SONY

Personal Audio System

Operating Instructions

ZS-PE60

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, do not cover the ventilation opening of the appliance with newspapers, tablecloths, curtains, etc. Do not expose the appliance to naked flame sources (for example, lighted candles).

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.

WARNING, Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

The nameplate is located on the bottom exterior.

CAUTION
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

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

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.

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT OPEN.

For customers in Europe

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 Belgium, bijkantoor van Sony Europe Limited, Da Vincilaan 7-D1, 1935 Zaventem, Belgium. For any service or guarantee matters, please refer to the addresses provided in the separate service or guarantee documents.

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

This symbol on the product, the battery or on the packaging indicates that the product and the battery 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 products and 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. 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 and the electrical and electronic equipment will be treated properly, hand over these products 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 or battery.

This product is designed to be used for the following purposes:
• Playing back music sources on discs or USB devices
• Listening to radio stations
• Listening to sound from a connected optional component

Power Sources

Connect the AC power cord **A**, or insert six LR6 (size AA) batteries (not supplied) into the battery compartment **B**.

❶ To AC IN
❷ To a wall outlet

Insert all the way into the AC IN jack.

A AC power cord (supplied)

Bottom

Press down on the battery compartment cover at **❸** and slide it in the direction of the arrow **❹**.

B

Always insert the **⊖** side of the battery first.

The batteries are oriented in different directions. Insert them in the correct orientation as illustrated inside the battery compartment.

Notes
• When using the unit on batteries and the battery power drops to a certain level, the **OPR/BATT** ② indicator dims or power of the unit may go off during playback. If this happens, replace all the batteries with new ones. Once the **OPR/BATT** ② indicator becomes dim, you can continue to use the radio and AUDIO IN functions for some time, but you can no longer use the CD or USB functions. Before you replace the batteries, be sure to remove any CDs, disconnect any USB devices or optional components from the unit, and store the FM antenna ⑲ in its original position if extended.
• To use the unit on batteries, disconnect the AC power cord **A** from the wall outlet and the unit (in the order of ❷ → ❶).
• Settings stored in the unit's memory are saved even when the AC power cord is disconnected or the batteries are removed.
• In standby mode with the AC power cord connected, "STANDBY" appears on the display.
• Do not mix an old battery with a new one or mix different type of batteries.

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.
To turn the standby function on or off, press **VOLUME** – ⑬ while holding down **TUNE/⌂** + ⑨ when the unit is in standby mode with the AC power cord connected. The automatic standby function setting cannot be changed when the unit is turned on. Each time you press the buttons, "STANDBY" flashes for 2 seconds and "ON" or "OFF" appears on the display.

Notes
• The displayed content starts flashing on the display about 2 minutes before entering standby mode.
• The automatic standby function is not available with the FM/AM function.

Basic Operations

⑲*²

② ③④⑤⑥⑦ ⑧ ⑨
①
⑩
⑱
⑪
⑰
⑫
⑬*¹
⑯
⑭
⑮*¹
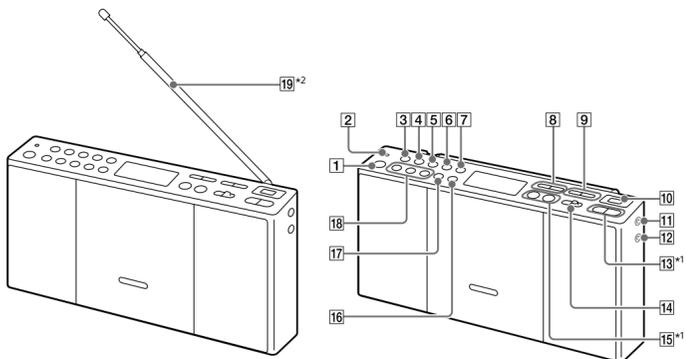
① OPERATE button
② OPR/BATT indicator
③ USB button
④ CD button
⑤ FM/AM button
⑥ AUDIO IN button
⑦ PLAY/FM MODE button
⑧ |◀◀ (go backward)/ PRESET – button
▶▶| (go forward)/ PRESET + button
⑨ TUNE/⌂ (folder) – button
TUNE/⌂ (folder) + button
⑩ ⫫ (USB) port
⑪ AUDIO IN jack
⑫ ∩ (headphones) jack
⑬ VOLUME – button
VOLUME + button*¹
⑭ CD OPEN ⟶ switch
⑮ ▶|| (play/pause) button*¹
■ (stop) button
⑯ DISPLAY (ENTER) button
⑰ SLEEP button
⑱ FAVORITE RADIO STATION (–SET) buttons
⑲ FM antenna*²

