

Home Theatre System

Operating Instructions

S-master
Digital Amplifier

 Digital
Cinema
Sound

 **R·D·S**

HT-RD150

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.
The mains lead must only be changed at a qualified service shop.

Precautions

- This unit operates on 220 – 240 V AC, 50/60 Hz. Check that the unit's operating voltage is identical with your local power supply.
- To prevent fire, do not cover the ventilation of the apparatus with newspapers, table-cloths, curtains, etc. And do not place lighted candles on the apparatus.
- To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.
- AC power cord must be changed only at the qualified service shop.



Do not throw away the battery with general house waste, dispose of it correctly as chemical waste.

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.

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

Precautions

On safety

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.

When disconnecting the mains leads, do not touch the metallic part of the jacks or plugs.

Do not put any object into the holes on the set (fan ventilation holes, jacks, etc.). Electric shock may result.

On power sources

- The system is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the system itself has been turned off.
- If you are not going to use the system for a long time, be sure to disconnect the system from the wall outlet. To disconnect the AC power cord (mains lead), grasp the plug itself; never pull the cord.
- Do not disconnect the AC power cord (mains lead) while the system is in use.

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 holes for the cooling fan by putting anything on the system. The system is equipped with a high power amplifier. If the ventilation holes are blocked, the system can overheat and malfunction.
- Do not place the system on a soft surface such as a rug that might block the ventilation holes.
- Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

- Do not place the system in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- Do not place the system in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the system away from equipment with strong magnets, such as microwave ovens, or large loudspeakers.
- Do not place heavy objects on the system.
- Do not put objects in front of the speakers as they may fall over when loud sound is output.
- If the system is brought directly from a cold to a warm location, moisture may condense inside and cause damage to the system. If condensation occurs, disconnect the mains lead of the system. Then, reconnect the mains lead and turn the system on after the temperature has been held constant for 30 minutes. If the system still does not work normally for several hours, consult your nearest Sony dealer.

About this manual

Instructions in this manual describe the controls on the remote. You can also use the controls on the centre unit if they have the same or similar names as those on the remote.

Copyrights

- This system incorporates with Dolby^{*1} Digital and Dolby Pro Logic (II)^{*1} adaptive matrix surround decoder and the DTS^{*2} Digital Surround System.

^{*1} Manufactured under license from Dolby Laboratories. "Dolby," "Pro Logic," and the double-D symbol are trademarks of Dolby Laboratories.

^{*2} Manufactured under license from Digital Theater Systems, Inc. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.

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

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Hookups and Settings

Overview

Complete the following steps to start using this home theatre system.

Step 1: Unpacking (page 5)



Step 2: Connecting the Speakers (page 7)



Step 3: Connecting the FM/AM Aerials (page 10)



Step 4: Connecting the Other Components (page 11)



Step 5: Connecting the Mains Leads (page 14)



Step 6: Basic Speaker Setup (page 15)

Notes

- Plug cords securely to prevent unwanted noise.
- See the instructions supplied with the components to be connected.
- Be sure to disconnect the mains lead of each component before connecting.


Step 1: Unpacking

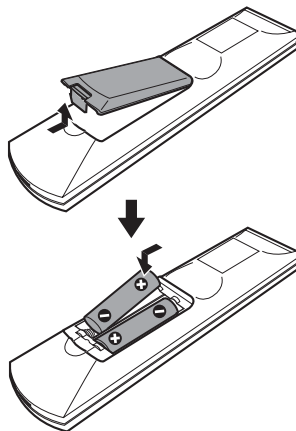
Check that you have the following items.

- Active subwoofer (1)
- Centre unit (1)
- Speakers (4)
- AM loop aerial (1)
- FM wire aerial (1)
- Speaker cords (short × 2, long × 2)
- Optical digital cord (1)
- Remote commander (remote) (1)
- R6 (size AA) batteries (2)
- Foot pads for subwoofer and speakers (front/surround)*
- Operating Instructions (1)
- Hookup Guide (card) (1)


* Attach the pads to the bottom of the speakers to prevent speaker vibration or movement while listening (large for the subwoofer, small for other speakers).

Inserting batteries into the remote

You can control the system using the supplied remote. Insert two R6 (size AA) batteries by matching the ⊕ and ⊖ ends on the batteries to the markings inside the compartment. Point the remote at  (remote sensor) on the centre unit when operating the system.



Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Use the batteries correctly to avoid possible leakage and corrosion. Do not touch the liquid with bare hands should leakage occur. Observe the following:
 - Do not use a new battery with an old battery, or batteries of different manufacturers.
 - Do not attempt to recharge the batteries.
 - If you do not intend to use the remote for an extended period of time, remove the batteries.
 - If battery leakage occurs, wipe out any liquid inside the battery compartment, and insert new batteries.
- Do not expose the remote sensors (marked  on the centre unit) to strong light, such as direct sunlight or lighting apparatus. The system may not respond to the remote.

About the code setting for operating other component

You can operate not only the system but also other connected components (TV, DVD recorder/player, etc.) with the supplied remote (page 31).

Default settings are as follows:

TV: Sony TV

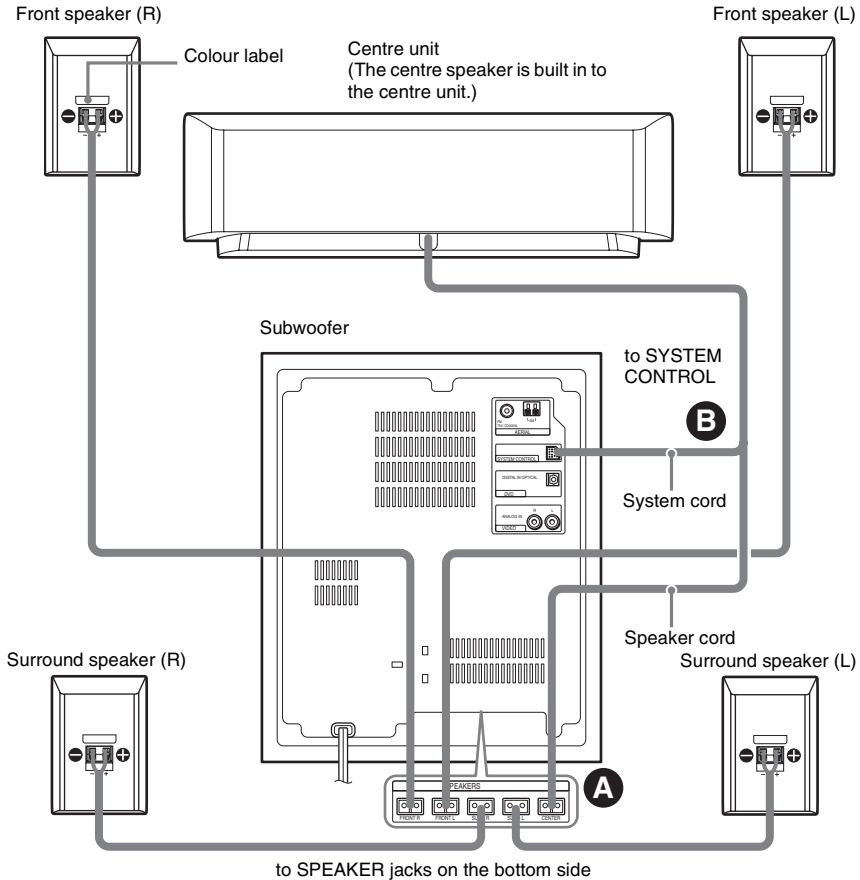
DVD: Sony DVD recorder

VIDEO: Sony VCR (VHS)

If you connect a component that is not in the default setting list above (such as a DVD player, etc.), you can operate them (Sony products only except for the TV) with the supplied remote by setting the appropriate code. For details, see “Operating Other Components With the Supplied Remote” on page 31.

Step 2: Connecting the Speakers

Connect the speakers to the subwoofer using the supplied speaker cords as shown in **A** and **B** below.



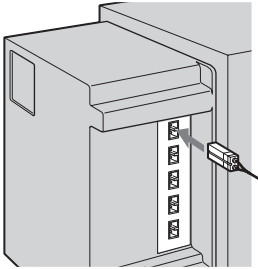
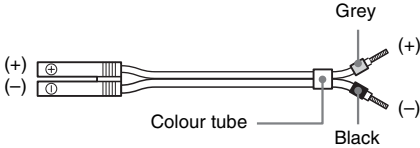
Notes

- Do not set the speakers in an inclined position.
- Do not place the speakers in locations that are:
 - Extremely hot or cold
 - Dusty or dirty
 - Very humid
 - Subject to vibrations
 - Subject to direct sunlight
- Do not connect any speakers other than those supplied with this system.
- Use caution when placing the speakers and/or speaker stands (not supplied) that are attached with the speakers on a specially treated (waxed, oiled, polished, etc.) floor, as staining or discoloration may result.

A Wiring the speakers

Connect the supplied speakers to the SPEAKER jacks on the bottom side of the subwoofer using the speaker cords.

Use the speaker cord whose tube is the same colour as the jack label on the connecting speaker.

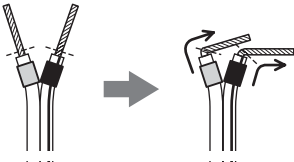


Notes

- Cover the floor with a cloth when connecting.
- Be sure to match the polarity of the speaker cord and the terminal on the component; ⊕ to ⊕ (grey), ⊖ to ⊖ (black). If reversed, the sound will lack bass and may be distorted.

Notes on speaker cord treatment

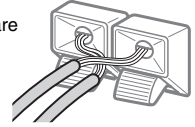
- Do not insert the speaker cord insulation in the speaker terminals. Bend the stripped cord at the end of the insulation before connecting.



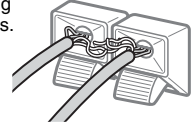
- To prevent short-circuiting of the speakers, make sure the stripped speaker cord does not touch the other stripped speaker cord or the terminal.

Example:

Too much insulation is removed. Stripped cords are touching each other.



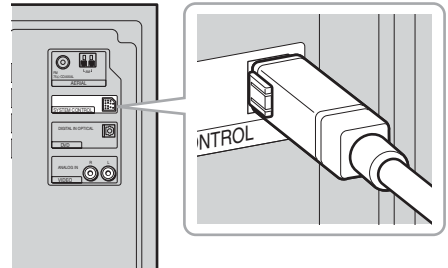
Stripped cords are touching the other speaker terminals.



