

SONY®

3-800-899-51(1)

CD Radio Cassette-Corder

Operating Instructions

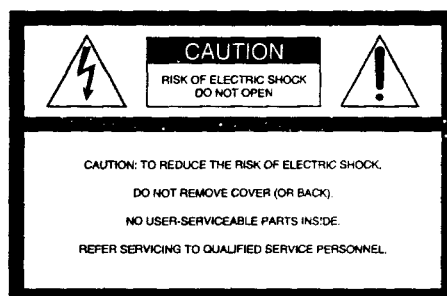
CFD-44

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Warning

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

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



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.

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 rear 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 your Sony dealer regarding this product.

Model No. CFD-44

Serial No. _____

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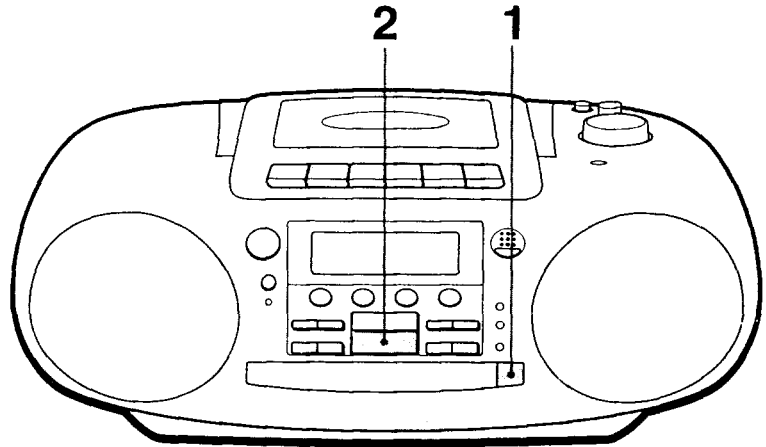
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Playing a CD

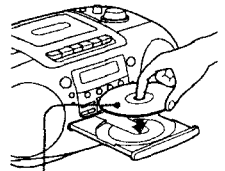


Connect the supplied AC power cord (see page 21).

1




Press  OPEN/CLOSE (direct power-on) and place the CD on the CD tray.



With the label side up

2



Press  CD PLAY.

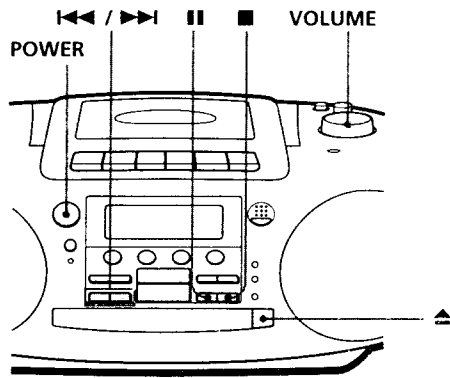
The CD tray closes and the player plays all the tracks once.

Display



Track number Playing time

Use these buttons for additional operations

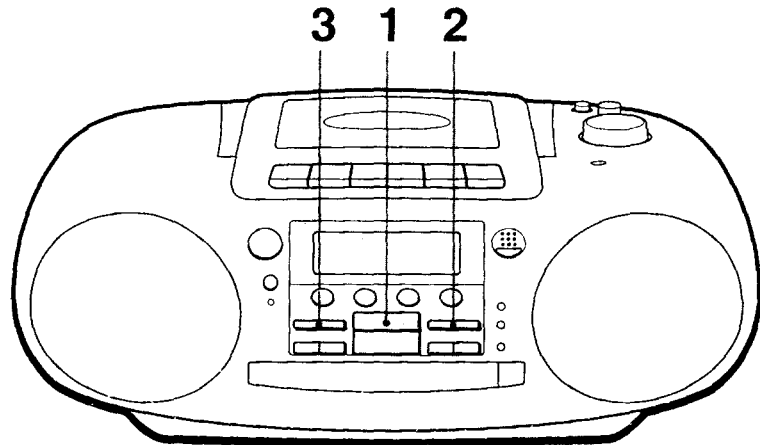


Tip

Next time you want to listen to a CD, just press **▶**. The player turns on automatically and starts playing the CD.