*¹ ▶|| ⑮, VOLUME + ⑬ have a tactile dot.
*² Extend the FM antenna ⑲ only when listening to FM radio (for AM radio, a ferrite bar antenna is built into the unit).

Before using the unit

To turn the power on or off
Press **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** ④, **USB** ③, **FM/AM** ⑤, **AUDIO IN** ⑥ or **FAVORITE RADIO STATION (–SET)** ⑱ while the unit is turned off. The power turns on with the relevant function selected. The direct power-on function is unavailable when the unit is powered by batteries only and the AC power cord is not connected.

Note
It will take a while for the unit to turn on if **CD** ④ is pressed immediately after the unit was turned off while the CD function was active.

To adjust the volume
Press **VOLUME** + or – ⑬.
If you want to adjust the volume level continuously, hold the button down, and release it at the desired level.

To listen through headphones
Connect headphones to the ∩ (headphones) jack ⑫.
To protect your hearing, avoid listening at excessive volume level when listening through headphones.

Playing a music disc

1 Press **CD** ④ to turn on the CD function.

2 Slide the **CD OPEN** ⟶ ⑭ to the right, and place a disc in the CD compartment with the label side facing forward.

Press the center area of the disc gently until it snaps into place.

Label side facing forward.
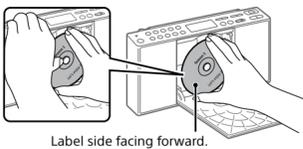
3 Close the CD compartment door.

Push the upper right area of the compartment door securely.
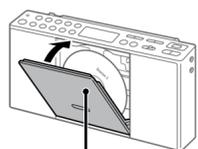
The disc is loaded and the disc information appears on the display.

Audio CD
(Total number of tracks and total playing time appear in order.)

```
TRACK
08
```
Total number of tracks
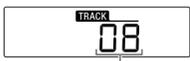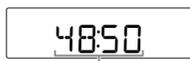
```
48:50
```
Total playing time

MP3/WMA disc
(Total number of folders and total number of files appear.)

```
FOLDER    TRACK
009  050
```
Total number of folders*¹   Total number of files

4 Press ▶|| ⑮ to start playback.

```
0008
```
Playing time*², ³

*¹ If MP3/WMA files are present only in the root directory, "001" appears on the display.
*² If the playing time is longer than 100 minutes, "--:--" appears on the display.
*³ By pressing **DISPLAY** ⑯, playback screen changes between showing the function name, the playing time, and the current track number (or showing the current folder and file numbers (MP3/WMA)).

Other operations

To	Do this
Pause playback	Press ▶|| ⑮. To return to playback, press the button again.
Stop playback	Press ■ ⑮. When you press ▶|| ⑮ after playback is stopped, playback will start from the beginning of the track/file you were last playing (Resume Play).
Select a folder on an MP3/WMA disc	Press **TUNE/⌂** + or – ⑨.
Select a track/file	Press |◀◀ or ▶▶| ⑧. You can skip tracks/files one by one.
Find a point in a track/file	Hold down |◀◀ or ▶▶| ⑧ during playback, and release the button at the desired point. When locating a point while paused, press ▶|| ⑮ to start playback after the desired point is found.

