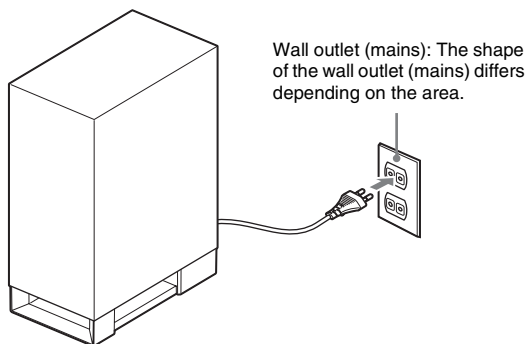
- Insert the external memory straight. If you force the external memory into the slot, this will cause damage to both the external memory and the EXT slot of the control unit.
- Keep the external memory away from small children to prevent them from accidentally swallowing it.
- Do not apply too much pressure to the external memory in the slot, as it may cause a malfunction.
- To avoid data corruption or damage to the external memory, turn the system off when inserting or removing the external memory.
- Do not insert an external memory that contains photo or music files to avoid corrupting the external memory data.

To remove the external memory

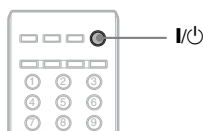
- 1 Press **I/⏻** to turn the system off.
- 2 Pull out the external memory from the EXT slot.

Connecting the AC power cord (mains lead)

Before connecting the AC power cord (mains lead) of the subwoofer to a wall outlet (mains), connect all the speakers to the subwoofer.



To turn the system on/off



Press I/O.

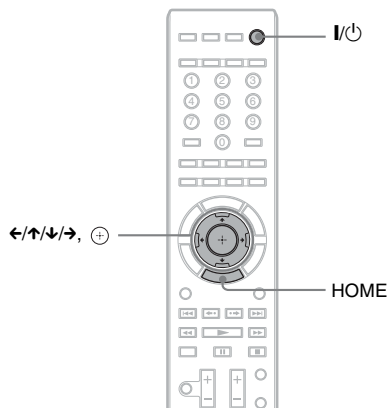
To save power in standby mode

Check that the following settings are made:

- [Control for HDMI] is set to [Off] (page 58).
- [Standby Mode] is set to [Normal] (page 74).

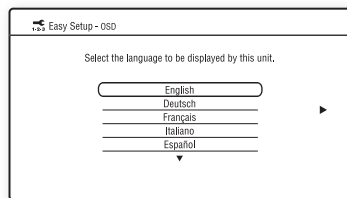
Step 3: Performing the Easy Setup

Follow the Steps below to make the basic adjustments for using the system.
Displayed items vary depending on the country model.



- 1 Turn on the TV.
- 2 Press I/⏻.
- 3 Switch the input selector on your TV so that the signal from the system appears on the TV screen.

The Easy Setup Display for OSD language selection appears.



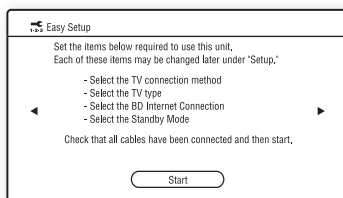
If the Easy Setup Display does not appear

Recall the Easy Setup Display. See “To recall the Easy Setup Display” (page 31).

- 4 Press $\uparrow/\downarrow$ to select a language for the OSD.

- 5 Press $\oplus$ or $\rightarrow$.

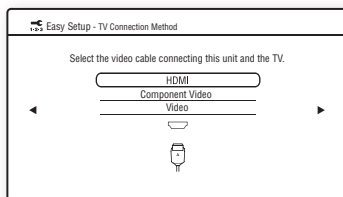
The setting message appears.



This message appears only when performing the [Easy Setup] for the first time. It does not appear when performing the [Easy Setup] accessed via the [Setup] setting.

- 6 Press $\oplus$ or $\rightarrow$.

The Setup Display for video cable selection appears.



- 7 Press $\uparrow/\downarrow$ to select the cable used to connect the system and TV.

Check the connection of the system and TV (page 20).

- When you connect the system and TV with an HDMI cable, select [HDMI], go to Step 8 and set the video output resolution to match your TV.
- When you connect the system and TV with a component video cord, select [Component Video], go to Step 8 and set the video output resolution to match your TV.
- When you connect the system and TV with the video cord, select [Video] and go to Step 9.

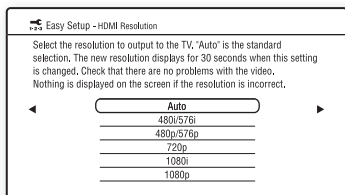
Note

- When you do not connect the system and TV with an HDMI cable, you cannot select [HDMI].
- When connecting the HDMI OUT jack and other video output jacks at the same time, select [Component Video].

8 Press $\oplus$ or $\rightarrow$.

The Setup Display for video output resolution selection appears. For details, see [Output Video Format] (page 69).

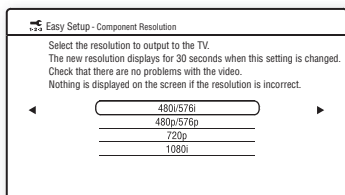
When you select [HDMI] in Step 7



Select from [Auto], [480i/576i], [480p/576p], [720p], [1080i], or [1080p].

When connecting the HDMI OUT jack and other video output jacks at the same time, video signals may only output from the HDMI OUT jack when [Auto] or [1080p] is selected.

When you select [Component Video] in Step 7



Select from [480i/576i], [480p/576p], [720p], or [1080i].

When you change the video output resolution

A picture is displayed in the selected resolution for about 30 seconds, then the display asks for confirmation.

Follow the on-screen instructions and go to the next step.

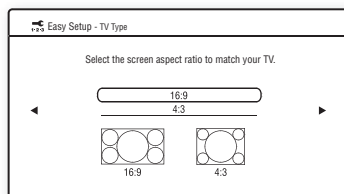
Note

- If the picture is distorted or no picture appears, wait for about 30 seconds without pressing any buttons. [Is this resolution OK?] appears. Select [Cancel]. The display returns to the resolution setting screen.

- If the selected video output resolution is incorrect, no picture appears on the screen. In this case, press and hold $\blacktriangle$ and $\blacktriangle$ on the control unit for more than 5 seconds to reset the video output resolution to the lowest resolution. To change the video output resolution, set [Output Video Format] in [Video Settings] (page 69).

9 Press $\oplus$ or $\rightarrow$.

The Setup Display for selecting the aspect ratio of the TV to be connected appears.



10 Press $\uparrow/\downarrow$ to select the setting that matches your TV type.

- [16:9]: If you have a wide-screen TV or a 4:3 standard TV with a wide-screen mode. (page 68)
- [4:3]: If you have a 4:3 standard TV. (page 68)

11 Press $\oplus$ or $\rightarrow$.

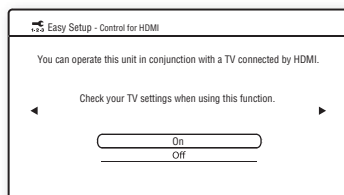
When you connect the system and TV with an HDMI cable

The Setup Display for the [Control for HDMI] function appears. Go to Step 12.

When you do not connect the system and TV with an HDMI cable

The Setup Display for [BD Internet Connection] appears. Go to Step 14.

12 Press $\uparrow/\downarrow$ to select the setting for the Control for HDMI function.



Select [On] to use the [Control for HDMI] function (page 58) when connecting Sony

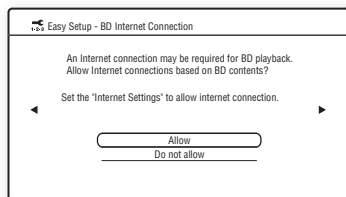
components that are compatible with the Control for HDMI function.

If you do not use the [Control for HDMI] function, select [Off].

13 Press $\oplus$ or $\rightarrow$.

The Setup Display for [BD Internet Connection] appears.

14 Press $\uparrow/\downarrow$ to select the setting for the BD Internet connections.

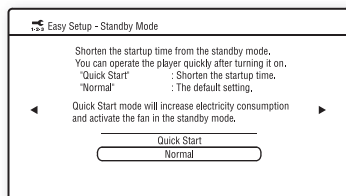


Select [Allow] to allow Internet connections.

If you do not allow the connections, select [Do not allow].

15 Press $\oplus$ or $\rightarrow$.

The Setup Display for [Standby Mode] appears.



16 Press $\uparrow/\downarrow$ to select the standby mode.

You can operate the player quickly after turning on this function.

Select [Quick Start] if you want to shorten the startup time from the standby mode. The default setting is [Normal].

Note

- Quick Start mode will increase electricity consumption and may activate the fan in the standby mode.

17 Press $\oplus$.

Easy Setup is finished. All connections and setup operations are complete.

To quit the Easy Setup

Press HOME in any Step.

To recall the Easy Setup Display

1 Press HOME.

The home menu appears on the TV screen.

2 Press $\leftarrow/\rightarrow$ to select [Setup].

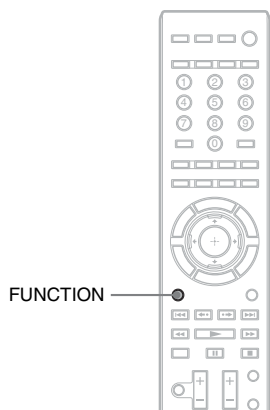
3 Press $\uparrow/\downarrow$ to select [Easy Setup], then press $\oplus$.

4 Press $\leftarrow/\rightarrow$ to select [Start], then press $\oplus$.

The Easy Setup display appears.

Step 4: Selecting the Source

You can select the playback source.



Press FUNCTION repeatedly until the desired function appears in the front panel display.

Each time you press FUNCTION, the function changes as follows.

“BD/DVD” → “TUNER FM” → “TV” →
 “SAT/CABLE” → “DMPORT” → “AUDIO”
 → ...

Function	Source
“BD/DVD”	Disc that is played by the system
“TUNER FM”	FM radio (page 52)
“TV”	TV (component that is connected to the TV (DIGITAL IN OPTICAL) jack (page 22))
“SAT/CABLE”	Component that is connected to the SAT/CABLE (DIGITAL IN COAXIAL) jack (page 23)
“DMPORT”	DIGITAL MEDIA PORT adapter (page 57)
“AUDIO”	Component that is connected to the AUDIO (AUDIO IN L/R) jacks (page 23)

Note

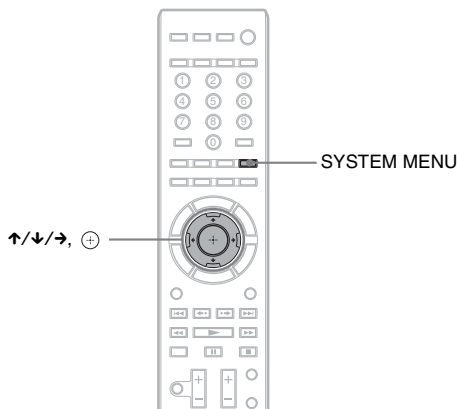
- When you connect the system and the TV with an audio cord, select “AUDIO” to enjoy TV sound with this system.

If distortion occurs in the sound of a connected component

You can reduce the input level for the connected component. For details, see [Attenuate - AUDIO] (page 70).

Step 5: Enjoying Surround Sound Effect

You can enjoy surround sound effect simply by selecting one of the “DEC. MODE” (decoding mode) settings. They bring the exciting and powerful sound of movie theaters into your home.



Selecting surround sound effects based on your listening preference

- 1** Press **SYSTEM MENU**.
- 2** Press **↑/↓** repeatedly until “**AUDIO MENU**” appears in the front panel display, then press **+** or **→**.
- 3** Press **↑/↓** repeatedly until “**DEC. MODE**” appears in the front panel display, then press **+** or **→**.
- 4** Press **↑/↓** repeatedly until the “**DEC. MODE**” setting you want appears in the front panel display.
See the table below for descriptions of “**DEC. MODE**” settings.
- 5** Press **+**.
The setting is made.
- 6** Press **SYSTEM MENU**.
The system menu turns off.

About speaker output

The default setting is “AUTO.”

“DEC. MODE” setting	Surround sound effect
“AUTO”	The system outputs the sound with suitable effect automatically depending on the source. • 2 channel source: Outputs 2 channel sound as it is. • Multi-channel source: Simulates 5.1 surround sound with two front speakers and a subwoofer. The WIDE STAGE indicator on the front panel display lights up. • Source from USB/DMPort input: Produces a clear enhanced sound image.
“2CH STEREO”	Outputs 2 channel sound regardless of the audio signal type being input. Multi-channel surround formats are downmixed to 2 channels. The 2CH indicator on the front panel display light up.

To turn the surround sound effect off

Select “2CH STEREO” for “DEC. MODE.”

Note

- Depending on the input stream, the “DEC. MODE” setting may not be effective.
- The surround sound effect is canceled when the sound mode is set to “SPORTS.”

Tip

- The system memorizes the last “DEC. MODE” setting selected for each function. Whenever you select a function such as “BD/DVD” or “TUNER FM,” the “DEC. MODE” setting that was last applied to the function is automatically applied again. For example, if you select “BD/DVD” with “AUTO” as the “DEC. MODE” setting, then change to another function, and then return to “BD/DVD,” “AUTO” will be applied again.

Playing a BD/DVD

BD

DVD

Depending on the disc, some operations may be different or restricted.

Refer to the operating instructions supplied with your disc.

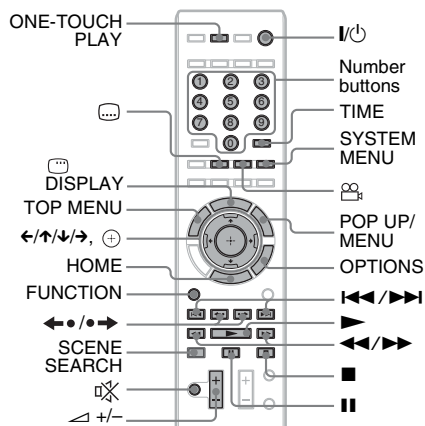
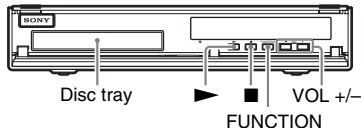
Top view



With the front cover closed



With the front cover opened



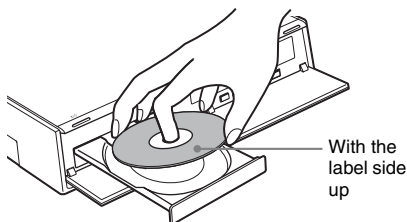
- 1 Turn on your TV.
 - 2 Switch the input selector on the TV to this system.
 - 3 Press I/O.
- The system turns on.

- 4 Press FUNCTION repeatedly until "BD/DVD" appears in the front panel display.

- 5 Press ▲.

- 6 Place a disc.

Place one disc on the disc tray, and then press ▲.



