

# Personal Audio System

## Operating Instructions



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CFD-S50

http://www.sony.net/

### WARNING

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

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

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

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.

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

Excessive sound pressure from earphones and headphones can cause hearing loss.

Do not expose the batteries (battery pack or batteries installed) to excessive heat such as sunshine, fire or the like for a long time.

The nameplate and important information concerning safety are located on the bottom exterior.

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

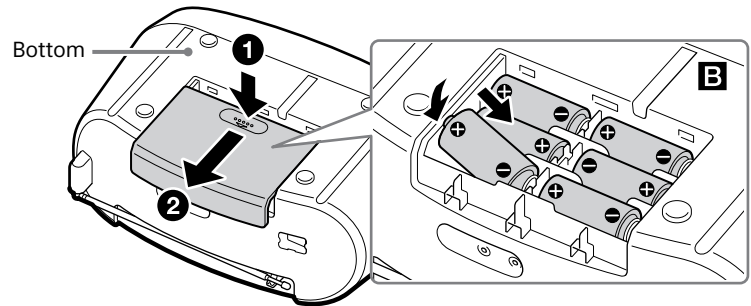
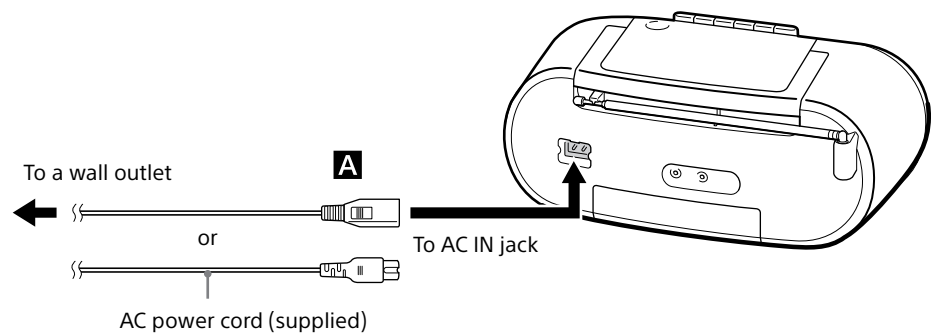
This product has been manufactured by or on behalf of Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. Inquiries related to product compliance based on European Union legislation shall be addressed to the authorized representative, Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters, please refer to the addresses provided in the separate service or guarantee documents.

### 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.

### Power Sources

Connect the AC power cord **A**, or insert six R14 (size C) batteries (not supplied) into the battery compartment **B**.



Use alkaline batteries with this unit. The use of manganese batteries is not recommended, since this type of battery has an extremely short usage time.

- Notes**
- Replace the batteries when the OPR/BATT indicator **12** dims, or when the unit becomes inoperable. Replace all of the batteries with new ones. Before you replace the batteries, be sure to remove any CD or tape and disconnect any optional component from the unit.
  - To use the unit on batteries, disconnect the AC power cord from the unit and the wall outlet.

### To use the power-management function (European models only)

This unit is equipped with an automatic standby function. With this function, the unit enters standby mode automatically after about 15 minutes if there is no operation or audio signal output.

- Notes**
- The displayed content starts flashing on the display about 2 minutes before entering standby mode.
  - In standby mode with the AC power cord connected, "STANDBY" appears on the display (European models only).
  - The automatic standby function is not available with the FM/AM function.

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.

Europe Only

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

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.

In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.