To	Do this
Adjust the volume	Turn VOLUME.
Stop playback	Press ■ .
Pause playback	Press II . Press the button again to resume play after pause.
Go back to the beginning of the current track.	Press I◀◀ .
Go to the next track	Press ▶▶I .
Remove the CD	Press ▲ .
Turn on/off the player	Press POWER.

Listening to the radio



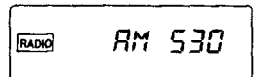
Connect the supplied AC power cord (see page 21).

1



Press RADIO (direct power-on).

Display



2



Press FM or AM to select the band you want .

3

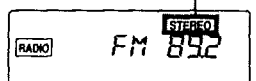


Hold down TUNING + or - until the frequency digits begin to change in the display.

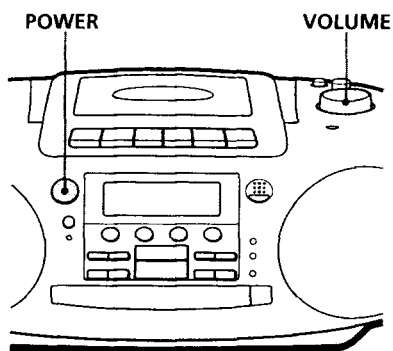
The player automatically scans the radio frequencies and stops when it finds a clear station.

If you can't tune in a station, press the button once at a time.

Indicates an FM stereo broadcast.



Use these buttons for additional operations



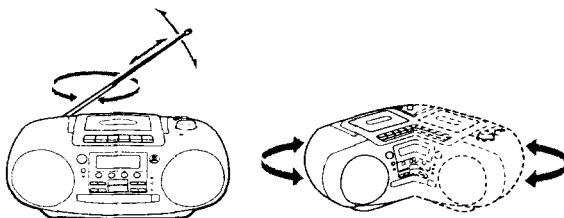
Tips

- If the FM broadcast is noisy, set the FM MODE/ISS at the rear to "MONO" and the radio will play in monaural.
- Next time you want to listen to the radio, just press the RADIO button. The player turns on automatically and starts playing the previous station.

To	Do this
Adjust the volume	Turn VOLUME .
Turn on/off the radio	Press POWER.

To improve broadcast reception

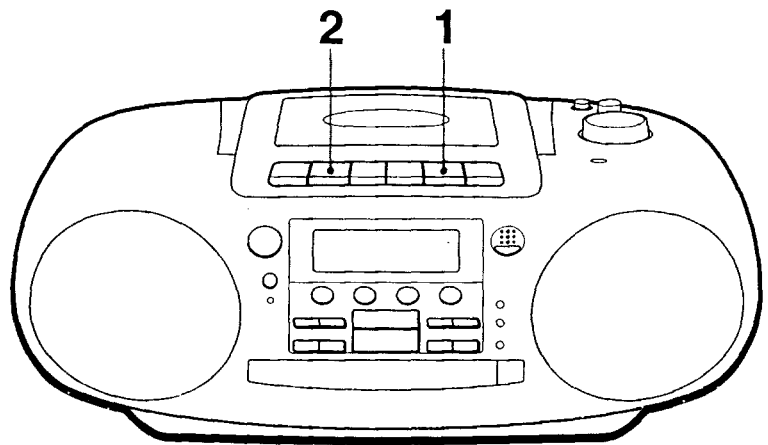
Reorient the antenna for FM. Reorient the player itself for AM.



For FM

For AM


Playing a tape



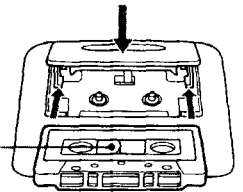
Connect the supplied AC power cord (see page 21).

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 up



2



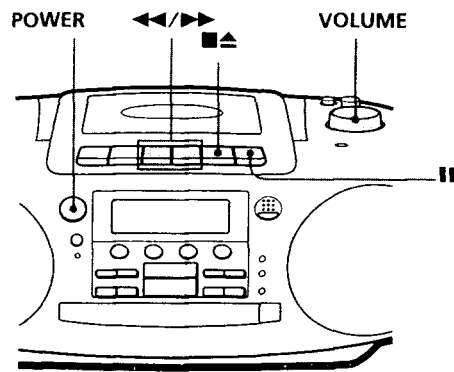
Press .