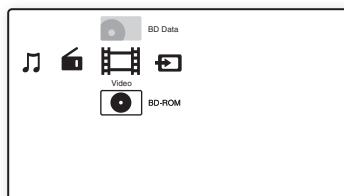
When you insert a commercially available BD-ROM or DVD VIDEO, playback may automatically start depending on the disc. In this case, go to Step 9.

Note

- 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.
- Do not place more than one disc on the tray.

- 7 Press ←/→ to select [Video].

- 8 Press ↑/↓ to select ●, then press ► or ⊕.



For commercially available BD-ROM or DVD VIDEO, playback starts.

For a BD or DVD recorded on other equipment, the title list appears. Press ↑/↓ to select the desired title, then press ► or ⊕. Playback starts.

9 Press $\triangleleft$ +/- to adjust the volume.

The volume level appears on the TV screen and in the front panel display.

Note

- When you set the [Control for HDMI] function to [On], the TV that is connected to the system with an HDMI cable (not supplied) can be sync-operated with the system. For details, see "Using the Control for HDMI Function for "BRAVIA" Sync" (page 58).

Tip

- You can change the speed at which the volume is turned up and down.
To turn the volume up/down quickly, press and hold the $\triangleleft$ +/- on the remote or VOL +/- on the control unit.
To set the volume up/down precisely, press the $\triangleleft$ +/- on the remote or VOL +/- on the control unit briefly.

Other operations

To	Press
Stop	■
Pause	⏸
Resume play after pause	⏸ or ▶
Go to the next chapter	⏭
Go back to the preceding chapter	⏮ twice in a second. When you press ⏮ once, you can go to the beginning of the current chapter.
Turn off the sound temporarily	🔊 To cancel, press it again or $\triangleleft$ + to adjust the sound volume.
Remove the disc	⏏ on the control unit.

To	Press
Locate a point quickly by playing a disc in fast forward or fast reverse (Scan) ¹⁾	▶▶ or ◀◀ while playing a disc. Each time you press ▶▶ or ◀◀ during scan, the playback speed changes as follows: Playback direction ▶▶ 1 (×10) → ▶▶ 2 (×30) → ▶▶ 3 (×120) Reverse direction ◀◀ (×1) → ◀◀ 1 (×10) → ◀◀ 2 (×30) → ◀◀ 3 (×120) When you press and hold the button, fast forward/fast reverse continues at the selected speed until you release the button. To return to normal speed, press ▶. Actual speeds may differ with some discs.
Play in slow, freeze frame (playback direction only)	▶▶ for more than one second in pause mode. When you press ▶▶ briefly in pause mode, you can play one frame at a time. (Depending on the disc, this function may not work.) To return to normal playback, press ▶.
Replay the previous scene ²⁾	◀● (instant replay) during playback.
Briefly fast forward the current scene ³⁾	●▶ (instant advance) during playback.

¹⁾Scan speeds may differ with some discs.

²⁾BD/DVD VIDEO/DVD-RW/DVD-R only.

³⁾BD/DVD VIDEO/DVD-RW/DVD-R/DVD+RW/DVD+R only.

To play a restricted BD or DVD (Parental Control)

When you play a restricted BD

Change [BD Parental Control] in [BD/DVD Viewing Settings] (page 71).

When you play a restricted DVD

Change [DVD Parental Control] in [BD/DVD Viewing Settings] (page 72).

When you play a restricted BD or DVD, the display for entering your password appears on the screen.

Enter your four-digit password using the number buttons, and press **+**.

Playback starts.

To register or change the password, see [Password] (page 72).

To play a restricted BD-RE or BD-R (Disc Lock)

When you play a BD-RE or BD-R restricted by the Disc Lock function, the display for entering your password appears on the screen.

1 Enter the four-digit password that has been registered when creating the disc using the number buttons, and press **+**.

2 Select a title, and press **▶** or **+**.
Playback starts.

One-Touch Play (for HDMI connection only)

Press ONE-TOUCH PLAY.

The system and the connected TV turn on and the input selector on the TV is switched to the system; then you can enjoy the contents of a disc.

Note

- When using the HDMI connection, there may be a delay before the playback picture appears on the screen, and the beginning portion of the playback picture may not be displayed.
- To use this function, set [Control for HDMI] to [On] in [HDMI Settings] (page 74).

Available OPTIONS

1 Press **OPTIONS**.

The options menu appears.

2 Press **↑/↓** to select an item, then press **+**.

The available items differ depending on the disc type or system situation.

Items	Details
[Video Settings]	Adjusts settings for picture (page 41).
[Title List]	Displays the title list.
[Play]	Plays the title from the point where you pressed ■ .
[Play from start]	Plays the title from the beginning.
[Top Menu]	Displays the disc's Top Menu (page 39).
[Menu/Popup Menu]	Displays the BD-ROM's Pop-up Menu or DVD's menu (page 39).
[Stop]	Stops playback.
[Title Search]	Searches for a title and starts playback from the beginning (page 40).
[Chapter Search]	Searches for a chapter and starts playback from the beginning (page 40).

Changing the angles

B D

DVD

If various angles (multi-angles) for a scene are recorded on a disc, you can change the viewing angle.

Press  during playback to select the desired angle.

Displaying the subtitles

B D

DVD

If subtitles are recorded on a disc, you can turn the subtitles on/off during playback. If multilingual subtitles are recorded on the disc, you can change the subtitle language during playback, or turn the subtitles on/off whenever you want.

Press  during playback to select the desired subtitle language.

Resuming playback from the point where you stopped the disc

(Resume Play)

B D

DVD

When you stop the disc, the system remembers the point where you pressed . As long as you do not remove the disc, Resume Play will work even if the system is set to standby mode by pressing .

1 While playing a disc, press  to stop playback.

2 Press  to select , then press  or .

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

Note

- Depending on where you stop the disc, the system may not resume playback from exactly the same point.
- The point where you stopped playing may be cleared when:
 - you open the disc tray.
 - you play another title.
 - you change the settings on the system.
 - you disconnect the AC power cord (mains lead).
 - you remove the external memory (for BD-ROMs).
- This function may not work properly with some discs.

To play from the beginning of the title

Press **OPTIONS** to select [Play from start], then press . Playback starts from the beginning of the title.

Using the BD's or DVD's menu

BD DVD

To display the Top Menu

A BD/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 BD/DVD which contains several titles, you can select the title you want using the Top Menu. You can also select items such as the language for the subtitles and the language for the sound using the Top Menu.

1 Press TOP MENU.

The disc's menu appears on the TV screen. The contents of the menu vary depending on the disc.

2 Press $\leftarrow/\uparrow/\downarrow/\rightarrow$ or the number buttons to select the item you want to play or change.

3 Press $\oplus$.

To display Pop-up Menus

Some BD-ROMs contain Pop-up Menus that appear without interrupting playback.

1 Press POP UP/MENU during playback.

The Pop-up Menu appears.

2 Press $\leftarrow/\uparrow/\downarrow/\rightarrow$, the color buttons, or number buttons to select the item, and follow the on-screen instructions.

Searching for a scene quickly

(Scene Search)

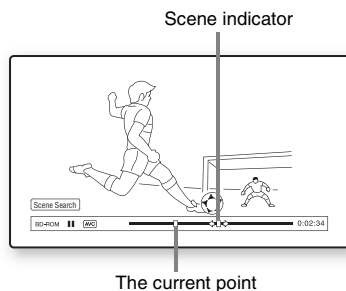
BD DVD

You can move quickly between scenes within the title currently being played back.

1 Press SCENE SEARCH during playback or in pause mode.

Playback pauses and a bar with a scene indicator (square-shaped – indicates the current point) appears at the bottom of the screen.

2 Press and hold $\leftarrow/\rightarrow$ or $\lll/\ggg$ to move the scene indicator to the scene you are searching for.



The scene indicator on the bar is displayed around the playing point.

3 Release the button at the point you want to watch.

The scene at which you released the button is displayed in pause mode.

To search for a scene again, move the scene indicator using $\leftarrow/\rightarrow$ or $\lll/\ggg$.

4 Press SCENE SEARCH, $\oplus$, $\blacktriangleright$, or II .

Playback starts.

To cancel Scene Search mode

Press SCENE SEARCH, $\oplus$, $\blacktriangleright$, or II .

Playback starts from the point you pressed the button.

Note

- The Scene Search function is available for titles longer than 100 seconds and shorter than 100 hours.
- Depending on the disc, this function may not work.

Searching for a Title/Chapter

BD

DVD

You can search for a chapter if the title contains chapter marks.

- 1 Press **OPTIONS** during playback or in pause mode.**

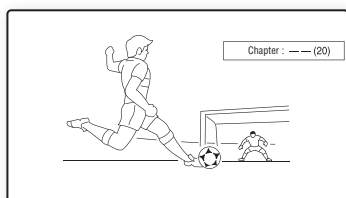
The options menu appears.

- 2 Press **↑/↓** to select a search method, then press **+**.**

- [Title Search] (for a BD-ROM/DVD VIDEO): Searches the desired title.
- [Chapter Search]: Searches the desired chapter.

The display for entering the number appears.

Example: Chapter Search



- 3 Press the number buttons to enter the number of the title or chapter.**

If you make a mistake, press **CLEAR**, and re-enter another number.

- 4 Press **+**.**

After a while, the system starts playback from the selected number.

To cancel [Title Search] / [Chapter Search]

Press **RETURN**.

Displaying the playing time and audio information

BD

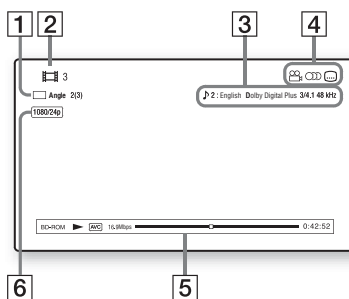
DVD

You can check the title information, including the video transmission rate, etc.

Press **⏏ **DISPLAY** during playback.**

The displayed information differs depending on the disc type and system status.

Example: When playing a BD-ROM



- 1** The current selected angle
- 2** Title number or name
- 3** The currently selected audio setting
- 4** Available functions (angle/audio/subtitle)
- 5** Playback information
Displays Disc type/Play mode/Video codec/Bit rate/Playing status bar/Playing time (Remaining time*)
- 6** Output resolution/Video frequency

Tip

- You can also check the playback information in the front panel display.
- You can change each setting by pressing **⏏**, **⏏**, or **⏏**.

To view the playing time and remaining time in the front panel display

Press **TIME** repeatedly.

Each time you press **TIME** while playing the disc, the display changes:

① ↔ ②

- ① Playing time of the current title
- ② Remaining time of the current title

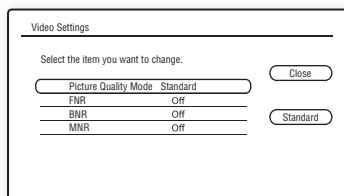
Some displayed items may disappear after a few seconds.

Adjusting pictures for videos

B D

DVD

- 1 Press **OPTIONS** during playback.**
The options menu appears.
- 2 Press **↑/↓** to select **[Video Settings]**, then press **+**.**
The **[Video Settings]** screen appears.



- 3 Press **↑/↓** to select an item, then press **+**.**

[Picture Quality Mode]

Optimizes the picture settings for different lighting environments.

- **[Standard]**
- **[Brighter Room]**
- **[Theatre Room]**

[FNR]

Reduces random noise appearing in the picture.

- **[Off]**
- **[Auto]**

[BNR]

Reduces mosaic-like block noise in the picture.

- **[Off]**
- **[Auto]**

[MNR]

Reduces minor noise around the picture outlines (mosquito noise).

- **[Off]**
- **[Auto]**

- 4 Press **←/↑/↓/→** to select or adjust the settings, then press **+**.**

To adjust any other items, repeat steps 3 and 4.

Note

- Set the picture setting of your TV to [Standard] before changing [Picture Quality Mode].
- [Video Settings] is disabled when the connected TV is set to Theatre Mode (page 59).
- Depending on the disc or the scene being played, [FNR], [BNR], or [MNR] effects may be hard to discern.

Adjusting the delay between the picture and sound

(A/V SYNC)

B D**DVD**

When the sound does not match the pictures on the TV screen, you can adjust the delay between the picture and sound.

- 1 Press SYSTEM MENU.**
- 2 Press $\uparrow/\downarrow$ repeatedly until “AUDIO MENU” appears in the front panel display, then press $\oplus$ or $\rightarrow$.**
- 3 Press $\uparrow/\downarrow$ repeatedly until “A/V SYNC” appears in the front panel display, then press $\oplus$ or $\rightarrow$.**
- 4 Press $\uparrow/\downarrow$ to adjust the delay between the picture and sound.**

You can adjust from 0 ms to 300 ms in 25 ms increments.

- 5 Press $\oplus$.**
The setting is made.

- 6 Press SYSTEM MENU.**
The system menu turns off.

Note

- Depending on the input stream, A/V SYNC may not be effective.

Enjoying BonusView/BD-Live

BD

Some BD-ROMs with “BD-LIVE Logo” have bonus contents and other data that can be downloaded to the external memory (local storage) for enjoyment.

- 1** If a disc is inserted, remove the disc from the control unit.
- 2** Turn the system off.
- 3** Insert the external memory (not supplied) into the EXT slot on the rear of the control unit.

The external memory is used as the local storage.

Make sure that the external memory is properly inserted into the control unit (page 26).

- 4** Connect the system to a network (page 27).
- 5** Turn the system on.
- 6** Set [BD Internet Connection] to [Allow] in [BD/DVD Viewing Settings] (page 73).
- 7** Insert a BD-ROM with BONUSVIEW/BD-LIVE.

The operation method differs depending on the disc. Refer to the instruction manual supplied with the disc.

To delete data in the external memory

You can delete unnecessary data.

- 1** If a disc is inserted, remove the disc from the control unit.
- 2** Press HOME.
- 3** Press $\leftarrow/\rightarrow$ to select  [Video].
- 4** Press $\uparrow/\downarrow$ to select [BD Data], then press $\oplus$.

- 5** Select the disc name, then press OPTIONS.

- 6** Select [Erase], then press $\oplus$.

- 7** Select [OK], then press $\oplus$.

The data of the selected disc will be deleted.

Note

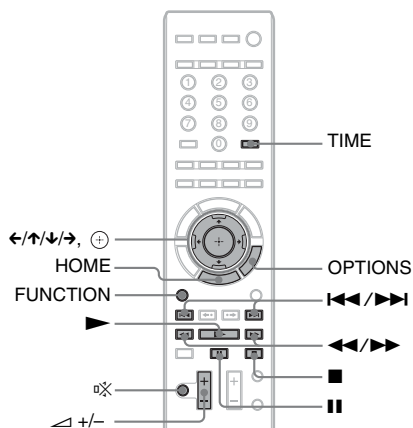
- Depending on the BD-ROM, the disc name may not be displayed.