Tip
To cancel the Resume Play, press ■ ⑮ while the CD is stopped.

Note
Resume Play is cancelled in the following cases:
— When you open the CD compartment.
— When you turn off the power.

Example of folder structure and playing order
The playing order of the folders and files is as follows. However, the playing order may differ from the original order on the disc, depending on the recording method used.

CD-R
CD-RW
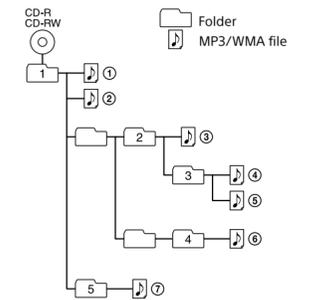
Folder
♪ MP3/WMA file

Notes on MP3/WMA discs
• When a disc is loaded, the unit reads all the files on that disc. During this time, "READ" is flashing. If there are many folders or non-MP3/WMA files on the disc, it may take a long time for play to begin or for the next MP3/WMA file to start to play.
• We recommend that non-MP3/WMA files or unnecessary folders are excluded when creating MP3/WMA discs.
• During playback, audio files other than MP3 and WMA files are skipped even if those files are included in a folder.
• The audio formats supported by this unit are as follows:
— MP3: file extension ".mp3"
— WMA: file extension ".wma"
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.
• WMA files encoded in WMA DRM, WMA Lossless and WMA PRO formats cannot be played back.
• This unit cannot play audio files on a disc in the following cases:
— When the total number of audio files exceeds 999.
— When the total number of folders on a single disc exceeds 255 (including the "ROOT" folder).
— When the directory level (folder depths) exceeds 9* (including the "ROOT" folder).
  * Playback for files contained in directory levels above 9 is possible but not guaranteed.


Listening to music on a USB device

You can listen to audio files stored on a USB device (a digital music player or USB storage media). Audio files in MP3 and WMA formats* can be played on this unit.

* Files with copyright protection (Digital Rights Management) cannot be played on this unit.

Compatible USB devices
Compatibility requirements for the USB devices are as follows. Before using a device with this unit, check that it meets the requirements.
• Compliance with USB 2.0 (Full Speed)
• Supports Mass Storage mode*

* Mass Storage mode is a mode that allows a USB device to become accessible to a host device, enabling file transfers. Most USB devices support Mass Storage mode.

1 Connect the USB device to the ⫫ (USB) port ⑩.

2 Press **USB** ③ to turn on the USB function.

```
FOLDER
009
```
Total number of folders

3 Press ▶|| ⑮ to start playback.

```
0008
```
Playing time*¹, ²

*¹ If the playing time is longer than 100 minutes, "--:--" appears on the display.
*² By pressing **DISPLAY** ⑯, playback screen changes between showing the function name, the playing time, and the current folder and file numbers.

Other operations

To	Do this
Pause playback	Press ▶|| ⑮. To return to playback, press the button again*.
Stop playback	Press ■ ⑮. When you press ▶|| ⑮ after playback is stopped, playback will start from the beginning of the track/file you were last playing (Resume Play).
Select a folder	Press **TUNE/⌂** + or – ⑨.
Select a file	Press |◀◀ or ▶▶| ⑧. You can skip files one by one.
Find a point in a file	Hold down |◀◀ or ▶▶| ⑧ during playback, and release the button at the desired point. When locating a point while paused, press ▶|| ⑮ to start playback after the desired point is found.

* When playing a VBR MP3/WMA file, playback may restart from a different point.

Note
When removing a USB device, hold down ■ ⑮ until "no DEV" appears, and then turn off the unit or switch to other functions beforehand. Removing the USB device without performing these steps may corrupt the data on the USB device or damage the device itself.

Example of folder structure and playing order
The playing order of the folders and files is as follows. However, the playing order may differ from the original order on the USB device, depending on the recording method used.