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

Display



Use these buttons for additional operations

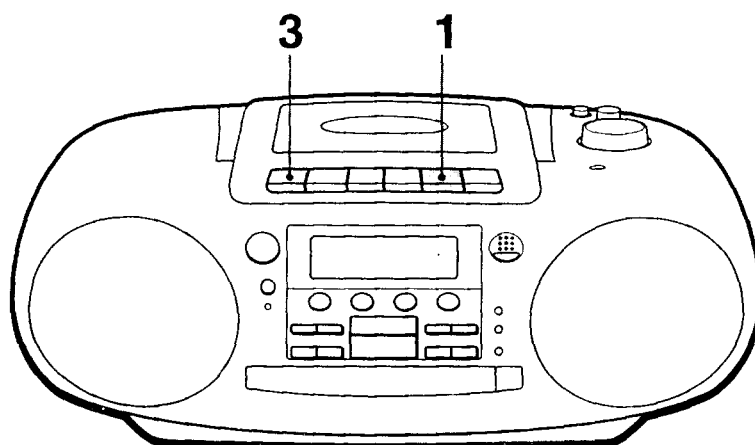


Tip

Next time you want to listen to a tape, just press ►. The player turns on automatically and starts playing the tape.

To	Do this
Adjust the volume	Turn VOLUME.
Stop playback	Press ■▲.
Fast-forward or rewind the tape	Press ►► or ◀◀.
Pause playback	Press ⏸. Press the button again to resume play after pause.
Eject the cassette	Press ■▲.
Turn on/off the player	Press POWER.

Recording on a tape



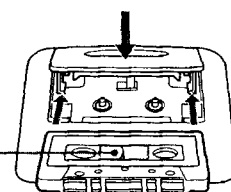
Connect the supplied AC power cord (see page 21).

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 up



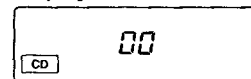
2

Select the program source you want to record.

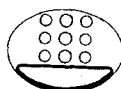
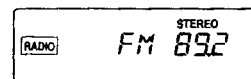


To record from the CD player, insert a CD and press ■ on the CD section (see page 4).

Display

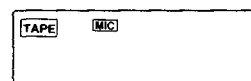


To record from the radio, press RADIO, then FM or AM, and tune in the station you want (see page 6).



MIC ON

To record from the microphone, press MIC ON to make the microphone ready for recording.

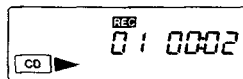


3

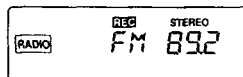


Press ● to start recording. (▶ is depressed automatically).

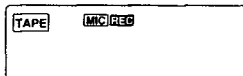
Recording from the CD



Recording from the radio



Recording from the microphone

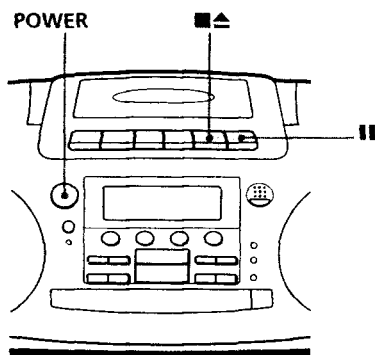


Basic Operations

Tips

- Adjusting the volume or the tone (see page 22) will not affect the recording level.
- For the best results, use the AC power as a power source for recording.
- If the AM program makes a whistling sound after you've pressed ● in step 3, set the FM MODE/ISS (Interference Suppress Switch) at the rear to the position that most decreases the noise. Normally set the switch to "2".
- To erase recording, proceed as follows:
 - 1 Insert the the tape whose recording you want to erase into the tape compartment.
 - 2 Remove CD, of any, and press ■.
 - 3 Press ●.

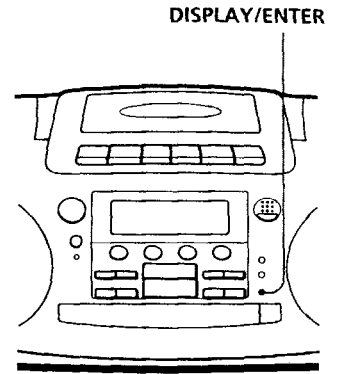
Use these buttons for additional operations



To	Press
Stop recording	■
Pause recording	 Press the button again to resume recording.
Turn on/off the player	POWER

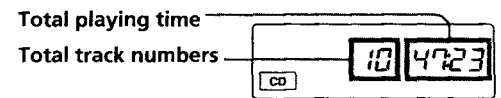
Using the display

You can check information about the CD using the display.