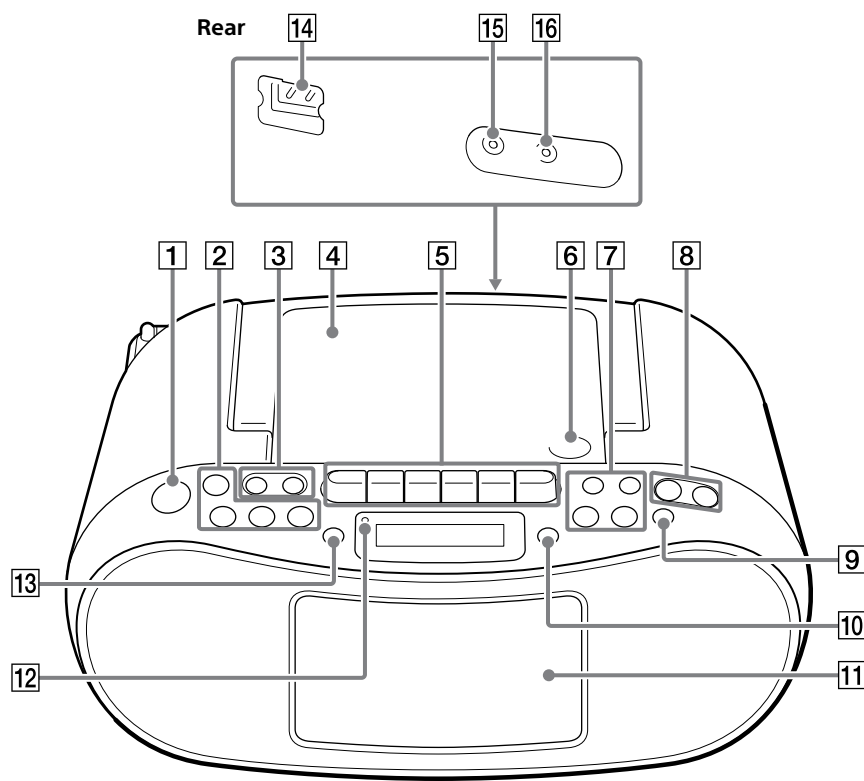
For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries.

For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

### Licence and Trademark Notice

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

## Basic Operations



- |                                |                                       |                                    |
|--------------------------------|---------------------------------------|------------------------------------|
| 1 POWER (or OPERATE) button    | 14 (fast forward) button              | 9 MEGA BASS button                 |
| 2 Function buttons             | 15 (rewind) button                    | 10 DISPLAY/ENTER button            |
| RADIO FM/AM-AUTO PRESET button | 16 (play) button*                     | 11 Cassette tape compartment cover |
| TAPE button                    | 17 (record) button                    | 12 OPR/BATT indicator              |
| CD button                      | 18 PUSH OPEN/CLOSE button             | 13 MODE button                     |
| AUDIO IN button                | 19 (go backward)/PRESET - button      | 14 AC IN jack                      |
| 3 TUNE/ (folder) + button      | 20 (go forward)/PRESET + button       | 15 (headphones) jack               |
| TUNE/ (folder) - button        | 21 (play/pause)/MANUAL PRESET button* | 16 AUDIO IN jack                   |
| 4 CD compartment cover         | 22 (stop) button                      |                                    |
| 5 Tape operation buttons       | 23 VOLUME - button                    |                                    |
| (pause) button                 | 24 VOLUME + button*                   |                                    |
| (stop/open) button             |                                       |                                    |

### Before using the unit

**To turn the power on or off**  
Press POWER (or OPERATE) **1**. You can also turn on the power of this unit using the direct power-on function (below). In this manual, operations are mainly explained using the direct power-on function.

**To use the direct power-on function**  
Press CD **2**, TAPE **2**, RADIO FM/AM **2** or AUDIO IN **2** while the unit is turned off. The power turns on with the relevant function selected.

**To adjust the volume**  
Press VOLUME + or - **8**. The volume level of this unit is adjustable in steps from 0 to 31.

**To listen through headphones**  
Connect headphones to the (headphones) jack **15**.

**To reinforce the bass**  
Press MEGA BASS **9**. "MEGA BASS" lights up on the display. To return to normal sound, press the button again.

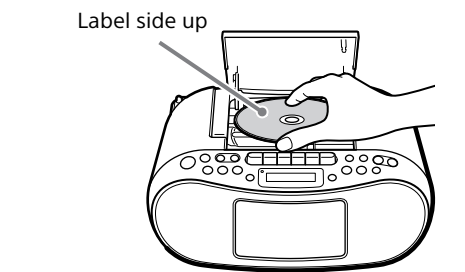
### Playing a music disc

You can play the following types of discs with this unit.

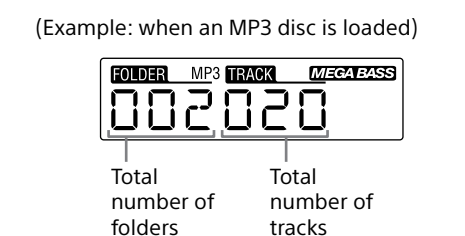
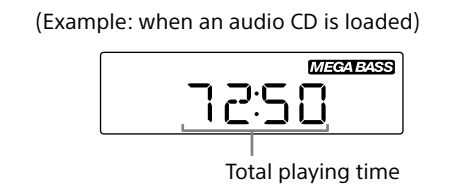
- Audio CDs on which CD-DA tracks are recorded in CD-DA disc format
- CD-R/CD-RW discs on which CD-DA tracks are recorded in CD-DA disc format
- CD-R/CD-RW discs on which MP3 audio files are recorded in ISO 9660 Level 1/Level 2 or Joliet

- Press CD **2** to turn on the CD function.