B Connecting the subwoofer and the centre unit

Connect the system cord of the centre unit to the SYSTEM CONTROL jack of the subwoofer, then, connect the speaker cord to the CENTER SPEAKER jack. Insert the SYSTEM CONTROL plug fully until it clicks.

to SYSTEM CONTROL

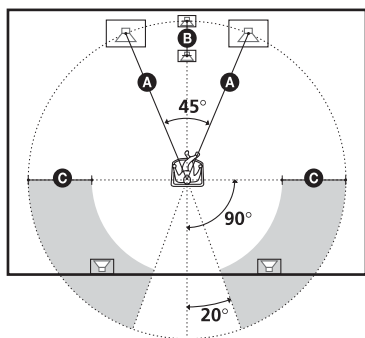


Notes

- If the system cord is disconnected while the power is on, the system enters standby mode (page 14).
- After connecting the speakers, centre unit, and the mains leads, you can check for a speaker short-circuit using the test tone (page 27). If the test tone is not output, or is output from a speaker other than indicated in the centre unit display, check the speaker connection.
- Be sure to connect the system cord to the subwoofer's SYSTEM CONTROL jack properly oriented to avoid damage to the jack or system cord.

Positioning the speakers

For the best possible surround sound, all the speakers other than the subwoofer should be the same distance from the listening position (A). However, this system allows you to place the centre unit up to 1.6 m closer (B) and the surround speakers up to 4.6 m closer (C) to the listening position. The front speakers can be placed from 1.0 to 7.0 m (A) from the listening position.



Note

Do not place the centre unit and surround speakers farther away from the listening position than the front speakers.

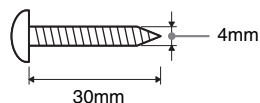
Note on subwoofer placement

If the subwoofer is placed too close to a CRT TV or projector, magnetic leakage may interfere with the video signals and cause colour irregularity. Should this happen, turn off the TV or the projector, wait for 15 to 30 minutes, and then turn it on again. If the problem persists, try the following:

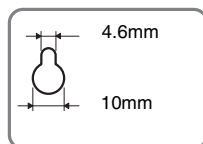
- Place the subwoofer at least 0.3 m away from the TV or the projector.
- Remove any magnetic object near the subwoofer (healthcare devices, toys, etc.). Magnetic latches on TV stands may also cause the problem.

To install the speakers on a wall

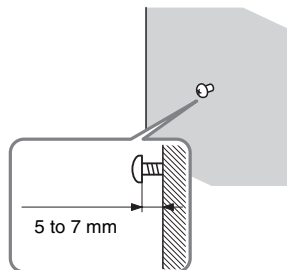
- 1 Prepare screws (not supplied) that are suitable for the hole on the back of each speaker.



Hole on the back of the speaker

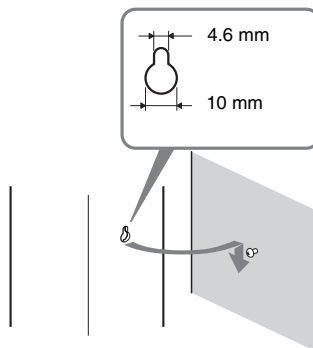


- 2 Fasten the screws to the wall. The screws should protrude 5 to 7 mm.



- 3 Hang the speakers on the screws.

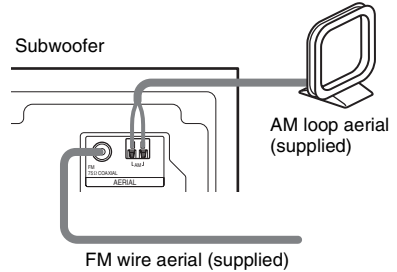
Hole on the back of the speaker



Notes

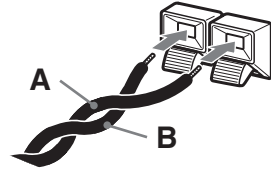
- Use screws that are suitable for the wall material and strength. As a plaster board wall is especially fragile, attach the screws securely to a beam and fasten them to the wall. Install the speakers on a vertical, flat wall where reinforcement is applied.
- Contact a screw shop or installer regarding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

Step 3: Connecting the FM/AM Aerials

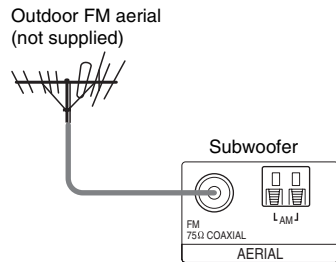


💡 Hints

- When connecting the AM loop aerial, cord (A) or cord (B) can be connected to either terminal.



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



Notes

- To prevent interference, keep the FM/AM aerial away from the system and other components.
- Be sure to fully extend the FM wire aerial.
- After connecting the FM wire aerial, keep it as horizontal as possible.

Step 4: Connecting the Other Components

Connect the other components (DVD recorder/player, “Play Station 2,” VCR, etc.) to the system. See also the operating instructions supplied with the connected components. To listen to the sound of other components through the system, see “Enjoying the Sound of the System” (page 16).

Note

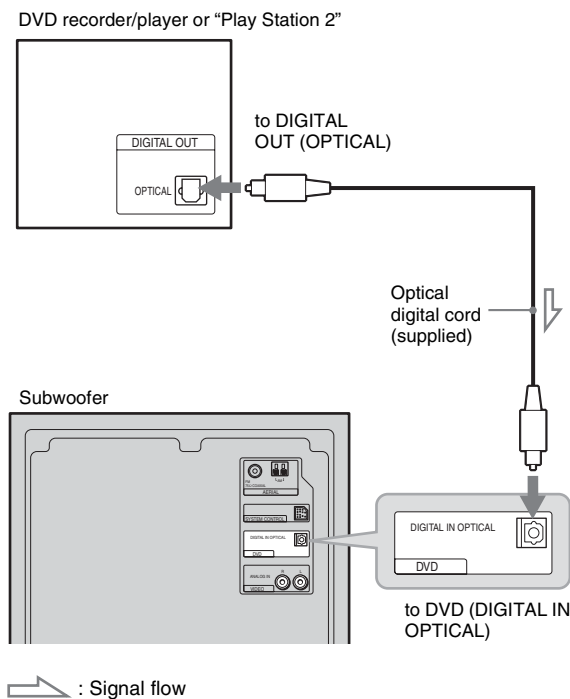
Disconnect the system and component mains leads from the mains when connecting them.

Connecting a DVD recorder/player or “Play Station 2”

Connect the DVD (DIGITAL IN OPTICAL) jack of the subwoofer to the DIGITAL OUT (OPTICAL) jack of your DVD recorder/player or “Play Station 2” using the optical digital cord (supplied). To listen to the connected component, press DVD (input select button) (page 16).

Note

You cannot input the video signal to this system. When you connect other components (DVD recorder/player, “Play Station 2,” etc.), connect the video output jacks of the components to the video input jack of your TV.



Hint

You can connect a satellite tuner with the optical digital out jack instead of a DVD player or recorder.

Setting for when using a Sony DVD recorder/player or “Play Station 2”

When connecting a Sony DVD recorder/player or “Play Station 2” as shown on the previous page, perform the following settings on each component to fully enjoy the surround sound of the system. Other settings may be necessary for other manufacture’s DVD recorder/player. For details, refer to the operating instructions supplied with each component.

DVD recorder/player

- 1** Select “AUDIO SETUP” in the setup display.
- 2** Set “AUDIO DRC” to “WIDE RANGE.”
- 3** Set “DIGITAL OUT” to “ON.”
- 4** Set “DOLBY DIGITAL” to “DOLBY DIGITAL.”
- 5** Set “DTS” to “ON.”
- 6** Set “Fs” to “48 kHz.”

“Play Station 2”

- 1** Select “AUDIO SETTING” in the setup display.
- 2** Select “AUDIO DIGITAL OUTPUT.”
- 3** Set “OPTICAL DIGITAL OUTPUT” to “ON.”
- 4** Set “DOLBY DIGITAL” to “ON.”
- 5** Set “DTS” to “ON.”

“Play Station 2” is a trademark of Sony Computer Entertainment.

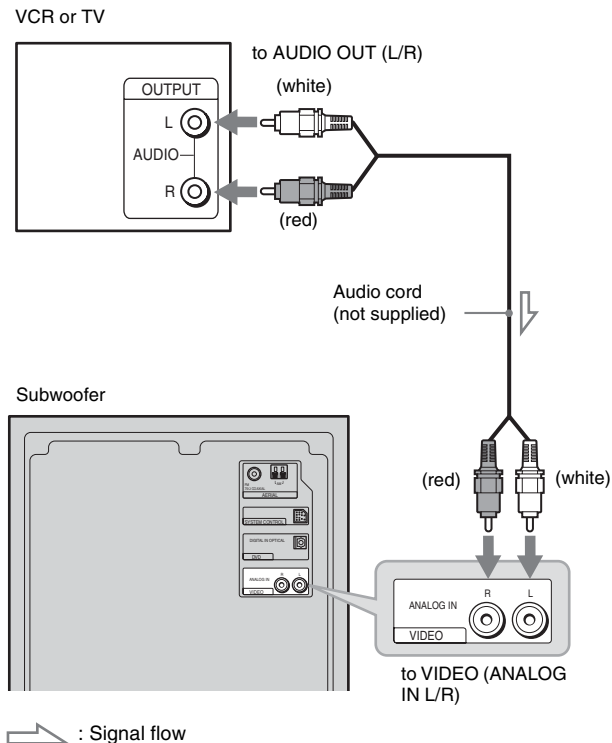
Connecting a VCR or TV

Connect the VIDEO (ANALOG IN L/R) jacks of the subwoofer to the AUDIO OUT (L/R) jacks of the VCR or TV using the audio cord (not supplied).

To listen to the connected VCR or TV, press VIDEO (input select button) (page 16).

Note

You cannot input the video signal to this system. When you connect other components (VCR, TV, etc.), connect the video output jacks of the components to the video input jack of your TV.

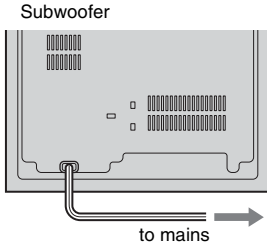



Hints

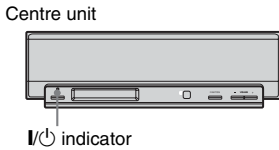
- If the VCR or TV outputs only monaural sound, use audio cords that distribute monaural sounds to the left/right channels (not supplied). In this case, the surround effect may not be effective.
- If the connected VCR or TV is set for the surround sound, the system's surround effect may not be audible. Set the surround setting of the VCR or TV to off.