Tip

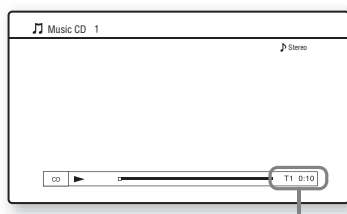
- To delete all data in the external memory at once, select [Erase All] in Step 6.
- Press $\oplus$ instead of OPTIONS in Step 5 to skip Step 6.

Playing a CD

CD



- 1 Press FUNCTION repeatedly until “BD/DVD” appears in the front panel display.**
- 2 Place a CD.**
The Music Player screen appears.
- 3 Press ►.**
Playback starts.

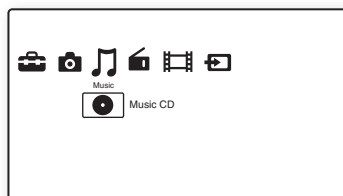


Current track number and elapsed time

- 4 Press ◀ +/– to adjust the volume.**
The volume level appears on the TV screen and in the front panel display.

To select a track

- 1 Press HOME.**
- 2 Press ◀/▶ to select 𠂔 [Music].**



- 3 Press +.**
The music list appears.
- 4 Press ▲/▼ to select a track, then press ► or +.**
The system plays the selected track.

Other operations

To	Press
Stop	■
Pause	⏸
Resume play after pause	⏸ or ►
Start playback from the point where you pressed ■.	►
Go to the next track	►
Go back to the preceding track	◀◀ twice in a second. When you press ◀◀ once, you can go to the beginning of the current track.
Turn off the sound temporarily	🔇 To cancel, press it again or ◀ + to adjust the sound volume.
Remove the disc	⏏ on the control unit.
Fast reverse/fast forward	◀◀ or ►► during playback.

Available OPTIONS

1 Press OPTIONS.

The options menu appears.

2 Press $\uparrow/\downarrow$ to select an item, then press $\oplus$.

The available items differ depending on the disc type or system situation.

Items	Details
[Play]	Plays the selected track.
[Play from start] (during playback)	Plays the current track from the beginning.
[Play from start] (in stop mode)	Plays the selected track from the beginning.
[Stop]	Stops playback.

Note

- The point where you stopped playing (resume point) is cleared from memory when:
 - You open the disc tray.
 - You turn the system off.

To view the playing time and remaining time in the front panel display

Press TIME repeatedly.

Each time you press TIME while playing the disc, the display changes:

① → ② → ③ → ④ → ① → ...

- ① Playing time of the current track
- ② Remaining time of the current track
- ③ Playing time of the disc
- ④ Remaining time of the disc

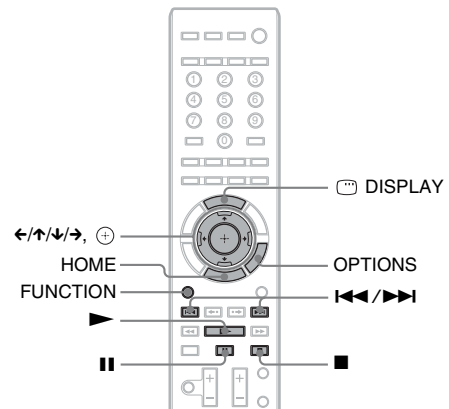
Playing Photo Files



1) BD-REs/BD-Rs containing JPEG image files

2) DVD+RWs/DVD+Rs/DVD-RWs/DVD-Rs containing JPEG image files

3) CD-RWs/CD-Rs containing JPEG image files

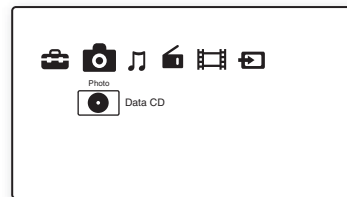


1 Press FUNCTION repeatedly until "BD/DVD" appears in the front panel display.

2 Place a disc that contains photo files.

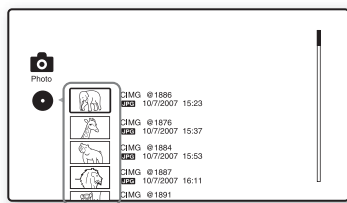
3 Press HOME.

4 Press $\leftarrow/\rightarrow$ to select [Photo].



5 Press $\oplus$.

The file list or folder list appears.



Thumbnails of files*

* Appears only when the file has thumbnail information.

6 Press $\uparrow/\downarrow$ to select a file or folder, then press $\oplus$.

When you select a folder, press $\uparrow/\downarrow$ to select a file in the folder, then press $\oplus$.
The selected photo file is displayed.

Other operations

To	Press
Play a slideshow	$\blacktriangleright$
Stop a slideshow	$\blacksquare$
Pause a slideshow	$\parallel$
Go to the next photo	$\blacktriangleright\blacktriangleright$
Go back to the preceding photo	$\blacktriangleleft\blacktriangleleft$
Display the file information	INFO DISPLAY

Available OPTIONS

1 Press OPTIONS.

The options menu appears.

2 Press $\uparrow/\downarrow$ to select an item, then press $\oplus$.

The available items differ depending on the situation.

Items	Details
[Slideshow Speed] ¹⁾²⁾	Changes the slideshow speed. • [Fast] • [Normal] • [Slow]
[Stop] ¹⁾	Stops a slideshow.
[Rotate Left] ¹⁾	Rotates the photo counterclockwise by 90 degrees.
[Rotate Right] ¹⁾	Rotates the photo clockwise by 90 degrees.
[View Image] ²⁾	Displays the selected picture.
[Slideshow] ²⁾	Starts a slideshow.

¹⁾Appears when you press OPTIONS during playback of photo files.

²⁾Appears when you press OPTIONS while the file/folder list is displayed.

Note

- When you attempt to play the following photo files, the  mark appears on the screen and they cannot be played.
 - Photo files with width or height larger than 8,192 pixels
 - Photo files with width or height smaller than 15 pixels
 - Photo files exceeding 32 MB
 - Photo files with extreme aspect ratios (greater than 50:1 or 1:50)
 - Photo files in Progressive JPEG format
 - Photo files that have a “.jpeg” or “.jpg” extension, but are not in JPEG format
 - Photo files that have an extremely long name
- The following photo files cannot be played.
 - Photo files recorded on BD-Rs in any format other than UDF (Universal Disk Format) 2.6
 - Photo files recorded on BD-REs in any format other than UDF (Universal Disk Format) 2.5

- The following photo files or folders cannot be displayed in the file list or folder list.
 - Photo files that have an extension other than “.jpeg” or “.jpg”
 - Photo files that have an extremely long name
 - Photo files in the 5th tree and photo files/folders in the 6th tree or lower
 - Folders beyond the 500th folder, when the total number of folders and files in a single tree exceeds 500
- Photo files edited on a PC may not be played.
- Thumbnail images of some photo files may not be displayed.
- Large photo files may take some time to display or to start a slideshow.

To view images in high picture quality

If you have a Sony TV compatible with “PhotoTV HD,” you can enjoy images in high picture quality by the following connection and setting.

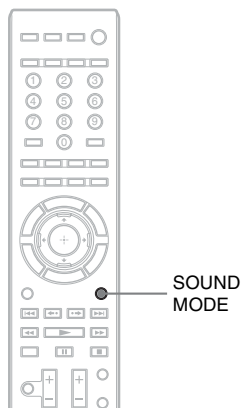
1 **Connect the system to the TV using an HDMI cable (not supplied).**

2 **Set the TV’s video setting to [VIDEO-A] mode.**

For details on [VIDEO-A], refer to the operating instructions supplied with the TV.

Selecting the Effect to Suit the Source

You can select a suitable sound mode for movies or music.



Press SOUND MODE repeatedly during playback until the desired mode appears in the front panel display.

- **“AUTO”**: The system selects “MOVIE” or “MUSIC” automatically to produce the sound effect depending on the disc or sound stream.
- **“MOVIE”**: The system provides the sound for movies.
- **“MUSIC”**: The system provides the sound for music.
- **“SPORTS”**: The system adds reverberation for the sports program.
- **“NEWS”**: The system provides the sound for the voice program, such as news.

Note

- When you set [Sound Effect] to [Off] (page 71), the sound mode is set to “AUTO” automatically and the sound mode setting cannot be changed.
- Depending on the disc or source, when you select “AUTO,” the beginning of the sound may be cut off as the system selects the optimum mode automatically. To avoid cutting the sound, select other than “AUTO.”
- Depending on the input stream, the sound mode may not be effective.

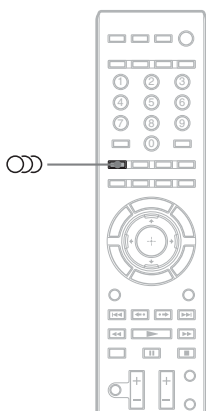
About the Theatre Mode Synchronization

When you turn the Theatre Mode to on by pressing THEATRE, the system automatically switches the sound mode to “MOVIE” for suiting the movie sound.

Selecting the Audio Format, Multilingual Tracks, or Channel

When the system is playing a BD/DVD VIDEO recorded in multiple audio formats (PCM, Dolby Digital, MPEG audio, or DTS), you can change the audio format. If the BD/DVD VIDEO is recorded with multilingual tracks, you can also change the language.

With a CD, 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.



Press  repeatedly during playback to select the desired audio signal.

The audio information appears on the TV screen.

■ BD/DVD VIDEO

Depending on the BD/DVD VIDEO, the choice of language varies.

When 4 digits are displayed, they indicate a language code. See “Language Code List” (page 93) to confirm which language the code represents. When the same language is displayed two or more times, the BD/DVD VIDEO is recorded in multiple audio formats.

■ DVD-VR

The types of sound tracks recorded on a disc are displayed.

Example:

- [ Stereo]
- [ Stereo (Audio1)]
- [ Stereo (Audio2)]
- [ Main]
- [ Sub]
- [ Main/Sub]

Note

- [ Stereo (Audio1)] and [ Stereo (Audio2)] do not appear when only one audio stream is recorded on the disc.

■ CD

- [ Stereo]: The standard stereo sound.
- [ 1/L]: The sound of the left channel (monaural).
- [ 2/R]: The sound of the right channel (monaural).

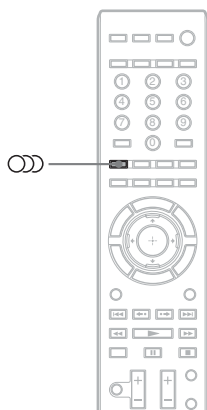
Enjoying Multiplex Broadcast Sound

(DUAL MONO)

You can enjoy multiplex broadcast sound when the system receives or plays a Dolby Digital multiplex broadcast signal.

Note

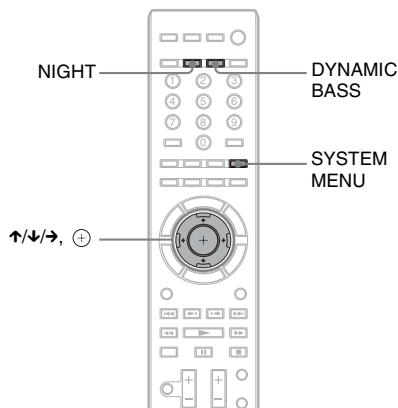
- To receive the Dolby Digital signal, you need to connect a TV or other component to the system with an optical or coaxial digital cord (pages 22, 23) and set the digital output mode of the TV or other component to Dolby Digital.



Press  repeatedly until the desired signal appears in the front panel display.

- **“MAIN”**: Sound of the main language will be output.
- **“SUB”**: Sound of the sub language will be output.
- **“MAIN/SUB”**: Mixed sound of both the main and sub languages will be output.

Using the Sound Effect



Reinforcing bass frequencies

You can reinforce bass frequencies.

Press DYNAMIC BASS.

“D. BASS ON” appears in the front panel display and bass frequencies are effectively reinforced.

During this mode is on, “BASS” lights up in the front panel display.

To turn off the sound effect

Press DYNAMIC BASS so that “BASS” disappears from the front panel display.

Enjoying sound at low volume

You can enjoy sound effects or dialog, as you would in a movie theater, even at low volume. It is useful for watching movies at night.

Press NIGHT.

“NIGHT ON” appears in the front panel display and the sound effect is activated.

During the night mode is on, “NIGHT” lights up in the front panel display.

To turn off the sound effect

Press NIGHT so that “NIGHT” disappears from the front panel display.

Changing the tonal balance

You can adjust the sound by changing the tonal balance of the sound.

- 1 Press SYSTEM MENU.**
- 2 Press ↑/↓ repeatedly until “AUDIO MENU” appears in the front panel display, then press ⊕ or →.**
- 3 Press ↑/↓ repeatedly until “TONE” appears in the front panel display, then press ⊕ or →.**
- 4 Press ↑/↓ to select the desired setting, then press ⊕.**
 - “BASS”: You can adjust the bass frequencies.
 - “TREBLE”: You can adjust the treble frequencies.
- 5 Press ↑/↓ to adjust the sound.**

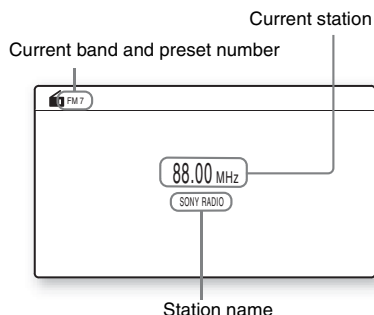
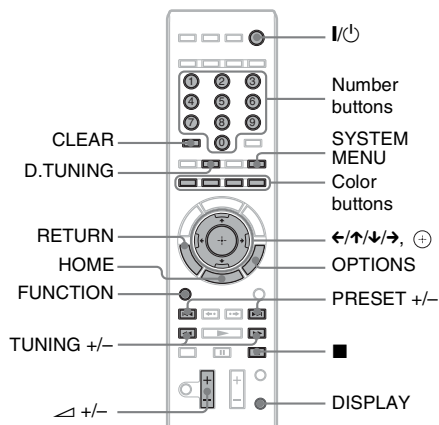
The adjusted value appears in the front panel display. You can set the value from -6 to +6.
- 6 Press ⊕.**

The setting is made.
- 7 Press SYSTEM MENU.**

The system menu turns off.

Listening to the Radio

You can enjoy radio sound with the system's speakers.



Tip

- You can operate the tuner function using the tuner menu on the front panel display. See “Operating the tuner function using the system menu” (page 54)

1 Press FUNCTION repeatedly until “TUNER FM” appears in the front panel display.

2 Select the radio station.

Automatic tuning

Press and hold TUNING +/- until the auto scanning starts.

[Auto Tuning] appears on the TV screen. Scanning stops when the system tunes in a station.

To stop the automatic tuning manually, press TUNING +/- or ■.

“TUNED” and “STEREO” (for stereo program) light up in the front panel display.

Manual tuning

Press TUNING +/- repeatedly.

3 Press <-> +/- to adjust the volume.

To turn off the radio

Press I/Power.

Available OPTIONS

1 Press OPTIONS.

The options menu appears.

2 Press <-> +/- to select an item, then press +.

The available items differ depending on the situation.