Checking the total track numbers and playing time

Press DISPLAY/ENTER in stop mode.



Checking the remaining time

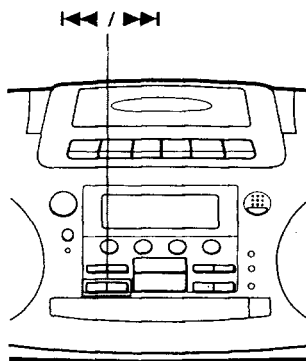
Press DISPLAY/ENTER while playing a CD.

To display	Press DISPLAY/ENTER
Remaining time on the current track*	Once
Remaining time on the CD and the number of tracks left	Twice
Playing time and the current track number	Three times

* For a track whose number is more than 21, the remaining time appears as "--:--" in the display.

Locating a specific point in a track

You can locate a specific point in a track while playing a CD using ►► or ◀◀ AMS/SEARCH.



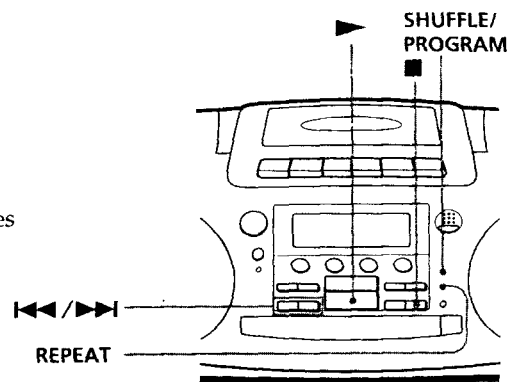
The CD Player

To locate	Press
a point while listening to the sound	►► (forward) or ◀◀ (backward) while playing and hold down until you find the point.
a point while observing display	►► (forward) or ◀◀ (backward) in pause and hold down until you find the point.

Playing tracks repeatedly

(Repeat Play)

You can play tracks repeatedly in normal, shuffle or program play modes (see pages 15 and 16).



1 Press ■.

"CD" appears in the display.

2 Select the repeat mode you want appears in the display.

To repeat	Press	Select
a single track	REPEAT	REPEAT 1
all tracks	REPEAT	REPEAT ALL
tracks in random order	SHUFFLE/ PROGRAM	SHUFFLE
programed tracks	SHUFFLE/ PROGRAM	PROGRAM

3 Do either of the following to start repeat play:

- **When you've selected REPEAT 1**, select the track by pressing ►► or ◀◀, then press ►.
- **When you've selected REPEAT ALL**, press ►.
- **When you've selected SHUFFLE**, press REPEAT, then press ►.
- **When you've selected PROGRAM**, program tracks (see step 3 on page 16) and press REPEAT, then press ►.

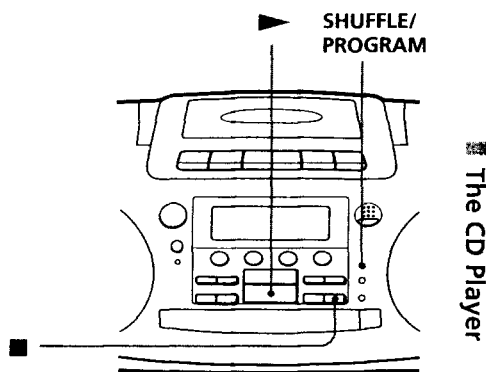
To cancel Repeat Play

Press REPEAT until no indication appears in the display.

Playing tracks in random order

(Shuffle Play)

You can play tracks on a CD in random order.