Step 5: Connecting the Mains Leads

Plug the subwoofer and TV mains leads (power cords) into the mains.

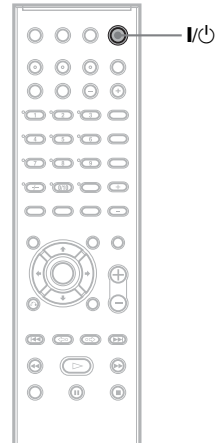
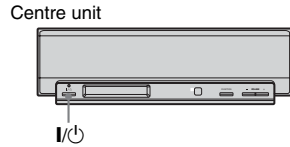


Check that the  indicator on the centre unit lights up when the subwoofer mains lead is connected.




After all connections are complete, follow the steps of “Step 6: Basic Speaker Setup” (page 15).


To turn the system on and off



Press .

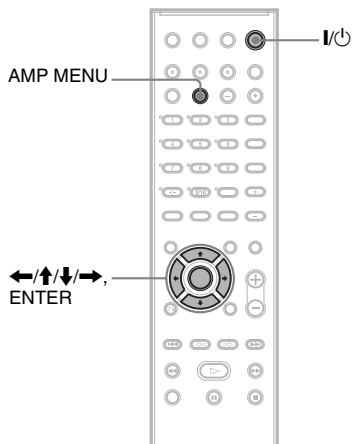
When you turn off the system, the system enters standby mode and the  indicator in the centre unit display lights up in red.

Note

When you disconnect the mains lead in standby mode, the  indicator lights up for a while. This is not a malfunction.

Step 6: Basic Speaker Setup

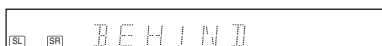
To fully enjoy the system's sound, reflect the current speaker positions in the system. Enter the speaker distance from your listening position using the AMP menu in the centre unit display. For details about the AMP menu, see page 24; about speaker placement, see page 9.



- 1 Press I/Power to turn on the system.
- 2 Press AMP MENU repeatedly until the AMP menu (page 24) appears in the centre unit display.
- 3 Press \uparrow/\downarrow to select "SP SETUP" (speaker setup), and press ENTER or \rightarrow .
Example:



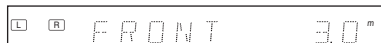
- 4 Press \uparrow/\downarrow to select "SURR SP" (surround speaker), and press ENTER or \rightarrow .



- 5 Press \uparrow/\downarrow to select the setting for the surround speaker position.
If unsure about the position, see "SURR SP" (surround speaker)" on page 25.

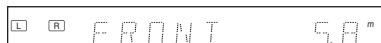
- 6 Press \leftarrow to return to the previous layer.

- 7 Press \uparrow/\downarrow to select "FRONT DIST" (front speaker distance), and press ENTER or \rightarrow .



- 8 Press \uparrow/\downarrow to set the front speaker distance from the listening position.

The display changes in 0.2 m increments, from 1.0 to 7.0 m. Enter the shorter distance if the two speaker distances differ.
Example: When entering 5.8 m for the front left and right speakers.



- 9 Press \leftarrow to return to the previous layer.

- 10 Repeat steps 7 to 9 to set "CEN DIST" (centre speaker distance) and "SURR DIST" (surround speaker distance).

- 11 Press AMP MENU to turn off the AMP menu.

To better adjust the speaker

You can change the speaker level, etc. See "Speaker Level Settings (LEVEL)" (page 26).

To return to the previous layer

Press \leftarrow .

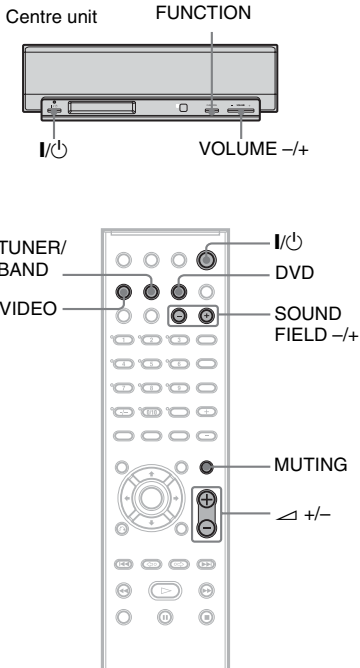
To operate the connected component after setting

Select the component (input source) by pressing DVD, VIDEO, or TUNER/BAND after turning off the AMP menu.

Basic hookups and settings are complete. You are ready to start using the system.

Enjoying the Sound of the System

You can enjoy the sound of connected components through the speakers of the system. Be sure to connect components correctly.



Selecting the source

See also the operating instructions supplied with the connected components. Make sure that the components are connected correctly (page 11).

1 Press I/⏻ to turn on the system.

2 Press DVD, TUNER/BAND, or VIDEO (input select buttons) on the remote.

Select the desired source. Selected source is appears in the centre unit display.

DVD: Component that is connected to the DVD jack (DVD recorder/player, “Play Station 2,” etc.)

VIDEO: Component that is connected to the VIDEO jacks (VCR, TV, etc.)

TUNER/BAND: Radio (FM/AM) (page 29)

3 Press SOUND FIELD -/+ to select the sound field you want (page 18).

Hints

- You can select the source by using FUNCTION on the centre unit. Press FUNCTION repeatedly to select the desired source. The centre unit display changes as follows:

“DVD” → “VIDEO” → “FM” → “AM”

- You can operate other connected components with the supplied remote. For details, see “Operating Other Components With the Supplied Remote” on page 31.

Note

When you listen to the VCR or TV sound or stereo sound of a 2 channel source from the six speakers, select the “PRO LOGIC” or “PLII MUSIC/MOVIE” sound field (page 18).

Adjusting the volume

Press VOLUME -/+ on the centre unit or \triangle +/- on the remote to adjust the volume.

To mute the sound

Press MUTING.

To cancel muting, press it again or \triangle + to adjust the sound volume.

Checking the Information in the Centre Unit Display

You can set up the system while checking the status information in the centre unit display.

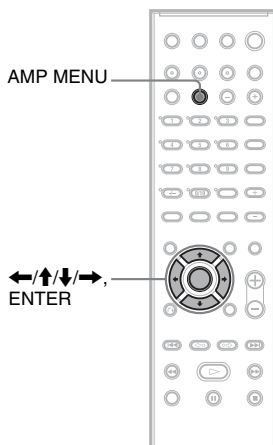
Centre unit display



The following information appears.

| Display | Function |
|---------------------------------------------------------|-----------------------------------------------------------------------------------|
| DIGITAL (Dolby Digital) dts (DTS) | Indicates the current audio signal format. |
| PL (Dolby Pro Logic) PLII (Dolby Pro LogicII) DCS | Indicates the current surround format (page 19). |
| LINK | Lights up when a 2 channel source is output from the surround speakers (page 19). |
| DSGX | Lights up when DSGX is activated (page 20). |
| A/V SYNC | Lights up when A/V SYNC is activated (page 22). |
| L C R SL SW SR | Lights up to indicate the speaker that you are adjusting. |

To turn down the brightness of the centre unit display (DIMMER)



- 1 Press AMP MENU repeatedly until the AMP menu (page 24) appears in the centre unit display.
 - 2 Press **↑/↓** to select "CUSTOMIZE," and press ENTER or **→**.
 - 3 Press **↑/↓** to select "DIMMER," and press ENTER or **→**.
- DIMMER OFF
- 4 Press **↑/↓** to select a setting.
 "DIMMER OFF" (default): The centre unit display brightens.
 "DIMMER ON": The centre unit display darkens.
 - 5 Press ENTER or AMP MENU to turn off the AMP menu.

To return to the previous layer

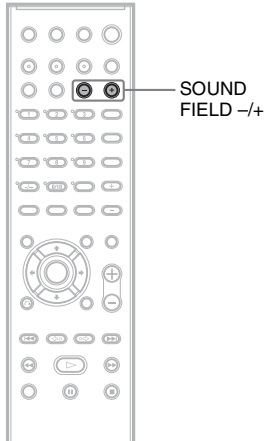
Press **←**.

To operate the connected component after setting

Select the component (input source) by pressing DVD, VIDEO, or TUNER/BAND after turning off the AMP menu.

Selecting the Sound Field

You can take advantage of surround sound simply by selecting one of system's preprogrammed sound fields, which bring the exciting and powerful sound of movie theatres into your home.



Press SOUND FIELD +/- to select one of the sound fields.

Example:



The centre unit display changes as follows. For details, see the pages in parentheses.

| Sound field | |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| "A. F. D. AUTO" | Outputs the originally recorded sound with no sound effects (page 18). |
| "PRO LOGIC," "PLII MOVIE," "PLII MUSIC" | Outputs 2 channel sources like CDs as 5.1 channel. Dolby Pro Logic produces five channels from 2 channel sources (page 19). |
| "C. ST. EX A," "C. ST. EX B," "C. ST. EX C" | Produces an ideal movie theatre sound environment using DCS (Digital Cinema Sound) technology (page 19). |

| Sound field | |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| "MULTI ST.," "REAR ST." | Outputs 2 channel sources from the front, centre, and surround speakers, or surround speakers only (page 19). |
| "HALL," "JAZZ CLUB," "L. CONCERT" (live concert), "GAME," "SPORTS," "MONO MOVIE" | Provides sound to suit the source (movies, music, news, sports, or others). |
| "NIGHT" | You can enjoy sound effects or dialogue, as you would in a movie theatre, even at low volume. Useful for watching movies at night. |
| "2CH STEREO" | Outputs sound only from the front left and right speakers and subwoofer. No surround effects (page 19). |

💡 Hints

- If you do not want any surround effect, select "A.F.D. AUTO" or "2CH STEREO."
- The system remembers the last sound field selected for each function. (i.e., if you listen to DVDs with "HALL" and then FM/AM radio with another sound field, the system remembers and applies "HALL" when you return to the DVD function.)

Automatic outputting of the original sound

"A. F. D. AUTO" (Auto Format Direct Auto)

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

Using only the front speaker and subwoofer

“2CH STEREO” (2 Channel Stereo)

Outputs the sound from the front left and right speakers and subwoofer. Standard 2 channel (stereo) sources completely bypass the sound field processing. Multi channel surround formats are downmixed to 2 channels.

