

SONY

2-672-606-11(1)

Personal Audio System

Operating Instructions

US

Owner's Record

The model number and the serial number are located at the bottom of the unit.

Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. ZS-H10CP

Serial No. _____

ZS-H10CP

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http://www.sony.net/



Printed on 100% recycled paper using VOC (Volatile Organic Compound)-free vegetable oil based ink.

WARNING

CAUTION

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

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To avoid electric shock, do not open the cabinet. Refer servicing to qualified personnel only.

To reduce the risk of fire, do not cover the ventilation of the apparatus with newspapers, tablecloths, curtains, etc. And do not place lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not place objects filled with liquids, such as vases, on the apparatus.

Connect the AC power adaptor to an easily accessible AC outlet. Should you notice an abnormality in the AC power adaptor, disconnect it from the AC outlet immediately.

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

Information

For customers in the USA

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

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

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

Notes on DualDiscs

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

Music discs encoded with copyright protection technologies

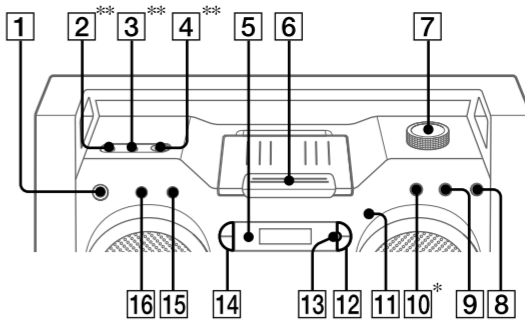
This product is designed to playback discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard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

MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

For customers in the USA

Please register this product on line at <http://www.sony.com/productregistration> Proper registration will enable us to send you periodic mailings about new product, services and other important announcements. Registering your product will also allow us to contact you in the unlikely event that the product needs adjustment or modification. Thank you.

Basic Operations



- * **▶||** button **[10]** has a tactile dot.
- ** The **[2]** (headphones) jack, AUDIO IN jack **[3]** and AUDIO IN button **[4]** are covered with a rubber cap.

Before using the unit

To turn on/off the power

Press POWER **[1]**.

To adjust the volume

Turn VOLUME towards + or - **[7]**.

To listen through headphones

Connect the headphones to the **[2]** (headphones) jack **[2]**.

To reinforce the bass sound

Press MEGA BASS **[11]**.

“MEGA BASS” appears in the display.

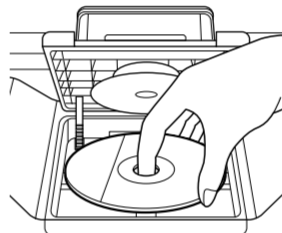
To return to normal sound, press the button again.

Playing a CD/MP3 disc

1 Press **[9]** when the unit is not in CD mode.

2 Pull PULL OPEN **[6]**, and place a disc with the label side up on the CD compartment.

To close the CD compartment, press PULL OPEN **[6]** until it clicks.

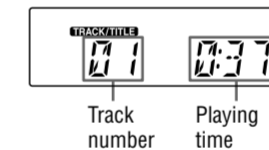


3 Press **▶||** **[10]**.

The unit plays all the tracks/MP3 files once.

When you play an MP3 disc, “MP3” appears in the display after the unit reads the file information.

Audio CD



MP3 disc



MP3 file number After the folder name*, song title and artist name are displayed, the playing time** will appear.

- * If there is no folder, “ROOT” appears in the display.
- ** If the playing time is more than 100 minutes, it appears “---:--” in the display.

