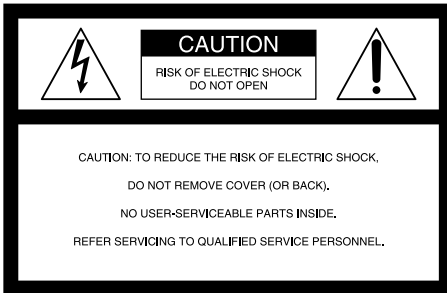# SONY®

CD Radio Cassette-Corder

Operating Instructions

CFD-E75

Warning
To prevent fire or shock hazard, do not expose the player to rain or moisture.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,

DO NOT REMOVE COVER (OR BACK).

NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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.

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

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

For customers in Canada
To prevent electric shock, match wide blade of plug to wide slot, fully insert.

Information
For customers in the United States

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

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

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

Owner's Record

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

Model No. CFD-E75

Serial No. _____

Table of contents

Basic Operations

The CD Player

The Radio

The Audio Emphasis

The Timer

Setting Up

Additional Information

3

Playing a CD

3   1, 2

Connect the supplied AC power cord (see page 24).

1

≜ PUSH OPEN/CLOSE
○ ○ ○ ○ ○
○ ○ ○ ○ ○ ○

Press ≜PUSH OPEN/CLOSE down to open the CD compartment and place the CD on the CD compartment.
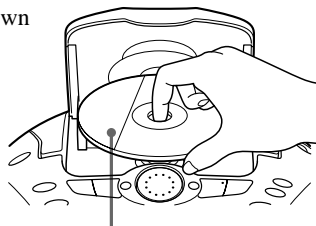
With the label side up

2
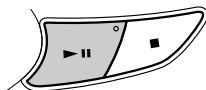
≜ PUSH OPEN/CLOSE
○ ○ ○ ○ ○
○ ○ ○ ○ ○ ○

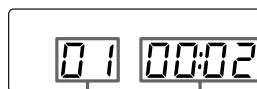Close the lid of the CD compartment.

3

►II   ■
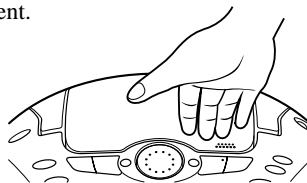
Press ►II (► on the remote).

The player turns on (direct power-on) and plays all the tracks once.

Display

01 00:02

Track number   Playing time

4

Use these buttons for additional operations

Jog dial

⏏PUSH OPEN/CLOSE

■

VOLUME +, –

**▶II**

POWER
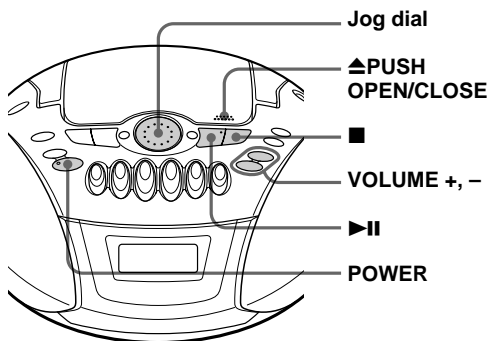
| To	Do this
adjust the volume	Press VOLUME +, – (VOL +, – on the remote).
stop playback	Press ■.
pause playback	Press ▶II (II on the remote). Press the button again to resume play after pause.
go to the next track	Turn the jog dial clockwise. (On the remote, press ▶▶I.)
go back to the previous track	Turn the jog dial counterclockwise. (On the remote, press I◀◀.)
remove the CD	Press ⏏PUSH OPEN/CLOSE.
turn on/off the player	Press POWER.

About CD-Rs/CD-RWs

This player is compatible with CD-Rs/CD-RWs but playback capability may vary depending on the quality of the disc, the recording device and application software.
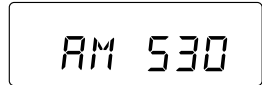
5

Listening to the radio

Connect the supplied AC power cord (see page 24).

1
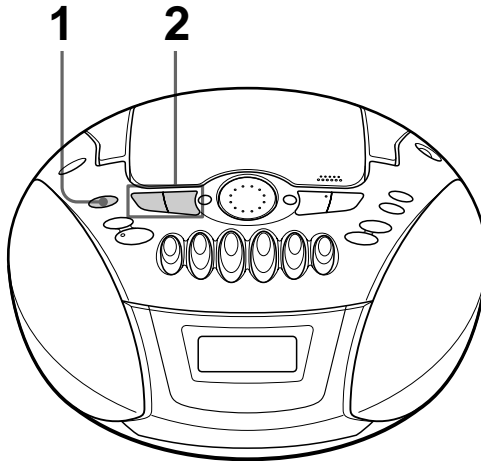
RADIO
BAND
AUTO PRESET
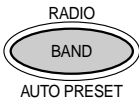
Press RADIO BAND•AUTO PRESET until the band you want appears in the display (direct power-on).

Display

$$AM\ 530$$

2

◄◄
–
►►
+
TUNE
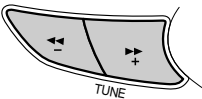
Hold down TUNE + or – until the frequency digits begin to change in the display.

The player automatically scans the radio frequencies and stops when it finds a clear station.

