SONY®

CD Radio Cassette-Corder

Operating Instructions

CFD-ZW700
CFD-ZW705
CFD-ZW750
CFD-ZW770

©1999 by Sony Corporation

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.
```
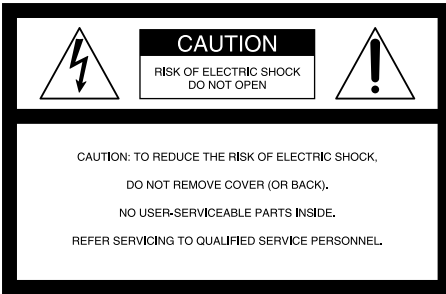
This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

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 rear of the CD radio cassette-corder and the serial number is located in the battery compartment.
Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. _____

Serial No. _____

About This Manual

The instructions in this manual are for the CFD-ZW700, CFD-ZW705, CFD-ZW750 and CFD-ZW770. Before you start reading, check your model number. The CFD-ZW770 is the model used for illustration purposes.
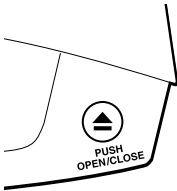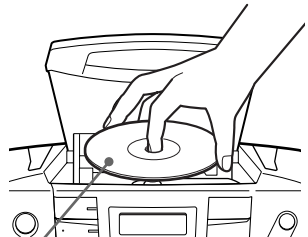
Table of contents

Playing a CD

1,2   3

For hookup instructions, see pages 25 – 27.

1

Push ▲ PUSH OPEN/CLOSE down to open the CD compartment and place the CD on the CD compartment.

PUSH
OPEN/CLOSE

With the label side up

2
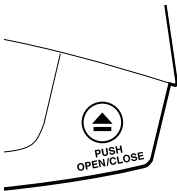
Close the lid of the CD compartment.

PUSH
OPEN/CLOSE

3

Press ▶❚❚.

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

·   ▶ ❚❚

Display

`01  00:02`

1 2 3 4 5 6 7 8 9 10 11 12
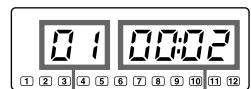
Track number Playing time

Use these buttons for additional operations

POWER   ■   ►II   ▲ PUSH OPEN/CLOSE

VOLUME +, –

I◄◄ , ►►I

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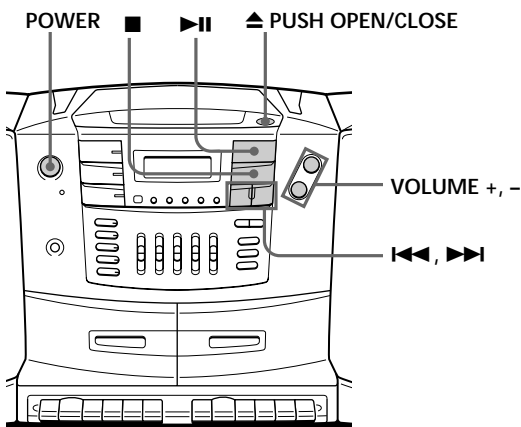
Next time you want to listen to a CD, just press ►II. The player turns on automatically and starts playing the CD.

| To	Press
adjust the volume	VOLUME +, – (VOL +, – on the remote, CFD-ZW750/ZW770 only)
stop playback	■
pause playback	►II (II on the remote, CFD-ZW750/ZW770 only) Press the button again to resume play after pause.
go to the next track	►►I