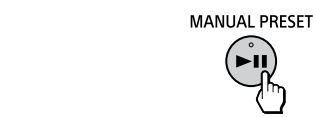
- Press PUSH OPEN/CLOSE **4**, place a disc in the CD compartment and then close the compartment cover.



The disc is loaded and the disc information appears on the display. The information displayed varies depending on the disc type (audio CD/MP3 disc).



- Press **16** to start playback.

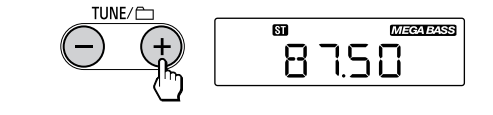


### Listening to the radio

- Press RADIO FM/AM **2** repeatedly to select the band "FM" or "AM."



- Hold down TUNE + or - **3** until the frequency digits begin to change on the display.



The unit automatically scans the radio frequencies and stops when it finds a clear station. When an FM stereo broadcast is received, "ST" lights up on the display.

If you cannot tune to a station using automatic tuning mode, press TUNE + or - **3** repeatedly to change the frequency step by step.

**Tip**  
If the stereo FM reception is noisy, press MODE **13** repeatedly until "Mono" appears on the display. You will lose the stereo effect, but the broadcast will improve.

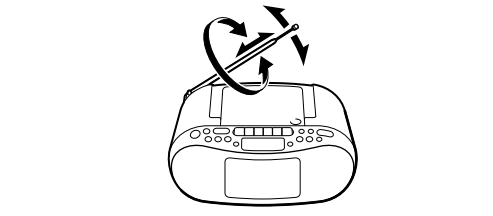


**To change the FM/AM tuning interval** (Philippines, Singapore, Malaysia and India models only)  
The FM/AM tuning interval can be changed if necessary using the following procedure.

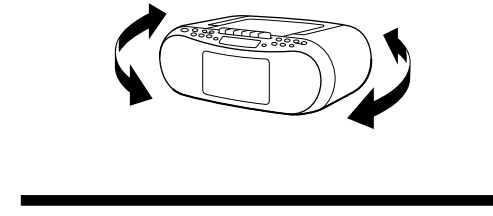
- Press RADIO FM/AM **2** repeatedly to select a band.
- Hold down MANUAL PRESET **7** until "FM-xx" or "AM-xx" flashes on the display.
- Hold down RADIO FM/AM **2** until the current tuning step appears.
- Press **14** or **15** to select the desired tuning step. "FM 50K" (for 50 kHz interval) or "FM 100K" (for 100 kHz interval) in the FM band, and "AM 9K" (for 9 kHz interval) or "AM 10K" (for 10 kHz interval) in the AM band can be selected.
- Press ENTER **10**.

Changing the tuning interval erases all the FM/AM preset stations stored in the unit. Reset your preset stations after changing the tuning interval.

**To improve radio reception**  
Reorient the antenna to improve FM reception.



Reorient the unit itself to improve AM reception.

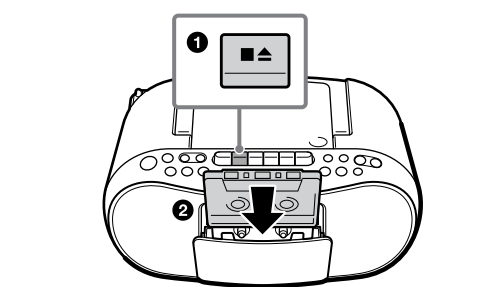


### Playing a tape

Check the following items before starting operation.

- Use a type I (normal) tape only. You cannot use any other types of tape with this system.
- If there is tape slack, rewind the slack using a pencil to avoid damaging the tape or the unit.

- Press TAPE **2** to turn on the tape function.
- Insert a recorded tape into the cassette tape compartment **11** and then close the compartment cover.



- Press **16** to start playback.