If you can't tune in a station, press the button repeatedly to change the frequency step by step.

Indicates an FM stereo broadcast
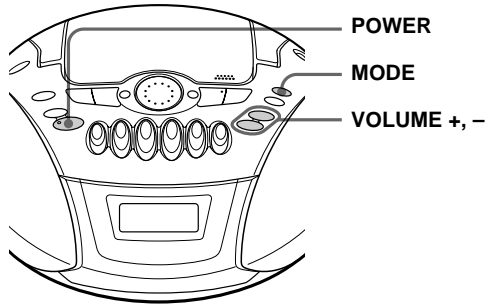
ST
$$FM\ 89.2$$

Use these buttons for additional operations
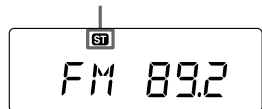

POWER

MODE

VOLUME +, –

To	Press
adjust the volume	VOLUME +, – (VOL +, – on the remote)
turn on/off the radio	POWER

To improve broadcast reception

Reorient the antenna for FM. Reorient the player itself for AM.
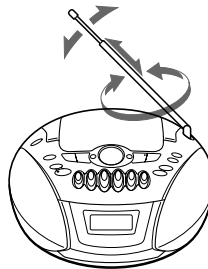
for FM   **for AM**
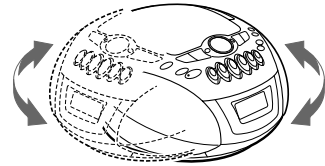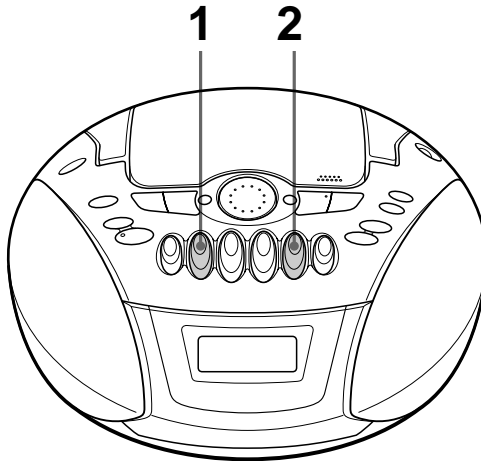
7

Playing a tape

1   2

Connect the supplied AC power cord (see page 24).

1

Press ■▲ to open the tape compartment and insert a recorded tape. Use TYPE I (normal) tape only. Close the compartment.

With the side you want to play facing you
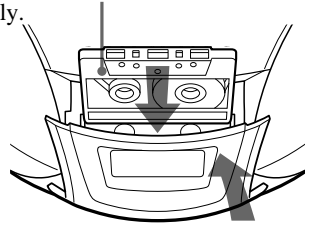
2
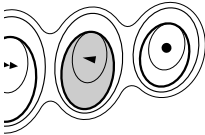
Press ◄.

The player turns on (direct power-on) and starts playing.

Display
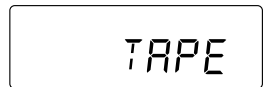
TAPE

Use these buttons for additional operations

POWER

VOLUME +, –

◄◄, ►►

■▲

Ⅱ

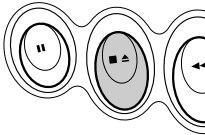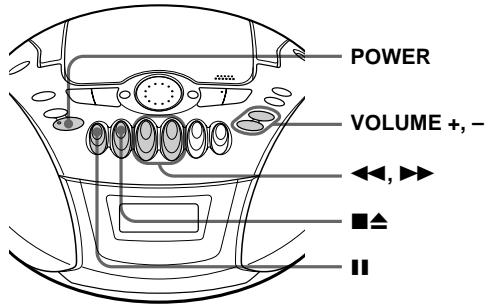| To	Press
adjust the volume	VOLUME +, – (VOL +, – on the remote)
stop playback	■▲
fast-forward or rewind the tape	◄◄ or ►►
pause playback	Ⅱ Press the button again to resume play after pause.
eject the cassette	■▲
turn on/off the player	POWER

9

Recording on a tape
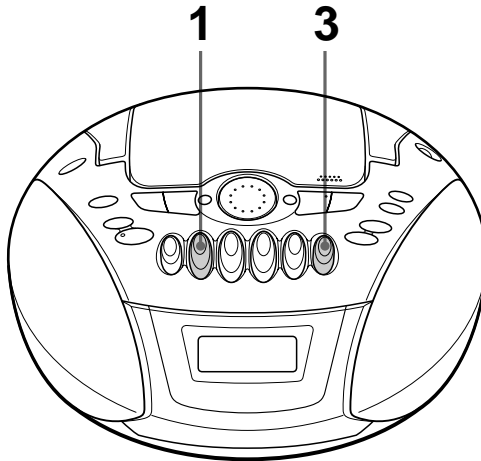
Connect the supplied AC power cord (see page 24).

1
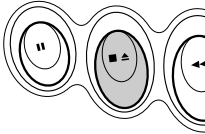
Press ■▲ to open the tape compartment and insert a blank tape. Use TYPE I (normal) tape only.