go back to the previous track	I◄◄
remove the CD	▲ PUSH OPEN/CLOSE
turn on/off the player	POWER

Listening to the radio
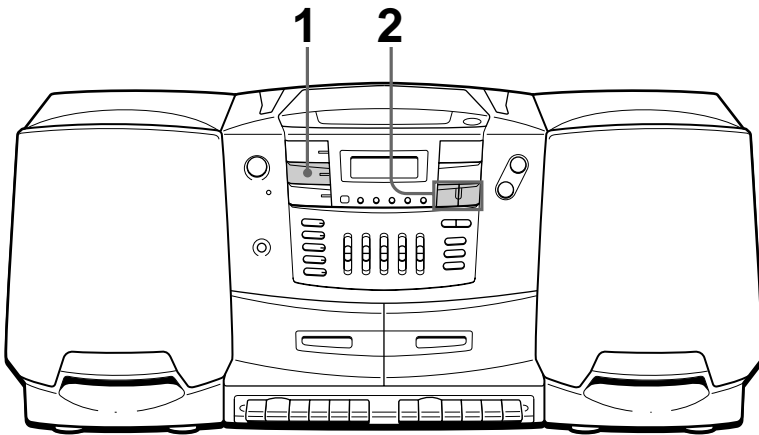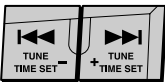
For hookup instructions, see pages 25 – 27.

1

· RADIO BAND

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

Display

$$AM \quad 530$$

2

TUNE
TIME SET ⏮ ⏭ TUNE
TIME SET +
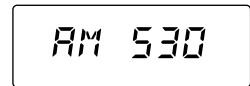
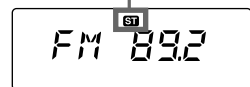Hold down TUNE•TIME SET + or – (TUNE + or – on the remote, CFD-ZW750/ZW770 only) until the frequency digits begin to change in the display.

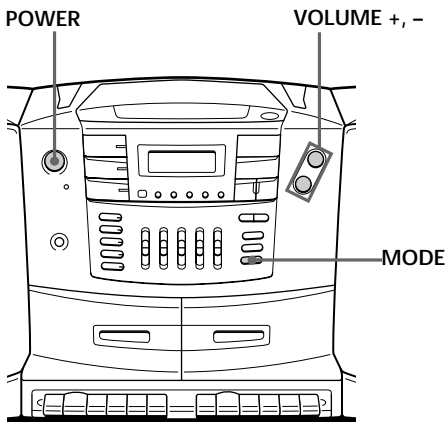The player automatically scans the radio frequencies and stops when it finds a clear station.

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

Indicates an FM stereo broadcast

$$[ST] \quad FM \quad 89.2$$

Use these buttons for additional operations

POWER   VOLUME +, –

MODE

To	Press
adjust the volume	VOLUME +, – (VOL +, – on the remote, CFD-ZW750/ZW770 only)
turn on/off the radio	POWER

To improve broadcast reception

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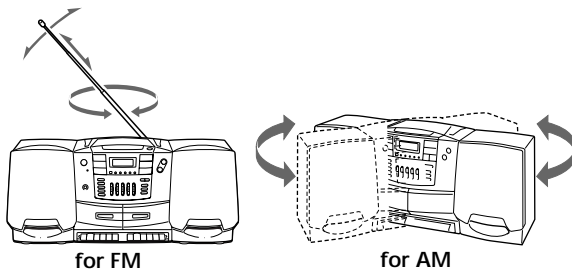

for FM   **for AM**

Tips
- If the FM broadcast is noisy, press MODE until "Mono" appears in the display and radio will play in monaural.
- Next time you want to listen to the radio, just press RADIO BAND. The player turns on automatically and starts playing the previous station.

Playing a tape

For hookup instructions, see pages 25 – 27.

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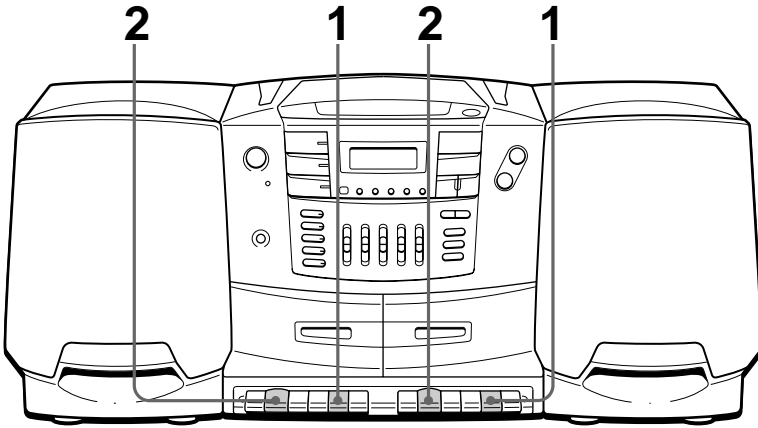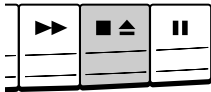
Press ■▲ to open the tape compartment and insert a recorded tape. Use TYPE I (normal) tape only. Close the compartment.

With the side you want to play facing you

2
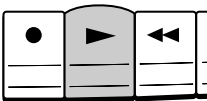
Press ►.

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

Display