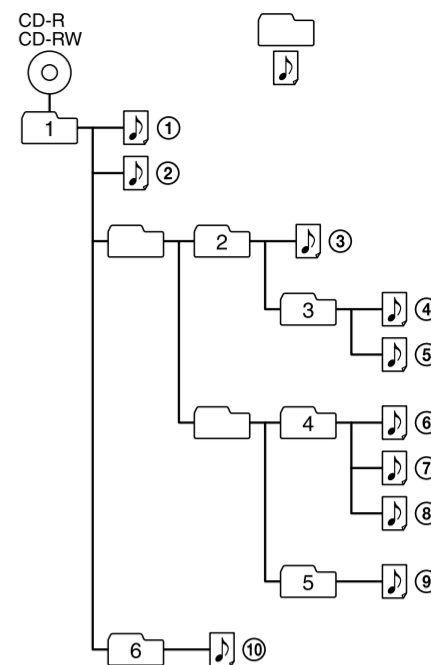
To	Do this
Pause playback	Press ▶ [10] . To resume play, press it again.
Stop playback	Press ■ [9] .
Go to the next track/MP3 file	Press ▶▶ [12] .
Go back to the previous track/MP3 file	Press ◀◀ [12] .
Select a folder on an MP3 disc	Press TUNE/FOLDER + [14] to go forward or press TUNE/FOLDER - [14] to go backward.
Play the selected folder only (MP3 disc only)	Press MODE [16] until “FLDR” appears, press TUNE/FOLDER + or - [14] to select a folder and then press ▶ [10] to start playing.
Locate a point while listening to the sound	Press ▶▶ (forward) or ◀◀ (backward) [12] while playing and hold it until you find the point.
Locate a point while observing the display	Press ▶▶ (forward) or ◀◀ (backward) [12] in pause and hold it until you find the point.
Remove the CD	Pull PULL OPEN [6] .

Tips

- Playback starts from the track/MP3 file you last stopped playing (Resume play). During stop, the track/MP3 file number to be played is displayed.
- To cancel the resume play (to start play from the beginning of the first track/MP3 file), press **■** **[9]** in stop mode. The resume play is also canceled when you open the CD compartment.

Example of folder structure and playing order

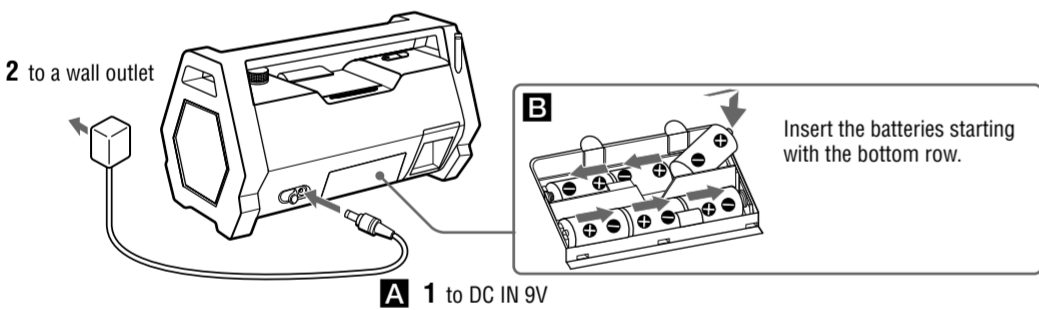
The playing order of the folders and files is as follows:



Notes on MP3 discs

- When the disc is inserted, the unit reads all the files on that disc. During this time, “READING” is displayed. If there are many folders or non-MP3 files on the disc, it may take a long time for play to begin or for the next MP3 file to start play. We recommend that you do not save unnecessary folders or files other than MP3 ones in the disc to be used for MP3 listening.
- A folder that does not include an MP3 file is skipped.
- Maximum number of files: 255
Maximum number of folders: 150 (including the root folder)
Maximum number of folders and files in total: 256
Maximum directory levels: 8
- Folder names and file names can be displayed with up to 30 characters including quotation marks.
- The characters that can be displayed on this unit are listed below:
- A - Z
- 0 - 9
- _ " \$ % ' () * + , - . / \ ` @ #
Other characters are displayed as “ _ ”.
- This unit conforms to Version 1.0, 1.1, 2.2, 2.3 and 2.4 of the ID3 tag format. When the file has ID3 tag information, the song title, artist name and album name can be displayed and “ID3” appears in the display. If the file does not have ID3 tag information, the file name appears instead of the song title, the folder name appears instead of the album name and “NO ARTIST” appears instead of the artist name. ID3 tag information can be displayed with up to 15 characters.
- When naming, be sure to add the file extension “mp3” to the file name.
- If you put the extension “mp3” to a file other than an MP3 file, the unit cannot recognize the file properly and will generate random noise that could damage your speakers.
- The file name does not correspond to the ID3 tag.