Items	Details
[Preset Memory]	Preset 20 FM stations.
[Direct Tuning]	Input station frequency directly.
[Preset Name Input]	Enter a name for a preset station.
[FM Mode]	Select monaural or stereo reception of FM programs.

To view the station name or frequency in the front panel display

When the system is set to “TUNER FM,” you can check the frequency using the front panel display.

Press DISPLAY.

Each time you press DISPLAY on the remote, the display changes as shown.

① Station name*

② Frequency**

* This is displayed if you have entered a name for a preset station.

** Returns to the original display after several seconds have elapsed.

Presetting radio stations

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

- 1 Press FUNCTION repeatedly until “TUNER FM” appears in the front panel display.**
- 2 Press and hold TUNING +/- until the auto scanning starts.**
[Auto Tuning] appears on the TV screen. Scanning stops when the system tunes in a station. “TUNED” and “STEREO” (for stereo program) light up in the front panel display.
- 3 Press OPTIONS.**
The options menu appears.
- 4 Press ↑/↓ to select [Preset Memory], then press ⊕.**
- 5 Press ↑/↓ to select the preset number you want.**
- 6 Press ⊕.**
The setting is made.

To change the preset number

Select the desired preset number by pressing PRESET +/-, then perform the procedure from Step 3.

Selecting the preset station

- 1 Press FUNCTION repeatedly until “TUNER FM” appears in the front panel display.**
The last received station is tuned in.
- 2 Press PRESET +/- repeatedly to select the preset station.**
The preset number and frequency appear on the TV screen and front panel display. Each time you press the button, the system tunes in one preset station.

Tip

- You can select the preset station number directly by pressing the number buttons.

Selecting a radio station by inputting a frequency directly

When you know the frequencies, you can select radio stations by inputting the frequencies directly.

- 1 Press FUNCTION repeatedly until “TUNER FM” appears in the front panel display.**
- 2 Press OPTIONS.**
The options menu appears.
- 3 Press ↑/↓ to select [Direct Tuning], then press ⊕.**
- 4 Press the number buttons to select the frequencies.**
- 5 Press ⊕.**
The setting is made.

To operate by using D.TUNING

- 1 Press FUNCTION repeatedly until “TUNER FM” appears in the front panel display.**
 - 2 Press D.TUNING.**
-
- 3 Press the number buttons to select the frequencies.**
 - 4 Press ⊕.**

If an FM program is noisy

If an FM program is noisy, you can select monaural reception. There will be no stereo effect, but reception will improve.

- 1 Press OPTIONS.**
The options menu appears.
- 2 Press ↑/↓ to select [FM Mode], then press ⊕.**
- 3 Press ↑/↓ to select [Monaural].**
 - [Stereo]: Stereo reception.
 - [Monaural]: Monaural reception. “MONO” appears in the front panel display.

4 Press $\oplus$.

The setting is made.

Naming preset stations

You can enter a name for preset stations. These names (for example, "XYZ") appear in the front panel display when a station is selected.

Only one name can be entered for each preset station.

1 Press FUNCTION repeatedly until "TUNER FM" appears in the front panel display.

The last received station is tuned in.

2 Press PRESET +/- repeatedly to select the preset station you want to create an index name for.

3 Press OPTIONS.

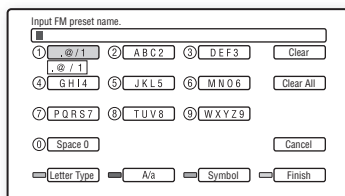
The options menu appears.

4 Press $\uparrow/\downarrow$ to select [Preset Name Input], then press $\oplus$.

The display for entering characters appears.

To enter characters, see the following Steps.

To enter characters



1 Press the number button repeatedly to select a character.

Example:

Press the number 3 button once to enter [D].

Press the number 3 button three times to enter [F].

2 Press $\rightarrow$, and enter the next character.

3 Press the BLUE button ([Finish]) to finish.

You can use the following buttons to enter characters.

Buttons	Details
Red button [Letter Type]	Switches the keyboard between alphabet and numbers.
Green button [A/a]	Switches the keyboard between upper case and lower case.
Yellow button [Symbol]	Displays the keyboard for symbols.
Blue button [Finish]	The input is entered, and the system returns to the previous display.
CLEAR [Clear]/[Clear All]	Erases the character to the right of the cursor. To erase all displayed characters, press and hold CLEAR for 2 seconds or more.
RETURN [Cancel]	Returns to the previous display, canceling the input.
$\leftarrow/\uparrow/\downarrow/\rightarrow$, $\oplus$	• Select an input function using $\leftarrow/\uparrow/\downarrow/\rightarrow$, and press $\oplus$. • Enter characters as follows: ① Select a character selection panel using $\leftarrow/\uparrow/\downarrow/\rightarrow$, and press $\oplus$. ② Select a character using $\leftarrow/\rightarrow$, and press $\oplus$.

Operating the tuner function using the system menu

You can operate the tuner function using the system menu on the front panel display.

To preset radio stations

1 Press FUNCTION repeatedly until "TUNER FM" appears in the front panel display.

2 Press and hold TUNING +/- until the auto scanning starts.

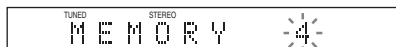
Scanning stops when the system tunes in a station. "TUNED" and "STEREO" (for stereo program) light up in the front panel display.

3 Press SYSTEM MENU.

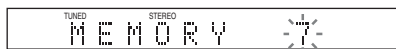
4 Press $\uparrow/\downarrow$ repeatedly until "TUNER MENU" appears in the front panel display, then press $\oplus$ or $\rightarrow$.

- 5** Press $\uparrow/\downarrow$ repeatedly until “MEMORY” appears in the front panel display, then press $\oplus$ or $\rightarrow$.

A preset number appears in the front panel display.



- 6** Press $\uparrow/\downarrow$ to select the preset number you want.



Tip

- You can select the preset number directly by pressing the number buttons.

- 7** Press $\oplus$.
“COMPLETE!” appears in the front panel display, and the station is stored.
- 8** Repeat Steps 2 to 7 to store other stations.
- 9** Press SYSTEM MENU.

The system menu turns off.

To change the preset number

Select the desired preset number by pressing PRESET $+/-$, then perform the procedure from Step 3.

If an FM program is noisy

If an FM program is noisy, you can select monaural reception. There will be no stereo effect, but reception will improve.

- 1** Press SYSTEM MENU.
- 2** Press $\uparrow/\downarrow$ repeatedly until “TUNER MENU” appears in the front panel display, then press $\oplus$ or $\rightarrow$.
- 3** Press $\uparrow/\downarrow$ repeatedly until “FM MODE” appears in the front panel display.



- 4** Press $\oplus$ or $\rightarrow$.
- 5** Press $\uparrow/\downarrow$ to select “MONO.”
- “STEREO”: Stereo reception.
 - “MONO”: Monaural reception.

- 6** Press $\oplus$.
The setting is made.

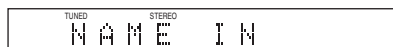
- 7** Press SYSTEM MENU.
The system menu turns off.

To name preset stations

You can enter a name for preset stations. These names (for example, “ABC”) appear in the front panel display when a station is selected.

Only one name can be entered for each preset station.

- 1** Press FUNCTION repeatedly until “TUNER FM” appears in the front panel display.
The last received station is tuned in.
- 2** Press PRESET $+/-$ repeatedly to select the preset station you want to create an index name for.
- 3** Press SYSTEM MENU.
- 4** Press $\uparrow/\downarrow$ repeatedly until “TUNER MENU” appears in the front panel display, then press $\oplus$ or $\rightarrow$.
- 5** Press $\uparrow/\downarrow$ repeatedly until “NAME IN” appears in the front panel display.



- 6** Press $\oplus$ or $\rightarrow$.
- 7** Create a name by using $\leftarrow/\uparrow/\downarrow/\rightarrow$.
Press $\uparrow/\downarrow$ to select a character, then press $\rightarrow$ to move the cursor to the next position.



You can input letters, numbers, and other symbols for a radio station.

If you make a mistake

Press $\leftarrow/\rightarrow$ repeatedly until the character to be changed flashes, then press $\uparrow/\downarrow$ to select the desired character.

To erase the character, press $\leftarrow/\rightarrow$ repeatedly until the character to be erased flashes, then press CLEAR.

8 Press **⊕**.

“COMPLETE!” appears in the front panel display, and the station name is stored.

9 Press **SYSTEM MENU**.

The system menu turns off.

Using the Radio Data System (RDS)

What is the Radio Data System?

The Radio Data System (RDS) is a broadcasting service that allows radio stations to send additional information along with the regular program signal. This tuner offers convenient RDS features, such as station name display. The station name appears on the TV screen as well.

RDS is available only for FM stations.*

* Not all FM stations provide RDS service, nor do they provide the same type of services. If you are not familiar with the RDS system, check with your local radio stations for details on RDS services in your area.

Receiving RDS broadcasts

Simply select a station from the FM band.

When you tune in a station that provides RDS services, the station name* appears in the front panel display.

* If an RDS broadcast is not received, the station name may not appear in the front panel display.

Note

- RDS may not work properly if the station you are tuned to is not transmitting the RDS signal properly, or if the signal strength is weak.

Using the DIGITAL MEDIA PORT Adapter

The DIGITAL MEDIA PORT (DMPORT) adapter is for enjoying sound from a portable audio source or computer. By connecting a DIGITAL MEDIA PORT adapter, you can enjoy sound from the connected component on the system.

Available DIGITAL MEDIA PORT adapters vary in each area.

For details on connecting the DIGITAL MEDIA PORT adapter, see “Connecting the other components” (page 23).

Note

- Do not connect an adapter other than the DIGITAL MEDIA PORT adapter.
- Do not connect or disconnect the DIGITAL MEDIA PORT adapter to/from the control unit while the system is turned on.
- Depending on the type of DIGITAL MEDIA PORT adapter, images are also output. In this case, the system outputs a composite video signal only, regardless of the type of video signal.

Playing the connected component on the system

1 Press **FUNCTION** repeatedly until “DMPORT” appears in the front panel display.

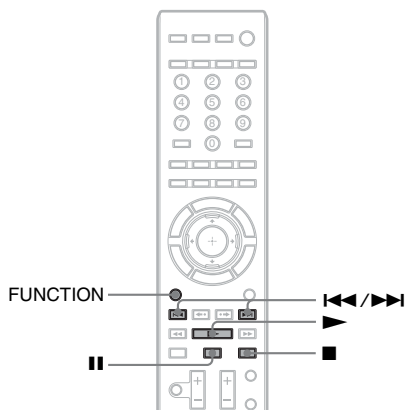
2 Start playback of the connected component.

The sound and images from the connected component are played on the system or connected TV.

For operation details, refer to the operating instructions of the DIGITAL MEDIA PORT adapter.

Tips

- Depending on the type of DIGITAL MEDIA PORT adapter, you may be able to operate a connected component using either the buttons on the remote or the control unit. The following illustration shows an example of buttons that can be used in this case.



To enhance compressed sound

You can enhance compressed sound such as an MP3 audio file. This effect is activated automatically when you set “DEC. MODE” to “AUTO” (page 33) while the “DMPORT” function is selected. To cancel the effect, select other than “AUTO.”

Using the Control for HDMI Function for “BRAVIA” Sync

This function is available on TVs with the “BRAVIA” Sync function only.

By connecting Sony components that are compatible with the Control for HDMI function with an HDMI cable, operation is simplified as below:

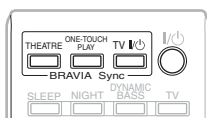
- Theatre Mode (page 59)
- One-Touch Play (page 59)
- System Power Off (page 59)
- Volume Limit (page 60)
- System Audio Control (page 59)
- Language Follow (page 60)

Control for HDMI is a mutual control function standard used by CEC (Consumer Electronics Control) for HDMI (High-Definition Multimedia Interface).

The Control for HDMI function will not work in the following cases:

- When you connect this system to a component which is not compatible with the Control for HDMI function.
- A component does not have an HDMI jack.

There are convenient buttons on the system’s remote for operating the TV, such as THEATRE, ONE-TOUCH PLAY, and TV I/O. For details, see “Controlling the TV with the Supplied Remote” (page 62) and refer to the operating instructions of the TV.



Note

- Depending on the connected component, the Control for HDMI function may not work. Refer to the operating instructions supplied with the component.
- The Control for HDMI function may not work if you connect a component other than Sony, even if the component is compatible with the Control for HDMI function.

Preparing for the Control for HDMI function

(Control for HDMI - Easy Setting)

The system is compatible with the Control for HDMI - Easy Setting function. If the TV is compatible with the Control for HDMI - Easy Setting function, you can set the system’s [Control for HDMI] function automatically by setting the TV. For details, refer to the operating instructions of the TV.

If the TV is not compatible with the Control for HDMI - Easy Setting function, set the Control for HDMI function of the system and TV manually.

Note

- For details on setting the TV, refer to the operating instructions.

- 1 Make sure that the system and the TV are connected with an HDMI cable.**
- 2 Turn on the TV and press I/O to turn on the system.**
- 3 Switch the input selector on your TV so that the signal from the system through the HDMI input appears on the TV screen.**
- 4 Set the Control for HDMI function of the system and TV.**

The Control for HDMI function for system and TV is simultaneously set to on.

To set the [Control for HDMI] function of the system to on/off manually

- 1 Press HOME.**
The home menu appears on the TV screen.
- 2 Press $\leftarrow/\rightarrow$ to select  [Setup].**
- 3 Press $\uparrow/\downarrow$ to select [HDMI Settings], then press $\oplus$.**
The options for [HDMI Settings] appear.
- 4 Press $\uparrow/\downarrow$ to select [Control for HDMI], then press $\oplus$.**
- 5 Press $\uparrow/\downarrow$ to select the setting, then press $\oplus$.**
 - [On]: On.
 - [Off]: Off.

Note

- During the setting of the Control for HDMI function for the system, the System Audio Control function does not work.

Using the Theatre Mode

(Theatre Mode)

If your TV is compatible with the Theatre mode, when you press THEATRE, you can enjoy the optimum video mode and sound quality suited for movies, and TV sound is output from the system's speakers automatically. Also, the TV's video mode switches to Theatre Mode.

Watching BD/DVD by a single button press

(One-Touch Play)

By only pressing ONE-TOUCH PLAY, the TV turns on, the TV is set for BD/DVD input selector, and the system starts playing a disc automatically.

Also, when you insert a disc, One-Touch Play is enabled. If One-Touch Play does not start (in the case of inserting a disc that is not compatible with the auto playback function), press  or ONE-TOUCH PLAY.

The system and TV work as follows (e.g.):

This system	TV
Turns on. (If not already turned on.)	Turns on. (If not already turned on.)
↓	↓
Switches to "BD/DVD" function.	Switches to HDMI input.
↓	↓
Starts playing the disc and outputs the sound.	Minimizes sound level. (System Audio Control)

Turning the system off in sync with the TV

(System Power Off)

When you turn the TV off by using the POWER button on the TV's remote or TV  on the system's remote, the system turns off automatically.