USB device
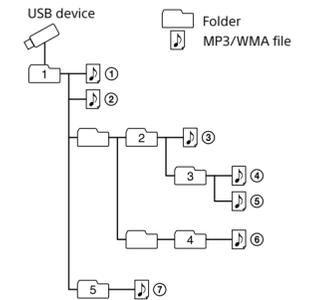
Folder
♪ MP3/WMA file

Notes on the USB device
• It may take a long time before playback starts when:
— the folder structure is complex.
— the USB device is close to capacity.
• When a USB device is connected, the unit reads all the files on the device. If there are many folders or files on the device, it may take a long time for the unit to finish reading them.
• Do not connect a USB device to the unit through a USB hub.
• With some connected USB devices, after an operation is performed, there may be a delay before it is performed by this unit.
• This unit may not support all the functions provided with a connected USB device.
• Do not save non-MP3/WMA files or unnecessary folders to a USB device that contains MP3/WMA files.
• During playback, audio files other than MP3 and WMA files are skipped even if those files are included in a folder.
• The audio formats supported by this unit are as follows:
— MP3: file extension ".mp3"
— WMA: file extension ".wma"
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.
• WMA files encoded in WMA DRM, WMA Lossless and WMA PRO formats cannot be played back.
• This unit cannot play audio files on a USB device in the following cases:
— When the total number of audio files in a single folder exceeds 999.
— When the total number of audio files on a single USB device exceeds 4,000.
— When the total number of folders on a single USB device exceeds 255 (including the "ROOT" folder).
— When the directory level (folder depths) exceeds 9 (including the "ROOT" folder).
These numbers may vary depending on the file and folder structure.
• Compatibility with all encoding/writing software is not guaranteed. If audio files on the USB device were originally encoded with incompatible software, those files may produce noise or interrupted sound, or may not be played back at all.

To use the unit as a battery charger
You can use the unit as a battery charger for USB devices that have a rechargeable function when the unit is turned on.
Be sure to turn on the USB function beforehand.
Charging is only available when the USB function is turned on.

Note
When charging a USB device, connect the unit to a wall outlet using the AC power cord to keep the batteries from being drained.

Note on charging the battery (European models only)
If the automatic standby mode is set to "ON," charging will stop when the unit enters standby mode even if the battery is not fully charged. To prevent this from happening, set the automatic standby mode to "OFF." See "To use the power-management function (European models only)" for details on turning off the automatic standby function.

Listening to the radio

1 Press **FM/AM** ⑤ repeatedly to turn on the radio function and select the "FM" or "AM" band.

2 Adjust the antenna for optimum reception.

FM

Extend the FM antenna ⑲ and adjust its length and angle for optimum reception.
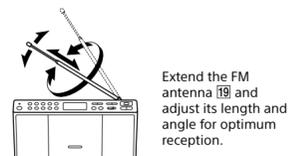
Notes
• When adjusting the FM antenna ⑲, be sure to hold it by the bottom part. The antenna may be damaged if you move it with excessive force while holding it by the upper part.
• When adjusting the FM antenna ⑲ by rotating it as illustrated below, do not rotate the antenna further once it hits the protruding part on the unit. Doing so may damage the antenna.

Lift the antenna at an angle when rotating it to a different position so that it does not hit the protruding part.

Protruding part

AM

Reorient the unit itself for optimum reception (a ferrite bar antenna is built into the unit).
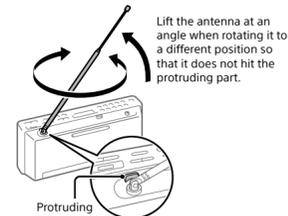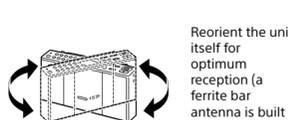
3 Hold down **TUNE/⌂** + or – ⑨ until the frequency digits begin to change on the display.
The unit automatically scans the radio frequencies and stops when it finds a clear station.
If you cannot tune to a station using automatic tuning mode, press **TUNE/⌂** + or – ⑨ repeatedly to change the frequency step by step.
When an FM stereo broadcast is received, "ST" lights up on the display.

