

## Troubleshooting Guide — Check the following possible causes.

	<p><b>No sound from speakers</b></p> <ul style="list-style-type: none"> <li>Improper polarity of the batteries</li> <li>Weak batteries → Replace all the batteries with new ones.</li> <li>Improper FUNCTION selector setting.</li> <li>The headphones are plugged in.</li> </ul>
	<p><b>The unit does not operate</b></p> <ul style="list-style-type: none"> <li>The disc is inserted with the labeled surface down.</li> <li>The disc compartment lid is not closed.</li> <li>Dusty or defective disc → Clean the disc with an optional cleaning cloth. Wipe the disc from the center out.</li> <li>Moisture condensation. → See "Precautions".</li> <li>Improper FUNCTION selector setting.</li> <li>When the CD operation buttons cannot be activated, turn off the unit and turn it on again.</li> </ul> <p><b>Skipping of sound in CD operation</b></p> <ul style="list-style-type: none"> <li>Dusty or defective disc → Clean the disc.</li> <li>Dirty lens → Clean the lens with a commercially available blower.</li> <li>Strong vibrations.</li> </ul>
	<p><b>No tape operation</b></p> <ul style="list-style-type: none"> <li>PAUSE button is depressed → Press again to release it.</li> </ul> <p><b>REC button cannot be depressed.</b></p> <ul style="list-style-type: none"> <li>The cassette inserted has the tabs removed. → Cover the slots.</li> </ul> <p><b>Sound drop-outs, loss of high frequencies, or excessive noise</b></p> <ul style="list-style-type: none"> <li>Dirty heads → Clean the portions illustrated below with a cleaning tip slightly moistened with cleaning fluid or alcohol.</li> </ul> <p><b>Recording or playback cannot be made or there is a decrease in sound level.</b></p> <ul style="list-style-type: none"> <li>Dirty heads → Clean the heads.</li> <li>Improper FUNCTION selector setting.</li> </ul> <p><b>Unsatisfactory erasing</b></p> <ul style="list-style-type: none"> <li>Dirty erase head → Clean the head.</li> </ul>

**SONY**

CD Radio Cassette-Corder

# CFD-50

## Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

## Owner's Record

The model number is located at the bottom and 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-50 Serial No. \_\_\_\_\_

## WARNING

To prevent fire or shock hazard, do not expose the unit 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.

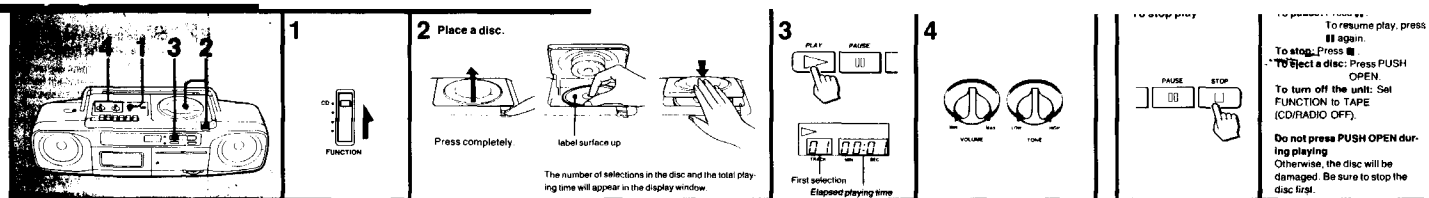
## INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B Computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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 the receiving antenna.  
Relocate the equipment with respect to the receiver.  
Move the equipment away from the receiver.  
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.  
If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:  
"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Stock No. 004-000-00345-4.

## For the customers in Canada

This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.



## Information Display

**During playing**

Selection Number being played

Elapsed playing time

While CD player is set in pause

Pause indicator appears

**Between selections**

Remaining time for the next selection is displayed.

To display remaining time of the disc being played  
Press REMAIN/ENTER.

Remaining number of selections

Total remaining time of disc

For normal display, press REMAIN/ENTER again.

**Note**

- Even if REMAIN/ENTER button is pressed, remaining time of the disc being played cannot be displayed when it has more than 100 selections or its remaining time is more than 100 minutes.
- During shuffle or program play, remaining time of the disc is not displayed even if REMAIN/ENTER is pressed.

**Locating a Particular Selection (AMS\*)**

To locate the beginning of the current selection

Press once

To locate the next selection

Press once

To go back at high speed

Keep pressed

To go ahead at high speed

Keep pressed

\* AMS is the abbreviation of Automatic Music Sensor.

## Notes on the AMS function

- The player pauses at the beginning of the located selection when you press **AMS** or **AMS** in the pause mode.
- If you press **AMS** repeatedly, the player locates the previous selection.
- If you press **AMS** repeatedly, the player locates the next selections and stops at the last selection.