Outputting 2 channel sources like CDs by 5.1 channel

“PRO LOGIC” (Dolby Pro Logic)

Produces five output channels from 2 channel sources. This mode performs Pro Logic decoding to the input signal and output to front, centre, and surround speakers.

Meanwhile, the surround channel becomes monaural.

“PLII MOVIE/PLII MUSIC” (Dolby Pro Logic II Movie/Music)

Produces five full-bandwidth output channels from 2 channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

Note

When the input signal is a multi channel source, Dolby Pro Logic and Dolby Pro Logic II Movie/Music are cancelled and the multi channel source is output directly.

Outputting 2 channel sources from the centre and surround speakers

“MULTI ST.” (Multi Stereo)

Outputs 2 channel sources from the front, centre, and surround speakers simultaneously. Front and surround speakers output the same sound.

“REAR ST.” (Rear Stereo)

Outputs 2 channel sources from the surround speakers only. The front speakers output sound only if you select “NONE” in “SURR SP” in the AMP menu (page 25).

Hint

When you select “MULTI ST.” or “REAR ST.,” the “LINK” indicator lights up in the centre unit display.

Enjoying Digital Cinema Sound (DCS)

In collaboration with Sony Pictures Entertainment, Sony measured the sound environment of their studios and integrated the data of the measurement and Sony’s own DSP (Digital Signal Processor) technology to develop “Digital Cinema Sound.” “Digital Cinema Sound” simulates in a home theatre an ideal movie theatre sound environment based on the preference of the movie director.

“C. ST. EX A” (Cinema Studio EX A)

Reproduces the sound of the Sony Pictures Entertainment “Cary Grant Theater” cinema production studio. This is a standard mode, great for watching most any type of movie.

“C. ST. EX B” (Cinema Studio EX B)

Reproduces the sound of the Sony Pictures Entertainment “Kim Novak Theater” cinema production studio. This mode is ideal for watching science-fiction or action movies with lots of sound effects.

“C. ST. EX C” (Cinema Studio EX C)

Reproduces the sound of the Sony Pictures Entertainment scoring stage. This mode is ideal for watching musicals or classic films where music is featured in the soundtrack.

About Cinema Studio EX

Cinema Studio EX is ideal for enjoying the movie software encoded in multi channel format, such as the Dolby Digital DVD. This mode reproduces the sound of Sony Pictures Entertainment’s studios. Cinema Studio EX consists of the following three elements.

- Virtual Multi Dimension
Creates five sets of virtual speakers surrounding the listener from a single pair of actual surround speakers.
- Screen Depth Matching
In a movie theatre, sound seems to come from inside the movie screen. This element creates the same sensation in your listening room by shifting the sound of the front speakers “into” the screen.

- Cinema Studio Reverberation

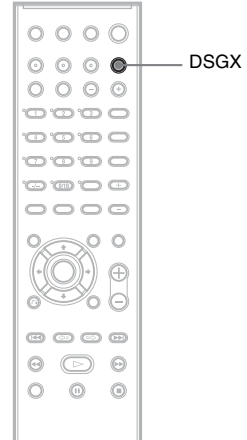
Reproduces reverberation peculiar to a movie theatre. Cinema Studio EX is an integrated mode which operates these elements simultaneously.

Notes

- The virtual speaker effect may cause increased noise in the playback signal.
- When listening with sound fields that employ virtual speakers, no sound will be heard directly from the surround speakers.

Reinforcing Bass Frequencies (DSGX)

The DSGX (Extended Dynamic Sound Generator) function reinforces bass frequencies.



Press DSGX.

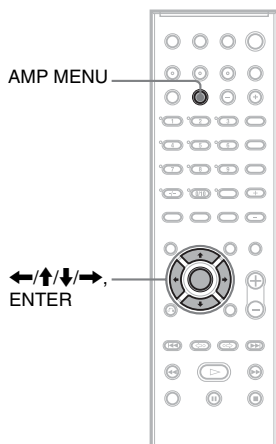
The DSGX function is activated, and the “DSGX” indicator lights up in the centre unit display. To cancel the function, press DSGX again.

Enjoying the Sound at Low Volume (AUDIO DRC)

The AUDIO DRC (Dynamic Range Compression) function narrows the dynamic range of the sound track. Useful for watching movies at low volume late at night.

Notes

- The AUDIO DRC function applies only to Dolby Digital sources.
- When you set the “DIGITAL OUT” setting of the connected DVD recorder/player to “D-PCM,” the AUDIO DRC function may not work.



1 Press AMP MENU repeatedly until the AMP menu (page 24) appears in the centre unit display.

2 Press \uparrow/\downarrow to select “CUSTOMIZE,” and press ENTER or \rightarrow .

Example:

AUDIO DRC

3 Press \uparrow/\downarrow to select “AUDIO DRC,” and press ENTER or \rightarrow .

DRC OFF

4 Press \uparrow/\downarrow to select a setting (select “DRC STD” or “DRC MAX”).

“DRC OFF” (default): No compression of dynamic range.

“DRC STD”: Standard effect.

“DRC MAX”: Maximum effect. (Volume of sound effects, such as explosions, may be reduced.)

5 Press ENTER or AMP MENU to turn off the AMP menu.

To return to the previous layer

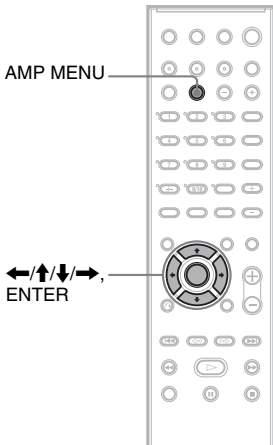
Press \leftarrow .

To operate the connected component after setting

Select the component (input source) by pressing DVD, VIDEO, or TUNER/BAND after turning off the AMP menu.

Adjusting the Delay Between the Picture and Sound (A/V SYNC)

If picture and sound do not match, you can adjust the delay between them.



To return to the previous layer

Press ←.

To operate the connected component after setting

Select the component (input source) by pressing DVD, VIDEO, or TUNER/BAND after turning off the AMP menu.

Note

This function may not work depending on the input stream, or the selected input source and the Sound Field setting. When active, the “A/V SYNC” indicator lights up in the centre unit display.

- 1 Press AMP MENU repeatedly until the AMP menu (page 24) appears in the centre unit display.
- 2 Press ↑/↓ to select “CUSTOMIZE,” and press ENTER or →.
- 3 Press ↑/↓ to select “A/V SYNC,” and press ENTER or →.

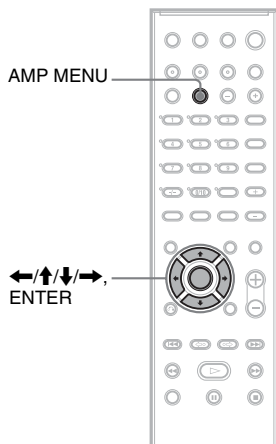
SYNC OFF

“SYNC OFF” (default): Does not adjust.
“SYNC ON”: Adjusts the delay between picture and sound.

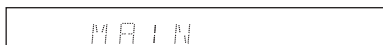
- 4 Press ↑/↓ to select “SYNC ON.”
The A/V SYNC function is activated, and the “A/V SYNC” indicator lights up in the centre unit display.
- 5 Press ENTER or AMP MENU to turn off the AMP menu.
To cancel the setting, repeat the above steps and select “SYNC OFF” in step 4.

Enjoying Stereo or Bilingual Broadcasts (DUAL MONO)

You can switch between audio channels when you play a DVD-RW disc or the system receives multiplex sound from a component that is connected to the DVD (DIGITAL IN OPTICAL) jack. Select the channel and speaker output, as below.



- 1** Press **AMP MENU** repeatedly until the AMP menu (page 24) appears in the centre unit display.
- 2** Press **↑/↓** to select “CUSTOMIZE,” and press **ENTER** or **→**.
- 3** Press **↑/↓** to select “DUAL MONO,” and press **ENTER** or **→**.
Example:



- 4** Press **↑/↓** to select a setting.
 “MAIN” (default): Main sound is output from the centre speaker.
 “SUB”: Sub sound is output from the centre speaker.
 “MAIN+SUB”: Main and sub sound are output from the centre speaker.
 “MAIN/SUB”: Main sound is output from the front left speaker; sub sound from the front right speaker.

- 5** Press **ENTER** or **AMP MENU** to turn off the AMP menu.

To return to the previous layer

Press **←**.

To operate the connected component after setting

Select the component (input source) by pressing DVD, VIDEO, or TUNER/BAND after turning off the AMP menu.

Note

If “CENTER SP” is set to “CENTER NO” in the AMP menu (page 25), sound is output from the front left and right speakers.

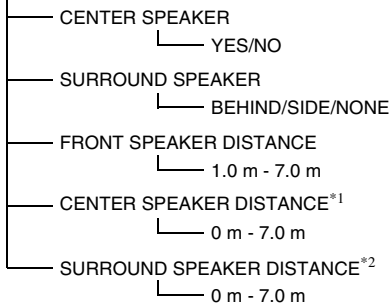
Using the AMP Menu

◆AMP menu tree

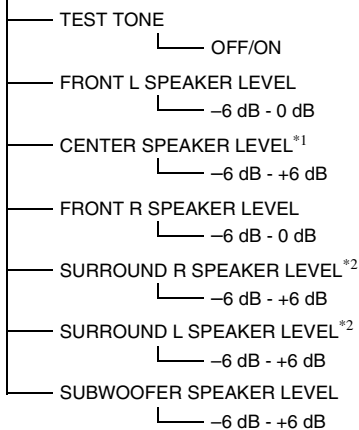
Actual displays are abbreviated.

1st Layer 2nd Layer 3rd Layer

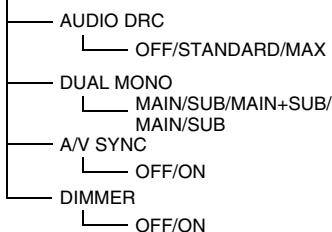
SPEAKER SETUP



SPEAKER LEVEL



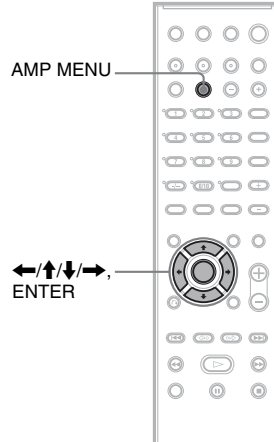
CUSTOMIZE



*¹ Setting item does not appear if “CENTER SPEAKER” setting is “CENTER NO.”

