SONY

Personal Audio System

Operating Instructions

CFD-S50

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.

CAUTION

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

Owner's Record

The model number is located on the bottom of the unit, and the serial number is located inside the battery compartment of the unit. Record these numbers in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. CFD-S50
Serial No. _____

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

The following FCC/IC statement applies only to the version of this model manufactured for sale in the U.S.A. and Canada. Other versions may not comply with FCC/IC technical regulations.
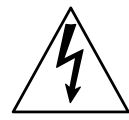
NOTE:

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.

CAUTION

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

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
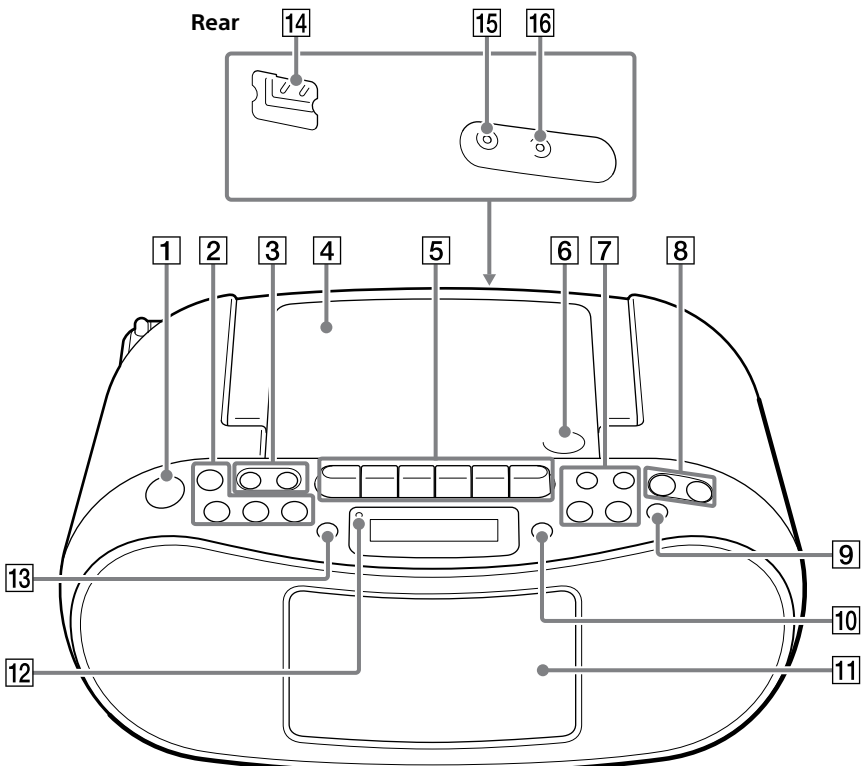
This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This graphical symbol is located on the bottom of the unit.

Licence and Trademark Notice

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

Power Sources

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

To a wall outlet
A
AC power cord (supplied)
To AC IN jack

Bottom ❶
❷
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

• In standby mode with the AC power cord connected, "STANDBY" appears on the display (Canadian model only).
• 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.

Basic Operations

Rear 14 | 15 16

1 2 3 4 | 5 | 6 7 | 8

9
10
13 | 11
12

1 POWER button
2 Function buttons
  RADIO FM/AM–AUTO PRESET button
  TAPE button
  CD button
  AUDIO IN button
3 TUNE/⌂ (folder) + button
  TUNE/⌂ (folder) – button
4 CD compartment cover
5 Tape operation buttons
  ⏸ (pause) button
  ■▲ (stop/open) button

◄◄ (fast forward) button
►► (rewind) button
◄ (play) button*
● (record) button
6 PUSH OPEN/CLOSE ⏏ button
7 I◄◄ (go backward)/PRESET – button
  ►►I (go forward)/PRESET + button
  ►II (play/pause)/MANUAL PRESET button*
  ■ (stop) button*
8 VOLUME – button
  VOLUME + button*

9 MEGA BASS button
10 DISPLAY/ENTER button
11 Cassette tape compartment cover
12 OPR/BATT indicator
13 MODE button
14 AC IN jack
15 ⌂ (headphones) jack
16 AUDIO IN jack

* ►II 7, VOLUME + 8 and ◄ 5 have a tactile dot.

Before using the unit

To turn the power on or off
Press POWER 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
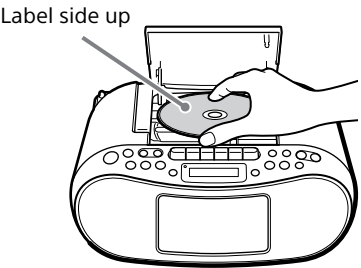Connect headphones to the ⌂ (headphones) jack 15.