Power sources



Connect the AC power adaptor **A** or insert six R20 (size D) batteries (not supplied) into the battery compartment **B**.

Notes

- Replace the batteries when the OPR/BATT indicator **[5]** dims or when the unit stops operating. Replace all the batteries with new ones. Before you replace the batteries, be sure to take out the CD from the unit.
- To operate the unit on batteries, disconnect the AC power adaptor from the unit.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION: With 3.2-ohm loads, both channels driven from 150 - 10 000 Hz; rated 1.4 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other specifications

CD player section

System
Compact disc digital audio system
Laser diode properties
Emission duration: Continuous
Laser output: Less than 44.6 μW
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Number of channels
2
Frequency response
20 - 20 000 Hz ±1 dB
Wow and flutter
Below measurable limit

Radio section

Frequency range
FM: 87.5 - 108 MHz
AM: 530 - 1 710 kHz
Antennas
FM: Telescopic antenna
AM: Built-in ferrite bar antenna

General

Speaker
Full range: 10 cm (3 7/8 inches) dia., 3.2 Ω, cone type (2)
Inputs
AUDIO IN jack (stereo minijack): minimum input level 245 mV
Outputs
Headphones jack (stereo minijack):
For 16 - 68 Ω impedance headphones
Power output
2.3 W + 2.3 W (at 3.2 Ω, 10 % harmonic distortion)
Power requirements
DC IN 9 V jack accepts:
Supplied AC power adaptor for use with 120 V AC, 60 Hz
9 V DC; 6 R20 (size D) batteries
Battery life

CD playback
Sony R20P: approx. 3 h
Sony alkaline LR20: approx. 10 h
Radio reception
Sony R20P: approx. 14 h
Sony alkaline LR20: approx. 28 h

Dimensions
Approx. 558 × 292 × 275 mm (w/h/d)
(22 × 11 1/2 × 10 7/8 inches) (incl. projecting parts)
Mass
Approx. 6.4 kg (14 lb) (incl. batteries)
Supplied accessories
AC power adaptor (1)

Design and specifications are subject to change without notice.

Optional accessories

Sony MDR headphones series

Other Operations

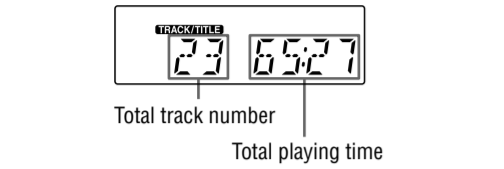
Using the display

You can check information about the CD using the display.

Checking information of an audio CD

To check the total track number and playing time of the CD

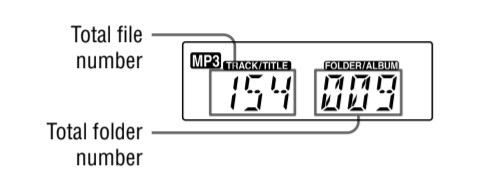
Press **■** **[9]** while the CD is stopped, and you can check them in the display.



Checking information of an MP3 disc

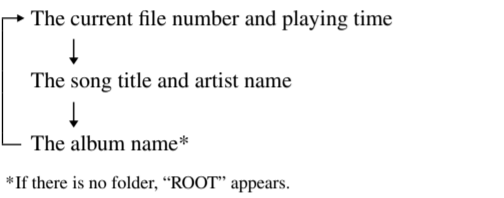
To check the total folder number and total file number on the CD

Press **■** **[9]** while the CD is stopped, and you can check them in the display.