```
          TAPE
```

Use these buttons for additional operations

POWER   VOLUME +, –

◀◀, ▶▶
■▲
❚❚
◀◀, ▶▶
■▲
❚❚
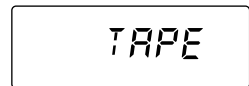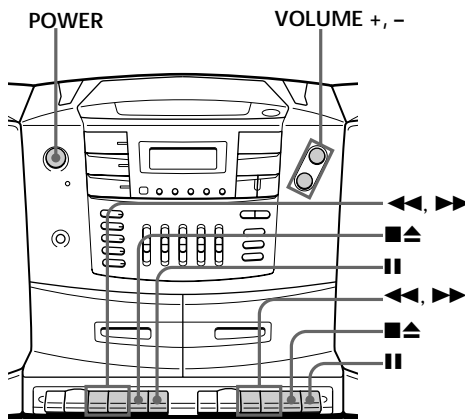
Note

During playback, do not press buttons on the other deck. Otherwise the playback speed may change.

Tip

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

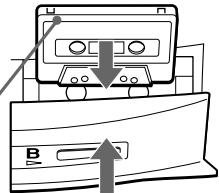| To	Press
adjust the volume	VOLUME +, – (VOL +, – on the remote, CFD-ZW750/ZW770 only)
stop playback	■▲
fast-forward or rewind the tape	▶▶ or ◀◀
pause playback	❚❚ Press the button again to resume play after pause.
eject the cassette	■▲
turn on/off the player	POWER

Basic Operations

Recording on a tape

2   3   1

For hookup instructions, see pages 25 – 27.

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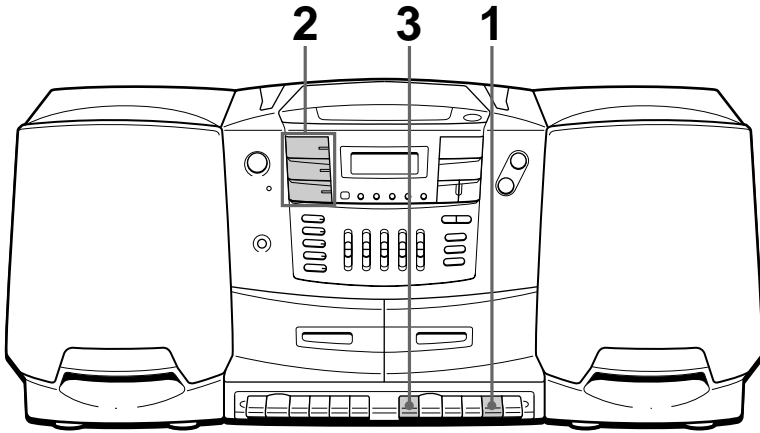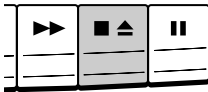
Press ■▲ to open the tape compartment on deck B and insert a blank tape. Use TYPE I (normal) tape only.

With the side you want to record on facing you

B
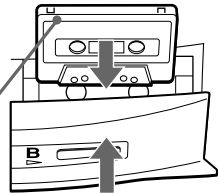
2

Select the program source you want to record.

Display

To record from the CD player: insert a CD (see page 4) and press CD.

CD

12 55:27
OVER12
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
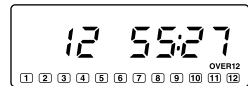
To record from the radio: tune in the station you want (see page 6).

· RADIO
BAND

FM ᴿᵀ 89.2
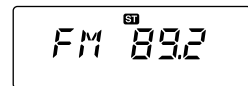
To record from the tape (dubbing): insert a recorded tape into deck A and press TAPE until "dUb" appears in the display.

TAPE

dUb
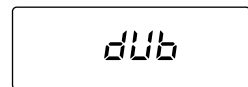
3 **Deck B**

Start recording.

To record from the CD player and the radio, press ● on deck B (► is depressed automatically).

Deck A
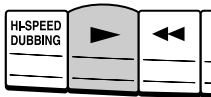
HI-SPEED DUBBING

To record from the tape, press ● on deck B (►is depressed automatically). Then press ► on deck A. (For high speed dubbing, press HIGH-SPEED DUBBING instead of ► on deck A).

Tips
• Adjusting the volume or the audio emphasis (see pages 28 and 29) will not affect the recording level.
• If the AM program makes a whistling sound after you have pressed ● in step 3, set the ISS (Interference Suppress Switch) at the rear of the player to the position that most decreases the noise.
• For the best results, use the AC power as a power source.

Use these buttons for additional operations

POWER

■▲

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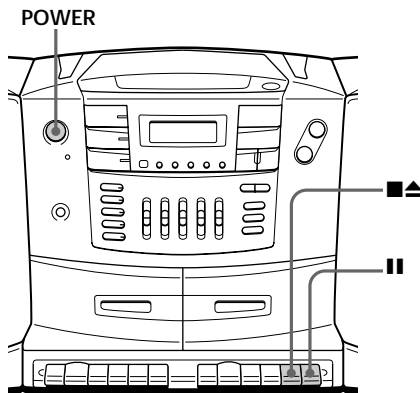
To	Press
stop recording	■▲ on deck B
pause recording	II on deck B Press the button again to resume recording.
turn on/off the player	POWER

To erase a recording, proceed as follows:
1 Insert a tape whose recording you want to erase into deck B.
2 Press TAPE untill "TAPE" appears in the display.
3 Press ●.