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

1 Press CD 2 to turn on the CD function.

2 Press PUSH OPEN/CLOSE ⏏ 6, place a disc in the CD compartment and then close the compartment cover.
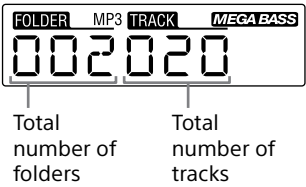
Label side up

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).
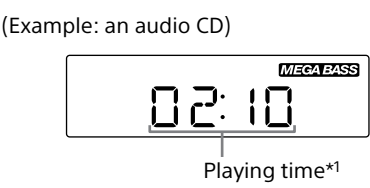
(Example: when an audio CD is loaded)

72:50
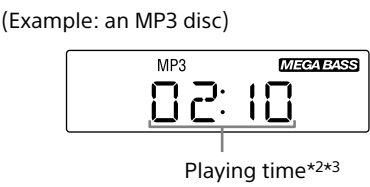Total playing time

(Example: when an MP3 disc is loaded)

002020
Total number of folders | Total number of tracks

3 Press ►II 7 to start playback.

MANUAL PRESET

(Example: an audio CD)
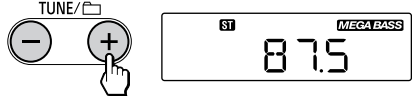
02:10
Playing time*[1]

(Example: an MP3 disc)

02:10
Playing time*[2]*[3]

*[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.
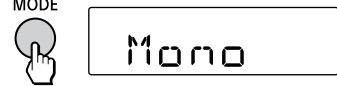
Other operations

To	Do this
Pause playback	Press ►II 7. To return to playback, press the button again.
Stop playback	Press ■ 7. When you press ►II 7 after playback is stopped, playback starts from the beginning of the track/file you were last playing (Resume Play).
Cancel Resume Play	Press ■ 7 twice. When you press ►II 7 after you cancel Resume Play, playback starts from the beginning of the first track/file.
Select a folder on an MP3 disc	Press ⌂ + or – 3.
Select a track/file	Press I◄◄ or ►►I 7. You can skip tracks/files one by one.
Find a point in a track/file	Hold down I◄◄ or ►►I 7 during playback, and release the button at the desired point. When locating a point while paused, press ►II 7 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:

CD-R
CD-RW
☐ Folder
♪ MP3 file

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."

Listening to the radio

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

AUTO PRESET

2 Hold down TUNE + or – 3 until the frequency digits begin to change on the display.
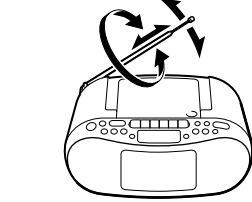
TUNE/⌂
87.5

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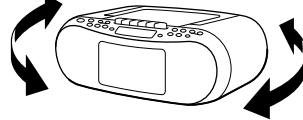
Tip
If the stereo FM reception is noisy, press MODE 13 repeatedly until "Mono" appears on the display. You will lose the stereo effect, but the broadcast will improve.

MODE
Mono

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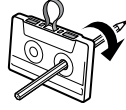Reorient the antenna to improve FM reception.

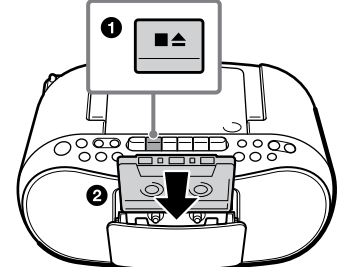Reorient the unit itself to improve AM reception.

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.

1 Press TAPE 2 to turn on the tape function.

2 Press ■▲ 5 (❶), insert a cassette tape into the cassette tape compartment (❷) and then close the compartment cover.

3 Press ◄ 5 to start playback.

Other operations

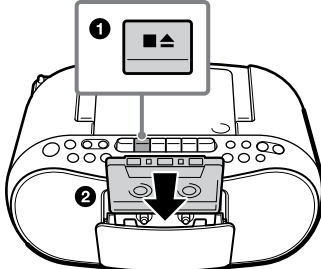| To	Do this
Stop playback	Press ■▲ 5.
Pause playback	Press ⏸ 5. To resume playback, press the button again.
Fast-forward or rewind	Press ◄◄ or ►► 5.
Eject the cassette	Press ■▲ 5.

Note
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.