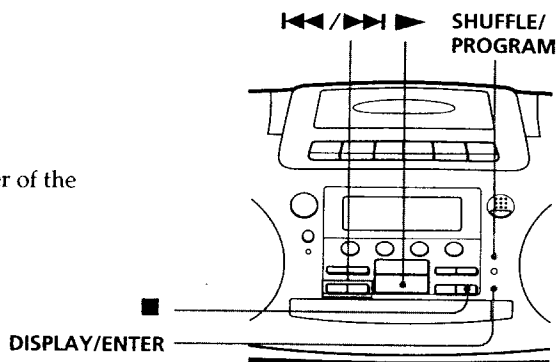
- 1 Press ■.
"CD" appears in the display.
- 2 Press SHUFFLE/PROGRAM until "SHUFFLE" appears in the display.
- 3 Press ► to start shuffle play.

To cancel Shuffle Play

Press SHUFFLE/PROGRAM until "SHUFFLE" disappears in the display.

Creating your own program (Program Play)

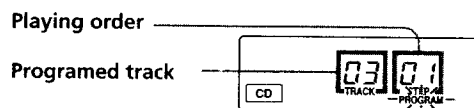
You can arrange the playing order of the tracks on a CD.



Tips

- You can play the same program again, since the program is saved until you open the CD tray or until you turn off the power.
- The current program will be erased if you open the CD tray or if you turn off the power.
- You can record your own program. After you've created the program, insert a blank tape and press ● to start recording.

- 1 Press ■.
"CD" appears in the display.
- 2 Press SHUFFLE/PROGRAM until "PROGRAM" appears in the display.
- 3 Press ►► or ◀◀ then press DISPLAY/ENTER for the tracks you want to program in the order you want. You can program up to 20 tracks.



- 4 Press ► to start program play.

To cancel Program Play

Press SHUFFLE/PROGRAM until "PROGRAM" disappears in the display.

To check the order of tracks before play

Press DISPLAY/ENTER on the player.

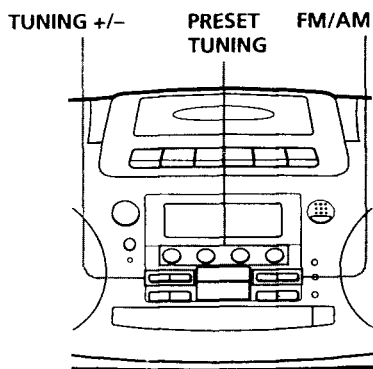
Every time you press the button, the track number appears in the programed order.

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 programming procedure.

Presetting radio stations

You can store radio stations into the player's memory. You can preset up to 8 radio stations, 4 for each band in any order.

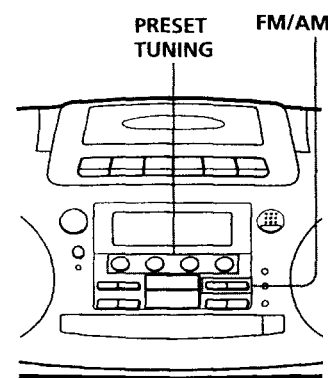


The Radio

- 1** Press FM or AM to select the band you want.
- 2** Press TUNING +/- to tune in a station you want.
- 3** Hold down the PRESET TUNING button (1 to 4) you want to preset the station for about 2 seconds.
The relevant number flashes in the display and the station is preset in the number, replacing the old one.

Playing preset radio stations

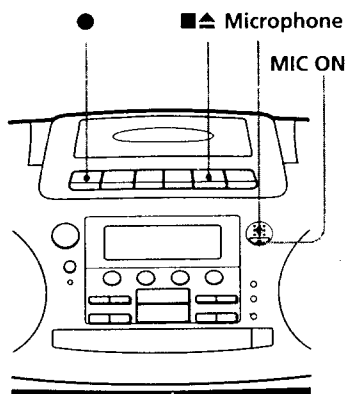
Once you've preset the stations, use PRESET TUNING (1 to 4) to tune in your favorite stations.



- 1** Press FM or AM to select the band you want.
- 2** Press PRESET TUNING (1 to 4) to tune in a stored station.

Recording through the built-in Microphone

You can record sound using the built-in microphone.

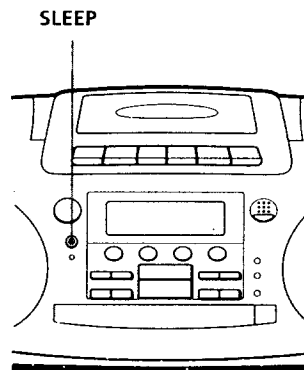


The Tape Player

- 1 Press and insert a tape for recording into the tape compartment. Use TYPE I (normal) tape only.
- 2 Turn on the power.
- 3 Press MIC ON to make the player ready for recording through the built-in microphone.
- 4 Press to start recording. (is depressed automatically.)