Using the display

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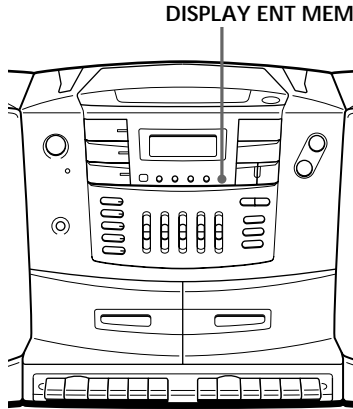
DISPLAY ENT MEM

Checking the total track numbers and playing time
Press DISPLAY ENT MEM in stop mode.

If the CD has more than 12 tracks, "OVER 12" appears in the display.

Total playing time

Total track number

Music calendar

13 65:27

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ OVER12
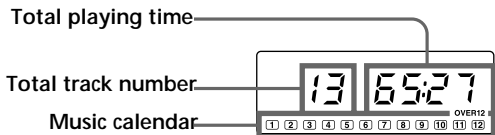
Checking the remaining time
Press DISPLAY ENT MEM while playing a CD.

The track numbers in the music calendar disappear after they are played.

To display	Press DISPLAY ENT MEM
the current track number and the remaining time on the current track*	once
the number of tracks left and the 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 point in a track

You can quickly find a specific point in a track while playing a CD.
You can also locate any track using the number buttons on the remote (CFD-ZW750/ZW770 only).
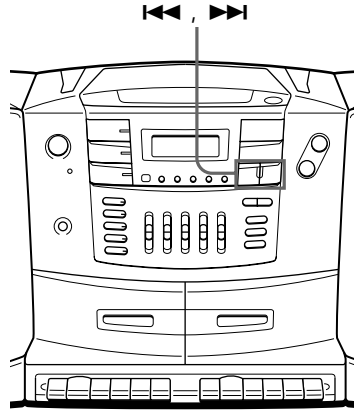
To locate	Press
a point while listening to the sound	▶▶I (forward) or I◀◀ (backward) while playing and hold down until you find the point
a point while observing the display	▶▶I (forward) or I◀◀ (backward) in pause and hold down until you find the point
a specific track directly (CFD-ZW750/ZW770 only)	number button of the track on the remote

Note

CFD-ZW750/ZW770 only:
You cannot locate a specific track if "SHUF" or "PGM" is lit in the display. Turn off the indication by pressing ■.

Tip

CFD-ZW750/ZW770 only:
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.

Playing tracks repeatedly

(Repeat Play)

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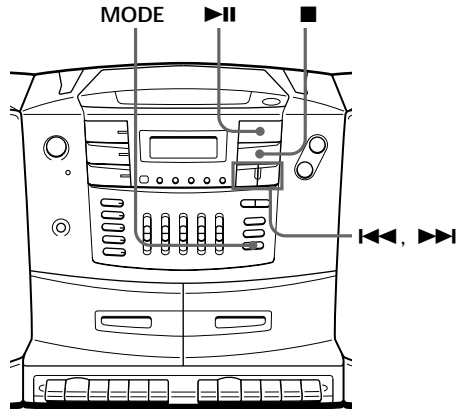
MODE ►II ■

◄◄ , ►►

1 Press ■.

"Cd" appears in the display.

2 Proceed as follows.

To repeat	Do this
a single track	1 Press MODE until "REP 1" appears. 2 Press ◄◄ or ►► to select the track that you want to repeat. 3 Press ►II.
all the tracks	1 Press MODE until "REP ALL" appears. 2 Press ►II.
tracks in random order	1 Press MODE until "SHUF REP" appears. 2 Press ►II.
programed tracks	1 Press MODE until "PGM REP" appears. 2 Program tracks (see step 3 on page 16). 3 Press ►II.

To cancel Repeat Play
Press MODE until "REP" disappears from the display.

Playing tracks in random order

(Shuffle Play)

You can play tracks in random order.
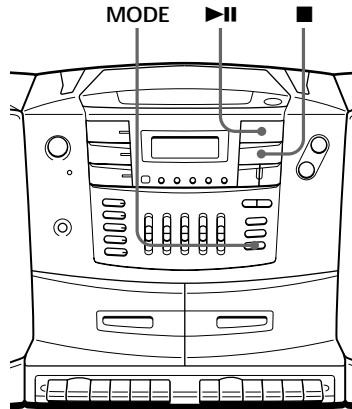
MODE ▶Ⅱ ■

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.

The CD Player

Creating your own program
(Program Play)

MODE   ▶II   ■

DISPLAY
ENT MEM

You can make a program of up to 20 tracks in the order you want them to be played.

1 Press ■.

"Cd" appears in the display.

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

3 Press I◀◀ or ▶▶I then press DISPLAY ENT MEM for the tracks you want to program in the order you want.