Tips
• The unit of frequency of tuned stations is MHz for the FM band and kHz for the AM band.
• If the stereo FM reception is noisy, press **PLAY/FM MODE** ⑦ repeatedly until "Mono" appears on the display. You will lose the stereo effect, but the reception will be improved.

To improve radio reception
Use the radio in a place where radio signals can be easily received such as near a window. Also, adjust the antenna (FM) or reorient the unit itself (AM) for good reception.

Areas with poor reception: Far from windows, etc.

Areas with good reception: Near windows, etc.
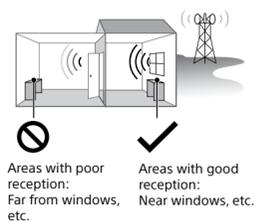
If the reception problem still persists, try changing the installation location. Avoid places such as the following:

Between buildings

Nearby mobile phones, electrical appliances

On steel desks or tables

Presetting stations to FAVORITE RADIO STATION buttons

You can preset up to three favorite stations to **FAVORITE RADIO STATION (–SET)** 18 buttons. Assign one FM or AM program for each button.

1 Press **FM/AM** 5 repeatedly to turn on the radio function and select the "FM" or "AM" band.
2 Tune to the station you want to preset.
3 Press and hold the desired **FAVORITE RADIO STATION (–SET)** 18 button until you hear a beep.

The tuned station is preset to the selected button of **FAVORITE RADIO STATION (–SET)** 18 and the same number as that of the button will light up on the display.

(Example: Presetting FM 87.50 MHz to number ❶)

To change the preset station
Repeat steps 1 to 3.
The preset station on the button will be replaced by the new one.

Listening to preset stations with FAVORITE RADIO STATION buttons

Press the desired **FAVORITE RADIO STATION (–SET)** 18 button.

Note
To avoid changing the preset accidentally, press the button briefly. If you hold down the button, the preset on the button will be replaced by the currently tuned station.

Other Operations

Selecting play mode

You can set the unit to play tracks or files repeatedly or in random order while a disc/USB device is stopped.
If you try to set or change the play mode during playback or pause status of a disc or USB device, "PUSH STOP" appears on the display. Press ■ 15 after the message appears.

Press **PLAY/FM MODE** 7 repeatedly.

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

→ Normal play (None)
↓
Single repeat (↺ 1)
↓
All repeat (↺)
↓
Selected folder play (🗀)*
↓
Selected folder repeat play (🗀 , ↺)*
↓
Shuffle play (↻)
↓
Program play (PGM)
↓
Program repeat play (↺ , PGM)

* These functions are available only when playing MP3/WMA files on an MP3/WMA disc or USB device.

Playing tracks/files repeatedly (Repeat Play)

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

1 Press **CD** 4 or **USB** 3 to turn on the CD or USB function.
2 Proceed as follows.

To repeat	Do this
A single track/file	1 Press **PLAY/FM MODE** 7 repeatedly until "↺ 1" appears. 2 Press |◄◄ or ►►| 8 to select a track/file that you want to repeat. When you want to specify a folder that contains MP3/WMA files, press **TUNE/🗀** + or – 9 first to select a folder, and then press |◄◄ or ►►| 8 to select a file. 3 Press ►|| 15.
All tracks/files	1 Press **PLAY/FM MODE** 7 repeatedly until "↺" appears. 2 Press ►|| 15.
A selected folder on an MP3/WMA disc or USB device	1 Press **PLAY/FM MODE** 7 repeatedly until "🗀" and "↺" appear. 2 Select a folder by pressing **TUNE/🗀** + or – 9. 3 Press ►|| 15.