With the side you want to record on facing you
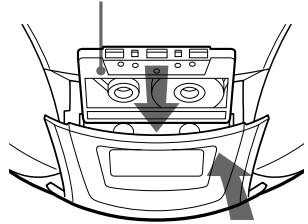
2
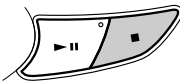
Select the program source you want to record.

To record from the CD player, insert a CD (see page 4) and press ■ on the CD section.

Display

$$13 \quad 65:27$$

RADIO
BAND
AUTO PRESET
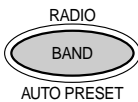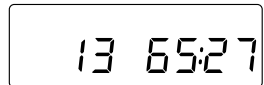
To record from the radio, tune in the station you want (see page 6).

$$\text{ST}$$
$$FM \quad 89.2$$
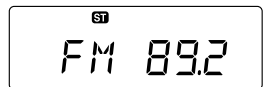
3
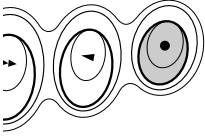
Press ● to start recording
(◀ is depressed automatically).

Use these buttons for additional operations

POWER

MODE

◀

■▲

II

Tips

- Adjusting the volume or the audio emphasis (see page 18) will not affect the recording level.
- If the AM program makes a whistling sound after you've pressed ● in step 3, press MODE to select the position of ISS (Interference Suppress Switch) that decreases the noise the most.
- For the best results, use the AC power as a power source.
- To erase a recording, proceed as follows:
  1 Insert the tape whose recording you want to erase.
  2 Press II.
  3 Press ◀.
  4 Press ●.
  5 Press II.

To	Press
stop recording	■▲
pause recording	II Press the button again to resume recording.
turn on/off the player	POWER

11

Using the display

You can check information about the CD using the display.
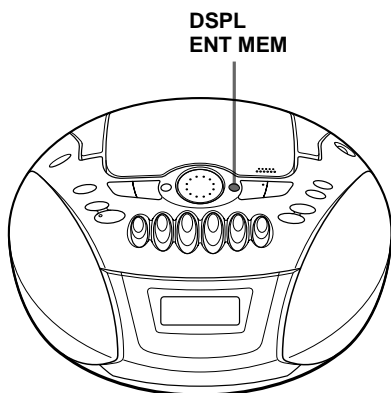
**DSPL
ENT MEM**

Checking the total track number and playing time

Press DSPL•ENT MEM in stop mode.

Total playing time
Total track number

$$13 \quad 65{:}27$$
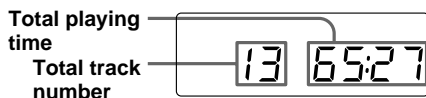
Checking the remaining time

Press DSPL•ENT MEM while playing a CD.

To display	Press DSPL• ENT MEM
the current track number and remaining time on the current track*	once
the number of tracks left and remaining time on the CD	twice
the current track number and playing time	three times

* For a track whose number is more than 20, the remaining time appears as "– –:– –".

Locating a specific track

You can quickly locate any track on a CD using the number buttons on the remote.

You can also find a specific point in a track while playing a CD.

Number buttons

⏮, ⏭
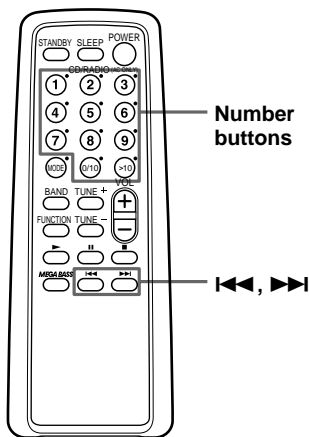
To locate	Press
a specific track directly	the number button of the track.
a point while listening to the sound	▶▶I (forward) or I◀◀ (backward) while playing and hold down until you find the point. (On the player, use ▶▶ or ◀◀).
a point while observing the display	▶▶I (forward) or I◀◀ (backward) in pause and hold down until you find the point. (On the player, use ▶▶ or ◀◀).

Note

You cannot locate a specific track if "SHUF" or "PGM" is lit in the display. Turn off the indication by pressing ■.

Tip

When you locate a track numbered over 10, press >10 first, then the corresponding number buttons.
Example:To play track number 23, press >10 first, then 2 and 3.

12

Playing tracks repeatedly (Repeat Play)

You can play tracks repeatedly in normal, shuffle or program play modes (see page 14).

►II   ■

Jog dial   MODE

1 Press ■.

"Cd" appears in the display.

2 Proceed as follows.

To repeat	Do this
a single track	1 Press MODE until "REPEAT 1" appears. 2 Turn the jog dial to select the track that you want to repeat. 3 Press ►II.
all the tracks	1 Press MODE until "REPEAT ALL" appears. 2 Press ►II.
tracks in random order	1 Press MODE until "SHUF REPEAT" appears. 2 Press ►II.
programed tracks	1 Press MODE until "PGM REPEAT" appears. 2 Program tracks (see step 3 on page 14). 3 Press ►II.

To cancel Repeat Play

Press MODE until "REPEAT" disappears from the display.

On the remote

• Use ► instead of ►II.
• When you've selected "REPEAT 1", select the track by pressing the number buttons.

13

Playing tracks in random order (Shuffle Play)

You can play tracks in random order.