```
        ┌─PGM─
  03  01
  TRACK   STEP
   3
```

Programed track ─────   Playing order
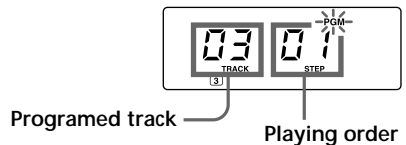
The programed tracks appear in the music calender.

4 Press ▶II to start program play.

Tips
- You can play the same program again, since the program is saved until you open the disc compartment.
- You can record your own program. After you've created the program, insert a blank tape into deck B and press ● on deck B to start recording.

To cancel Program Play
Press MODE until "PGM" disappears from the display.

To check the order of tracks before play
Press DISPLAY 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.

Enjoying sound effects (LOOP/FLASH)

FLASH   LOOP

You can repeat part of a CD (LOOP) and can "flash" the CD sound (FLASH) during playback.
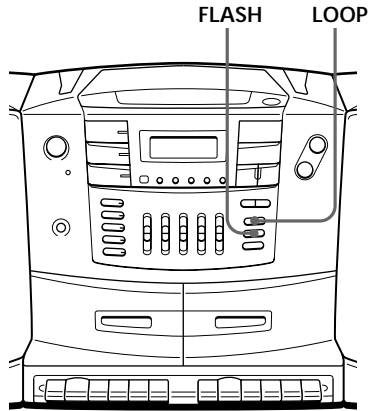
1 Play a CD.

2 Press and hold LOOP or FLASH at the point you want to start the function.

To	Press and hold
repeat a selected part of a CD	LOOP
"flash" the CD sound	FLASH

To cancel the LOOP or FLASH function

Release the button.

The player returns to normal play.

Presetting radio stations

RADIO BAND   DISPLAY ENT MEM

You can store radio stations into the player's memory. You can preset up to 20 radio stations, 10 for each band in any order.

TUNE
TIME SET
–, +
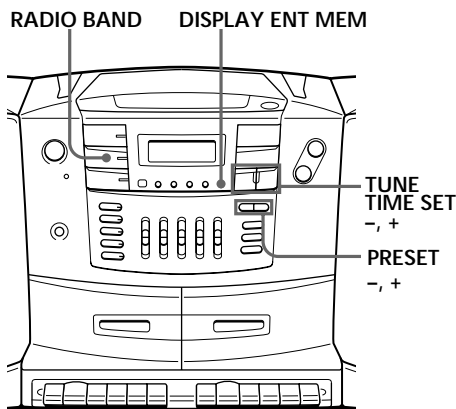
PRESET
–, +

The Radio

On the remote (CFD-ZW750/ZW770 only)

1 Press BAND to select the band.
2 Set the frequency to the station you want.
3 Press and hold the number buttons that you want to preset the new station on for 2 seconds.

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

2 Set the frequency to the station you want.

3 Press and hold DISPLAY ENT MEM for 2 seconds.

4 Press PRESET + or – until the preset number (1 to 10) you want for the station flashes in the music calender.

5 Press DISPLAY ENT MEM again.