To check file information

Press DSPL/ENTER **[13]** while playing an MP3 disc. The display changes as follows:



Playing tracks/MP3 files repeatedly (Repeat Play)

You can play tracks/MP3 files repeatedly in normal, shuffle or program play modes.

1 Press **■** **[9]** when the unit is not in CD mode.

2 Proceed as follows:

To repeat	Do this
A single track/MP3 file	<ol style="list-style-type: none">Press REPEAT [15] until “☞ 1” appears. Press ◀◀ or ▶▶ [12] to select the track/MP3 file that you want to repeat. Press ▶▶ [10].
All tracks/MP3 files on the CD	<ol style="list-style-type: none">Press REPEAT [15] until “☞” appears. Press ▶▶ [10].
A selected folder (MP3 disc only)	<ol style="list-style-type: none">Press MODE [16] to display “FLDR” and then press REPEAT [15] until “☞” appears. Select the folder by pressing TUNE/FOLDER + or – [14]. Press ▶▶ [10].
Tracks/MP3 files in random order	<ol style="list-style-type: none">Start Shuffle Play (see “Playing tracks/MP3 files in random order”). Press REPEAT [15] until “SHUF” and “☞” appear. Press ▶▶ [10].
Files in a selected folder in random order (MP3 disc only)	<ol style="list-style-type: none">Start Folder Shuffle Play (see “Playing tracks/MP3 files in random order”). Press REPEAT [15] until “FLDR”, “SHUF” and “☞” appear. Press ▶▶ [10].
Programmed tracks/MP3 files	<ol style="list-style-type: none">Program tracks/MP3 files (see “Creating your own program”). Press REPEAT [15] until “☞” and “PGM” appear. Press ▶▶ [10].

To cancel Repeat Play

Press REPEAT **[15]** until “**☞**” disappears from the display.

Playing tracks/MP3 files in random order (Shuffle Play)

You can play tracks/MP3 files in random order. When playing an MP3 disc, you can also play MP3 files in a selected folder in random order (Folder Shuffle Play).

1 Press **■** **[9]** when the unit is not in CD mode.

2 Press MODE **[16]** until “SHUF” appears in the display.

When you select Folder Shuffle Play (MP3 disc only), press MODE **[16]** until “FLDR” and “SHUF” appear in the display. Then press TUNE/FOLDER + or – **[14]** to select a folder you want.

3 Press **▶▶** **[10]** to start Shuffle Play.

To cancel Shuffle Play

Stop play first. Then press MODE **[16]** until “SHUF” disappears from the display.

Tips

- During Shuffle Play, you cannot select the previous track/MP3 file by pressing **◀◀** **[12]**.
- The resume function does not work during Shuffle Play.

Creating your own program (Program Play)

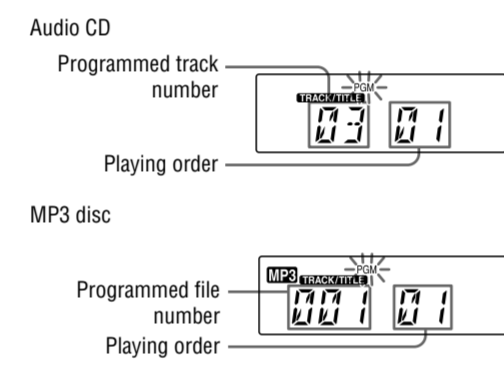
You can arrange the playing order of up to 15 tracks/MP3 files on a CD.

1 Press **■** **[9]** when the unit is not in CD mode.

2 Press MODE **[16]** until “PGM” appears in the display.

3 Press **◀◀** or **▶▶** **[12]** then press DSPL/ENTER **[13]** for the tracks you want to program in the order you want.