►II   ■   MODE
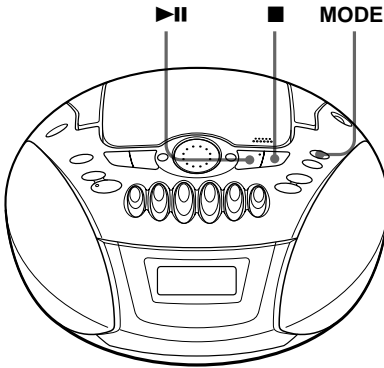
1 Press ■.
"Cd" appears in the display.

2 Press MODE until "SHUF" appears in the display.

3 Press ►II to start shuffle play.

To cancel Shuffle Play
Press MODE until "SHUF" disappears from the display.

On the remote
Use ► instead of ►II.

Creating your own program (Program Play)

You can arrange the playing order of up to 20 tracks on a CD.

DSPL
ENT MEM   MODE
Jog dial   ►II   ■
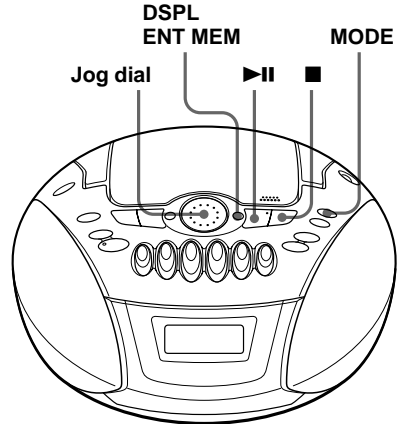
1 Press ■.
"Cd" appears in the display.

2 Press MODE until "PGM" appears in the display.

3 Turn the jog dial to select the track you want to program, and press DSPL•ENT MEM.
Repeat this step.

Programed track   Playing order

4 Press ►II to start program play.

14

On the remote

1 Press ■.
2 Press MODE until "PGM" appears in the display.
3 Press the number buttons for the tracks you want to program in the order you want.
4 Press ▶.

To cancel Program Play

Press MODE until "PGM" disappears from the display.

To check the order of tracks before play

Press DSPL•ENT MEM.

Every time you press the button, the track number appears in the programed order.

To change the current program

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

Tips

• You can play the same program again, since the program is saved until you open the CD compartment.
• You can record your own program. After you've created the program, insert a blank tape and press ● to start recording.

15

Presetting radio stations

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

RADIO BAND
AUTO PRESET

Jog dial
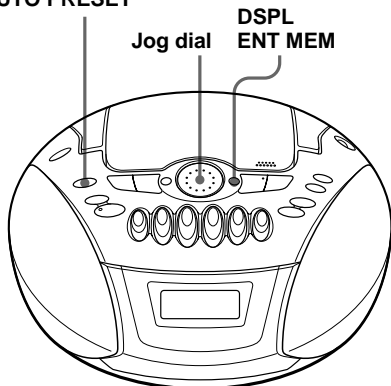
DSPL
ENT MEM

1 Press RADIO BAND•AUTO PRESET to select the band.

2 Hold down RADIO BAND•AUTO PRESET for 2 seconds until "AUTO" appears in the display.

3 Press DSPL•ENT MEM.
The stations are stored in memory from the lower frequencies to the higher ones.

If a station cannot be preset automatically

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

1 Press RADIO BAND•AUTO PRESET to select the band.

2 Tune in a station you want.

3 Hold down DSPL•ENT MEM for 2 seconds.

4 Select the preset number you want to preset the new station on by turning the jog dial.

5 Press DSPL•ENT MEM.
The new station replaces the old one.

On the remote

1 Press BAND until the band you want appears in the display.

2 Press TUNE + or – until you tune in the station you want.

3 Hold down the number button that you want to preset the new station on for 2 seconds.
To select the preset number over 10, press >10 first, then the corresponding number buttons.
You need to hold down the last number button to enter for about 2 seconds. (Example: To select 12, press >10 and 1 first, then hold down 2 for about 2 seconds.)

16

Playing preset radio stations

Once you've preset the stations, use the jog dial on the player or the number buttons on the remote to tune in to your favorite stations.

**RADIO BAND
AUTO PRESET**   **Jog dial**
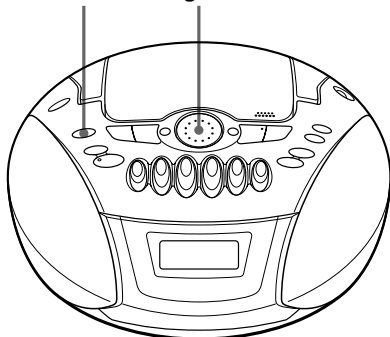
1 Press RADIO BAND•AUTO PRESET to select the band.

2 Turn the jog dial to tune in the stored station.

On the remote

1 Press BAND until the band you want appears in the display.

2 Press the number button to tune in a stored station.

To tune in a preset station over 10, press >10 first, then the corresponding number buttons. (Example: To tune in a preset station 12, press >10 and 1 first , and then press 2.)