The frequency digits flash in the display and the station is stored into the player's memory.

The new station replaces the old one.

Playing preset radio stations

RADIO BAND   **PRESET –, +**

Once you have preset the stations, use
PRESET +/– on the player or the
number buttons on the remote (CFD-
ZW750/ZW770 only) to tune in to your
favorite stations.

1 Press RADIO BAND to select the band.

2 Press PRESET + or – to tune in the stored station.

Setting the clock

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

CLOCK   DISPLAY ENT MEM
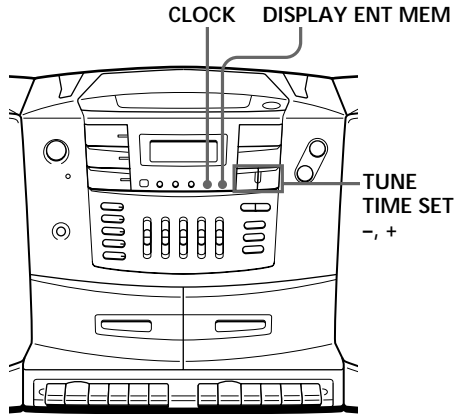
TUNE
TIME SET
–, +

Tip

The time display system of this player is the 12-hour system:
AM12:00 = midnight
PM12:00 = noon

Before you set the clock, connect the power source (pages 25 - 27).

1 Press and hold CLOCK for 2 seconds until the hour digits flash.

AM 12:00

2 Press TUNE•TIME SET + or – until you set the current hour. Then press DISPLAY ENT MEM.

The minute digits flash. Set the minutes by pressing TUNE•TIME SET + or – until the correct minute is displayed.

PM 8:00 ➔ PM 8:45
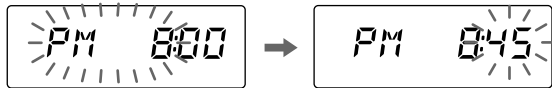
3 Press DISPLAY ENT MEM.

The clock starts from 00 seconds.

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 21).

TIMER   STANDBY   DISPLAY ENT MEM
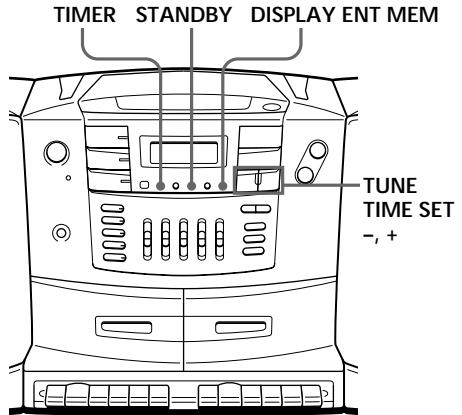
TUNE
TIME SET
–, +

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
a CD	Insert a CD.
the radio	Tune in a station

2 Press TIMER.

The ⏰ (clock) and the music source ("Cd" or "RAdIO") flash.

3 Select the music source ("Cd" or "RAdIO") by pressing TUNE•TIME SET + or –, then DISPLAY ENT MEM.

4 Set the timer to the hour you want the music to start by pressing TUNE•TIME SET + or –, then DISPLAY ENT MEM.
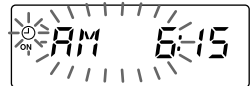
Set the minutes by pressing TUNE•TIME SET + or –, then DISPLAY ENT MEM.

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

6 Set the volume by pressing TUNE•TIME SET + or – , then DISPLAY ENT MEM.