*² Setting item does not appear if “SURROUND SPEAKER” setting is “NONE.”

By using the AMP menu in the centre unit display, you can set up the system for the optimum surround sound. For details about the surround options of the system, see page 18.



- 1 Press AMP MENU repeatedly until the AMP menu appears in the centre unit display.**

Example:



- 2 Press ↑/↓ to select an option.**

“SP SETUP” (speaker setup): Allows you to enter the speaker positions, etc. (page 25).

“LEVEL” (level): Turns the test tone on or off, and sets the speaker level (page 26).

“CUSTOMIZE” (customize): Sets other functions for the system (page 28).

- 3 Press ENTER or →.**

An item in the second layer appears.

Example: “CENTER SP” (centre speaker)



4 Press \uparrow/\downarrow to select the item you want to set.

Example: "FRONT DIST" (front speaker distance)

FRONT DIST

5 Press ENTER or \rightarrow .

FRONT 3.0"

6 Press \uparrow/\downarrow to select a setting.

The setting is applied to the system.

7 Press ENTER or AMP MENU to turn off the AMP menu.

To return to the previous layer

Press \leftarrow .

To operate the connected component after setting

Select the component (input source) by pressing DVD, VIDEO, or TUNER/BAND after turning off the AMP menu.

Note

Turn off the AMP menu after finishing the AMP menu setup. When you do not turn off the AMP menu, some buttons on the remote may not work.

Basic Speaker Settings (SP SETUP)

You can input the speaker positions and select whether or not to engage any centre or surround speakers.

Select "SP SETUP" (speaker setup) in the AMP menu. To use the AMP menu, see "Using the AMP Menu" (page 24). For details about setting speaker distance, see also "Step 6: Basic Speaker Setup" (page 15).

The default settings are underlined.

Notes

- The settings below may not be the defaults if you followed "Step 6: Basic Speaker Setup" (page 15) to reflect the current speaker placement.
- Change your current settings again should you change the speaker positions.
- The centre speaker is built in to the centre unit.

"CENTER SP" (centre speaker)

"CENTER YES" Normally select this.

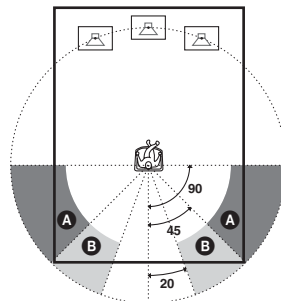
"CENTER NO" Select this if no centre speaker is used.

"SURR SP" (surround speaker)

"BEHIND" Select this if surround speakers are located in **B**.

"SIDE" Select this if surround speakers are located in **A**.

"NONE" Select this if no surround speaker is used.



“FRONT DIST” (front speaker distance)

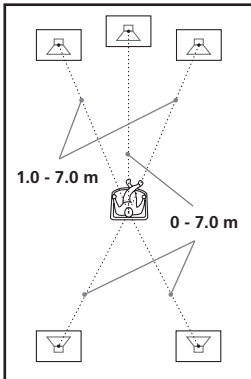
Set the front speaker distance from your listening position between 1.0 to 7.0 m in 0.2 m increments. The default setting is “3.0.”

“CEN DIST” (centre speaker distance)

Set the centre speaker distance between the “FRONT DIST” setting and -1.6 m of the “FRONT DIST” setting (set in 0.2 m increments). The default setting is “3.0.”

“SURR DIST” (surround speaker distance)

Set the surround speaker distance between the “FRONT DIST” setting and -4.6 m of the “FRONT DIST” setting (set in 0.2 m increments). The default setting is “3.0.”



Notes

- When you select an item, the sound momentarily cuts off.
- Depending on the setting of other speakers, the subwoofer sound may be excessive.
- If front and surround speakers are not placed at an equal distance from your listening position, set the distance according to the closest speaker.
- Do not place the surround speakers and the centre speaker farther away from your listening position than the front speakers.
- Depending on the input stream, the distance settings may not be effective.

Speaker Level Settings (LEVEL)

You can individually set the loudness of each speaker. Use the test tone for easy adjustment (go to “Setting the speaker level by using the test tone” on page 27).

You can also adjust the levels without using the test tone. Select “LEVEL” (level) in the AMP menu. To use the AMP menu, see “Using the AMP Menu” (page 24).

The default settings are underlined.

Notes

- Change your current settings again should you change the speaker positions.
- The centre speaker is built in to the centre unit.

“TEST TONE”

| | |
|------------------------|--------------------------------------------|
| “ <u>T. TONE OFF</u> ” | Emits no test tone. |
| “T. TONE ON” | Emits test tone from the speakers in turn. |

“FL LEVEL” (front left speaker level)

Set the front left speaker level between -6 dB to 0 dB in 1 dB increments. The default setting is “0.”

“CEN LEVEL” (centre speaker level)

Set the centre speaker level between -6 dB to +6 dB in 1 dB increments. The default setting is “0.”

“FR LEVEL” (front right speaker level)

Set the front right speaker level between -6 dB to 0 dB in 1 dB increments. The default setting is “0.”

“SR LEVEL” (surround right speaker level)

Set the surround right speaker level between -6 dB to +6 dB in 1 dB increments. The default setting is “0.”

“SL LEVEL” (surround left speaker level)

Set the surround left speaker level between -6 dB to +6 dB in 1 dB increments. The default setting is “0.”

“SW LEVEL” (subwoofer level)

Set the subwoofer level between -6 dB to +6 dB in 1 dB increments. The default setting is “0.”

To adjust the volume of all the speakers at one time

Press \triangleleft +/- on the remote. Or press VOLUME +/- on the centre unit.

Setting the speaker level by using the test tone

1 Press AMP MENU repeatedly until the AMP menu (page 24) appears in the centre unit display.

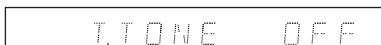
2 Press \uparrow/\downarrow repeatedly to select “LEVEL” (level), and press ENTER or \rightarrow .

Example:



TEST TONE

3 Press \uparrow/\downarrow to select “TEST TONE” (test tone), and press ENTER or \rightarrow .



T.TONE OFF

4 Press \uparrow/\downarrow to select “T. TONE ON” (test tone on).

The speakers emit the test tone in turn.

5 Press \leftarrow to return to the previous layer, and then press \uparrow/\downarrow to select a speaker;

“FL LEVEL” (front left speaker level)

“CEN LEVEL” (centre speaker level)

“FR LEVEL” (front right speaker level)

“SR LEVEL” (surround right speaker level)

“SL LEVEL” (surround left speaker level)

“SW LEVEL” (subwoofer level)

6 Press ENTER or \rightarrow .

The selected speaker emits the test tone.

7 From your listening position, adjust the speaker level by pressing \uparrow/\downarrow .

Check the status in the centre unit display.

Example: When outputting a test tone of -4 dB from the front left speaker.



FL LEVEL -4 dB

8 Repeat steps 5 to 7 to adjust the other speaker levels.

9 When you finish adjusting levels, press \leftarrow to return to the previous layer.

10 Press \uparrow/\downarrow to select “TEST TONE,” and press ENTER or \rightarrow .

11 Press \uparrow/\downarrow to select “T. TONE OFF” (test tone off), and press AMP MENU to turn off the AMP menu.

To return to the previous layer

Press \leftarrow .

To operate the connected component after setting

Select the component (input source) by pressing DVD, VIDEO, or TUNER/BAND after turning off the AMP menu.

Note

When you adjust the speaker settings, the sound momentarily cuts off.

Additional Settings (CUSTOMIZE)

You can make further setting to the system. For detailed explanations, see also “Basic Operations” (page 16).

Select “CUSTOMIZE” in the AMP menu. To use the AMP menu, see “Using the AMP Menu” (page 24).

The default settings are underlined.

“AUDIO DRC” (audio dynamic range compression) (Dolby Digital DVD only)

Narrows the dynamic range of a soundtrack to make it audible even at low volume. This setting is effective only when listening with the system. See page 21 for details.

| | |
|-----------------------------|--------------------------------------------------------------------------------|
| “ <u>DRC OFF</u> ” | No compression of dynamic range. |
| “DRC STD” (DRC standard) | Standard effect. |
| “DRC MAX” | Maximum effect. (Volume of sound effects, such as explosions, may be reduced.) |

“DUAL MONO” (dual mono) (For multiplex broadcast only)

Allows you to enjoy multiplex broadcast sound when AC-3 multiplex broadcast signals are received. See page 23 for details.

| | |
|-----------------|-------------------------------------------------------------------------------------------------|
| “ <u>MAIN</u> ” | Outputs the main sound from the centre speaker. |
| “SUB” | Outputs the sub sound from the centre speaker. |
| “MAIN+SUB” | Outputs the main and sub sounds from the centre speaker. |
| “MAIN/SUB” | Outputs the main sound from the front left speaker, and sub sound from the front right speaker. |

Note

If “CENTER SP” is set to “CENTER NO” in the AMP menu (page 25), sound is output from the front left and right speakers.

“A/V SYNC”

Adjusts any delay between picture and sound. See page 22 for details.

| | |
|---------------------|-------------------------------------------------|
| “ <u>SYNC OFF</u> ” | Does not adjust. |
| “SYNC ON” | Adjust the delay between the picture and sound. |

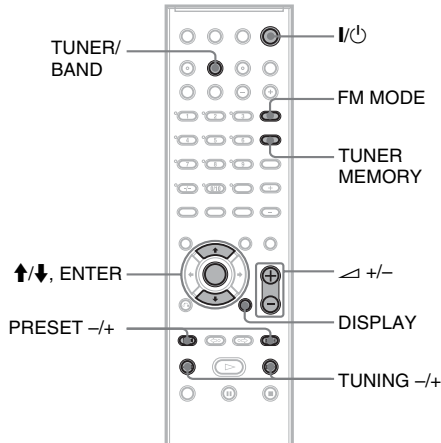
“DIMMER”

Turns down the brightness of the centre unit display. See page 17 for details.

| | |
|-----------------------|------------------------------------|
| “ <u>DIMMER OFF</u> ” | The centre unit display brightens. |
| “DIMMER ON” | The centre unit display darkens. |

Enjoying the Radio

Connect the FM/AM aerials to the subwoofer (page 10) and preset radio stations.