Recording on 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.
• Make sure that the overwrite protection tab has not been removed. If the tab has been removed, cover the broken tab using adhesive tape.

1 Prepare the source you want to record.

■ To record CD-DA tracks or MP3 files on a disc
Press CD 2 and place a disc in the CD compartment. Make sure not to start playback. See "Playing a music disc."

■ To record a radio program
Press RADIO FM/AM 2 repeatedly to select a band and tune to the desired station. See "Listening to the radio."

■ To record sound from a connected optional component
Press AUDIO IN 2 and connect an optional component, and then start playback.

2 Press ■▲ 5 (❶), insert a cassette tape into the cassette tape compartment (❷) and then close the compartment cover.

3 Press ● 5 to start recording (the play button ◄ 5 will depress automatically at the same time).

Tips
• Adjusting the volume or the audio emphasis will not affect the recording level.
• If the AM program makes whistling sound after you have press ● 5 in step 3, press MODE 13 repeatedly to select the position of ISS (Interference Suppress Switch) that may decreases the noise.
• Use AC power as the power source for recording for best recording results.

Other operations

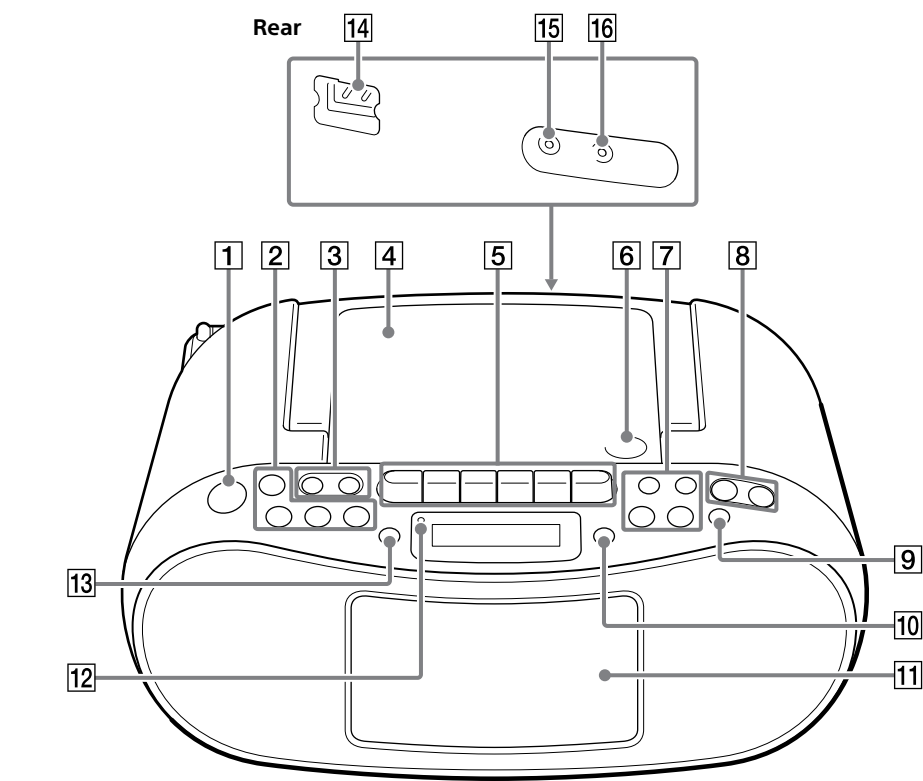| To	Do this
Stop recording	Press ■▲ 5.
Pause recording	Press ►II 5. To resume recording, press the button again.

To record from partway through the current CD-DA track or MP3 file
Press ►II 7 to pause playback where you want to start recording, then press ● 5.

To record favorite CD-DA tracks or MP3 files on a disc
Create a program (see "Creating your own program (Program Play)"), then press ● 5 to start recording.

To erase recorded cassette tapes
To erase a cassette tape, you need to record silence over the previous recording.

1 Press TAPE 2 to turn on the tape function.

2 Insert a recorded tape into the cassette tape compartment.

3 Press ● 5.
Erasing process starts, and previous recording is overwritten with silent data.

Rear

14 15 16

1 2 3 4 5 6 7 8

13 9

12 10 11

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.

MODE

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 (SHUF)
↓
Program play (PGM)
↓
Program repeat play (⊊, PGM)

* These functions are available only when playing MP3 files on a 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.

CD

2 Proceed as follows.

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

To cancel Repeat Play

Press ■ 7 to stop playback, and then press MODE 13 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 or MP3 files on a CD-R/CD-RW disc in random order.