```
☀ ⊿/OL  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 TIMER , then DISPLAY ENT MEM. Each time you press DISPLAY 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 in step 1 on page 22, 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.

Falling asleep to music

SLEEP

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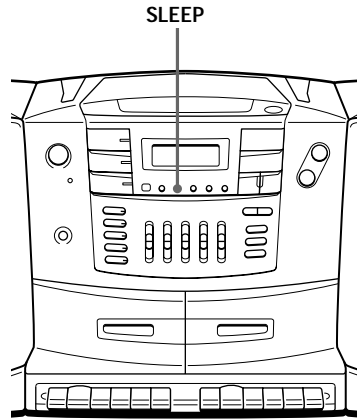
Note
When you are playing a tape using this function:
If the tape length of one side is longer than the set time, the player will not go off until the tape reaches the end.

1 Play the music source you want.

2 Press SLEEP to display "SLEEP".

3 Press SLEEP to select the minutes until the player goes off automatically.

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

60

SLEEP

"60" → "90" → "120" → no indication → "10" → "20" → "30."

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

Hooking up the system

Make sure you turn off the power before making any connections.

2 **Speaker terminals**

Speaker cords

Right speaker

Left speaker

a 5 **Battery compartment**

3 **to a wall outlet**
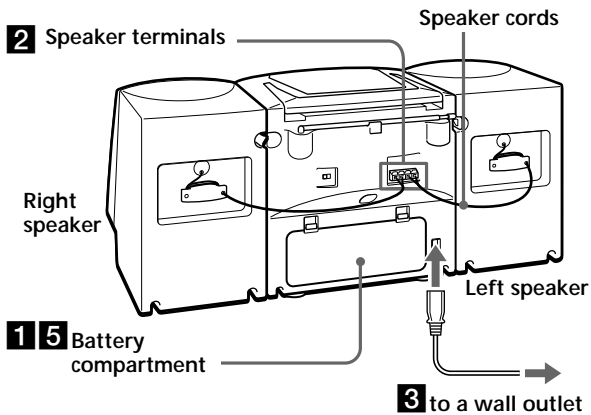
a Inserting the back-up batteries

Insert three size AA (R6) batteries (not supplied) into the battery compartment. These batteries work to save the memory data.
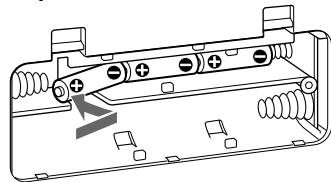
To remove the batteries, push the ⊕ side.

Tips
- To detach the speakers, unlock speaker (see B on the diagram) and slide the speaker box all the way up and away from the player.
- Connect the speakers for this unit only to the speaker terminals of this unit. If you connect any other speakers or equipment, malfunction may occur.

b Hooking up the speakers

1 Align the grooves and slide the speaker box down until it snaps into place A.

B

A

Setting Up

2 Connect the black wires to (–) minus and the red
wires to (+) plus terminals; the right speaker wires
to the R and the left speaker wires to the L
terminals.

SPEAKER IMPEDANCE 6Ω

⊕ R ⊖   ⊖ L ⊕
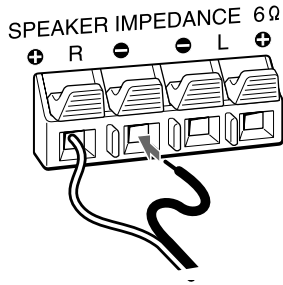
c **Connecting the AC power cord**

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.

d **Inserting batteries into the remote
(CFD-ZW750/ZW770 only)**
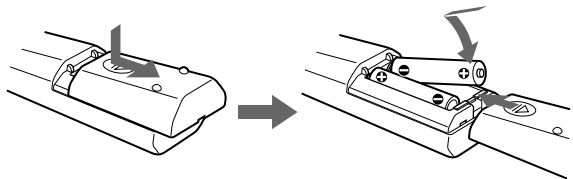
Insert two size AA (R6) batteries (not supplied)

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.

Note

> *CFD-ZW750/ZW770 only:*
> When you operate the
> player on batteries:
>
> – you cannot turn on
>   the player using the
>   remote.
> – the backlight in the
>   display does not light
>   (CFD-ZW770 only).

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.

5 Using the player on batteries

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

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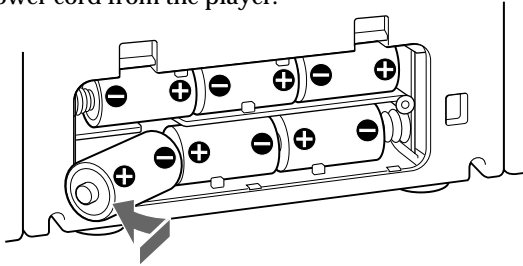
Selecting the audio emphasis

**(Sound Mode/MEGA BASS/
5 BAND GRAPHIC EQUALIZER)**

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

MEGA BASS   5 BAND GRAPHIC EQUALIZER
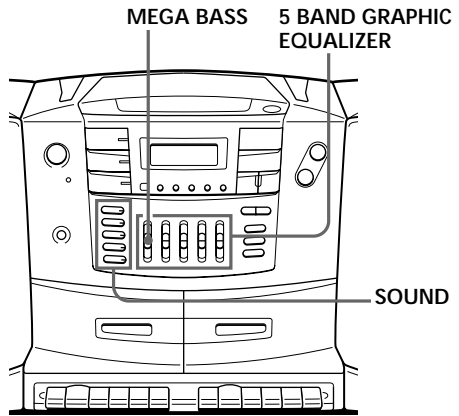
SOUND

Selecting the sound characteristic

Press one of the SOUND buttons to select the sound characteristic you want.

Press	For
MANUAL	adjusting the audio emphasis with 5 BAND GRAPHIC EQUALIZER (see page 29).
ROCK	Rock'n'roll: powerful, clean sounds
POP	Popular music: light, bright sounds
JAZZ	Jazz: clear bass audio and powerful sounds of instruments such as piano or guitar
CLUB	Dance music: extensive, powerful vocals and dynamic instrumental sounds

When adjusting the
5 BAND GRAPHIC
EQUALIZER, be sure
to press the MANUAL
button. The graphic
equalizer will not work
in any other position.