Presetting radio stations

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

- 1 Press **I/⏻** to turn on the system.
- 2 Press **TUNER/BAND** repeatedly to select FM or AM.
- 3 Press and hold **TUNING -/+** until auto scanning starts.

Scanning stops when the system tunes in a station. The "TUNED" indicator (along with the "ST" indicator for stereo programmes) lights up in the centre unit display.



- 4 Press **TUNER MEMORY**.
A preset number appears.



- 5 Press **↑/↓** to select the preset number you want.



- 6 Press **ENTER**.
The station is stored.



- 7 Repeat steps 2 to 6 to store other stations.

To change the preset number

Repeat the above steps and select a different preset number in step 5.

Listening to the radio

- 1 Press **I/⏻** to turn on the system.
- 2 Press **TUNER/BAND** repeatedly to select FM or AM.
The last received station is tuned in.



- 3 Press **PRESET -/+** to select the preset station you want.
- 4 Press **∠ +/-** to adjust the volume.

To turn off the radio

Press **I/⏻** to turn off the system.

To listen to non-preset radio stations

Use manual or automatic tuning in step 3 above.

- To tune in a station manually, press **TUNING -/+**.
- To start auto tuning, press and hold **TUNING -/+**. If you want to stop scanning, press **TUNING -/+** again.

If FM sound is noisy

Press **FM MODE** so that "MONO" appears in the centre unit display. There will be no stereo effect, but reception will improve. To restore the stereo effect, press **FM MODE** again.

Hints

- You can also select a preset station using the number buttons and ENTER button.
- To improve reception, reorient the aerials.
- You can also select FM or AM by pressing FUNCTION on the centre unit repeatedly. "AM" or "FM" appears in the centre unit display.

About the Radio Data System (RDS)

The Radio Data System (RDS) is a broadcasting service that allows radio stations to send additional information along with the regular broadcast signal. This tuner offers convenient RDS features, such as station name display. RDS is available only on FM stations*.

* Not all FM stations provide the RDS service, neither 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.

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.

To receive RDS broadcasts

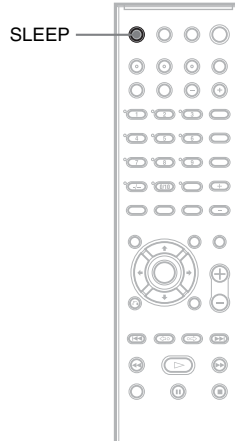
Simply select a station from the FM band. When you tune in a station that provides RDS services, the station name* appears in the display. * If an RDS broadcast is not received, the station name may not appear in the display.

Hint

When a station name is displayed, you can check the frequency by pressing DISPLAY repeatedly.

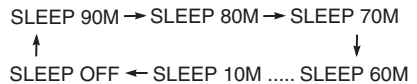
Using the Sleep Timer

You can set the system to turn off at a preset time, so you can fall asleep listening to music. You can set a time up to 90 minutes in 10-minute increments.



Press SLEEP repeatedly.

The "SLEEP" indicator lights up in the centre unit display. Each time you press the button, sleep time appears in the centre unit display as follows:



To check the remaining time

Press SLEEP once.

To change the remaining time

Press SLEEP repeatedly to select the desired time.

To cancel the function

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

Note

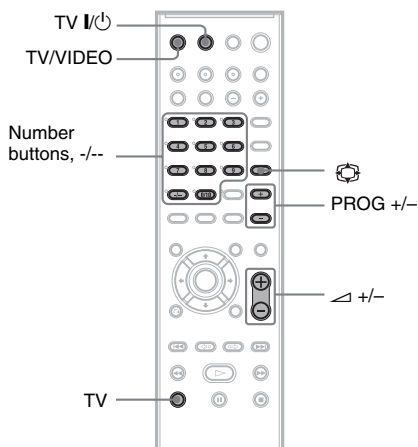
You cannot turn off the connected components by this function.

Operating Other Components With the Supplied Remote

You can use the supplied remote to operate the connected TV, Sony DVD recorder/player, "Play Station 2," or Sony VCR (VHS). Point the remote to the component that you want to operate.

Operating TVs with the remote

You can operate not only Sony TVs but also other manufactures' TVs with the supplied remote (see the right).



1 Press TV.

The TV button lights up in red.

2 Press following buttons to operate the TV during the TV button lights up.

| Button | Function |
|--------------------------------------------|--------------------------------------------|
| TV I/⏻ | Turns your TV on or off. |
| △ +/- | Adjusts the volume of your TV. |
| TV/VIDEO | Switches your TV's input source. |
| PROG +/- (Sony TV only) | Selects the programme position on your TV. |
| Number buttons and -/--* (Sony TV only) | Selects the programme position on your TV. |

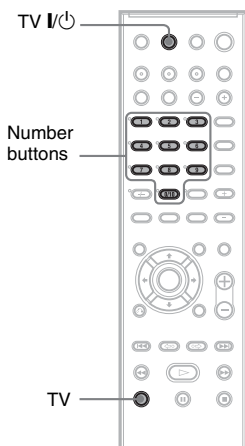
 (Sony TV only)

Changes the aspect ratio of your TV.

* When selecting the TV's two-digit programme position, press -/-- and then the number buttons.

Setting the remote's signal code for another manufacturer's TV

You can adjust the remote's signal to operate a TV that is not a Sony.



1 Hold down TV I/⏻.

2 Enter your TV's manufacturer code using the number buttons.

| Manufacturer | Code number |
|--------------|--------------|
| Sony | 01 (default) |
| Grundig | 04 |
| Hitachi | 06 |
| Panasonic | 05, 12 |
| Philips | 02, 03 |
| Samsung | 13 |
| Sanyo | 07 |
| Sharp | 08 |
| Thomson | 11 |
| Toshiba | 10 |
| JVC | 09 |

3 Release TV I/⏻.

The remote is set to control your TV.

For operation of the TV, see “Operating TVs with the remote” on page 31.

Notes

- If more than one code number is listed, try entering them one at a time until you find the one that works with your TV.
- Depending on the TV, you may not be able to control with some or all of the buttons.
- If you enter a new code number, the code number previously entered will be erased.
- When you replace the batteries of the remote, the code number may be reset to the default setting. Set the appropriate code number again.

Operating the Sony DVDs or Sony VCRs with the remote

1 Select the component that you want to operate by pressing DVD or VIDEO (input select button).

DVD (page 32): DVD recorder (When you connect the Sony component other than Sony DVD recorder, set the component code (page 34).)

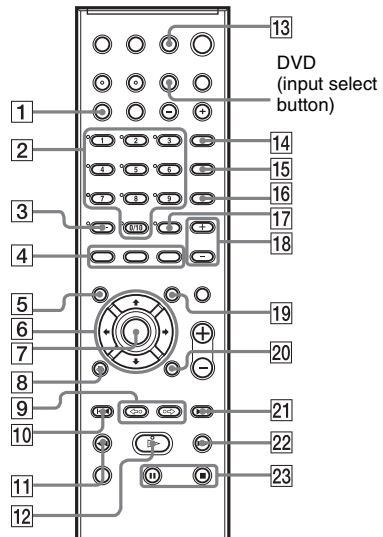
VIDEO (page 33): VCR

2 Press the following buttons to control the component.

Notes

- You can control Sony products only.
- Depending on the component, you may not be able to use some or all of the buttons below.
- When operating, see also the operating instructions supplied with the component.















DVD (Sony products only)



Note

To operate a component other than a DVD recorder, set the component code (page 34).

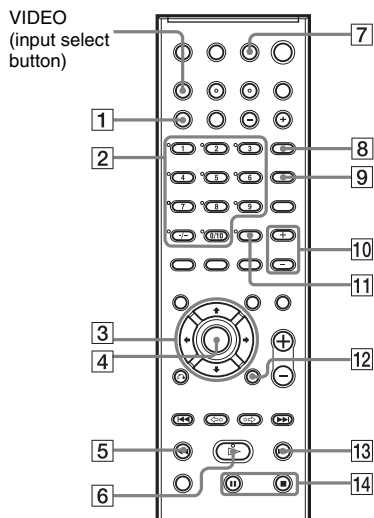
| Button | Function |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 1 AV MENU | Displays the AV menu. |
| 2 Number buttons | Select the items from the screen. |
| 3 CLEAR | Erases the selected items, etc. |
| 4 VIDEO* ¹ HDD* ¹ DVD* ¹ | Selects the function of the Sony HDD/DVD (/Video Cassette) recorder or Sony DVD/Video Cassette (VHS) recorder. |
| 5 TOP MENU/ GUIDE | Displays the top menu of a disc. |
| 6 ←/↑/↓/→ | Move the cursor to select items. |
| 7 ENTER | Enters the setting. |
| 8 ↶ RETURN | Returns to the previous setting or state. |
| 9 ←•/•→ | Replays the previous scene during playback or plays briefly fast forward the current scene. |
| 10 ⏮ | Goes back to the preceding chapter, title, track, or scene. |







| Button | Function |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11 |  Plays back a disc in fast reverse during playback.  *2 Plays one frame at a time when pressed briefly in pause mode.  Plays in slow motion when pressed for more than one second in pause mode. |
| 12 |  Plays back a disc. |
| 13 |  Turns the power on/off. |
| 14 |  Selects the audio. |
| 15 |  Selects the subtitle. |
| 16 |  Selects the angle. |
| 17 | SET Enters the setting. |
| 18 | PROG +/- Select the programme position on HDD/DVD (/VIDEO) recorder. |
| 19 | SYSTEM MENU Displays the title/timer list. |
| 20 | DISPLAY Changes the on screen display. |
| 21 |  Goes to the next chapter, title, track, or scene. |
| 22 |  Plays back a disc in fast forward during playback.  *2 Plays one frame at a time when pressed briefly in pause mode.  Plays in slow motion when pressed for more than one second in pause mode. |
| 23 |  Stops playback.  Pauses playback. |

*1 Used for changing the function of the Sony HDD/ DVD (/Video Cassette) recorder or Sony DVD/Video Cassette (VHS) recorder that is connected to the DVD (DIGITAL IN OPTICAL) jack. Use this button after pressing the DVD input select button.

*2 Sony DVD recorder only. For details, see the instructions of the DVD recorder.