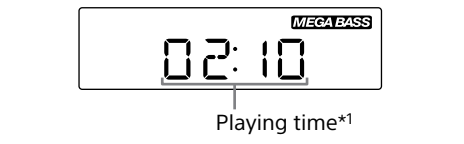


### Other operations

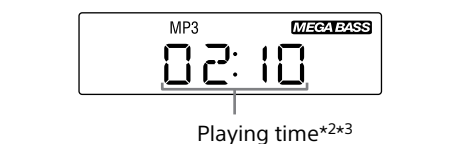
To	Do this
Stop playback	Press <b>16</b> .
Pause playback	Press <b>17</b> . To resume playback, press the button again.
Fast-forward or rewind	Press <b>14</b> or <b>15</b> .
Eject the cassette	Press <b>18</b> .

- Notes**
- Do not turn off the power during the tape playback. Doing so may cause malfunction. Make sure to stop playback before turning off the power.
  - After the tape is wound to the beginning or end, press **14** or **15** (except for European models).

(Example: an audio CD)



(Example: an MP3 disc)



- \*1 Each time you press DISPLAY **10**, the playback screen switches between showing the playing time and showing the current track number.
- \*2 If the playing time is longer than 100 minutes, "----" appears on the display.
- \*3 Each time you press DISPLAY **10**, the playback screen switches between showing the playing time and showing the current track number and the number of the folder containing that track.

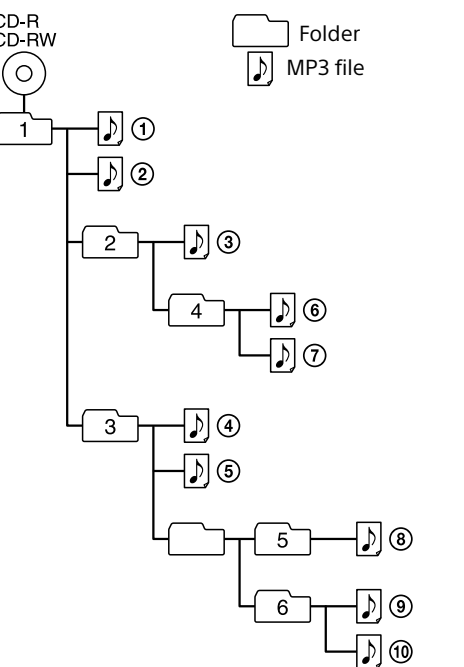
### Other operations

To	Do this
Pause playback	Press <b>17</b> . To return to playback, press the button again.
Stop playback	Press <b>17</b> . When you press <b>17</b> after playback is stopped, playback starts from the beginning of the track/file you were last playing (Resume Play).
Cancel Resume Play	Press <b>17</b> twice. When you press <b>17</b> after you cancel Resume Play, playback starts from the beginning of the first track/file.
Select a folder on an MP3 disc	Press <b>3</b> + or - <b>3</b> .
Select a track/file	Press <b>14</b> or <b>15</b> . You can skip tracks/files one by one.
Find a point in a track/file	Hold down <b>14</b> or <b>15</b> during playback, and release the button at the desired point. When locating a point while paused, press <b>17</b> to start playback after the desired point is found.