Note

- Before using the System Power Off function, set the function for TV power. For details, refer to the operating instructions of the TV.
- Depending on the status, the system or the connected components may not turn off automatically. For details, see the operating instructions supplied with the connected components.

Enjoying TV sound from the speakers in this system

(System Audio Control)

You can enjoy TV sound with this system by easy operation.

To use this function, connect the system and the TV with a digital optical cord and an HDMI cable (page 20).

You can use the System Audio Control function as follows:

- You can enjoy TV sound from the speakers of the system by means of a simple operation. For details, see the operating instructions of the TV.
- When the system is turned on, TV sound will be output from the speakers of the system.

- When TV sound is output from the speakers of the system, you can adjust the volume and turn off the sound of the system using the TV remote.

Note

- While the TV is in PAP (picture and picture) mode, the System Audio Control function will not work. When the TV exits PAP mode, the output method of the TV returns to the one before PAP mode.
- When you connect the system and the TV with an audio cord, the System Audio Control function does not work.

Setting the Maximum Volume Level of the System

(Volume Limit)

If you change the output method of the TV to the system speaker on the TV menu or by pressing THEATRE, loud sound may be output depending on the volume level of the system. You can prevent this by limiting the maximum level of the volume. For details, see [Volume Limit] (page 74).

Changing the language for the on-screen display of the TV

(Language Follow)

When you change the language for the on-screen display of the TV, the system's on-screen display language is also changed after turning the system off and on.

Setting the Speakers

[Speaker Settings]

To obtain the best possible sound, set the speaker's distance from your listening position. Then use the test tone to adjust the level and the balance of the speakers to the same level.

1 Press HOME.

The home menu appears on the TV screen.

2 Press ←/→ to select [Setup].

3 Press ↑/↓ to select [Audio Settings], then press .

4 Press ↑/↓ to select [Speaker Settings], then press .

The [Speaker Settings] display appears.

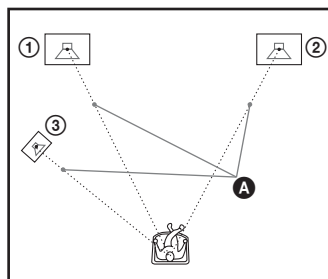
5 Press ↑/↓ to select the item, press . Setup the following settings.

■ [Distance]

When you move the speakers, be sure to set the parameters of the distance () from the listening position to the speakers. You can set the parameters from 0.0 to 7.0 meters.

The speakers in the illustration correspond to the following:

- ① Front left speaker (L)
- ② Front right speaker (R)
- ③ Subwoofer



[Front Left/Right] 3.0 m: Set the front speaker distance.

[Subwoofer] 3.0 m: Set the subwoofer distance.

Note

- Depending on the input stream, [Distance] may not be effective.

■ [Level]

You can adjust the sound level of the speakers. You can set the parameters from -6.0 dB to +6.0 dB. Be sure to set [Test Tone] to [On] for easy adjustment.

[Front Left/Right] 0.0 dB: Set the front speaker level.

[Subwoofer] 0.0 dB: Set the subwoofer level.

■ [Test Tone]

The speakers will emit a test tone to adjust [Level].

[Off]: The test tone is not emitted from the speakers.

[On]: The test tone is emitted from each speaker in sequence while adjusting level. When you select one of the [Speaker Settings] items, the test tone is emitted from each speaker in sequence.

Adjust the sound level as follows.

- 1** Set [Test Tone] to [On].
- 2** Press $\uparrow/\downarrow$ to select [Level], then press $\oplus$.
- 3** Press $\uparrow/\downarrow$ to select the desired speaker type, then press $\oplus$.
- 4** Press $\leftarrow/\rightarrow$ to select the left or right speaker, then press $\uparrow/\downarrow$ to adjust the level.
- 5** Press $\oplus$.
- 6** Repeat Steps 3 to 5.
- 7** Press RETURN.
The system returns to the previous display.
- 8** Press $\uparrow/\downarrow$ to select [Test Tone], then press $\oplus$.
- 9** Press $\uparrow/\downarrow$ to select [Off], then press $\oplus$.

Note

- The test tone signals are not output from the HDMI OUT jack.

Tip

- To adjust the volume of all the speakers at one time, press $\triangleleft$ $\pm$ $\triangleright$.

Controlling the TV with the Supplied Remote

By adjusting the remote signal, you can control your TV with the supplied remote.

Note

- When you replace the batteries of the remote, the code number may reset itself to the default (SONY) setting. Reset the appropriate code number.

Preparing the remote for controlling the TV

Press and hold TV  while entering your TV's manufacturer's code (see the table) using the number buttons. Then release TV .

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

Code numbers of controllable TVs

If more than one code number is listed, try entering them one at a time until you find the code that works with your TV.

Manufacturer	Code number
SONY	501 (default), 502
DAEWOO	506
EMERSON	567
FUNAI	548
GE	509
GOLDSTAR/LG	503, 517, 544, 568
GRUNDIG	533
HITACHI	514
ITT	521, 522
JVC	516
LOEWE	518
MITSUBISHI/MGA	527
NEC	503
NOKIA	521, 522, 573, 575
PANASONIC	553, 572
PHILIPS	515, 518, 557, 570
PIONEER	526

Manufacturer	Code number
RADIO SHACK	565
RCA/PROSCAN	510
SABA	530, 537, 558
SAMSUNG	515, 517, 544, 566, 569, 571, 574
SANYO	508, 545
SHARP	535, 565
TELEFUNKEN	547, 558
THOMSON	547, 549
TOSHIBA	541, 551
ZENITH	543

Controlling the TV with the remote

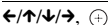
You can control the TV using the following buttons. To use these buttons (other than THEATRE, TV , , ), set the remote to the TV mode by pressing TV, so that TV lights up for 1 second.

To exit the TV mode, press TV so that TV flashes four times.

Note

- While in the TV mode, if you press any of the following buttons, TV lights up. (Depending on the manufacturer setting, some buttons may not work, and TV does not light up.)
- When you press other than the following buttons while the remote is in the TV mode, TV flashes four times and the remote exits the TV mode automatically, and the system is operated as the function of the pressed button.
- Depending on the TV, you may not be able to use some or all of the buttons.

By pressing	You can
TV 	Turn the TV on or off.
THEATRE	Enjoy optimal image suited for movies.
 / 	Switch the TV's input source between the TV and other input sources. After pressing  , you can hold the current text page.
 +/-	Adjust the TV volume.

By pressing	You can
PROG +/-, 	Select the TV channel. After pressing  , you can select the next () or previous () text page.
	Turn off the TV sound temporarily.
Number buttons, -/-	Select the TV channel. After pressing  , you can select the text page by entering the three digit page number.
HOME	Display the menu of the TV.
ANALOG	Switch to analogue mode.
DIGITAL	Switch to digital mode.
	Display the information.
	Access text.
	Display the Digital Electronic Programme Guide (EPG).
TOOLS	Display the operation menu for the current display.
RETURN	Return to the previous channel or layer on the menu of the TV.
	Change the aspect ratio of the connected TV.
 , 	Select the item on the menu.

Tip

- The function of these buttons are same as the remote buttons of the SONY TV. For details, refer to the operating instructions of the TV.

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-minute increments.

Press SLEEP.

Each time you press SLEEP, the minutes display (the remaining time) changes by 10-minutes. When you set the sleep timer, “SLEEP” flashes in the front panel display.

To check the remaining time

Press SLEEP once.

To change the remaining time

Press SLEEP repeatedly to select the desired time.

To set the sleep timer using the system menu

- 1 Press **SYSTEM MENU**.
- 2 Press **↑/↓** repeatedly until “SLEEP MENU” appears in the front panel display, then press **+** or **→**.
- 3 Press **↑/↓** to select a setting.
The minutes display (the remaining time) changes by 10 minutes.

Tip

- You can select the remaining time by pressing the number buttons. In this case, you can preset the time in 1-minute increments.

- 4 Press **+**.
The setting is made and “SLEEP” flashes in the front panel display.
- 5 Press **SYSTEM MENU**.
The system menu turns off.

Using the Dimmer Function

The brightness of the front panel display, logo illumination LED and illumination LED can be set.

- 1** Press **SYSTEM MENU**.
- 2** Press **↑/↓** repeatedly until “**DISP MENU**” appears in the front panel display, then press **+** or **→**.
- 3** Press **↑/↓** repeatedly until “**DIMMER**” appears in the front panel display, then press **+** or **→**.
- 4** Press **↑/↓** to select the brightness of the front panel display.
 - “DIMMER OFF”: Bright.
 - “DIMMER ON”: Dark.
- 5** Press **+**.

The setting is made.
- 6** Press **SYSTEM MENU**.

The system menu turns off.

Changing the Illumination LED Lighting Type

(Illumination Mode)

You can select to have the illumination LED light up either perpetually or only when you press a button.

- 1** Press **SYSTEM MENU**.
- 2** Press **↑/↓** repeatedly until “**DISP MENU**” appears in the front panel display, then press **+** or **→**.
- 3** Press **↑/↓** repeatedly until “**ILLUM MODE**” appears in the front panel display, then press **+** or **→**.
- 4** Press **↑/↓** to select a setting.
 - “STANDARD”: turns on the illumination at all times.
 - “SIMPLE”: turns on the illumination for about 10 seconds when you press a button (except the **I/⏻** button) on the control unit.
- 5** Press **+**.

The setting is made.
- 6** Press **SYSTEM MENU**.

The system menu turns off.

Deactivating the Buttons on the Control Unit

(Child Lock)

You can deactivate the buttons on the control unit (except for ) for preventing misoperation, such as child mischief (child lock function).

Press  on the control unit for more than 5 seconds.

“CHILD LOCK” and “ON” appear in the front panel display.

The child lock function is activated and the buttons on the control unit are locked. (You can operate the system by using the remote.)

To cancel, press  for more than 5 seconds so that “CHILD LOCK” and “OFF” appear in the front panel display.

Note

- When you operate the buttons on the control unit while the child lock function is on, “CHILD LOCK” appears in the front panel display.

Using the Setup Display

You can make various adjustments of items such as picture and sound.

Select  (Setup) on the home menu when you need to change the settings of the system.

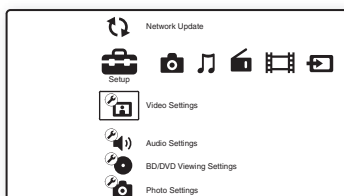
Note

- Playback settings stored in the disc take priority over the Setup Display settings and not all the functions described may work.

1 Press HOME.

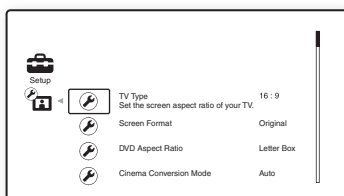
The home menu appears on the TV screen.

2 Press to select [Setup].



3 Press to select the setup category icon to change, then press .

Example: [Video Settings]



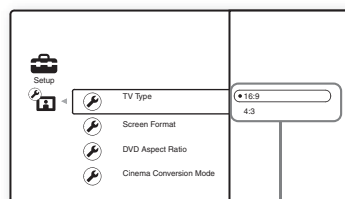
You can setup the following options.

Icon	Explanation
	[Network Update] (page 67) Updates the software of the system.
	[Video Settings] (page 68) Makes the video settings according to the type of connecting jacks.
	[Audio Settings] (page 70) Makes the audio settings according to the type of connecting jacks.
	[BD/DVD Viewing Settings] (page 71) Makes detailed settings for BD/DVD playback.
	[Photo Settings] (page 73) Makes the photo-related settings.
	[HDMI Settings] (page 74) Makes the HDMI settings.
	[System Settings] (page 74) Makes the system-related settings.
	[Network Settings] (page 75) Makes detailed settings for Internet and network.
	[Easy Setup] (page 77) Re-runs the Easy Setup to make the basic settings.
	[Resetting] (page 77) Resets the system to the factory settings.

4 Press to select an item, then press .

The options for the selected item appear.

Example: [TV Type]



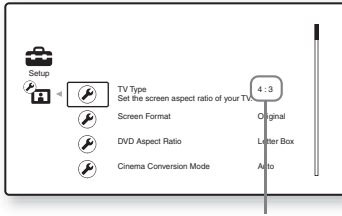
Options

5 Press $\uparrow/\downarrow$ to select a setting, then press $\oplus$.

The setting is selected and setup is complete.

The options for the selected item appear.

Example: [4:3]



Selected setting

[Network Update]

You can update and improve the functions of the system.

For information about update functions, refer to the following website:

<http://support.sony-europe.com/>

Note

- Do not disconnect the AC power cord (mains lead) or network cable while downloading or updating software.
- All operations, including opening the disc tray, are disabled while updating.
- Downloading times may differ depending on the server provider or line status.
- When error messages on network connections appear, check the network connections using [Network Diagnostic] of [Internet Settings] in [Network Settings] (page 75).

Tip

- The “UPDATE */9” counter (“*” indicates update step) in the front panel display also shows progress of the update.
- You can check the current software version by selecting [System Information] in [System Settings] (page 75).
- The [Setup] settings remain after updating.
- The system informs you of newer software version information when [Software Update Notification] is set to [On] (default) (page 75).

Updating the system's software using the network

1 Press $\uparrow/\downarrow$ to select [Network Update], then press $\oplus$.

The system connects to the network, and the display asks for confirmation.

2 Press $\leftarrow/\rightarrow$ to select [OK], then press $\oplus$.

The system starts downloading, then updating the software automatically.

When updating finishes, “COMPLETE!” appears for 5 seconds in the front panel display, then the system automatically turns off.

- 3 Press I/⏻ to turn the system on.**
The system starts up with the updated software.

Updating the system's software using an update disc

You can update and improve the functions of the system using an update disc provided by a Sony dealer or local authorized Sony service facility.

- 1 Insert the update disc.**
The display asks for confirmation.
- 2 Select [OK], and press (+).**
Software update starts.
When updating finishes, "COMPLETE!" appears for 5 seconds in the front panel display, then the system automatically turns off.
- 3 Press I/⏻ to turn the system on.**
The system starts up with the updated software.
- 4 Press ▲ to remove the disc.**

[Video Settings]

You can make the video settings according to the type of connecting jacks.

■ [TV Type]

You can select the aspect ratio of the connected TV.

[16:9]: Select this when connecting to a wide-screen TV or a TV with a wide-mode function.

[4:3]: Select this when connecting to a 4:3 screen TV without a wide-mode function.

■ [Screen Format]

You can select the display configuration for a 4:3 screen picture on a 16:9 wide-screen TV.

[Original]: Select this when connecting to a TV with a wide-mode function. Displays a 4:3 screen picture in 16:9 aspect ratio even on a wide-screen TV.

[Fixed Aspect Ratio]: Changes the picture size to fit the screen size with the original picture aspect ratio.