Falling asleep to music

You can set the player to turn off automatically after 60 minutes, allowing you to fall asleep while listening to music.



Tips

- The display window dims while the sleep timer is on.
- When you are playing a tape with more than 60 minutes of play time, the player may play for longer than 60 minutes until it reaches to the end of the tape side.
- When you are playing radio or CD, make sure that ► of the tape player is not depressed.

- 1** Play the music you want to fall asleep to: tape, radio or CD.

- 2** Press SLEEP.

"SLEEP" appears in the display. The player shuts off automatically after 60 minutes.

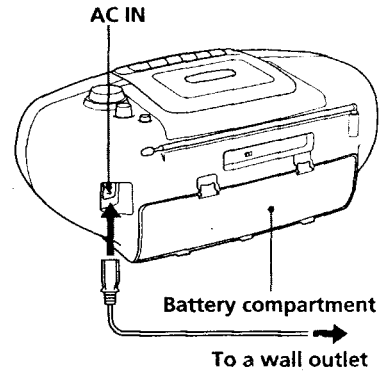
To cancel the sleep function

Press SLEEP again until "SLEEP" disappears in the display.

Choosing the power sources

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

Use the AC power source whenever you record since recording consumes much power.



The Timer/Setting Up

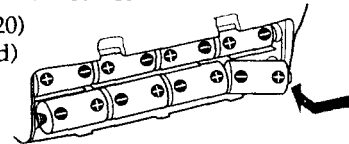
Connecting the AC power cord

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.

Using the player on batteries

Insert eight size D (R20) batteries (not supplied) into the battery compartment.

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



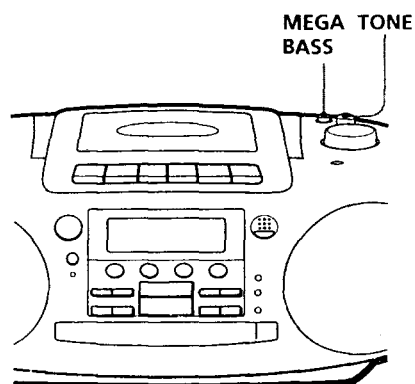
Tip

Replace the batteries when the OPR/BATT indicator dims or when the player stops operating. Replace all the batteries with new ones. Before you replace the batteries, be sure to take out the CD from the player.

Adjusting the audio emphasis

(TONE/MEGA BASS)

You can adjust the tone and reinforce the bass sound.



Adjusting the tone

Turn TONE.

Turn the control clockwise to enhance the high tone and counterclockwise to enhance the low tone.

Reinforcing the bass sound

Press MEGA BASS.

The powerful sound, emphasizing bass audio, is gained. To return to normal sound, press the button again.

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.

On power sources

- For AC operation, use the supplied AC power cord; do not use any other type.
- Unplug the player from the wall outlet when it is not to be used for an extended period of time.
- For battery operation, use eight size D (R20) 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 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 lenses 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 CD or cassette.

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

continued

Precautions (continued)

Notes on CDs

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

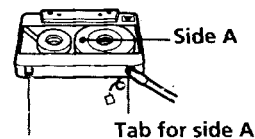


- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
- 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.



- To record on a tape with its tab broken off, cover the respective tab hole for side A or B with adhesive tape.
- The use of a cassette with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