**Tip**  
Resume Play is cancelled if you open the CD compartment.

### Example of folder structure and playing order

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

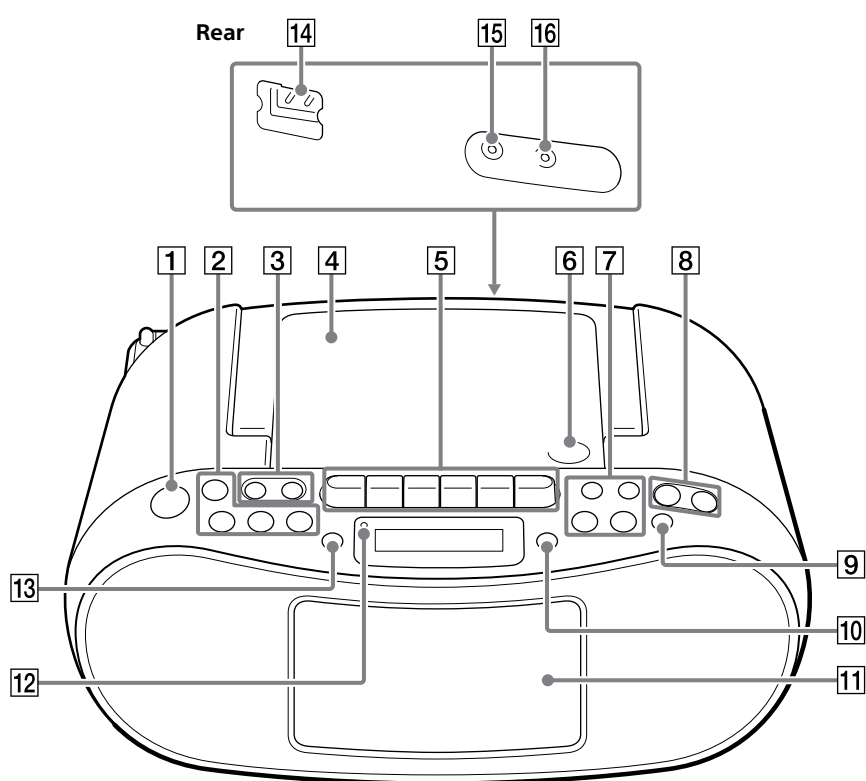


- Notes on MP3 discs**
- When a disc is loaded, the unit reads all the files on that disc. During this time, "READ" is blinking. If there are many folders or non-MP3 files on the disc, it may take a long time for play to begin or for the next MP3 file to start to play.
  - We recommend that non-MP3 files or unnecessary folders are excluded when creating MP3 discs.
  - During playback, folders that contain no MP3 files are skipped.
  - This system can only play MP3 files that have a file extension of ".mp3". Note that even if the file name has the correct file extension but the actual file was created in a different audio format, this unit may produce noise or may malfunction.
  - MP3 PRO format is not supported.
  - This unit cannot play audio files on a disc in the following cases:
    - When the total number of audio files exceeds 413.
    - When the total number of folders on a single disc exceeds 99.
    - When the directory level (folder depths) exceeds 9 (including the "ROOT" folder).

**To change play modes**  
Press MODE **13** repeatedly while the disc is stopped. For details, see "Selecting play mode."



## Other Operations



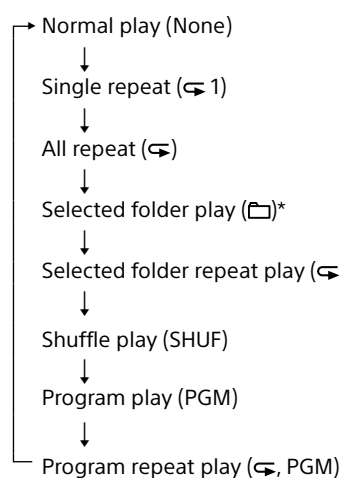
## Selecting play mode

You can set the unit to play tracks or files repeatedly or in random order while a disc is stopped.

Press MODE **[13]** repeatedly.



Each time you press the button, the indication changes as follows:



\* These functions are available only when playing MP3 files on an MP3 disc.

### Playing tracks/files repeatedly (Repeat Play)

You can set the unit to repeatedly play CD-DA tracks on an audio CD, or MP3 files on a CD-R/CD-RW disc in normal and program play modes.

1 Press CD **[2]** to turn on the CD function.



2 Proceed as follows.

To repeat	Do this
A single track/file	1 Press MODE <b>[13]</b> repeatedly until "1" appears. 2 Press <b>[7]</b> to select a track/file that you want to repeat. When you want to specify a folder that contains MP3 files, press <b>[+]</b> or <b>[-]</b> first to select a folder, and then press <b>[7]</b> to select a file. 3 Press <b>[7]</b> to start Repeat Play.
All tracks/files	1 Press MODE <b>[13]</b> repeatedly until "1" appears. 2 Press <b>[7]</b> to start Repeat Play.
A selected folder on an MP3 disc	1 Press MODE <b>[13]</b> repeatedly until "1" and "1" appear. 2 Select a folder by pressing <b>[+]</b> or <b>[-]</b> . 3 Press <b>[7]</b> to start Repeat Play.
Programmed tracks/files	1 Program tracks/files (see "Creating your own program (Program Play)"). 2 Press MODE <b>[13]</b> until "PGM" and "1" appear on the display. 3 Press <b>[7]</b> to start Repeat Play.

### To cancel Repeat Play

Press **[7]** to stop playback, and then press MODE **[13]** repeatedly until "1" (or "1") disappears from the display.

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

You can set the unit to play CD-DA tracks on an audio CD or MP3 files on a CD-R/CD-RW disc in random order.