17

Selecting the audio emphasis (MEGA BASS)

You can adjust the audio emphasis of the sound you are listening to.
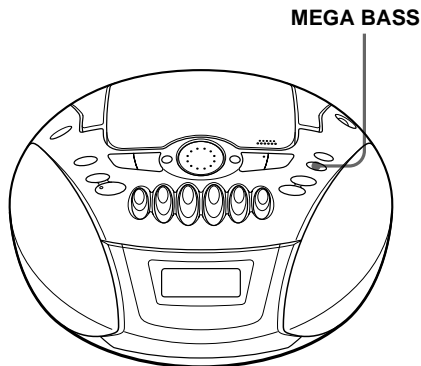
MEGA BASS

Reinforcing the bass sound

Press MEGA BASS.

"MEGA BASS" appears in the display.

To return to normal sound, press the button again.

Setting the clock

"– –:– –" indication appears in the display until you set the clock.

MENU   **DSPL**
ALARM   **Jog dial**   **ENT MEM**
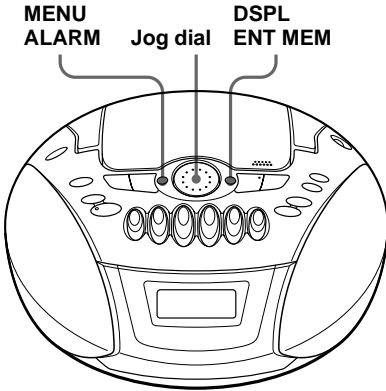
Before you set the clock, connect the power source (see page 24).

1 Press MENU•ALARM until "CLOCK" appears in the display, then press DSPL•ENT MEM.
The hour digit flashes.
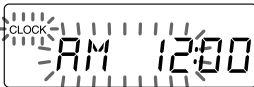
2 Turn the jog dial to set the current hour. Then press DSPL•ENT MEM.
The minute digits flash. Set the minutes by turning the jog dial until the correct minute is displayed.
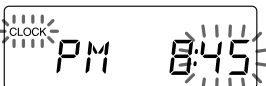
3 Press DSPL•ENT MEM.
The clock starts from 00 seconds.

Tip
The time display system: 12-hour system
AM 12:00 = midnight
PM 12:00 = noon

19

Waking up to music

You can wake up to music or a radio program at a preset time. Make sure you have set the clock ("Setting the clock" on page 19).

```
        MENU
        ALARM            DSPL
STANDBY      Jog dial  ENT MEM
```
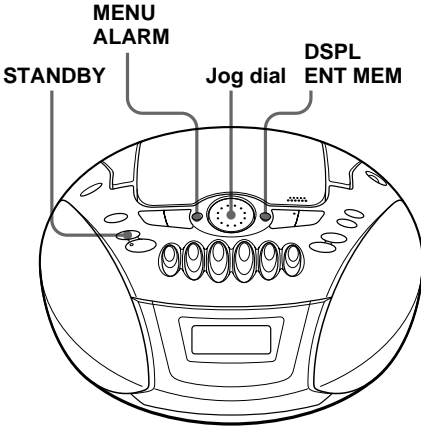
Before you begin, make sure the ⏱ (clock) indication is not lit in the display. If it is lit, press STANDBY.

1 Prepare the music source you want to play.

To play	Do this
the radio	Tune in a station
a CD	Insert a CD

2 Press MENU•ALARM until "TIMER" appears in the display, then press DSPL•ENT MEM.
The ⏱ (clock) and the music source ("Cd" or "RAdIO") flash.

3 Select the music source ("Cd" or "RAdIO") by turning the jog dial, then press DSPL•ENT MEM.

4 Set the timer to the hour you want the music to start by turning the jog dial, then press DSPL•ENT MEM.

```
   ⏱  TIMER
   ON   AM    6:15
```
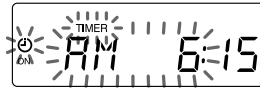
Set the minutes, then press DSPL•ENT MEM.

5 Set the timer to the hour and the minutes you want the music to go off. (Do as step 4.)

6 Turn the jog dial to set the volume, then press DSPL•ENT MEM.

```
   ⏱  TIMER
        VOL 2
```
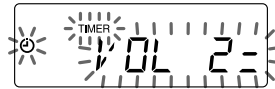
7 Press STANDBY.
The ⏱ indication lights up and the power goes off.
At the preset time, the power will go on, and the music will play. Then the power will go off at the preset time, and the player will enter into the standby mode.

To check/change when the playback will start
Press MENU•ALARM until "TIMER" appears in the display, then DSPL•ENT MEM. Each time you press DSPL•ENT MEM, a stored setting is displayed in the set order. To change the setting, display the setting you want to change and re-enter it.

To use the player before a timer playback starts

Just turn on the player, and then you can use it.

If you turn off the player before the preset time, timer playback will start at the preset time.

In case of the radio, however, if you listen to the station which is different from the one you tuned in step 1 on page 20, you will hear that station at the preset time. Make sure to tune in the station you want to listen to before you turn off the player.

To stop play

Press POWER to turn off the power.

Notes

• When you press STANDBY in step 7, make sure that ◀ or ● button of the tape player is not pressed.
• When you press ◀ or ● button of the tape player in the timer mode:
  If the tape length of one side is longer than the set time, the player will be turned off at the end of the tape, not at the set time.

Tips

• To exit the standby mode, press STANDBY to make ⏱ disappear from the display.
• The preset settings remain until you reset them.