## Notes on compact discs

**This way**

Handle the disc by its edge

**Not this way**

Do not touch the surface

**Not this way**

Do not stick paper or tape nor write anything on the surface

## Selecting Various Playing Modes

Each time PLAY MODE is pressed, play mode changes as follows. To stop the disc, press **STOP**. Operate while listening to the disc. However, select INTRO scan play when disc is not being played.

Play mode	Button to be pressed	Front display window
PLAY MODE	1 Press PLAY MODE once when disc is not being played.	16 55:32
PLAY MODE	2 Press <b>▶</b> Scanning starts from the first selection.	01 00:01
PLAY MODE	Press PLAY MODE once more while listening to the desired selection.	05 01:17
PLAY MODE	Press <b>◀▶</b> / <b>▶▶</b> for another selection.	05 01:17
PLAY MODE	Press PLAY MODE once more. When play reaches the end of the disc, it restarts from the first selection.	05 01:17
PLAY MODE	Press PLAY MODE once more.	05 01:17
PLAY MODE	Press PLAY MODE once more.	05 01:17

**During REPEAT SHUFFLE play**

To locate the beginning of the current selection  
Press **AMS**

To locate the next selection  
Press **AMS**

You cannot locate a previous selection even if you keep pressing **AMS**.

**1** Press PLAY MODE once more.

PLAY MODE

**2** Choose the desired selection with **◀▶** or **▶▶**.

5th Selection: Program 1

**3** Press REMAIN/ENTER

REMAIN/ENTER

The selection is stored

Program 2

**4** Repeat steps 1 and 2. (Up to 16 selections)

**5** Press **▶**

PLAY

disappears and play starts.

**6** Press PLAY MODE once more.

PLAY MODE

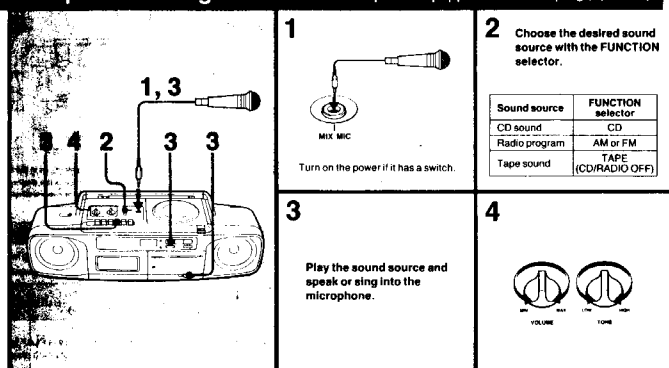
**7** Repeat step 2 to 5 above.

To return to normal play press PLAY MODE once more.

When you open the disc holder or you press **STOP**, All programmed selections are cleared.

If another selection is stored after 16 selections have been stored. The first selection will be cleared and the new one will be stored in its place. The program will be cleared when you press **STOP**.

## Microphone mixing — Use a monaural microphone equipped with a miniplug (optional).



To record the mixed sound  
insert a cassette and only press **●**. You can record the sound of the microphone mixed with a CD or radio program.

## Specifications

### AUDIO POWER SPECIFICATIONS

#### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 3.2-ohm loads, both channels driven from 150-15,000 Hz: rated 2.3 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  
Material GaAlAs  
Wavelength 780 nm  
Emission duration Continuous  
Laser output: less than 44.6  $\mu$ 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  
20—20,000 Hz  $\pm$  1 dB  
Below measurable limit

#### Radio section

Frequency range FM 87.6—108 MHz  
AM 530—1,710 kHz  
F.M. Telescopic antenna  
AM Built-in ferrite bar antenna

#### Tape recorder section and general

Recording system 4-track 2-channel stereo  
Frequency response 70—10,000 Hz  
(with TYPE I (NORMAL) cassette)  
Speakers Full-range speakers 10 cm dia. cone type  
For Canada model  
Full-range speakers 2.3 W + 2.3 W (at 3.2 ohms, 10% harmonic distortion)  
Inputs Mixing microphone input jack (mini-jack)  
Sensitivity 2.5 mV  
For low impedance microphone  
Outputs Headphones jack (stereo minijack)  
For 16—68 ohms impedance headphones

Power requirements 120 V AC, 60 Hz  
DC 9 V, 6 size D (R20) batteries  
Power consumption AC 25 W  
Battery life

	FM recording	Playback
Sony SUM-1 (NS)	approx. 11	approx. 8
Sony Alkaline AMT (N)	approx. 17	approx. 12

Dimensions 590  $\times$  172  $\times$  200 mm (w/h/d)  
(23 1/4  $\times$  6 7/8  $\times$  7 7/8 inches)  
incl. projecting parts and controls

Weight Approx. 4.6 kg, incl. batteries  
(Approx. 10 lb 2 oz)

Supplied accessories AC power cord (1)

Design and specifications subject to change without notice.