VCR (Sony products only)



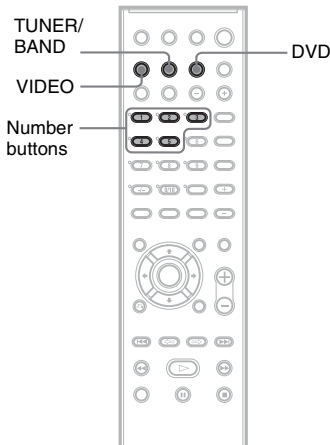
| Button | Function |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | AV MENU Displays the AV menu. |
| 2 | Number buttons, -/-- Select the programme position. |
| 3 |  Moves the cursor to select items. |
| 4 | ENTER Enters the setting. |
| 5 |  Rewinds a tape. Plays back in fast reverse. |
| 6 |  Plays back a tape. |
| 7 | AV I/O Turns the power on/off. |
| 8 | MPX Selects the main or sub sound. |
| 9 | ANT Selects the antenna input. |
| 10 | PROG +/- Selects the programme position on the VCR. |
| 11 | SET Enters the setting. |
| 12 | DISPLAY Changes the on screen display. |
| 13 |  Plays back in fast forward. |
| 14 |  Stops playback.  Pauses playback. |

Assigning other Sony components to the input select buttons

You can change the controllable component with the remote that is assigned for DVD, TUNER/BAND, or VIDEO (input select button). For example, when you connect a DVD player instead of a DVD recorder to the system, you can operate it by assigning the DVD player code to the DVD input select button.

The default settings are follows:

| Input select button | Controllable source |
|---------------------|---------------------------|
| DVD | DVD recorder (DVD 3 mode) |
| TUNER/BAND | Radio |
| VIDEO | VCR (VHS) (VTR 3 mode) |



- 1 Hold down the input select button (DVD, TUNER/BAND, VIDEO) to which you want to assign another component.**
(ex. When you assign the DVD player to DVD, press DVD.)

- 2 While pressing input select button (DVD, TUNER/BAND, VIDEO), enter the component code number of the desired component by pressing the number button.**
(ex. When you assign the DVD player, press 1 while pressing DVD.)

The component code numbers are follows:

| Component | Number |
|--------------------------------------------------|--------|
| DVD player/ "Play Station 2"* (DVD 1 mode) | 1 |
| Sony DVD component (DVD 2 mode) | 2 |
| DVD recorder* (DVD 3 mode) | 3 |
| VCR (VHS)* (VTR 3 mode) | 4 |
| TUNER | 5 |

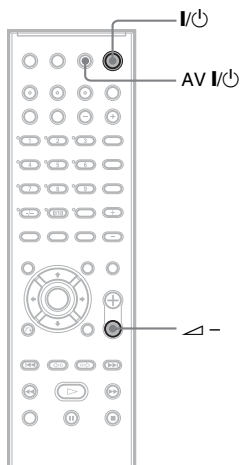
* Default setting of the connected component.

Note

When the component number of the connected component is not set to the default number, you can not operate the component. Set the component number of the connected component to the default setting.

Returning to the default setting of the remote

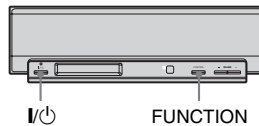
You can return the remote settings (manufacturer's code or component's code) to the defaults.



Press **I/⏻**, **AV I/⏻**, and **⏮** – simultaneously.

Returning to the Default Settings

You can return the system settings (for speakers, radio, etc.) to the defaults.



- 1** Press **I/⏻** on the centre unit to turn on the system.
- 2** Hold down **FUNCTION**, and then press **I/⏻** for about five seconds.

“COLD RESET” appears in the centre unit display, and the system settings return to their defaults.

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.

When bringing the system in for repairs, be sure to bring in the entire system.

This product is a system product, and the entire system is needed to determine the location requiring repair.

Power

The power does not turn on.

- ➔ Check that the mains leads are connected securely.
- ➔ The system cord is not connected to the subwoofer securely. Disconnect the subwoofer mains lead, and then the system cord. Reconnect the system cord, and then connect the mains lead after about two minutes.

I/⏻ indicator on the centre unit flashes.

- ➔ Unplug the subwoofer mains immediately, and make sure that:
 - The speaker cords are not short circuited.
 - Only the specified speakers are used.
 - The ventilation holes are not blocked.

When all of the above are confirmed, wait about two minutes until the I/⏻ indicator turns off, reconnect the subwoofer mains lead, and then turn on the system. If the indicator still flashes, consult your nearest Sony dealer.

Sound

There is no sound.

- ➔ The connecting cord is damaged.
- ➔ The input source setting on the system or the connection to the system is incorrect.
- ➔ Press MUTING if “MUTING ON” is displayed in the centre unit display.
- ➔ Check the speaker settings (page 7).

The sound volume is low.

- ➔ The sound volume is low on some DVDs. Set “AUDIO DRC” in AMP menu to “DRC MAX” or “DRC STD” (page 21).

Severe hum or noise is heard.

- ➔ Check that the speakers and components are connected securely.
- ➔ Check that the connecting cords are not too close to a transformer or motor, and at least three metres away from your TV set or any fluorescent lighting.
- ➔ Move your TV away from the system.
- ➔ The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.

The sound loses stereo effect when you play a source of the component connected to DVD (DIGITAL IN OPTICAL) jack.

- ➔ Make sure the system is connected properly.
- ➔ Check the “DUAL MONO” setting (page 23).

The surround effect of the system is difficult to hear when Dolby Digital or DTS audio sound track is played.

- ➔ Make sure the sound field function is on (page 18).
- ➔ Check the speaker connections and settings (page 7, 25, 26).
- ➔ Depending on the source, the output signal may not contain all of the 5.1 channels. Or, the track may be either monaural or stereo even when recorded in Dolby Digital format.

There is no sound from the subwoofer

- ➔ Check the speaker connections and settings (page 7, 25, 26).
- ➔ Set the sound field setting to “A.F.D. AUTO” (page 18).

The left and right sounds are unbalanced or reversed.

- ➔ Check that the speakers and the components are connected correctly and securely.

The sound comes from the centre speaker only.

- ➔ Depending on the source, the sound may come from the centre speaker only.

No sound is heard from the centre speaker.

- ➔ Check the speaker connections and settings (page 7, 25, 26).
- ➔ Make sure the sound field function is on (page 18).
- ➔ Depending on the source, the effect of the centre speaker may be less noticeable.

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

- ➔ Check the speaker connections and settings (page 7, 25, 26).
- ➔ Make sure the sound field function is on (page 18).
- ➔ Depending on the source, the effect of the surround speakers may be less noticeable.

Remote control**The remote does not function.**

- ➔ Batteries are weak.
- ➔ The remote is too far from the centre unit.
- ➔ The remote's manufacturer code or component code returned to the default setting when you replaced the batteries. Reset the code (page 31, 34).
- ➔ Turn on the centre unit.
- ➔ Point the remote at the centre unit when operating the system.

Others**Radio stations cannot be tuned in.**

- ➔ Check that the FM/AM aerial is connected securely. Adjust the aerial or connect an external aerial, if necessary (page 10).
- ➔ The reception is poor. Try manual tuning (page 29).
- ➔ No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 29).
- ➔ Press DISPLAY so that the frequency appears in the centre unit display.
- ➔ Keep the AM aerial away from the system and other component (DVD recorder, subwoofer, TV, etc.).

Mechanical sound is heard from the subwoofer.

- ➔ The subwoofer has ventilation fans, which operate when the power is on. This is an operational sound and is not a malfunction.

The system does not work normally.

- ➔ Disconnect the mains lead of the subwoofer from the mains. Wait about two minutes until the I/O indicator on the centre unit turns off, and then connect the mains lead.

Notes About This System

On adjusting volume

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

On cleaning

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

On your TV's colour

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

Specifications

Design and specifications are subject to change without notice.

For supplied accessories, see page 5.

AUDIO POWER

Amplifier section

Stereo mode (rated):

55W+55 W (3 ohms at 1 kHz, DIN)

Music power output when in surround mode (reference):

Front: 120 W+120 W (with SS-TS31)/

Centre*: 120 W (with SS-CTRD1)/

Surround*: 120 W+120 W (with SS-TS31B)/

Subwoofer*: 120 W (with SA-WSRD15)

* There may be no sound output depending on the source and the Sound Field setting.

Input

Video: Sensitivity: 250 mV/Impedance: 50 kilohms

FM/AM tuner section

System: PLL quartz-locked digital synthesizer system

FM tuner: Tuning range: 87.5-108.0 MHz (50 kHz step)/Aerial type: FM wire aerial/Aerial terminal: 75 ohms, unbalanced/Intermediate frequency: 10.7 MHz

AM tuner: Tuning range: 531-1,602 kHz (with the interval set at 9 kHz)/Aerial type: AM loop aerial/Intermediate frequency: 450 kHz

Speakers

Front: Speaker system: Bass reflex/Speaker unit: 65 mm dia. cone type/Rated impedance: 2.7 ohms/Dimensions (approx.): 90 × 132 × 107 mm (w/h/d)/Mass (approx.): 0.6 kg

Centre: Speaker system: Bass reflex/Speaker unit: 65 mm dia. cone type/Rated impedance: 2.7 ohms/Dimensions (approx.): 360 × 110 × 97 mm (w/h/d)/Mass (approx.): 1.5 kg

Surround: Speaker system: Bass reflex/Speaker unit: 65 mm dia. cone type/Rated impedance: 2.7 ohms/Dimensions (approx.): 90 × 132 × 107 mm (w/h/d)/Mass (approx.): 0.5 kg

Subwoofer: Speaker system: Bass reflex/Speaker unit: 200 mm dia. cone type/Rated impedance: 2.7 ohms/Dimensions (approx.): 270 × 325 × 413 mm (w/h/d)/Mass (approx.): 10.0 kg

General

Power requirements: 220-240 V AC, 50/60 Hz

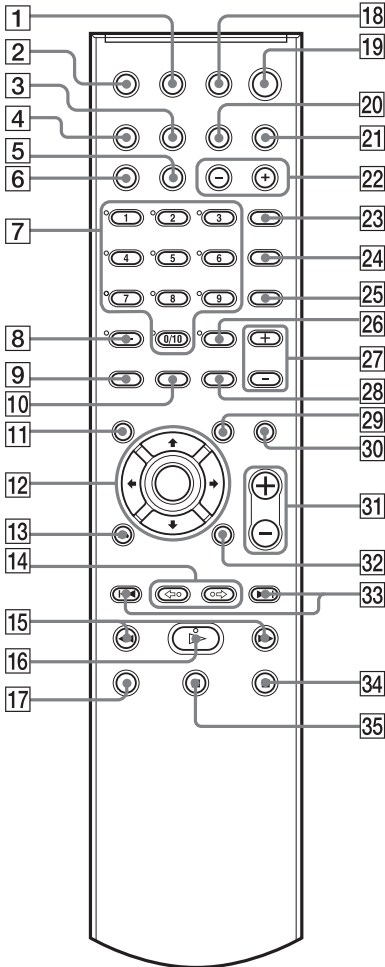
Power consumption: On: 145 W/Standby: 0.3 W

Guide to Parts and Controls

For more information, see the pages in parentheses.