■ [DVD Aspect Ratio]

You can select the display configuration for playback of 16:9 screen pictures on a 4:3 screen TV (selectable when [TV Type] is set to [4:3] and [Screen Format] is set to [Fixed Aspect Ratio]).

[Letter Box]: Displays a wide picture with black bands on the top and bottom.



[Pan & Scan]: Displays a full-height picture on the entire screen, with trimmed sides.



■ [Cinema Conversion Mode]

You can set the video conversion method for 480p/576p, 720p, 1080i, or 1080p* signals from the HDMI OUT jack or the COMPONENT VIDEO OUT jacks.

* HDMI only

[Auto]: Normally select this. The system automatically detects whether the material is video-based or film-based, and switches to the appropriate conversion method.

[Video]: The conversion method suited for video-based material will always be selected regardless of the material.

■ [Output Video Format]

You can select the jack type to output video signals. For details, see “Video Output Resolution” (page 91).

1 Press **↑/↓** to select the jack type to output video signals, then press **⊕**.

Note

- When connecting the HDMI OUT jack and other video output jacks at the same time, select [Component Video].

[TV Connection Method]

[HDMI]: Outputs signals from the HDMI OUT jack according to the [HDMI Resolution] setting below.

[Component Video]: Outputs signals from the COMPONENT VIDEO OUT jacks according to the [Component Resolution] setting below.

[Video]: Outputs signals from the VIDEO OUT jack.

2 (When you select [HDMI] or [Component Video])
Press **↑/↓** to select the signal type for the HDMI OUT jack or COMPONENT VIDEO OUT jacks, then press **⊕**.

When you change the video output resolution, a picture is displayed in the selected resolution for about 30 seconds, then the display asks for confirmation.

Follow the on-screen instructions.

“HD” lights up in the front panel display when outputting 720p/1080i/1080p video signals.

Note

- If the picture is distorted or no picture appears, wait for about 30 seconds without pressing any buttons. The display returns to the resolution setting screen.
- If the selected video output resolution is incorrect, no picture appears on the screen when you press any button in 30 seconds. In this case, press and hold **▶** and **▲** on the control unit for more than 5 seconds to reset the video output resolution to the lowest resolution.
- When connecting the HDMI OUT jack and other video output jacks at the same time, video signals may not output from the jacks, other than from the HDMI OUT jack, when [Auto] or [1080p] is selected.

[HDMI Resolution] / [Component Resolution]

[Auto] (HDMI only): Normally select this. The system outputs signals starting from the highest resolution acceptable to the TV: 1080p > 1080i > 720p > 480p/576p > 480i/576i

If the resulting image format is undesirable, try another setting that suits your TV.

[480i/576i]: Outputs 480i/576i video signals.

[480p/576p]: Outputs 480p/576p video signals.

[720p]: Outputs 720p video signals.

[1080i]: Outputs 1080i video signals.

[1080p] (HDMI only): Outputs 1080p video signals.

■ [BD-ROM 1080/24p Output]

You can set to output 1920 × 1080p/24 Hz video signals when playing film-based materials on BD-ROMs (720p/24 Hz or 1080p/24 Hz).

1920 × 1080p/24 Hz video signals can be output when all of the following conditions are met.

- You connect a 1080/24p-compatible TV using the HDMI OUT jack,
- [Output Video Format] is set to [HDMI], and
- [HDMI Resolution] is set to [Auto] or [1080p].

The 24P indicator lights up when outputting 1920 × 1080p/24 Hz video signals.

[Auto]: Outputs 1920 × 1080p/24 Hz video signals only when connecting a 1080/24p-compatible TV using the HDMI OUT jack.
[On]: Outputs 1920 × 1080p/24 Hz video signals regardless of the connected TV type.
[Off]: Select this when your TV is not compatible with 1080/24p video signals.

Note

- Video signals may not be output when [BD-ROM 1080/24p Output] is set to [On].

■ [YCbCr/RGB (HDMI)]

You can set the color setting for video signals output from the HDMI OUT jack. Select the setting that matches the connected TV type.

[Auto]: Automatically detects the type of external device, and switches to the matching color setting.

[YCbCr (4:2:2)]: Outputs YCbCr 4:2:2 video signals.

[YCbCr (4:4:4)]: Outputs YCbCr 4:4:4 video signals.

[RGB (16-235)]: Select this when connecting to a device with an HDCP-compliant DVI jack.

[RGB (0-255)]: Select this when connecting to an RGB (0-255) device.

■ [x.v.Colour Output]

Sets whether to send xvYCC information to the connected TV.

Combining xvYCC-compatible video with a TV that supports x.v.Colour display makes it possible to more accurately reproduce object colors present in the natural world.

[Auto]: Normally select this.

[Off]: Select this when the picture is unstable or colors appear unnatural.

■ [Pause Mode] (BD/DVD VIDEO/DVD-R/DVD-RW only)

You can select the picture in pause mode.

[Auto]: The picture, including subjects that move dynamically, is output with no jitter. Normally select this position.

[Frame]: The picture, including subjects that do not move dynamically, is output in high resolution.

[Audio Settings]

You can make the audio settings.

■ [BD Audio Setting]

You can select whether to mix or not mix the interactive audio (button sound, effect sound, etc.) and secondary audio (commentary) when playing a BD that contains such audio.

[Mix]: Outputs the audio obtained by mixing the interactive audio and secondary audio to the primary audio.

[Direct]: Outputs the primary audio only.

■ [Audio DRC] (BD/DVD VIDEO only)

You can compress the dynamic range of the sound track. [Audio DRC] is useful for watching movies at low volume late at night.

[Auto]: Performs playback at the dynamic range specified by the disc (BD-ROM only).

[Off]: No compression of dynamic range.

[On]: The system reproduces the sound track with the kind of dynamic range that the recording engineer intended.

■ [Attenuate - AUDIO]

Distortion may occur when you listen to a component connected to the AUDIO (AUDIO IN L/R) jacks. You can prevent distortion by reducing the input level on the system. Distortion is not a malfunction and will depend on the component connected.

[On]: Attenuates the input level. The output level is changed.

[Off]: Normal input level.

■ [BD/DVD Audio Output]

The system cannot output multi-channel sound from both the HDMI OUT jack and system's speakers simultaneously. You can select the output method.

[Speaker only]: Outputs multi-channel sound from the system's speakers only.

[Speaker priority]: Outputs multi-channel sound from the system's speakers and 2-channel linear PCM signals from the HDMI OUT jack.

[HDMI priority]: Outputs 2-channel stereo sound from the system's speakers, and enables sound output from the HDMI OUT jack. Sound format from the HDMI OUT jack depends on the connected component.

Note

- When you set [BD/DVD Audio Output] to [HDMI priority], a confirmation message appears on the TV screen. Press **↔** to select [OK] to complete the setup.
- When you set [BD/DVD Audio Output] to [HDMI priority], "DEC. MODE," NIGHT, SOUND MODE, "TONE," and DYNAMIC BASS functions are disabled.
- When the System Audio Control function (page 59) is activated, this setting may change automatically.

■ [Sound Effect]

You can set the system's sound effects ("DEC. MODE," NIGHT, SOUND MODE, "TONE," DYNAMIC BASS) to on/off.

[On]: Enables all of the system's sound effects. The upper limit of sampling frequency is set to 48 kHz.

[Off]: The sound effects are disabled. Select this when you do not want to set the upper limit of sampling frequency.

Note

- In DTS96/24 format, some sound effects do not work even if you set [Sound Effect] to [On].

■ [Speaker Settings]

To obtain the best possible sound, set the speakers. For details, see "Setting the Speakers" (page 60).

[BD/DVD Viewing Settings]

You can make detailed settings for BD/DVD playback.

■ [BD/DVD Menu]

You can select the default menu language for BD-ROMs or DVD VIDEOS.

When you select [Select Language Code], the display for entering the language code appears. Enter the code for your language by referring to "Language Code List" (page 93).

■ [Audio]

You can select the default track language for BD-ROMs or DVD VIDEOS.

When you select [Original], the language given priority in the disc is selected.

When you select [Select Language Code], the display for entering the language code appears. Enter the code for your language by referring to "Language Code List" (page 93).

■ [Subtitle]

You can select the default subtitle language for BD-ROMs or DVD VIDEOS.

When you select [Select Language Code], the display for entering the language code appears. Enter the code for your language by referring to "Language Code List" (page 93).

■ [BD Parental Control]

Playback of some BD-ROMs can be limited according to the age of the users. Scenes may be blocked or replaced with different scenes.

- 1 Enter your four-digit password using the number buttons.**
- 2 Press **↑/↓** to select [OK], then press **+**.**
- 3 Press **↑/↓** to select the age restriction, then press **+**.**
The lower the value, the stricter the limitation.
If you select [Select Age Restriction], you can enter the age restriction level from [0]

to [255] using $\leftarrow/\uparrow/\downarrow/\rightarrow$ and the number buttons.

To cancel the Parental Control setting

Select [No Restrictions].

Note

- If you forget the password, reset the system (page 77) and set a new password (see [Password] (page 72)).
- When you play discs which do not have the Parental Control function, playback cannot be limited on this system.
- Depending on the disc, you may be asked to change the Parental Control level while playing the disc. In this case, enter your password, then change the level.
- When [255] is selected in [Select Age Restriction], the Parental Control setting is canceled.

Tip

- You can change the password. See [Password] (page 72).

■ [DVD Parental Control]

Playback of some DVD VIDEOS can be limited according to a predetermined level such as the age of the users. Scenes may be blocked or replaced with different scenes.

- 1 Enter your four-digit password using the number buttons.**
- 2 Press $\uparrow/\downarrow$ to select [OK], then press $\oplus$.**
- 3 Press $\uparrow/\downarrow$ to select a level, then press $\oplus$.**

The lower the value, the stricter the limitation.

To cancel the Parental Control setting

Select [No Restrictions].

Note

- If you forget the password, reset the system (page 77) and set a new password (see [Password] (page 72)).
- When you play discs which do not have the Parental Control function, playback cannot be limited on this system.
- Depending on the disc, you may be asked to change the Parental Control level while playing the disc. In this case, enter your password, then change the level.

Tip

- You can change the password. See [Password] (page 72).

■ [Parental Control Region Code]

Playback of some BD-ROMs or DVD VIDEOS can be limited according to the geographic area. Scenes may be blocked or replaced with different scenes.

- 1 Enter your four-digit password using the number buttons.**
- 2 Press $\uparrow/\downarrow$ to select [OK], then press $\oplus$.**
- 3 Press $\uparrow/\downarrow$ to select the area restriction, then press $\oplus$.**

When you select [Select Region Code], the display for entering the region code appears. Enter the code for the area restriction by referring to "Parental Control/ Area Code List" (page 93).

Note

- If you forget the password, reset the system (page 77) and set a new password (see [Password] (page 72)).
- When you play discs which do not have the Parental Control function, playback cannot be limited on this system.
- Depending on the disc, you may be asked to change the Parental Control level while playing the disc. In this case, enter your password, then change the level.

Tip

- You can change the password. See [Password] (page 72).

■ [Password]

You can set or change the password for the Parental Control function. A password allows you to set a restriction on BD-ROM or DVD VIDEO playback. If necessary, you can differentiate the restriction levels for BD-ROMs and DVD VIDEOS.

- 1 Enter your four-digit password using the number buttons.**
- 2 Press $\uparrow/\downarrow$ to select [OK], then press $\oplus$.**

To change the password

- 1 After Step 1, enter your four-digit password using the number buttons.**
- 2 Press $\uparrow/\downarrow$ to select [OK], then press $\oplus$.**

- 3** Enter a new password using the number buttons.
- 4** Press **↑/↓** to select **[OK]**, then press **+**.

■ [Hybrid Disc Playback Layer]

You can select the layer priority when playing a Hybrid Disc. To change the setting, turn the system off and on again.

[BD]: Plays BD layer.

[DVD/CD]: Plays DVD or CD layer.

■ [BD Internet Connection]

You can set whether or not to allow Internet connections from the contents of a BD (in BDMV mode) being played. Network connections and settings are required when using this function (page 75).

[Allow]: Normally select this.

[Do not allow]: Prohibits Internet connection.



[Photo Settings]

You can make the photo-related settings.

■ [Slideshow Speed]

You can change the slideshow speed.

[Fast]: Photos change rapidly.

[Normal]: Photos change at normal speed.

[Slow]: Photos change slowly.

[HDMI Settings]

You can make the HDMI settings.

■ [Control for HDMI]

You can set the [Control for HDMI] function to on/off. This function is available when you connect the system and TV with an HDMI cable. For details, see “Using the Control for HDMI Function for “BRAVIA” Sync” (page 58).

[On]: You can operate mutually between components that are connected with an HDMI cable.

[Off]: Turns off the function.

■ [Volume Limit]

If you change the output method of the TV to the system speaker on the TV menu or by pressing THEATRE, the System Audio Control (page 59) is activated and loud sound may be output depending on the volume level of the system. You can prevent this by limiting the maximum level of the volume.

[Level3]: Maximum volume level is set to 15.

[Level2]: Maximum volume level is set to 20.

[Level1]: Maximum volume level is set to 30.

[Off]: Turns off the function.

Note

- This function is available only when you connect the system and TV with the HDMI cable and [Control for HDMI] is set to [On].

[System Settings]

You can make the system-related settings.

■ [OSD]

You can select your language for the system on-screen displays.

■ [Standby Mode]

You can shorten the startup time when turning the system on.

[Quick Start]: Shortens the startup time from standby mode. You can operate the system quickly after turning it on.

[Normal]: The default setting.

Note

- When [Standby Mode] is set to [Quick Start],
 - power consumption will be higher than when [Standby Mode] is set to [Normal].
 - the ventilation fan may turn on depending on the surrounding temperature.

■ [Auto Display]

You can display information when switching audio modes or during playback.

[On]: Automatically displays information on the screen when changing the viewing titles, picture modes, audio signals, etc.

[Off]: Displays information only when you press  DISPLAY.

■ [Screen Saver]

The screen saver image appears when you do not use the system for more than 15 minutes while an on-screen display, such as the home menu, is displayed on your TV screen. The screen saver image helps prevent your display device from becoming damaged (ghosting).

[On]: Turns on the screen saver function.

[Off]: Turns off the function.

■ [Software Update Notification]

You can get information on newer software versions. The information appears on the TV screen when you turn the system on. Network connections and settings are required when using this function (page 75).

[On]: Sets the system to inform you of newer software version information (page 67).

[Off]: Turns off the function.

■ [System Information]

You can display the system's software version information and the MAC address.



[Network Settings]

You can make detailed settings for Internet and network.

■ [Internet Settings]

These items are necessary when you connect to the Internet via a network cable. Enter the respective (alphanumeric) values for your broadband router or Wireless LAN router. The items that need to be set may differ, depending on the Internet service provider or the router. For details, refer to the instruction manuals that have been provided by your Internet service provider or supplied with the router.