To repeat	Do this
Programmed tracks/files	1 Program tracks/files (see "Creating your own program (Program Play)"). 2 Press **PLAY/FM MODE** 7 repeatedly until "PGM" and "↺" appear. 3 Press ►|| 15.

To cancel Repeat Play
Press ■ 15 to stop playback, and then press **PLAY/FM MODE** 7 repeatedly until "↺" (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, MP3/WMA files on a CD-R/CD-RW disc or on a USB device in random order.

1 Press **CD** 4 or **USB** 3 to turn on the CD or USB function.
2 Press **PLAY/FM MODE** 7 repeatedly until "↻" appears on the display.
3 Press ►|| 15 to start Shuffle Play.

To cancel Shuffle Play
Press ■ 15 to stop playback, and then press **PLAY/FM MODE** 7 repeatedly until "↻" disappears from the display.

Tips
• During Shuffle Play, you cannot select the previous track/file by pressing |◄◄ 8.
• If you press ►|| 15 after playback stopped by pressing ■ 15 during Shuffle Play, playback will start from the next randomly selected track (Resume Play is unavailable during Shuffle Play).

Creating your own program (Program Play)
You can arrange the playing order of up to 25 tracks/files on a disc/USB device.

1 Press **CD** 4 or **USB** 3 to turn on the CD or USB function.
2 Press **PLAY/FM MODE** 7 repeatedly until "PGM" appears on the display.
3 Press |◄◄ or ►►| 8 to select a track/file.
When you want to specify a folder that contains MP3/WMA files, press **TUNE/🗀** + or – 9 first to select a folder, and then press |◄◄ or ►►| 8 to select a file.
4 Press **ENTER** 16.
The track/file is programmed and the program step number appears.

(Example: audio CD)

Step number

5 Repeat steps 3 and 4 to program additional tracks/files.
6 Press ►|| 15 to start Program Play.

To play the same program again, press ►|| 15.
Note that the created program is cleared in the following cases:
— When you open the CD compartment.
— When you disconnect the USB device.
— When you turn off the power of the unit.

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

To display programmed track/file information
After creating your own program, you can check information about programmed tracks/files.

Before starting the Program Play
Press **DISPLAY** 16 repeatedly and the display changes as follows:

Total number of steps ↔ Last programmed track/file number

After Program Play stopped by pressing ■ 15
Press **DISPLAY** 16 repeatedly and the display changes as follows:

Current step number ↔ Current track/file number

To cancel Program Play
Press ■ 15 to stop playback, and then press **PLAY/FM MODE** 7 repeatedly until "PGM" disappears from the display.

To delete all tracks/files in the current program
Stop playback, and then press ■ 15. "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 **FM/AM** 5 repeatedly to turn on the radio function and select the "FM" or "AM" band.
2 Hold down **FM/AM** 5 until "AUTO" flashes on the display.

AUTO

3 Press **ENTER** 16 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 **FM/AM** 5 repeatedly to select a band.
2 Tune to the desired station.
3 Hold down **ENTER** 16 until "FM-xx" or "AM-xx" flashes on the display.
(Example: FM)

FM-01

4 Press **PRESET +** or – 8 until the preset number for the station you want flashes on the display.
5 Press **ENTER** 16 to store the station.
If another station is already assigned to the selected preset number, that station is replaced by the new one.

Tip
The preset radio stations remain in the unit's memory even in the following situations.
—The AC power cord is unplugged.
—The batteries are removed.

Listening to preset radio stations

1 Press **FM/AM** 5 repeatedly to turn on the radio function and select the "FM" or "AM" band.
2 Press **PRESET +** or – 8 to select a stored preset number for the desired radio station.

Tip
By repeatedly pressing **DISPLAY** 16 while listening to the radio, the radio information changes between showing the preset number and the frequency.
The preset number display automatically returns to the frequency display after 2 seconds have elapsed.

Using the Sleep Timer

You can set the unit to turn off automatically after a set time has elapsed.