Centre unit buttons of the same/similar name have the same function as the buttons on the remote.

Remote



| Button | Component | | | | AMP MENU*1 |
|---------------------------------------|--------------|--------------|---------------------|--------------|------------|
| | DVD | VIDEO | TV | TUNER | |
| 1 TV I/ON (31) | | | ● | | |
| 2 TV/VIDEO (31) SLEEP (30) | ● (SLEEP) | ● (SLEEP) | ● (TV/ VIDEO) | ● (SLEEP) | |
| 3 TUNER/ BAND (16, 29) | | | | ● | |
| 4 VIDEO (16, 32) | | ● | | | |
| 5 AMP MENU (15, 24) | | | | | ● |
| 6 AV MENU (32, 33) | ● | ● | | | |
| 7 Number buttons (31, 32, 33, 34) | ● | ● | ● | ● | |
| 8 -/-- (31, 33) CLEAR (32) | ● (CLEAR) | ● (-/-) | ● (-/-) | | |
| 9 VIDEO (32) | ● | | | | |
| 10 HDD (32) | ● | | | | |
| 11 TOP MENU/ GUIDE (32) | ● | | | | |
| 12 ←/↑/↓/→/ ENTER (15, 24, 32, 33) | ● | ● | | ● | ● |
| 13 ↻ RETURN/ EXIT (32) | ● | | | | |
| 14 ←•/•→ (32) | ● | | | | |

Point the remote at **R** (remote sensor) on the centre unit when you operate the system (ex. radio, AMP menu, etc.). Or, point it at **R** on the component that you want to operate.

| Button | Component | | | | AMP MENU*1 |
|--------|-------------------------------------------------------------------------------|--------------------------------------------|----------|------------------------|------------|
| | DVD | VIDEO | TV | TUNER | |
| 15 | ◀◀/▶▶ (32, 33) TUNING -/+ (29) ◀◀/▶▶*2 (32) ◀◀/▶▶*2 (32) | ● ● (◀◀/▶▶), (◀◀/▶▶) ◀◀/▶▶, ◀◀/▶▶ | | ● (TUNING -/+) | |
| 16 | ▷ (play) (32, 33) | ● ● | | | |
| 17 | TV (31) | | ● | | |
| 18 | AV I/⏻ (32, 33) | ● ● | | | |
| 19 | I/⏻ (14) | ● ● ● ● | | | |
| 20 | DVD (16, 32) | ● | | | |
| 21 | DSGX (20) | ● ● ● ● | | | |
| 22 | SOUND FIELD -/+ (18) | ● ● ● ● | | | |
| 23 | FM MODE (29) MPX (33) ○○○ (audio)(32) | ● ● (○○○) (MPX) | | ● (FM MODE) | |
| 24 | TUNER MEMORY (29) ANT (33) ⋯ (subtitle) (32) | ● ● (⋯) (ANT) | | ● (TUNER MEMORY) | |
| 25 | ⊞ (31) ⊞ (angle) (⊞) (32) | ● ● (⊞) (⊞) | ● (⊞) | | |
| 26 | ENTER/SET (32, 33) | ● ● ● | | | |
| 27 | PROG +/- (31, 32, 33) | ● ● ● | | | |
| 28 | DVD (32) | ● | | | |
| 29 | SYSTEM MENU (32) | ● | | | |
| 30 | MUTING (16) | ● ● ● ● | | | |

| Button | Component | | | | AMP MENU*1 |
|--------|----------------------------------|------------------|----|----------------------|------------|
| | DVD | VIDEO | TV | TUNER | |
| 31 | ⏵ (volume) +/- (16, 31) | ● ● ● ● | | ● | |
| 32 | DISPLAY (29, 32, 33) | ● ● ● | | ● | |
| 33 | PRESET -/+ (29) ◀◀/▶▶ (32) | ● (◀◀/ ▶▶) | | ● (PRESET -/+) | |
| 34 | ■ (stop) (32, 33) | ● ● | | | |
| 35 | ⏸ (pause) (32, 33) | ● ● | | | |

*1 Works during the AMP menu appears in the centre unit display (page 24).

*2 ◀◀/▶▶ for Sony DVD recorder only. ◀◀/▶▶ for Sony DVD recorder/player, etc. only.

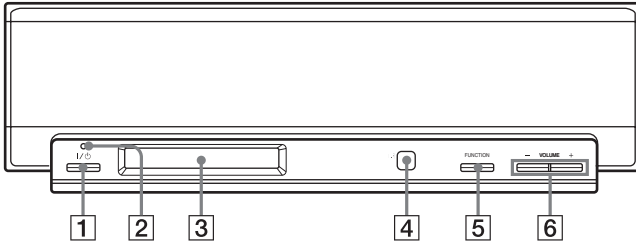
Hints


- You can use the buttons with an orange dot next to them when the TV button lights up when pressed (page 31).
- The AMP MENU and ⏵ + buttons have a tactile dot. Use as a reference when operating the system.
- You can turn off all the connected components by pressing AV I/⏻ and I/⏻ simultaneously.
- VIDEO (19), HDD (10), and DVD (28) are used for changing the function of Sony HDD/DVD (Video Cassette) recorder (page 32). After selecting the DVD input by pressing DVD (20), input select button, press VIDEO (19), HDD (10), or DVD (28).

Notes

- You can operate a Sony DVD or VCR only.
- When you operate the connected components after displaying AMP menu, turn off the AMP menu by pressing AMP MENU and press TUNER/BAND (3), VIDEO (4), or DVD (20).

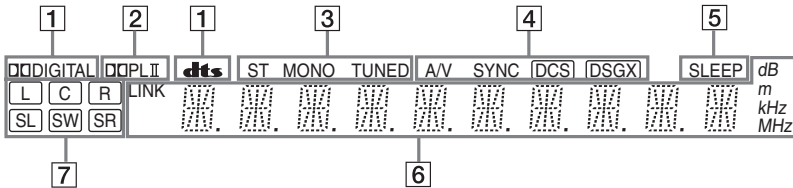
Centre unit



- 1** I/⏻ (power on/standby) button (14)
- 2** I/⏻ indicator (14)
- 3** Centre unit display (see below)
- 4**  (remote sensor) (5)
When operating the system, point the remote at this sensor.
- 5** FUNCTION button (16)
Switches the subwoofer input:
“DVD” → “VIDEO” → “FM” → “AM”
- 6** VOLUME -/+ buttons (16)

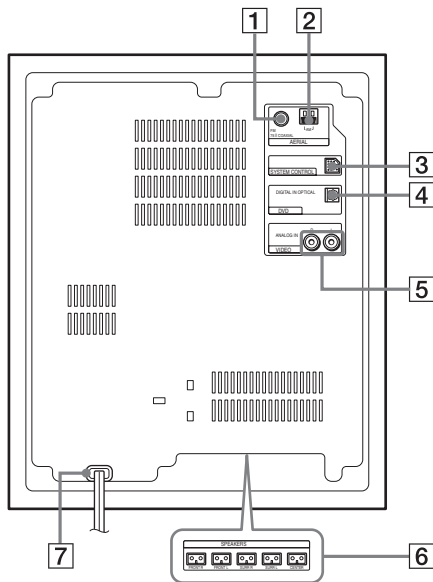
Centre unit display

For details, see “Checking the Information in the Centre Unit Display” (page 17), and the pages in parentheses.



- 1** Current audio signal format (17)
- 2** Current surround format (18)
- 3** Radio reception status
(ST (stereo)/MONO (monaural)/TUNED (tuned) (29))
- 4** Current sound settings:
 - A/V SYNC (22)
 - DCS (19)
 - DSGX (20)
- 5** SLEEP indicator (30)
- 6** Displays the following:
 - Radio station/frequency/MHz (for FM)/kHz (for AM) (29)
 - Speaker settings (distance, level) (24)
 - Sound field (18)
 - Function name (16)
- 7** Indicates the speaker that you are adjusting (distance and level). (17, 24)

Subwoofer (rear)



- 1 AERIAL (FM 75Ω COAXIAL) jack (10)
- 2 AERIAL (AM) terminal (10)
- 3 SYSTEM CONTROL jack (7)
- 4 DVD (DIGITAL IN OPTICAL) jack (11)
- 5 VIDEO (ANALOG IN L/R) jacks (13)
- 6 SPEAKERS (FRONT R/FRONT L/SURR R/SURR L/CENTER) jacks (7)
- 7 Mains lead (14)

Glossary

DCS (page 19)

This is the generic name of the surround sound produced by digital signal processing technology developed by Sony. Unlike previous surround sound fields mainly directed at the reproduction of music, Digital Cinema Sound is designed specifically for the enjoyment of movies.

Dolby Digital (page 18)

Digital audio compression technology developed by Dolby Laboratories. This technology conforms to multi-channel surround sound. The rear channel is stereo and there is a discrete subwoofer channel in this format. Dolby Digital provides the same discrete channels of high quality digital audio found in “Dolby Digital” theatre surround sound systems.

Good channel separation is realized because all of the channel data is recorded discretely, and little deterioration occurs because all channel data processing is digital.

Dolby Pro Logic II (page 18)

Dolby Pro Logic II creates five full-bandwidth output channels from 2 channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

◆Movie mode

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

◆Music mode

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

Dolby Surround Pro Logic (page 18)

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

DTS

Digital audio compression technology by Digital Theater Systems, Inc. This technology conforms to multi-channel surround sound. The rear channel is stereo and there is a discrete subwoofer channel in this format. DTS provides the same discrete channels of high quality digital audio.

Good channel separation is realized because all of the channel data is recorded discretely, and little deterioration occurs because all channel data processing is digital.

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