### OPTIONAL ACCESSORIES

Sony "MDR" headphone series  
Sony "Dynamic microphone" series  
Head demagnetizer HC-5C  
CD cleaner XP-CD1, XP-CD3, XP-CD4

## Precautions

### Notes on power sources

- For battery operation, use six size D (R20) batteries.
- For AC operation (120 V AC only), use the supplied AC power cord; do not use any other type.
- When the internal batteries will not be used, remove them to avoid damage caused by battery leakage and corrosion.
- Unplug the unit from the wall outlet when it is not to be used for an extended period of time.

### Notes on handling the unit

- 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.
- 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 lenses inside the CD player section. Should this occur, the player will not operate properly. In this case, remove the disc and wait about an hour for the moisture to evaporate.
- Avoid exposure to temperature extremes, direct sunlight, dust, or mechanical shock.
- If the unit is left in a car parked in the sun, be sure to choose a location in the car where the unit will not be subject to the direct rays of the sun.
- Should any solid object or liquid fall into the unit, unplug the unit, remove the batteries, and have the unit checked by qualified personnel before operating it any further.
- Be careful not to lift the handle while the telescopic antenna is in a raised position.
- After long storage, set the unit in playback mode and warm it up for a few minutes before inserting a cassette.
- Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the proper operation of the unit and to 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.

### Note on cassettes longer than 90 minutes

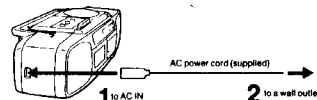
The use of those cassettes is not recommended except for long continuous recording or playback.

If you have any question or problem concerning your unit, please consult your nearest Sony dealer.

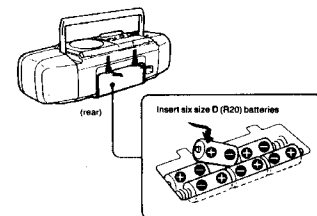
## Power Sources

— The OPR/BATT indicator lights up during operation.

### House Current



The unit cannot be operated on the internal batteries when the AC power cord is connected to the unit.



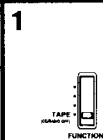
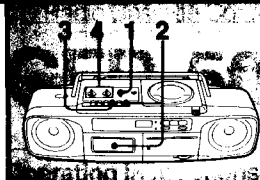
### For critical recording or disc playing

Operating the unit on AC power is recommended.

### When to replace the batteries

If the batteries become weak while the unit is in operation, the OPR/BATT indicator will glow faintly. In this case, replace all the batteries with new ones.

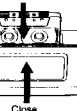
## Playing Back a Tape



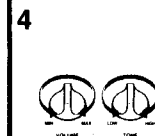
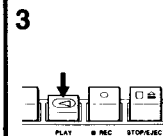
1 Insert a cassette.



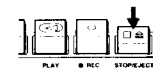
Use only TYPE I (normal) tapes.



Close



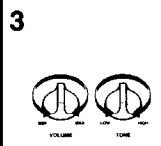
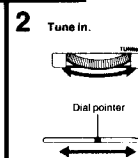
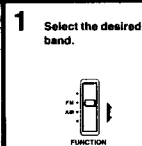
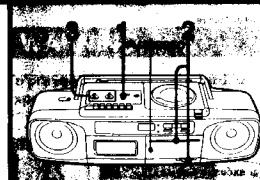
To stop playback



To pause: Press **II**.  
To release pause, press **II** again.  
To wind the tape: Press **◀** or **▶**.  
To rewind the tape: Press **◀**.

To locate a desired position  
Keep pressing **◀** or **▶** during play.  
At the desired point found by listening to the high-speed sound, release the pressed button to restart playing back.

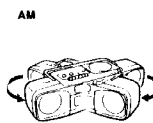
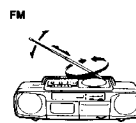
## Listening to the Radio



To turn off the radio



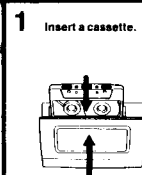
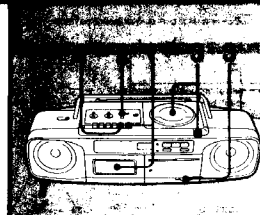
For improved reception



When an FM stereo program is tuned in  
FM STEREO indicator lights up.

If the received FM stereo is too weak  
The reception becomes monaural, and the FM STEREO indicator will go off.

## Recording — Use only a TYPE I (normal) cassette for recording.



1 Insert a cassette.



label surface up

2 From a disc



◀ is depressed automatically.

When you record from a disc, press **REC** after the number of the selections in the disc and the total playing time are displayed.  
Disc playing will automatically start from the first selection after approx. 8 seconds.

3 From the radio



To stop recording  
Press **II** of the CD player and **II** of the cassette deck.

Set FUNCTION to TAPE (CD/RADIO OFF).

On recording level  
Recording level is automatically set. Volume and tone adjustments will not affect recording level.

To record in PGM (program) mode  
1 Set FUNCTION to CD.  
2 Select PGM play. (See "Selecting Various Playing Modes")  
3 Press the **REC** button.  
Disc playing and recording will automatically start after approx. 8 seconds.

To prevent accidental erasure  
Break off the tab corresponding to the side which has been recorded on.  
Recording on that side will be protected.