Falling asleep to music

You can set the player to turn off automatically after 10, 20, 30, 60, 90, and 120 minutes, allowing you to fall asleep while listening to music.

```
MENU          DSPL
ALARM   Jog dial   ENT MEM
```
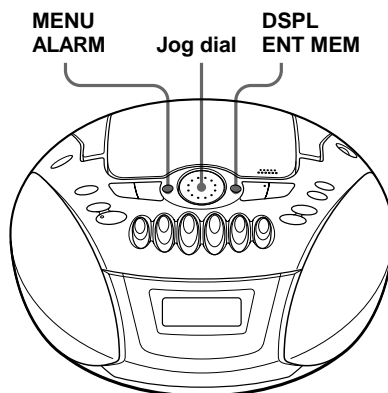

1 Play the music source you want.

2 Press MENU•ALARM until "SLEEP" appears in the display, and press DSPL•ENT MEM.

3 Turn the jog dial to select the minutes until the player goes off automatically.
   Each time you turn the jog dial, the indication changes as follows:
   "60" → "90" → "120" → "OFF" → "10" → "20" → "30."

```
┌──────────────┐
│    SLEEP     │
│     60       │
└──────────────┘
```

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Falling asleep to music (continued)

To cancel the sleep function
Press POWER to turn off the power.

Note
When you are playing a tape using this function: If the tape length of one side is longer than the set time, the player will not go off until the tape reaches the end.

Tips
• You can fall asleep and wake up to different music. Set the waking up timer first (see page 20), turn on the power, and then set the sleeping timer. However, you cannot store different radio stations.
• You can set different volume for the waking up timer and the sleeping timer. For instance, you can sleep at lower volume and wake up at higher volume.

Using the countdown timer

You can set the player to sound music or beep after a preset period of time, which is useful as a kitchen timer, etc.

MENU ALARM   **Jog dial**   **DSPL ENT MEM**
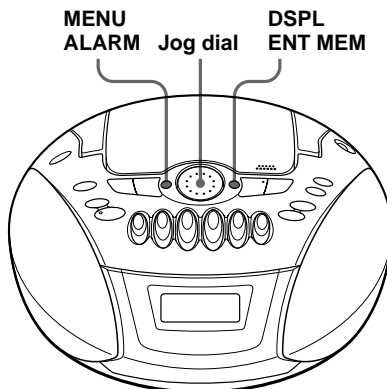
1   Press MENU•ALARM for 2 seconds until "ALARM" appears in the display.

2   Turn the jog dial to display the time (OFF, 1 to 60 minutes) for the alarm and press DSPL•ENT MEM.

$$LO \quad \overset{ALARM}{10:00}$$

3   Turn the jog dial to select the volume of the sound and press DSPL•ENT MEM.

Display	Volume
LO	low
HI	high

4 Turn the jog dial to select the sound for the alarm by and press DSPL•ENT MEM.

Display	Sound for alarm
bEEP	beep
MUSIC	"La primavera (Spring)" from "Le Quattro Stagioni (The Four Seasons)" by Vivaldi

5 Press DSPL•ENT MEM to turn on the countdown timer.

The countdown timer starts to count down the time.

After the preset period of time, the alarm will sound for about 20 seconds.

To stop the alarm

Press MENU•ALARM.

Tip

Because the settings are stored, you can turn on the countdown timer by pressing MENU•ALARM for about 2 seconds and then DSPL•ENT MEM. Be sure that "ALARM" appears in the display.

Choosing the power sources

You can use the AC power or batteries as a power source.

1 3 Battery compartment　　**AC IN**

2 to a wall outlet
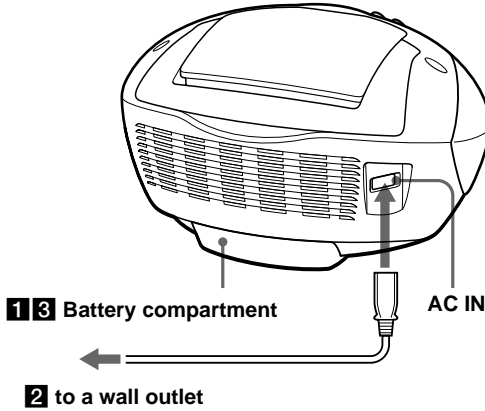
1 Inserting the back-up batteries

Insert three size AA (R6) batteries (not supplied) into the battery compartment. These batteries work to save the memory data.
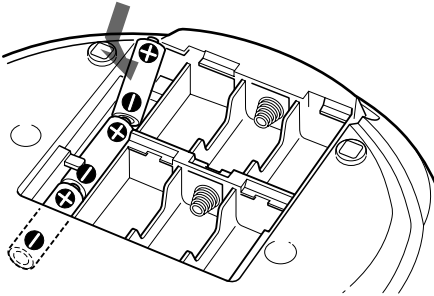
Replacing batteries

Take out the batteries as illustrated.
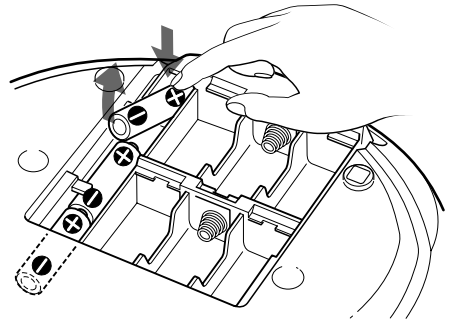
Note

Before you replace the batteries, be sure to take out the CD from the player.