For MP3 files, press TUNE/FOLDER + or – **[14]** first and then press **◀◀** or **▶▶** **[12]** and DSPL/ENTER **[13]**.



4 Press **▶▶** **[10]** to start Program Play.

To cancel Program Play

Stop play first. Then press MODE **[16]** until “PGM” disappears from the display.

To check the order of tracks/MP3 files before play

Press DSPL/ENTER **[13]**. Every time you press the button, the track/MP3 file number appears in the programmed order.

To change the current program

Press **■** **[9]** once if the CD is stopped and twice if the CD is playing. The current program will be erased. Then create a new program following the programing procedure.

Tips

- If you try to program 16 tracks/MP3 files or more, “FULL” will appear in the display.
- You can play the same program again, since the program is saved until you open the CD compartment.
- The resume function does not work during Program Play.

Presetting radio stations

You can store radio stations into the unit’s memory. You can preset up to 30 radio stations, 20 for FM and 10 for AM in any order.

1 Press RADIO•BAND•AUTO PRESET **[8]** to select the band.

2 Hold down RADIO•BAND•AUTO PRESET **[8]** for 2 seconds until “AUTO” flashes in the display.

3 Press DSPL/ENTER **[13]**.

The stations are stored in memory from the lower frequencies to the higher ones.

If a station cannot be preset automatically

You need to preset a station with a weak signal manually.

1 Press RADIO•BAND•AUTO PRESET **[8]** to select the band.

2 Tune in the station you want.

3 Hold down DSPL/ENTER **[13]** for 2 seconds until the preset number flashes in the display.

4 Press PRESET + or – **[12]** until the preset number you want for the station flashes in the display.

5 Press DSPL/ENTER **[13]**.

The new station replaces the old one.

Tip

The preset radio stations remain in memory even if you unplug the AC power adaptor or remove the batteries.

Playing preset radio stations

1 Press RADIO•BAND•AUTO PRESET **[8]** to select the band.

2 Press PRESET + or – **[12]** to tune in the stored station.

Connecting an optional component

You can enjoy the sound from a PC, TV, VCR, portable digital music player, etc. through the speakers of this unit.

Be sure to turn off the power of each component before making any connections.

For details, refer to the instruction manual of the component to be connected.

1 Connect AUDIO IN **[3]** to the line output jack of the portable digital music player or other components using an audio connecting cable* (not supplied).

* For a PC: use a cable which fills the connector of your PC. For a TV or VCR: use a cable with a stereo-mini plug on one end and two phono plugs on the other end. For a portable digital music player: use a cable with a stereo-mini plug on both ends.

2 Turn the unit and the connected component on.

3 Press AUDIO IN **[4]** and start playing sound on the connected component.

The sound from the connected component is output from the speakers.

Note

Connect the cables securely to avoid any malfunction.

Precautions

Discs that this unit CAN play

- Audio CD
- CD-R/CD-RW (CD-DA*/MP3 files)
- *CD-DA is the abbreviation for Compact Disc Digital Audio. It is a recording standard used for Audio CDs.

Discs that this unit CANNOT play

- CD-R/CD-RW other than those recorded in music CD format or MP3 format conforming to ISO9660 Level 1/Level 2 or Joliet
- CD-R/CD-RW of poor recording quality, CD-R/CD-RW that has scratches or is dirty, or CD-R/CD-RW recorded with an incompatible recording device
- CD-R/CD-RW which was finalized incorrectly

Notes on discs

- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out. If there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.



- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
- Do not stick paper or sticker on the CD, nor scratch the surface of the CD.
- After playing, store the CD in its case.

On safety

- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the unit, unplug the unit, and have it checked by qualified personnel before operating it any further.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.
- When inserting a CD, make sure to close the CD compartment until it clicks. If not, the CD might pop out.