1 Press CD 2 to turn on the CD function.

CD

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

MODE

3 Press ►II 7 to start Shuffle Play.

MANUAL PRESET
►II

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 I◄◄ 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.

CD

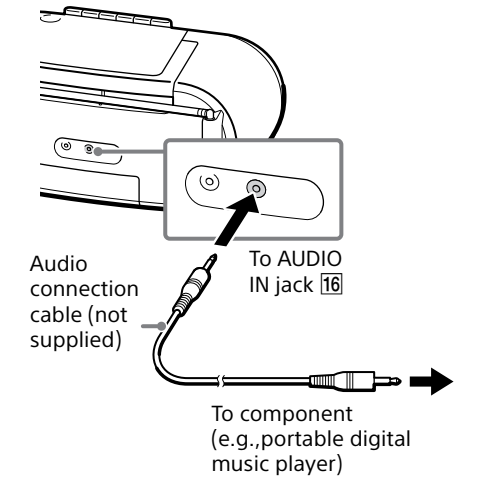2 Press MODE 13 repeatedly until "PGM" appears on the display.

MODE

---

3 Press I◄◄ or ►►I 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)

− PRESET +
I◄◄   ►►I
↓
DISPLAY/
ENTER

P-01 PGM

Step number

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 ►II 7 to start Program Play.

MANUAL PRESET
►II

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 ►II 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.

AUTO PRESET
RADIO
FM/AM

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

AUTO PRESET
RADIO
FM/AM

AUTO

3 Press ENTER 10 to store the station.

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

DISPLAY/
ENTER

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.

AUTO PRESET
RADIO
FM/AM

2 Tune to the desired station.

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

(Example: FM)

MANUAL PRESET
►II

FM-01

4 Press PRESET + or − 7 until the preset number for the station you want flashes on the display.

− PRESET +
I◄◄   ►►I

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.

DISPLAY/
ENTER

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

Listening to preset radio stations

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

AUTO PRESET
RADIO
FM/AM

2 Press PRESET + or − 7 to select a stored preset number for the desired radio station.

− PRESET +
I◄◄   ►►I

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.

Audio
connection
cable (not
supplied)

To AUDIO
IN jack 16

To component
(e.g.,portable digital
music player)

1 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).

2 Turn the connected component on.

3 Press AUDIO IN 2 and start playing sound on the connected component.

AUDIO

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.

Precautions

Discs that this unit CAN play

• Audio CDs on the market that conform to the CD-DA*1 standard.
• CD-R/CD-RW discs that contain audio tracks and conform to the CD-DA*1 standard.
• CD-R/CD-RW discs that contain MP3 files and are 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 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.
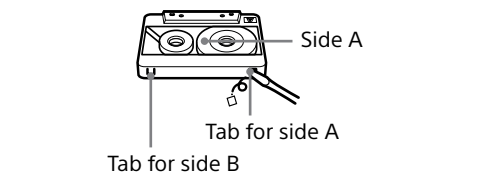• After playing, store the CD in its case.

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.

Side A

Tab for side A

Tab for side B

• 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.

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

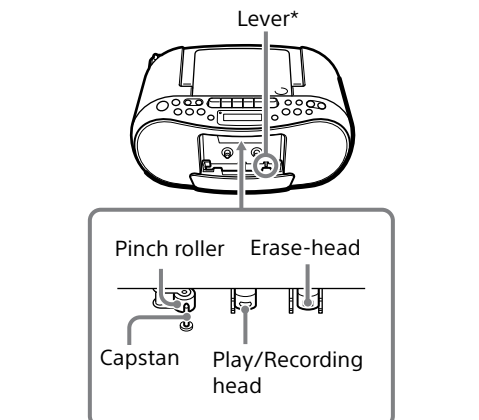**The tape does not move when you press an operation button.**
• Close the cassette compartment cover securely.

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.

Lever*

Pinch roller   Erase-head

Capstan   Play/Recording head

* 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

AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
(The United States model only)
With 4-ohm loads, both channels driven from 150 Hz — 10,000 Hz; rated 1.1 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

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
FM: 87.5 MHz — 108 MHz (100 kHz step)
AM: 530 kHz — 1,710 kHz (10 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
Ω (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
120 V AC, 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*1, *2
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
(12 5/8 in × 5 1/2 in × 8 5/8 in) (W/H/D) (incl. projecting parts)
Mass
Approx. 2.0 kg (4 lb 6 oz)
Approx. 2.3 kg (5 lb 1 oz) (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.

For customers in the USA

Please register this product on line at the following website.

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.