1 Press **SLEEP** 17.
The default setting ("90") appears and the "SLEEP" indicator lights up on the display.
2 Press **SLEEP** 17 repeatedly to select the desired setting.

90 → 60 → 30 → 15
↑   ↓
OFF ←——————————

Each time you press the button, the duration (in minutes) changes on the display, and the selected setting is confirmed automatically after about 4 seconds.

Tip
You can check the time left until the unit turns off by pressing **SLEEP** 17 again after setting the sleep timer.

Connecting optional components

You can enjoy the sound from an optional component, such as a TV, 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.

1 Connect the AUDIO IN jack 11 to the line output jack of the portable digital music player, TV or other component using an audio connection cable (not supplied).
2 Turn the connected component on.
3 Press **AUDIO IN** 6 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 jack on one end and two phono plugs on the other end.

Precautions

Discs that this unit CAN play
• Audio CD (CD-DA*¹ tracks)
• CD-R/CD-RW that contains MP3/WMA files and is finalized*² correctly.

*¹ CD-DA is the abbreviation for Compact Disc Digital Audio. It is a recording standard used for audio CDs.
*² 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 other than those recorded in audio CD format or formats conforming to ISO 9660 Level 1/Level 2 or Romeo, Joliet and UDF
• CD-R/CD-RW of poor recording quality, CD-R/CD-RW with scratches or that is dirty, or CD-R/CD-RW recorded using an incompatible recording device
• CD-R/CD-RW that is unfinalized or finalized incorrectly
• BD-ROM, BD-R/BD-RE
• DVD-ROM, DVD-R/DVD-RW, DVD+R/DVD+RW, DVD-RAM

Notes on discs
• Clean the CD with a cleaning cloth if the disc is dirty. Wipe the disc from the center out. If there are scratches, dirt or fingerprints on the disc, 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.

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 near the appliances that generate heat, such as lighting fixtures or heaters. The heat from those appliances may deform the enclosure and cause the system to malfunction.
• 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.
• Make sure not to splash water on the unit. This unit is not waterproof.

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.
• Make sure the AC power cord is connected to the wall outlet securely.
• Make sure the connector of AC power cord is inserted into the AC IN jack securely.
• Check if the batteries are inserted correctly, matching the polarities.
• Replace all the batteries with new ones when the **OPR/BATT** 2 indicator dims.

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.

The sound is noisy.
• Is someone using a mobile phone or other equipment emitting radio waves near the unit? If so, move the unit away from such devices.

A small humming noise is heard from the unit.
• This is not a malfunction. You may hear a small humming noise from the radio depending on the status of the power supply.

CD/MP3/WMA player

The CD player does not play even when a CD is in place.
• Place the CD with the label side facing forward.
• 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 are no playable MP3/WMA 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 when the **OPR/BATT** 2 indicator dims.

"Err" appears when the disc is loaded.
• The CD may be dirty. Clean the disc.
• The CD may have scratches. Replace the disc.
• The CD may have a reading problem. Replace the disc.
• A blank disc may be set in the CD compartment.
• An unplayable disc (DVD, BD, etc.) is loaded. Replace the disc.
• No disc is set in the CD compartment. Set a disc.
• The CD may be placed upside down. Place the CD with the label side facing forward.
• No audio files recorded in supported formats, or a file to be played back has an unsupported file extension.

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, files or non-MP3/WMA files.

USB device

The USB device does not work properly.
• If you connect an incompatible USB device, the following problems may occur.
— The USB device is not recognized.
— File or folder names are not displayed on this unit.
— Playback is not possible.
— The sound skips.
— There is noise.
— The sound output is distorted.

"Err01" appears.
• An unsupported USB device is connected and playback or pause operation is performed.

"Err02" appears and the unit turns off automatically.
• An abnormal level has been detected in the electrical current from the ⟙ (USB) port 10. In this case, remove the USB device from the ⟙ (USB) port 10 and reconnect the USB device, and then turn on the unit again. If this problem persists after turning on the power of the unit, contact your nearest Sony dealer.