1 Press **↑/↓** to select [IP Address Acquisition], then press **+**.

2 Press **↑/↓** to select an item, then press **+**.

[Use DHCP]: Select this when DHCP (Dynamic Host Configuration Protocol) server settings are available from your Internet service provider. The network settings necessary for the system will be assigned automatically.

If you set [DNS Server Auto Acquisition] to [Off], set the following items:

- [DNS Server (Primary)]
- [DNS Server (Secondary)]

[Use Static IP Address]: Set the IP address manually according to your network environment.

Set the following items:

- [IP Address]
- [Subnet Mask]
- [Default Gateway]
- [DNS Server (Primary)]
- [DNS Server (Secondary)]

Note

- When you set the [DNS Server (Primary)]/[DNS Server (Secondary)] addresses manually, enter the [DNS Server (Primary)] address. Otherwise, the [Internet Settings] will be set incorrectly.

3 If your ISP has a specific proxy server setting, press **↑/↓** to select [Proxy Settings], then press **+**.

The [Proxy Settings] display appears.
If the proxy server does not have a specific setting, go to step 8.

4 Press **↑/↓** to select [Use of Proxy Server], then press **+**.

5 Press **↑/↓** to select [On], then press **+**.

6 Select [Proxy Server] and [Port], and enter the settings.
To enter the proxy server, see “To enter characters” (page 76).

7 Press RETURN.

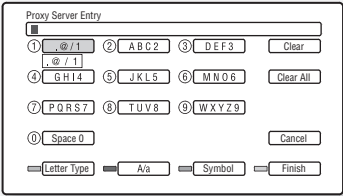
8 Press **↑/↓** to select [Network Diagnostic], then press **+**.

9 Press **←/→** to select [Start], then press **+**.

10 Check that the message [Network connections are correct.] appears.
The setup is finished. If the message does not appear, follow the on-screen messages.

To enter characters

The display for entering characters appears when you select [Proxy Server] in [Proxy Settings].



1 Press the number button repeatedly to select a character.

Example:
Press the number 3 button once to enter [D].
Press the number 3 button three times to enter [F].

2 Press **→**, and enter the next character.

3 Press the blue button ([Finish]) to finish.

You can use the following buttons to enter characters.

Buttons	Details
Red button [Letter Type]	Switches the keyboard between alphabet and numbers.
Green button [A/a]	Switches the keyboard between upper case and lower case.
Yellow button [Symbol]	Displays the keyboard for symbols.
Blue button [Finish]	The input is entered, and the system returns to the previous display.
CLEAR [Clear]/[Clear All]	Erases the character to the right of the cursor. To erase all displayed characters, press and hold CLEAR for 2 seconds or more.
RETURN [Cancel]	Returns to the previous display, canceling the input.
←/↑/↓/→, +	• Select an input function using ←/↑/↓/→, and press +. • Enter characters as follows: ① Select a character selection panel using ←/↑/↓/→, and press +. ② Select a character using ←/→, and press +.

[Easy Setup]

You can recall the Easy Setup to make the basic settings.

- 1** Press **←/→** to select **[Start]**, then press **⊕**.
- 2** Follow the instructions for “Step 3: Performing the Easy Setup” (page 29) from step 4.

[Resetting]

Resetting the system settings other than the settings related to password

You can reset the system settings to their factory default. Settings can be reset by function group. All the settings within the group will be reset.

- 1** Press **⊕** to select **[Reset to Factory Default Settings]**, then press **⊕**.
- 2** Press **↑/↓** to select the settings you want to reset to default, then press **⊕**.

You can reset the following settings:

- [Video Settings]
- [Audio Settings]
- [BD/DVD Viewing Settings] (except for the [BD Parental Control], [DVD Parental Control], [Parental Control Region Code], [Password] settings)
- [Photo Settings]
- [HDMI Settings]
- [System Settings]
- [Network Settings]
- [All Settings] (except for the [BD Parental Control], [DVD Parental Control], [Parental Control Region Code], [Password] settings)

The display asks for confirmation.

Note

- When [All Settings] is selected, all system settings other than the settings related to the password are reset, and the system turns off.
- Settings for “Adjusting pictures for videos” (page 41) are not reset.

- 3** Press **←/→** to select **[Start]**, then press **⊕**.
To cancel, select **[Cancel]**.

Resetting all the system settings to the default

You can reset all the system settings—including the settings related to password—to the default settings.

- 1** Press **+** to select **[Reset to Factory Default Settings]**, then press **+**.
- 2** Press **↑/↓** to select **[All Settings]**, then press **+**.
The display asks for confirmation.
- 3** Press **■** and **VOL –** on the control unit at the same time for more than 5 seconds.

All system settings are reset to the default settings, and the system turns off.

Note

- Settings for “Adjusting pictures for videos” (page 41) are not reset.

Precautions

On safety

- To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the system, or place the system near water, such as near a bathtub or shower room. Should any solid object or liquid fall into the cabinet, unplug the system and have it checked by qualified personnel before operating it any further.
- Do not touch the AC power cord (mains lead) with wet hands. Doing so may cause an electric shock.

On power sources

- Unplug the system from the wall outlet (mains) 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.

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 system 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 system can overheat and malfunction.
- Do not place the system on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots.
- Do not install the system in a confined space, such as a bookshelf or similar unit.
- Do not install the system near heat sources such as radiators, air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Do not install the system in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the system and discs away from components with strong magnets, such as microwave ovens, or large loudspeakers.
- Do not place heavy objects on the system.

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.
- If anything falls into the cabinet, unplug the system and have it checked by qualified personnel before operating it any further.

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

On cleaning discs, disc/lens cleaners

- **Do not use cleaning discs or disc/lens cleaners (including wet or spray types). These may cause the apparatus to malfunction.**

On replacement of parts

- In the events that this system is repaired, repaired parts may be collected for reuse or recycling purposes.

On your TV's color

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

IMPORTANT NOTICE

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

On moving the system

Before moving the system, make sure that there is no disc inserted, and remove the AC power cord (mains lead) from the wall outlet (mains).

Notes about the Discs

On handling discs

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



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

On cleaning

- Before playing, clean the disc with a cleaning cloth.

Wipe the disc from the center out.



- Do not use solvents such as 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.

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.

Note that if service personnel changes some parts during repair, these parts may be retained.

Power

Symptom	Remedy
The power is not turned on.	• Check that the AC power cord (mains lead) is connected securely. • Check that the system cable is connected securely. • Press I/⏻ after “STANDBY” disappears from the front panel display.
If the protect indicator on the right of the front panel display flashes.	Press I/⏻ to turn off the system, and check the following items after the protect indicator turns off. • Are the + and – speaker cords short-circuited? • Are you using only the specified speakers? • Is anything blocking the ventilation holes of the system? • Is any foreign object stopping the fan? • After checking the above items and fixing any problems, turn on the system. If the cause of the problem cannot be found even after checking all the above items, consult your nearest Sony dealer.

Picture

Symptom	Remedy
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. • Check the output method on your system (page 20). • Re-connect the connecting cord securely. • The system is connected to an input device that is not HDCP (High-bandwidth Digital Content Protection) compliant (“HDMI” on the front panel does not light up) (page 20). • When playing a double-layer DVD, the video and audio may be momentarily interrupted at the point where the layers switch.
No picture appears when the video output resolution selected in [Output Video Format] is incorrect.	• Press and hold  and  on the control unit for more than 5 seconds to reset the video output resolution to the lowest resolution.
Video signals are not output from the jacks, other than from the HDMI OUT jack, when connecting the HDMI OUT jack and other video output jacks at the same time.	• Set [Output Video Format] to [Component Video] (page 69).
The dark area of the picture is too dark/the bright area is too bright or unnatural.	• Set [Picture Quality Mode] to [Standard] (default) (page 41).
The picture is not output correctly.	• Check the [Output Video Format] settings (page 69).
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 BD/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 the other input jacks.
Even though you set the aspect ratio in [TV Type] of [Video Settings], the picture does not fill the TV screen.	• The aspect ratio on the disc is fixed.
Color irregularity occurs on the TV screen.	• If the speakers are used with a CRT-based TV or projector, install the speakers at least 0.3 meters from the TV set. • If the color irregularity persists, turn off the TV set once, then turn it on after 15 to 30 minutes. • If howling occurs, reposition the speakers farther away from the TV set. • Make sure that no magnetic object (magnetic latch on a TV stand, health care device, toy, etc.) is placed near the speakers.

Sound

Symptom	Remedy
There is no sound.	• The speaker cord is not connected securely. • Press  on the remote if MUTE indicator is displayed in the front panel display. • The system is in pause mode. Press  to return to normal play mode. • Fast forward or fast reverse is performed. Press  to return to normal play mode. • Check the speaker settings (page 60). • Slow forward or step forward is performed. Press  to return to normal play mode. • When you connect the system and the TV with an audio cable, select "AUDIO" by pressing FUNCTION to enjoy TV sound.
No sound is output from the HDMI OUT jack.	• The HDMI OUT jack is connected to a DVI (Digital Visual Interface) device (DVI jacks do not accept audio signals). • Try the following: ① Turn the system off and on again. ② Turn the connected component off and on again. ③ Disconnect and then connect the HDMI cable again. • Set [BD/DVD Audio Output] to [HDMI priority] (page 70).
The left and right sounds are unbalanced or reversed.	• Check that the speakers and components are connected correctly and securely.
Severe hum or noise is heard.	• Check that the speakers and components are connected securely. • Check that the connecting cords are away from a transformer or motor, and at least 3 meters 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 CD.	• Select stereo sound by pressing  (page 49). • Make sure the system is connected properly.
The surround effect is difficult to hear when you are playing a sound track of Dolby Digital, DTS, or MPEG audio.	• Check the "DEC. MODE" setting (page 33). • Depending on the BD/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 beginning of the sound is cut off.	• Set the sound mode to "MOVIE" or "MUSIC" (page 48). • Select "2CH STEREO" for "DEC. MODE" (page 33).
The sound effects are disabled.	• The effects of SOUND MODE, DYNAMIC BASS, NIGHT, "TONE," and "DEC. MODE" may be disabled depending on the input stream (page 71).

Operation

Symptom	Remedy
Radio stations cannot be tuned in.	• Check that the antenna (aerial) is connected securely. Adjust the antenna (aerial) or connect an external antenna (aerial) if necessary. • The signal strength of the stations is too weak (when tuning in with automatic tuning). Use direct tuning (page 53). • No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 52). • 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 control unit. • The distance between the remote and the control unit is too far. • The remote is not pointed at the remote sensor on the control unit. • The batteries in the remote are weak. • When you cannot perform menu operations via the front panel display, press HOME on the remote.
The disc does not play.	• The disc is dirty. • There is no disc inserted. • The disc is upside down. Insert the disc with the playback side facing down. • The disc is skewed on the disc tray. • You are attempting to play a disc with a format that cannot be played back by this system (page 88). • The region code on the BD/DVD does not match the system. • Moisture has condensed inside the control unit and may cause damage to the lenses. Remove the disc and leave the system turned on for about half an hour. • The system cannot play a recorded disc that is not correctly finalized (page 88).
The JPEG image file cannot be played.	• The following photo files cannot be played. – Photo files with width or height larger than 8,192 pixels – Photo files with width or height smaller than 15 pixels – Photo files exceeding 32 MB – Photo files with extreme aspect ratios (greater than 50:1 or 1:50) – Photo files in Progressive JPEG format – Photo files that have a “.jpeg” or “.jpg” extension, but not in JPEG format – Photo files that have an extremely long name – Photo files recorded on BD-Rs in any format other than UDF (Universal Disk Format) 2.6 – Photo files recorded on BD-REs in any format other than UDF (Universal Disk Format) 2.5 • Photo files edited on a PC may not be played. • It does not fit the TV screen.
File names are not displayed correctly.	• The system can only display ISO 8859-1-compliant character formats. Other character formats may be displayed differently. • Depending on the writing software used, the input characters may be displayed differently.
A disc does not start playing from the beginning.	• Resume Play has been selected. Press OPTIONS and select [Play from start], then press $\oplus$. • The title or BD/DVD menu automatically appears on the TV screen.
The system starts playing the disc automatically.	• The BD/DVD features an auto playback function.

Symptom	Remedy
Playback stops automatically.	Some discs may contain an auto pause signal. While playing such a disc, the system stops playback at the auto pause signal.
You cannot perform some functions such as stop or search.	Depending on the disc, you may not be able to perform some of the operations above. Refer to the operating instructions supplied with the disc.
Messages do not appear on the TV screen in the language you want.	In the Setup Display, select the desired language for the on-screen display in [OSD] in [System Settings] (page 74).
The language for the soundtrack/subtitle or angles cannot be changed.	- Try using the BD's or DVD's menu instead of the direct selection button on the remote (page 39). - Multi-lingual tracks/subtitles or multi-angles are not recorded on the BD or DVD being played. - The BD or DVD prohibits the changing of the language for the sound track/subtitle or angles.
The disc tray does not open and you cannot remove the disc even after you press  .	Try the following: ① Press and hold VOL – and  on the control unit for more than 5 seconds to open the disc tray. ② Remove the disc. ③ Disconnect the AC power cord (mains lead) from the wall outlet (mains), then reconnect after several minutes.
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.	Disconnect the AC power cord (mains lead) from the wall outlet (mains), then reconnect after several minutes.
The Control for HDMI function does not work.	- When “HDMI” does not light up in the front panel display, check the HDMI connection (page 20). - Set [Control for HDMI] in [HDMI Settings] to [On] (page 74). - Make sure that the connected component is compatible with the [Control for HDMI] function. - Check that the AC power cord (mains lead) of the connected component is connected securely. - Check the connected component's setting for the Control for HDMI function. Refer to the operating instructions supplied with the component. - If you change the HDMI connection, connect and disconnect the AC power cord (mains lead), or have a power failure, set [Control for HDMI] in [HDMI Settings] to [Off], then set [Control for HDMI] in [HDMI Settings] to [On] (page 74). - For details, see “Using the Control for HDMI Function for “BRAVIA” Sync” (page 58).
No sound is output from the system and TV while using the System Audio Control function.	- Make sure that the connected TV is compatible with the System Audio Control function. - For details, see “Using the Control for HDMI Function for “BRAVIA” Sync” (page 58).
The external memory is not recognized.	Try the following: ① Turn the system off. ② Face the connector of the external memory upward, align it with the EXT slot and insert the external memory into the EXT slot. (page 26). ③ Turn the system on. ④ Check that the EXT indicator lights up in the front panel display.
Bonus contents or other data that are contained in a BD-ROM cannot be played.	Try the following: ① Remove the disc. ② Turn the system off. ③ Remove and re-insert the external memory (page 26). ④ Turn the system on. ⑤ Check that the EXT indicator lights up in the front panel display. ⑥ Insert the BD-ROM with BonusView/BD-Live.