Tip

When the AC power cord is disconnected and the batteries for the player are not inserted (but the back-up batteries are inserted), the time display on the display window becomes dim to prevent battery exhaustion.

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2 Connecting the AC power cord

Insert one end of the supplied AC power cord to the AC IN socket located at the rear of the player, and the other end to the wall outlet.

3 Inserting batteries into the remote
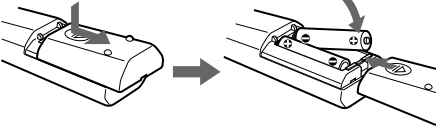
Insert two size AA (R6) batteries (not supplied)

Replacing batteries

With normal use, the batteries should last for about six months. When the remote no longer operates the player, replace all the batteries with new ones.

4 Using the player on batteries

Insert six size C (R14) batteries (not supplied) into the battery compartment.

To use the player on batteries, disconnect the AC power cord from the player.
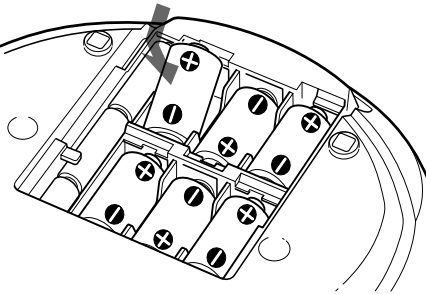
Replacing batteries

Replace the batteries when the OPR/BATT indicator dims or when the player stops operating. Replace all the batteries with new ones.

Notes

• Before you replace the batteries, be sure to take out the CD from the player.
• When you operate the player on the batteries, you cannot turn on the player with remote.

Tip

When you operate the player on batteries, replace the back-up batteries when the time display dims or when you cannot operate the timer. Replace all the batteries with new ones. With normal use, the back-up batteries should last for about six months. To save the memory data, replace the batteries with the AC power cord connected.

Setting Up

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Precautions

On safety

- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the player, unplug the player, 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 player. Attempting to do so may damage the player. Do not use such discs.

On power sources

- For AC operation, use the supplied AC power cord; do not use any other type.
- The player is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the player itself has been turned off.
- Unplug the player from the wall outlet when it is not be used for an extended period of time.
- For battery operation, use six size C (R14) batteries.
- When the batteries are not to be used, remove them to avoid damage that can be caused by battery leakage or corrosion.
- The nameplate indicating operating voltage, power consumption, etc. is located at the bottom.

On placement

- Do not leave the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place the player on an inclined or unstable place.
- Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the player to operate properly and prolong the life of its components.
- If the player is left in a car parked in the sun, be sure to choose a location in the car where the player will not be subjected to the direct rays of the sun.
- Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or spring-wound watches away from the player to prevent possible damage from the magnet.

On operation

- If the player 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 player will not operate properly. In this case, remove the CD and wait about an hour for the moisture to evaporate.
- If the player has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a cassette.

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

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Notes on CDs

- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.

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

If there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.

Notes on cassettes

- Break off the cassette tab from side A or B to prevent accidental recording. If you want to reuse the tape for recording, cover the broken tab with adhesive tape.

Side A

Tab for side A

Tab for side B

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

Troubleshooting

General

The power is not on.
- Connect the AC power cord to the AC IN socket and a wall outlet securely.
- Make sure the batteries are inserted correctly.
- Replace all the batteries with new ones if they are weak.
- You cannot turn on the player with the remote when you operate the player on batteries.

There is no audio.
- Unplug the headphones when listening through speakers.

The power is turned off abruptly.
- Replace all the batteries with new ones.

Unusual sound is heard.
The sound is noisy, weak or has poor quality.
- Replace all the batteries with new ones if they are weak.

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

CD Player

"no diSC" lights in the display even when a CD is in place.
- Place the CD with the label surface up.
- The CD-R/CD-RW was not finalized. Finalize the CD-R/CD-RW with the recording device.
- There is a problem with the quality of the CD-R/CD-RW, recording device, or application software.

The CD does not play.
- Place the CD with the label surface up.
- Clean the CD.
- Take out the CD and leave the CD compartment open for about an hour to dry moisture condensation.

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Troubleshooting (continued)

The sound drops out.
Noise is heard.
- Reduce the volume.
- Clean the CD, or replace it if the CD is badly damaged.
- Place the player in a location free from vibration.
- The sound may drop out or noise may be heard when using poor quality CD-Rs/CD-RWs or if there is a problem with the recording device or application software.

You cannot open/close the lid of the CD compartment.
- Place the player on a level surface and open/close the lid.

Radio

The audio is weak or has poor quality.
- Replace all the batteries with new ones if they are weak.
- Move the player away from the TV.
- If you are using the remote while listening to an AM radio, noise may be heard. This is unavoidable.

The picture of your TV becomes unstable.
- If you are listening to an FM program near the TV with an indoor antenna, move the player away from the TV.

Tape Player

The tape does not move when you press an operation button.
- Close the tape compartment securely.

The REC ● button does not function.
The tape does not play.
- Make sure the safety tab on the cassette is in place.