1 Press CD **[2]** to turn on the CD function.



2 Press MODE **[13]** repeatedly until "SHUF" appears on the display.



3 Press **[7]** to start Shuffle Play.



### To cancel Shuffle Play

Press **[7]** to stop playback, and then press MODE **[13]** repeatedly until "SHUF" disappears from the display.

**Note**  
During Shuffle Play, you cannot select the previous track/file by pressing **[7]**.

### Creating your own program (Program Play)

You can arrange the playing order of up to 25 tracks/files on a disc.

1 Press CD **[2]** to turn on the CD function.



2 Press MODE **[13]** repeatedly until "PGM" appears on the display.

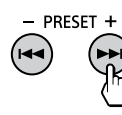


## Listening to preset radio stations

1 Press RADIO FM/AM **[2]** repeatedly to select a band.

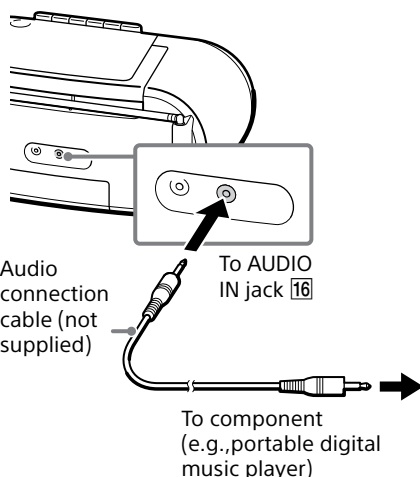


2 Press PRESET + or - **[7]** to select a stored preset number for the desired radio station.



## Connecting optional components

You can enjoy the sound from an optional component, such as a portable digital music player, 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.



- Connect the AUDIO IN jack **[16]** to the line output jack of the portable digital music player or other component using an audio connection cable (not supplied).
- Turn the connected component on.
- Press AUDIO IN **[2]** and start playing sound on the connected component.



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

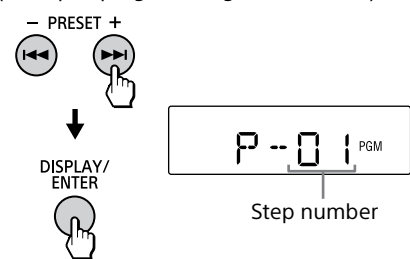
To connect the unit to a TV or video recorder/player, use an extension cable (not supplied) with a stereo-mini plug on one end and two phono plugs (L/R) on the other end.

### Notes

- If the AUDIO IN jack **[16]** is connected to the monaural output jack of a digital music player, sound may not be emitted through the right speaker of the unit.
- If the AUDIO IN jack **[16]** is connected to the line out jack of a digital music player, distortion may occur. If the sound is distorted, connect to the headphones jack instead.
- If the AUDIO IN jack **[16]** is connected to the headphones jack of a digital music player, increase the volume of the digital music player, and then adjust the volume of the unit.

3 Press **[7]** or **[7]** to select a track/file, then press ENTER **[10]**. The track/file is programmed and the program step number appears.

(Example: programming CD-DA tracks)



4 Repeat step 3 to program additional tracks/files. You can check the number of programmed steps (tracks/files) by pressing DISPLAY **[10]** repeatedly.

5 Press **[7]** to start Program Play.



The created program remains available until you open the CD compartment cover or turn off the power of the unit. To play the same program again, press **[7]**.

### Note

If you try to program 26 tracks/files or more, "FULL" appears on the display.

### To cancel Program Play

Press **[7]** to stop playback, and then press MODE **[13]** repeatedly until "PGM" disappears from the display.

### To delete all tracks/files in the current program

Stop playback, and then press **[7]**. "noSTEP" appears and you can create a new program, following the procedure "Creating your own program (Program Play)."

## Presetting radio stations

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

1 Press RADIO FM/AM **[2]** repeatedly to select a band.



2 Hold down AUTO PRESET **[2]** until "AUTO" flashes on the display.



3 Press ENTER **[10]** to store the station. The stations are stored in memory from lower frequencies to higher ones.



### If a station cannot be preset automatically

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

1 Press RADIO FM/AM **[2]** repeatedly to select a band.



2 Tune to the desired station.

3 Press MANUAL PRESET **[7]** until "FM-xx" or "AM-xx" flashes on the display.

(Example: FM)



4 Press PRESET + or - **[7]** until the preset number for the station you want flashes on the display.



5 Press ENTER **[10]** to store the station.

If another station is already assigned to the selected preset number, that station is replaced by the new one.