Symptom	Remedy
A message indicating that the local storage does not have enough space appears on the screen.	• Delete unnecessary data in the external memory (page 43). • Check that an external memory of 1 GB or more is used.
The system does not work and “CHILD LOCK” appears in the front panel display when you press any button on the control unit.	• Set the child lock function to off (page 65).
The system menu does not work.	• Press HOME on the remote.

Self-diagnosis Function

When the self-diagnosis function is activated to prevent the system from malfunctioning, an error code appears in the front panel display, or just ⚠ appears without any messages on the entire screen. In these cases, check the following.

When an error code appears in the front panel display

Error code	Corrective action
Exxxx	Contact your nearest Sony dealer or local authorized Sony service facility and give the error code.
SYSTEM ERR UPDATE NG	Disconnect the AC power cord (mains lead) from the wall outlet (mains), then reconnect and turn the system on. If the system does not work normally, consult your nearest Sony dealer or local authorized Sony service facility.

When just ⚠ appears without any messages on the entire screen

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

Playable Discs

Type	Disc logo	Characteristics	Icon
Blu-ray Disc		BD-ROMs and BD-REs/BD-Rs in BDMV and BDAV mode, including 8 cm discs (single layer) and DL discs	
DVD VIDEO		Discs such as movies that can be purchased or rented	
DVD/DATA DVD	 	DVD+RWs/DVD+Rs in +VR mode or DVD-RWs/DVD-Rs in video and VR mode, including 8 cm discs (single layer) and DVD+R DL/DVD-R DL discs	
	 		
			
AVCHD	 TM	Discs recorded in AVCHD format**	
CD		Music CDs or CD-Rs/CD-RWs in music CD format	
DATA CD	—	CD-Rs/CD-RWs containing JPEG image files	

* JPEG format conforming to UDF (Universal Disk Format).

** Some AVCHD format discs may not play, depending on the recording condition. The AVCHD format disc will not play if it has not been correctly finalized.

Notes about BD-ROM compatibility

Since the Blu-ray Disc specifications are new and evolving, some discs may not be playable depending on the disc type and the version.

The audio output differs depending on the source, connected output jack, and selected audio settings.

Discs that cannot be played

- BDs with cartridge
- DVD-RAMs
- HD DVDs
- DVD Audio discs
- PHOTO CDs
- Data part of CD-Extras
- VCDs/Super VCDs
- HD layer on Super Audio CDs
- BD-ROMs/DVD VIDEOS with a different region code (page 89).
- A disc that has a non-standard shape (e.g., card, heart)

- A disc with paper or stickers on it
- A disc that has the adhesive of cellophane tape or a sticker still left on it

Note on playback operations of a BD/DVD

Some playback operations of a BD/DVD may be intentionally set by software producers. Since this system plays a BD/DVD according to the disc contents the software producers designed, some playback features may not be available. Refer to the instructions supplied with the BD/DVD.

Region code (BD-ROM/DVD VIDEO only)

Your system has a region code printed on the bottom of the control unit and will only play a BD-ROM/DVD VIDEO (playback only) labeled with identical region codes. This system is used to protect copyrights.

DVD VIDEO labeled  will also play on this system.

If you try to play any other DVD VIDEO, the message [Playback prohibited by region code.] will appear on the TV screen. Depending on the BD-ROM/DVD VIDEO, no region code may be indicated even though playing the BD-ROM/DVD VIDEO is prohibited by area restrictions.

Notes about BD-REs/BD-Rs, DVD+RWs/DVD+Rs, DVD-RWs/DVD-Rs, or CD-Rs/CD-RWs

Some BD-REs/BD-Rs, DVD+RWs/DVD+Rs, DVD-RWs/DVD-Rs, or CD-Rs/CD-RWs cannot be played on this system due to the recording quality or physical condition of the disc, or the characteristics of the recording device and authoring software. The BD-Rs recorded on a PC cannot be played if postscripts are recordable.

A CD or DVD disc will not play if it has not been correctly finalized. For more information, refer to the operating instructions supplied with the recording device. Note that some playback functions may not work with some DVD+RWs/DVD+Rs, even if they have been correctly finalized. In this case, view the disc using normal playback.

Notes on discs

This product is designed to playback discs that conform to the Compact Disc (CD) standard. DualDiscs and some music discs encoded with copyright protection technologies do not conform to the Compact Disc (CD) standard, therefore, these discs may not be compatible with this product.

Note about double-layer DVDs

The playback pictures and sound may be momentarily interrupted when the layers switch.

Note about 8 cm BD-REs/8 cm BD-Rs

Some 8 cm BD-REs/8 cm BD-Rs cannot be played on this system.

Note about BD-REs/BD-Rs

This system supports Ver. 2.1 BD-RE and Ver. 1.1 and 1.2 BD-R including organic pigment type BD-R (LTH type).

Supported Audio Formats

Audio formats supported by this system are as follows.

Function	Format							
	LPCM 2ch	LPCM 5.1ch, LPCM 7.1ch	Dolby Digital	Dolby TrueHD, Dolby Digital Plus	DTS	DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS96/24	DTS-HD High Resolution Audio	DTS-HD Master Audio
"BD/DVD"	○	○	○	○	○	○*	○	○
"SAT/CABLE" "TV" (DIGITAL IN)	○	—	○	—	○	—	—	—

○: Supported format.

—: Unsupported format.

* BD only.

Note

- The table above is valid only when you set [BD Audio Setting] to [Direct] (page 70). If another setting is used, depending on the audio format, sound may be decoded to a suitable format automatically.
- This system does not play back MP3 format files.

Video Output Resolution

Output resolution differs depending on the [Output Video Format] setting in [Video Settings] (page 68).

Resolution setting	When [Output Video Format] is set to [HDMI]			When [Output Video Format] is set to [Component Video]		
	VIDEO OUT jack	COMPONENT VIDEO OUT jacks	HDMI OUT jack	VIDEO OUT jack	COMPONENT VIDEO OUT jacks	HDMI OUT jack
480i/576i	480i/576i	480i/576i	480i/576i	480i/576i	480i/576i	480i/576i
480p/576p	480i/576i	480i/576i	480p/576p	480i/576i	480p/576p	480p/576p
720p	480i/576i	480i/576i	720p	480i/576i	720p*	720p*
1080i	480i/576i	480i/576i	1080i	480i/576i	1080i*	1080i*
1080p	no picture	no picture	1080p	unselectable	unselectable	unselectable

* Protected contents on DVDs are output at 480p/576p resolution.

When [Output Video Format] is set to [Video]

480i/576i video signals are output from the VIDEO OUT or COMPONENT VIDEO OUT jacks, and 480p/576p video signals are output from the HDMI OUT jack.

About the video output resolution of the DIGITAL MEDIA PORT adapter

480i/576i video signals are output from the VIDEO OUT jack regardless of the resolution setting, and video signals are not output from the HDMI OUT and COMPONENT VIDEO OUT jacks when playing contents via the DIGITAL MEDIA PORT adapter.

Specifications

Amplifier Section

Power output (rated)	Front*: 80 W + 80 W (at 4 ohms, 1 kHz, 1% THD) Subwoofer*: 108 W (at 3 ohms, 100 Hz, 1% THD)
RMS output power (reference)	Front*: 105 W (per channel at 4 ohms, 1 kHz, 10% THD) Subwoofer*: 140 W (at 3 ohms, 100 Hz, 10% THD)

* Depending on the "DEC. MODE" settings and the source, there may be no sound output.

Inputs (Analog)	
AUDIO	Sensitivity: 450/250 mV
Inputs (Digital)	
SAT/CABLE (COAXIAL)	
	Impedance: 75 ohms

BD/DVD/CD System

Signal format system	PAL/NTSC
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Tuner Section

System	PLL quartz-locked digital synthesizer
FM tuner section	
Tuning range	87.5 MHz - 108.0 MHz (50 kHz step)
Antenna (aerial)	FM wire antenna (aerial)
Antenna (aerial) terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz

Video Section

Outputs	VIDEO: 1 V _{p-p} 75 ohms COMPONENT: Y: 1 V _{p-p} 75 ohms P _B /C _B , P _R /C _R : 0.7 V _{p-p} 75 ohms HDMI OUT: Type A (19 pin)
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Speakers

Front speaker (SS-TSZ7)

Speaker system	2-Way 3-Driver speaker system Bass reflex
Speaker unit	Woofer: 50 mm cone type × 2 Tweeter: 20 mm cone type 4 ohms
Rated impedance	4 ohms
Dimensions (approx.)	81 mm × 265 mm × 130 mm (w/h/d) 81 mm × 265 mm × 95 mm (w/h/d) with adjustable support
Mass (approx.)	0.91 kg

Subwoofer (SA-WSZ7)

Power requirements	220 V – 240 V AC, 50/60 Hz
Power consumption	On: 110 W Standby: 0.3 W (at the Power Saving mode)
Speaker system	Subwoofer Bass reflex
Speaker unit	160 mm cone type
Rated impedance	3 ohms
Dimensions (approx.)	187 mm × 445 mm × 340 mm (w/h/d)
Mass (approx.)	9.4 kg

Control unit (HCD-Z7)

Output voltage (DIGITAL MEDIA PORT)	DC 5 V
Output current (DIGITAL MEDIA PORT)	700 mA (MAX)
Output voltage (EXT)	DC 5 V
Output current (EXT)	500 mA (MAX)
LAN(100)	100BASE-TX Terminal
Dimensions (approx.)	350 mm × 69 mm × 277 mm (w/h/d)
Mass (approx.)	3.6 kg

Design and specifications are subject to change without notice.

Language Code List

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

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

Additional Information

Parental Control/Area Code List

Code Area	Code Area	Code Area	Code Area
2044 Argentina	2109 Germany	2376 Netherlands	2543 Taiwan
2047 Australia	2200 Greece	2390 New Zealand	2528 Thailand
2046 Austria	2219 Hong Kong	2379 Norway	2184 United Kingdom
2057 Belgium	2248 India	2427 Pakistan	
2070 Brazil	2238 Indonesia	2424 Philippines	
2079 Canada	2239 Ireland	2428 Poland	
2090 Chile	2254 Italy	2436 Portugal	
2092 China	2276 Japan	2489 Russia	
2093 Colombia	2304 Korea	2501 Singapore	
2115 Denmark	2333 Luxembourg	2149 Spain	
2165 Finland	2363 Malaysia	2499 Sweden	
2174 France	2362 Mexico	2086 Switzerland	

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Glossary

AVCHD

The AVCHD format is a high-definition digital video camera format used to record SD (standard definition) or HD (high definition) signals of either the 1080i specification* or the 720p specification** on DVDs, using efficient data compression coding technology. The MPEG-4 AVC/H.264 format is adopted to compress video data, and the Dolby Digital or Linear PCM system is used to compress audio data. The MPEG-4 AVC/H.264 format is capable of compressing images at higher efficiency than that of the conventional image compression format. The MPEG-4 AVC/H.264 format enables a high definition (HD) video signal shot on a digital video camera recorder to be recorded on DVD discs in the same way as it would be for a standard definition (SD) television signal.

* A high definition specification that utilizes 1080 effective scanning lines and the interlace format.

** A high definition specification that utilizes 720 effective scanning lines and the progressive format.

BD-J application

The BD-ROM format supports Java for interactive functions.

“BD-J” offers content providers almost unlimited functionality when creating interactive BD-ROM titles.

BD-R

BD-R (Blu-ray Disc Recordable) is a recordable, write-once Blu-ray Disc, available in the same capacities as the BD below. Since contents can be recorded and cannot be overwritten, a BD-R can be used to archive valuable data or storing and distributing video material.

BD-RE

BD-RE (Blu-ray Disc Rewritable) is a recordable and rewritable Blu-ray Disc, available in the same capacities as the BD below. The re-recordable feature makes extensive editing and time-shifting applications possible.

BD-ROM

BD-ROMs (Blu-ray Disc Read-Only Memory) are commercially produced discs and are available in the same capacities as the BD below. Other than conventional movie and video contents, these discs have enhanced features such as interactive content, menu operations using pop-up menus, selection of subtitle display, and slideshow. Although a BD-ROM may contain any form of data, most BD-ROM discs will contain movies in High Definition format, for playback on Blu-ray Disc/DVD players.

Blu-ray Disc (BD)

A disc format developed for recording/playing high-definition (HD) video (for HDTV, etc.), and for storing large amounts of data. A single layer Blu-ray Disc holds up to 25 GB, and a dual-layer Blu-ray Disc holds up to 50 GB of data.

Dolby Digital

This movie theater sound format 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 Digital Plus

Developed as an extension to Dolby Digital, the audio coding technology supports 7.1 multi-channel surround sound.

Dolby TrueHD

Dolby TrueHD is a lossless coding technology that supports up to 8 channels of multi-channel surround sound for the next generation optical discs. The reproduced sound is true to the original source bit-for-bit.

DTS

Digital audio compression technology developed by DTS, 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.

DTS-HD High Resolution Audio

Developed as an extension to DTS Digital Surround format. It supports a maximum sampling frequency of 96 kHz, and 7.1 multi-channel surround.

DTS-HD High Resolution Audio has a maximum transmission rate of 6 Mbps, with lossy compression (Lossy).

DTS-HD Master Audio

DTS-HD Master Audio has a maximum transmission rate of 24.5 Mbps, and uses lossless compression (Lossless), and DTS-HD Master Audio corresponds to a maximum sampling frequency of 192 kHz, and maximum of 7.1ch.

HDMI (High-Definition Multimedia Interface)

HDMI is an interface that supports both video and audio on a single digital connection, allowing you to enjoy high quality digital picture and sound. The HDMI specification supports HDCP (High-bandwidth Digital Content Protection), a copy protection technology that incorporates coding technology for digital video signals.

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.

LTH (Low to High)

LTH is a recording system that supports organic pigment type BD-R.

Parental Control

A function of the BD/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.

PhotoTV HD

“PhotoTV HD” allows for a highly-detailed pictures, and photo-like expression of subtle textures and colors. By connecting Sony “PhotoTV HD” compatible devices using an HDMI cable, whole new world of photos can be enjoyed in breathtaking Full HD quality. For instance, the delicate texture of the human skin, flowers, sand and waves can now be displayed on a large screen in beautiful photo-like quality.

Pop-up menu

An enhanced menu operation available on BD-ROMs. The pop-up menu appears when POP UP/MENU is pressed during playback, and can be operated while playback is in progress.

Progressive format (sequential scanning)

In contrast to the Interlace format, the progressive format can reproduce 50 - 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 or 625 progressive format.

x.v.Colour

x.v.Colour is a familiar term for the xvYCC standard proposed by Sony.

xvYCC is an international standard for color space in video.

This standard can express a wider color range than the currently used broadcast standard.

24p True Cinema

Movies shot with a film camera consist of 24 frames per second.

Since conventional televisions (both CRT and flat panels) display frames either at 1/60 or 1/50 second intervals, the 24 frames do not appear at an even pace.

When connected to a TV with 24p capabilities, the player displays each frame at 1/24 second intervals — the same interval originally shot with the film camera, thus faithfully reproducing the original cinema image.

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