The tape does not erase completely.
- Clean the erasing head (see page 29).
- Replace all the batteries with new ones if they are weak.
- The source which was recorded on TYPE II (high position) or TYPE IV (metal) tape using this unit is being played. Record on TYPE I (normal) tape and play.

The tape does not record.
- Make sure the tape is inserted properly.
- Make sure the safety tab of the cassette is in place.

The audio is weak.
The audio quality is poor.
- Clean the heads, pinch roller and capstan (see page 29).
- Demagnetize the heads using a demagnetizer (see page 29).

The sound is distorted.
- The TYPE II (high position) or TYPE IV (metal) tape is being used. Use TYPE I (normal) tape only.

Timer

The timer does not operate.
- Make sure the time on the clock is correct.
- Check to see if the AC power had been cut off.
- Make sure the ⊕ (clock) indication is displayed.

Remote

The remote does not function.
- Replace all the batteries in the remote with new ones if they are weak.
- Make sure that you are pointing the remote at the remote sensor on the player.
- Remove any obstacles in the path of the remote and the player.
- Make sure the remote sensor is not exposed to strong light such as direct sunlight or fluorescent lamp light.
- Move closer to the player when using the remote.

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

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Maintenance

Cleaning the lens

If the lens becomes dirty, it may cause a skipping of sound during CD operation. Clean with a commercially available blower.

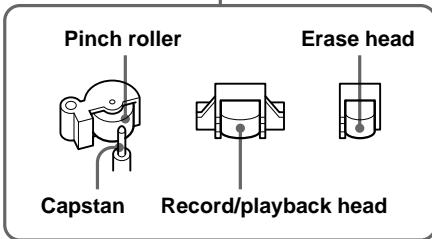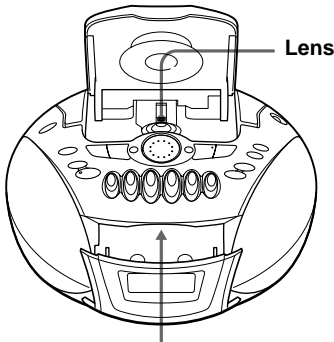### Cleaning the tape heads and tape path

Wipe the heads, the pinch roller and the capstan with a cleaning swab slightly moistened with cleaning fluid or alcohol after every 10 hours of operation for optimum playback and recording quality. To make the best possible recording, however, we recommend that you clean all surfaces over which tape travels before each recording.

Lens

Pinch roller   **Erase head**

Capstan   **Record/playback head**

After cleaning, insert a tape when the areas cleaned are completely dry.

Demagnetizing the tape heads

After 20 to 30 hours of use, enough residual magnetism will have built up on the tape heads to begin to cause loss of high frequency sound and hiss. At this time, you should demagnetize the heads and all metal parts in the tape path with a commercially available tape head demagnetizer.

Cleaning the cabinet

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

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 4-ohm loads, both channels driven from 100 - 10,000 Hz; rated 1.5 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other Specifications
CD player section

System
    Compact disc digital audio system
Laser diode properties
    Material: GaAlAs
    Wave length: 780 nm
    Emission duration: Continuous
    Laser output: Less than 44.6 µW
    (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
    200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
    2
Frequency response
    20 - 20 000 Hz +0/–1 dB
Wow and flutter
    Below measurable limit

Radio section

Frequency range
    FM: 87.6 - 108 MHz
    AM: 530 - 1 710 kHz
Antennas
    FM: Telescopic antenna
    AM: Built-in ferrite bar antenna

Cassette-corder section

Recording system
    4-track 2 channel stereo
Fast winding time
    Approx. 120 sec. with Sony cassette C-60
Frequency response
    TYPE I (normal): 70 - 13 000 Hz

General

Speaker
    Full range: 8 cm (3 ¼ in.) dia.,
    4 Ω, cone type (2)
Outputs
    Headphones jack (stereo minijack)
    For 16 - 64 Ω impedance headphones
Power output
    2 W + 2 W (at 4 Ω, 10 % harmonic distortion in AC operation)
Power requirements
    For CD radio cassette-corder:
    120 V AC, 60 Hz
    9 V DC, 6 size C (R14) batteries
    For memory back-up:
    4.5 V DC, 3 size AA (R6) batteries
    For remote control:
    3 V DC, 2 size AA (R6) batteries
Power consumption
    AC 14 W
Battery life
    For CD radio cassette-corder:

FM recording
Sony R14P: approx. 5 h
Sony alkaline LR14: approx. 20.5 h

Tape playback
Sony R14P: approx. 6 h
Sony alkaline LR14: approx. 27 h

CD playback
Sony R14P: approx. 1.5 h
Sony alkaline LR14: approx. 8 h

Dimensions
    Approx. 283 × 165 × 281 mm (w/h/d)
    (11 ¼ × 6 ½ × 11 ⅛ inches) (incl. projecting parts)
Mass
    Approx. 3.5 kg (7 lb. 11 oz) (incl. batteries)
Supplied accessories
    AC power cord (1)
    Remote control (1)

Design and specifications are subject to change without notice.

Optional accessories

Sony MDR headphones series

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Sony Corporation Printed in China   http://www.world.sony.com/