## Precautions

### Discs that this unit CAN play

- Audio CDs on the market that conform to the CD-DA<sup>1</sup> standard.
- CD-R/CD-RW discs that contain audio tracks and conform to the CD-DA<sup>1</sup> standard.
- CD-R/CD-RW discs that contain MP3 files and are finalized<sup>2</sup> correctly.
  - <sup>1</sup> CD-DA is the abbreviation for Compact Disc Digital Audio. It is a recording standard used for audio CDs.
  - <sup>2</sup> Finalizing is the process to make the CD-R/CD-RW discs playable on the consumer disc player products, and the finalizing can be enabled or disabled as optional settings during disc creation in most recording software.

### Discs that this unit CANNOT play

- CD-R/CD-RW discs other than those recorded in audio CD format or formats conforming to ISO 9660 Level 1/Level 2 or Joliet
- CD-R/CD-RW discs of poor recording quality, CD-R/CD-RW discs with scratches or those are dirty, or CD-R/CD-RW discs recorded using an incompatible recording device
- CD-R/CD-RW discs that are unfinalized or finalized incorrectly
- CD-R/CD-RW discs that contain files created in audio formats other than MP3

### Notes on discs

- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out. If there are scratches, dirt or fingerprints on the CD, a tracking error may occur.
- 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, or 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 a sticker on the CD, or scratch the surface of the CD.
- After playing, store the CD in its case.



### Note on DualDiscs

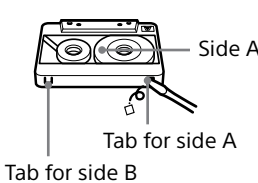
- A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

### 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.

### Notes on cassettes

- Remove the overwrite protection tab from side A or B to prevent accidental recording. If you want to reuse the tape for recording, cover the broken tab using adhesive tape.



- The use of a cassette tape with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

### On safety

- As the laser beam used in the CD player section is harmful to 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.

### On power sources

- For AC operation, use the supplied AC power cord; do not use any other cord.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time.
- When not using the batteries, remove them to avoid damage that can be caused by battery leakage or corrosion.

### 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 surface.
- Do not place anything within 10 mm of the rear of the cabinet. The ventilation openings must be unobstructed for the unit to operate properly and prolong the life of its components.
- 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.

### 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.

### On handling the unit

- Do not leave the CD compartment open to avoid dust and debris contamination.

### On cleaning the cabinet

- Clean the cabinet, panel and controls using 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, consult your nearest Sony dealer.

## Troubleshooting

### General

**The power does not turn on when the AC power cord is connected.**

- Make sure the AC power cord is connected to the wall outlet securely.

**The power does not turn on during battery operation.**

- Make sure the batteries are inserted correctly.

**The unit enters standby mode unexpectedly.**

- This is not a malfunction. The unit enters standby mode automatically after about 15 minutes if there is no operation or audio signal output. See "To use the power-management function (European models only)."

**There is no sound.**

- Make sure the appropriate function is selected for the music or sound source you want to listen to.
- Unplug the headphones when listening through speakers.

### CD/MP3 player

**The CD player does not play or "noDISC" is displayed even when a CD is in place.**

- Place the CD with the label side 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 or unfinalized.
- There are no playable MP3 files on the disc.
- 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 exhausted.

**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 vibrations.
- Clean the lens with a commercially available blower.
- The sound may drop out or noise may be heard when using a 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 many folders or non-MP3 files.

### Radio

**The sound is weak or reception is poor.**

- Replace all the batteries with new ones.
- Move the unit away from nearby TVs.
- For FM reception, extend the antenna to its full length, and reorient it for best FM reception. For AM reception, reorient the unit itself to find the best reception.
- If you are in a building, listen near a window.
- If a mobile phone is placed close to the unit, a loud noise may be heard from the unit. Keep the phone away from the unit.

### The TV picture is unstable.

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

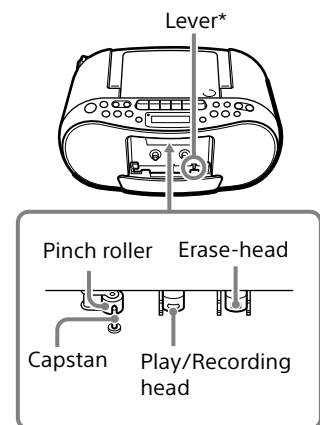
### Tape

**The tape does not move when you press an operation button.**

- Close the cassette compartment cover securely.
- The **[5]** button does not function or the tape does not start playback or recording.
- Make sure that the overwrite protection tub has not been removed.