"Err C13" appears.
• An unexpected error occurs in the connected device.
• An unknown device is connected.

There is no sound.
• The USB device may be connected incorrectly. Turn off the unit and reconnect the USB device. Then turn on the unit.

There is noise, skipping, or distorted sound.
• Turn off the unit and reconnect the USB device. Then turn on the unit again.
• The music data itself contains noise, or the sound is distorted. Noise may have entered during the creation of audio files. Try re-creating audio files and use them to play on this unit.

The USB device cannot be connected to the ⟙ (USB) port 10.
• The connector on the USB device or the USB cable is being inserted backwards. Insert it to the ⟙ (USB) port 10 in the correct direction.

"READ" is displayed for an extended time, or it takes a long time before playback starts.
• The reading process can take a long time in the following cases:
— There are many folders or files on the USB device.
— The file structure is complex.
— The memory is almost full.
— The internal memory is fragmented.
• To avoid the above problems, we recommend that you adhere to the following guidelines:
— Keep the total number of folders on a USB device to 100 or less.
— Keep the total number of files per folder to 100 or less.

Erroneous display
• The data stored on the USB device may be corrupted. Send the music data to the USB device again.
• This unit can display only numbers and letters of the alphabet. Other characters will not be displayed correctly.

The USB device is not recognized.
• Turn off the unit and reconnect the USB device, then turn on the unit.
• The USB device is not functioning properly. Refer to the USB device operation manual for details on how to deal with this problem.

Play does not start.
• Turn off the unit and reconnect the USB device.

Play does not start from the first track.
• Set the play mode to Normal Play.

MP3/WMA files cannot be played back.
• The audio files may have inappropriate file extensions. The file extensions supported by this unit are as follows:
— MP3: file extension ".mp3"
— WMA: file extension ".wma"
• The audio files may have been created in formats other than MP3/WMA formats.
• The USB storage device uses a file system other than FAT16 or FAT32.*
• The files are encrypted or protected by passwords.

* This unit supports FAT16 and FAT32, but some USB storage media may not support both file systems.
For details, refer to the operation manual of the USB storage device in question or contact the manufacturer.

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.

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 measured 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)
  WMA (Windows Media Audio)

Radio section
Frequency range
  Models for Europe
    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)
Intermediate frequency
  FM: 225 kHz
  AM: 177.5 kHz
Antennas
  FM: Telescopic antenna
  AM: Built-in ferrite bar antenna

Input
AUDIO IN
  Stereo mini jack
⟙ (USB) port
  Type A, maximum current 500 mA, USB 2.0 Full Speed compatible

Output
Ω (headphones) stereo mini jack
  For 16 Ω — 32 Ω impedance headphones

General
Speaker
  Full range, 5 cm dia., 8 Ω, cone type (2)
Power output
  1.1 W + 1.1 W (at 8 Ω, 10% harmonic distortion)
Power requirements
  Models for Europe
    230 V AC, 50 Hz (AC power supply)
    9 V DC (six LR6 (size AA) batteries)
  Korean model
    220 V AC, 60 Hz (AC power supply)
    9 V DC (six LR6 (size AA) batteries)
Power consumption
  10 W
  0.8 W (during standby mode)
Battery Life*¹ *²
  Playback of CD
    Approx. 2.5 hours
  Playback of USB device
    Approx. 3 hours (at 100 mA load)
    Approx. 0.8 hours (at 500 mA load)
  FM reception
    Approx. 15 hours

  *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. 318 mm × 156 mm × 70 mm (W/H/D) (incl. projecting parts)
Quantity
  Unit: 1
Mass
  Approx. 1.6 kg (incl. batteries)

Supplied accessories
  AC power cord (1)
  Operating Instructions (1) (this manual)
  Warranty Card (1) (for European models only)

Design and specifications are subject to change without notice.

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