On power sources

- For AC operation, use the supplied AC power adaptor; do not use any other type.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Unplug the unit from the wall outlet when it is not be used for an extended period of time.
- When the batteries are not to be used, remove them to avoid damage that can be caused by battery leakage or corrosion.
- The nameplate indicating operating voltage, etc. is located at the bottom.

On placement

- Do not leave the unit in a location near heat sources, in a place subject to direct sunlight, excessive dust or mechanical shock or in a car subject to the direct rays of the sun.
- Do not place the unit on an inclined or unstable place.
- Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or spring-wound watches away from the unit to prevent possible damage from the magnet.
- Do not place any objects on top of the handle on this unit.

Do not immerse in water

This product is not meant to be immersed in water or come in continuous contact with water.

- Before opening or shutting the CD compartment or battery compartment lid, be sure to wipe off water, dust or sand on the outside of the unit.
- Water in the headphones jack/DC IN 9V jack/AUDIO IN jack may cause rusting. Cover the jacks with the attached rubber cap when the jacks are not used.
- If the unit is splashed with salt water, wipe clean with a damp cloth, then dry with a soft dry cloth. Do not wash under running water; do not use soap or detergent; do not dry with an electric hair dryer.
- The supplied AC power adaptor is not water resistant. To prevent shock hazard, avoid using the unit near water during AC operation.
- The storage space on the back of this unit is not waterproof. Do not use it to store anything that can be damaged by water.

On operation

- If the unit is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD player section. Should this occur, the unit will not operate properly. In this case, remove the CD and wait about an hour for the moisture to evaporate.

Cleaning the cabinet

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

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

Troubleshooting

General

The power is not on.

- Connect the AC power adaptor to the wall outlet securely.
- Make sure the batteries are inserted correctly.
- Replace all the batteries with new ones if they are weak.

There is no audio.

- Unplug the headphones when listening through speakers.

Noise is heard.

- Someone is using a portable telephone or other equipment that emits radio waves near the unit. → Move the portable telephone, etc., away from the unit.

CD/MP3 player

The CD does not play or “NO DISC” is displayed even when a CD is in place.

- Place the CD with the label surface up.
- Clean the CD.
- Take out the CD and leave the CD compartment open for about an hour to dry moisture condensation.
- The CD-R/CD-RW is blank.
- There is a problem with the quality of the CD-R/CD-RW, recording device or application software.
- Replace all the batteries with new ones if they are weak.

The sound drops out.

- Reduce the volume.
- Clean the CD, or replace it if the CD is badly damaged.
- Place the unit in a location free from vibration.
- Clean the lens with a commercially available blower.
- The sound may drop out or noise may be heard when using poor quality CD-R/CD-RW or if there is a problem with the recording device or application software.

Starting playback takes more time than usual.

- The following discs take a longer time to start playback.
 - a disc recorded with a complicated tree structure.
 - a disc that has not been finalized (a disc to which data can be added).
 - a disc that has many folders or non-MP3 files.

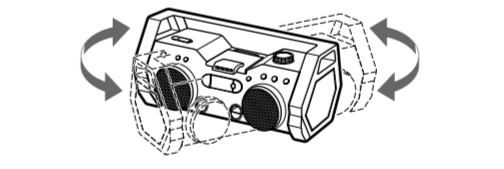
Radio

Reception is poor.

- Reorient the antenna to improve FM reception.



- Reorient the unit itself to improve AM reception.



The audio is weak or has poor quality.

- Replace all the batteries with new ones if they are weak.
- Move the unit away from the TV.

The picture of your TV becomes unstable.

- If you are listening to an FM program near the TV with an indoor antenna, move the unit away from the TV.

After trying the remedies, if you still have problems, unplug the AC power adaptor or remove all the batteries. After all the indications in the display disappear, plug the AC power adaptor or insert the batteries again. If the problem persists, please consult your nearest Sony dealer.