**Poor or distorted playback, recording or erasing quality.**

- Clean the surfaces of the pinch roller, play/recording head and erase-head as shown below using a dry cotton swab. If the surfaces are still dirty, clean them using a cotton swab moistened with a commercially available cleaning fluid.



\* Expose the erase-head by pressing the recording button (**[5]**) while holding down the lever with your finger.

- Demagnetize the heads using a commercially available tape head demagnetizer.
- Use a type I (normal) cassette tape. You cannot use the type IV (metal) tapes or type II (high position) tapes with this system. These types may cause sound distortion.

After trying the suggested remedies, if the problem persists, unplug the AC power cord or remove all the batteries. After all the indications on the display disappear, plug in the AC power cord again, or re-insert the batteries. If the problem persists, consult your nearest Sony dealer.

## 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 measurement at a distance of 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)  
Number of channels  
2  
Frequency response  
20 Hz – 20,000 Hz +1/-2 dB  
Wow and flutter  
Below measurable limit  
Supported audio format  
MP3 (MPEG 1 Audio Layer-3)  
Bit rates: 32 kbps – 320 kbps, VBR  
Sampling frequencies: 32/44.1/48 kHz

### Radio section

Frequency range  
European, Australian, Taiwan, Thai and Arabian models  
FM: 87.5 MHz – 108 MHz (50 kHz step)  
AM: 531 kHz – 1,602 kHz (9 kHz step)  
Korean model  
FM: 87.5 MHz – 108 MHz (100 kHz step)  
AM: 531 kHz – 1,602 kHz (9 kHz step)  
Philippines, Singapore, Malaysia and India models  
FM: 87.5 MHz – 108 MHz (100 kHz step)  
87.5 MHz – 108 MHz (50 kHz step)  
AM: 530 kHz – 1,610 kHz (10 kHz step)  
531 kHz – 1,602 kHz (9 kHz step)  
Intermediate frequency  
FM: 300 kHz  
AM: 400 kHz  
Antennas  
FM: Telescopic antenna  
AM: Built-in ferrite bar antenna

### Tape deck section

Recording system  
4-track 2-channel, stereo  
Fast winding time  
Approx. 150 s (sec.) with Sony cassette C-60  
Frequency response  
Type I (normal): 80 Hz – 10,000 Hz

### Input

AUDIO IN  
Stereo mini jack

### Output

(headphones) stereo mini jack  
For 16 Ω – 32 Ω impedance headphones

### General

Speaker  
Full range, 8 cm dia., 4 Ω, cone type (2)  
Power output  
1.7 W + 1.7 W (at 4 Ω, 10% harmonic distortion)  
Power requirements  
European and Australian models  
230 V AC, 50 Hz (AC power supply)  
9 V DC (6 R14 (size C) batteries)  
Taiwan model  
120 V AC, 60 Hz (AC power supply)  
9 V DC (6 R14 (size C) batteries)

Philippines, Singapore, Malaysia and India models  
230 V AC, 50 Hz (AC power supply)  
9 V DC (6 R14 (size C) batteries)

Thai model  
220 V AC, 50 Hz (AC power supply)  
9 V DC (6 R14 (size C) batteries)

Korean model  
220 V AC, 60 Hz (AC power supply)  
9 V DC (6 R14 (size C) batteries)

Arabian model  
220 V – 240 V AC, 50/60 Hz (AC power supply)  
9 V DC (6 R14 (size C) batteries)

Power consumption  
AC 12 W (approx. 0.8 W at the power saving mode)

Battery Life<sup>\*1, \*2</sup>  
Playback of CD  
Approx. 8 hours (at a volume level of around 24)  
Recording FM programs  
Approx. 19 hours  
Playback of tape  
Approx. 13 hours (at a volume level of around 24)

\*1 Measured by Sony standards. The actual battery life may vary depending on the circumstances of the unit or operating conditions.

\*2 When using Sony alkaline batteries

Dimensions  
Approx. 320 mm × 139 mm × 219 mm (W/H/D) (incl. projecting parts)

Mass  
Approx. 2.0 kg  
Approx. 2.3 kg (including the weight of a disc, batteries and a cassette tape)

### Supplied accessories

AC power cord (1)

Design and specifications are subject to change without notice.