Troubleshooting

	Symptom	Remedy
General	The power does not come on.	<ul style="list-style-type: none"> • Connect the AC power cord securely. • Make sure the batteries are inserted correctly.
	There is no audio.	<ul style="list-style-type: none"> • Make sure the display window is displaying the function you want to operate. • Adjust the volume. • Unplug the headphones when listening through speakers.
Radio	The audio is weak or has poor quality.	<ul style="list-style-type: none"> • Replace all the batteries with new ones if they are weak. • Move the player away from the TV.
	The picture of your TV becomes unstable.	<ul style="list-style-type: none"> • If you are listening to an FM program near the TV with an indoor antenna, move the player away from the TV.
CD Player	The CD does not play/"no disc" lights in the display even when a CD is in place.	<ul style="list-style-type: none"> • Make sure that the CD tray is closed. • Place the CD with the label surface up. • Clean the CD (see page 24). • Take out the CD and leave the CD tray open for about an hour to dry moisture condensation. • Make sure "CD" appears in the display.
	The sound drops out.	<ul style="list-style-type: none"> • Reduce the volume. • Clean the CD, or replace it if the CD is badly damaged • Place the player in a location free from vibration.
Tape Player	The tape does not move when you press an operation button.	<ul style="list-style-type: none"> • Close the cassette compartment securely.
	The REC ● button does not function/The tape does not play.	<ul style="list-style-type: none"> • Make sure the safety tab on the cassette is in place.
	The tape does not erase completely.	<ul style="list-style-type: none"> • Clean the erasing heads (see page 27). • Replace all the batteries with new ones if they are weak.

continued

Troubleshooting (continued)

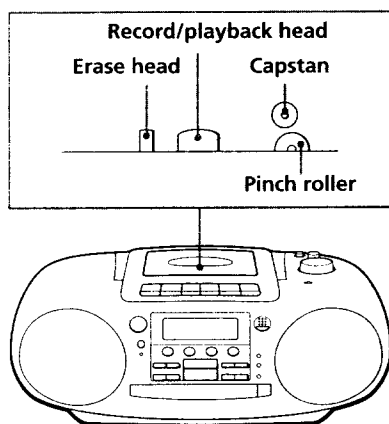
Tape Player	Symptom	Remedy
	The tape does not record.	<ul style="list-style-type: none">• Make sure the tape is inserted properly.• Make sure the safety tab of the cassette is in place.
	The audio is weak/The audio quality is poor.	<ul style="list-style-type: none">• Clean the heads, pinch roller and capstan (see page 27).• Demagnetize the heads using a demagnetizer (see page 27).
	The sound is distorted.	<ul style="list-style-type: none">• The TYPE II (high position) or TYPE IV (metal) tape is being used. Use TYPE I (normal) tape only.

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.

Maintenance

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.



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 6-ohm loads, both channel driven from 150 - 10,000 Hz; rated 4 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other Specifications

CD player section

System

Compact disc digital audio system

Laser diode properties

Material: GaAlAs

Wave length: 780 nm

Emission duration: Continuous

Laser output: Less than 44.6 μ W

(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 $\pm 1/-2$ dB

Wow and flutter

Below measurable limit

Radio section

Frequency range

FM: 87.6 - 108 MHz

AM: 531 - 1,602 kHz (Taiwan model)

530 - 1,710 kHz (Other models)

Aerials

FM: Telescopic aerial

AM: Built-in ferrite bar aerial

Cassette-corder section

Recording system

4-track 2 channel stereo

Fast winding time

Approx. 115 s (sec.) with Sony cassette C-60

Frequency response

TYPE I (normal): 70 - 10,000 Hz

General

Speaker

Full range: 10 cm dia., 3.2 ohms, cone type (2)

Outputs

Headphones jack (stereo minijack)

For 16 - 68 ohms impedance headphones

Power output (excluding US model)

4.5 W + 4.5 W (at 10 % harmonic distortion in DC operation)

Power requirements

120 V AC, 60 Hz

12 V DC, 8 size D (R20) batteries

Power consumption

AC 25 W

Battery life

FM recording

Sony R20P: approx. 9 h

Sony alkaline LR20: approx. 18 h

Tape playback

Sony R20P: approx. 5 h

Sony alkaline LR20: approx. 9 h

CD playback

Sony R20P: approx. 3.5 h

Sony alkaline LR20: approx. 7 h

Dimensions

Approx. 400 \times 173 \times 244 mm (w/h/d)

(15 $\frac{3}{4}$ \times 6 $\frac{7}{8}$ \times 9 $\frac{5}{8}$ inches) (incl. projecting parts)

Mass

Approx. 4 kg (8 lb. 13 oz) (incl. batteries)

Supplied accessory

AC power cord (1)

Design and specifications are subject to change without notice.

Optional accessories

Sony MDR headphones series

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