If you have selected MANUAL on page 28, slide
5 BAND GRAPHIC EQUALIZER to select the audio
emphasis you want.

Frequency coverage	Slide the control up (to MAX/+10)	Slide the control down (to MIN/–10)
MEGA BASS	to increase heavy bass sound	to decrease heavy bass sound
400 Hz	to emphasize speaking voice, middle frequencies of instrumental music	to de-emphasize speaking voice, middle frequencies of instrumental music
1 kHz	to provide more presence of vocals	to provide less presence of vocals
4 kHz	to heighten overall brightness of sound	to lessen overall brightness of sound
10 kHz	to increase high treble sounds	to decrease high treble sounds or reduce high frequency noise/tape hiss

Setting Up

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.
- 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 to be used for an extended period of time.
- For battery operation, use six 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 rear.

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.

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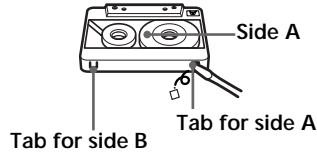
• The use of a cassette with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

Troubleshooting

	Symptom	Remedy
General	The power is not on.	• Connect the AC power cord to a wall outlet securely. • Make sure the batteries are inserted correctly. • You cannot turn on the player with the remote when you operate the player on batteries (CFD-ZW750/ZW770 only).
	There is no audio.	• Make sure the function you want to use appears in the display window. • Adjust the volume. • Unplug the headphones when listening through speakers.
CD Player	"no disc" lights in the display even when a CD is in place.	• Insert the CD with the label surface up.
	The CD does not play.	• Make sure that the CD compartment is closed. • 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. • Make sure "Cd" appears in the display.
	The sound drops out.	• Reduce the volume. • Clean the CD, or replace it if the CD is badly damaged • Place the player in a location free from vibration.
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 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.

	Symptom	Remedy
Tape Player	The tape does not move when you press an operation button.	• Close the cassette compartment securely.
	The ● button does not function/ The tape does not play.	• Make sure the safety tab on the cassette is in place. • Make sure "TAPE" appears in the display.
	The tape does not erase completely.	• Clean the erasing head (see page 34). • 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 rollers and capstans (See page 34). • Demagnetize the heads using a demagnetizer (see page 34).
	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 (CFD-ZW750/ZW770 only)	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 the player still does not function properly, 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 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 rollers and the capstans 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.

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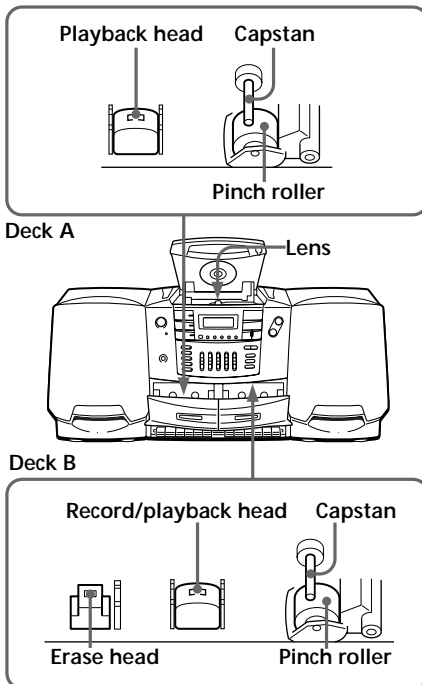
After cleaning, insert a tape when the areas cleaned are completely dry.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL
HARMONIC DISTORTION

CFD-ZW700/ZW705/ZW750:
With 3.2-ohm loads, both channel driven
from 150 - 8,000 Hz; rated 2 W per channel-
minimum RMS power, with no more than
10 % total harmonic distortion in AC
operation.

CFD-ZW770:
With 6-ohm loads, both channel driven from
150 - 8,000 Hz; rated 3.6 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 +1/−2 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 s (sec.) with Sony cassette C-60
Frequency response
　　TYPE I (normal): 80 - 12,500 Hz

General

Speaker
　　CFD-ZW700/ZW705/ZW750:
　　　　Full range: 10 cm (4 in.) dia.,
　　　　3.2 ohms, cone type (2)

CFD-ZW770:
　　Full range: 10 cm (4 in.) dia.,
　　6 ohms, cone type (2)
Outputs
　　Headphones jack (stereo minijack)
　　For 16 - 68 ohms impedance headphones
Power output (excluding US model)
　　CFD-ZW700/ZW705/ZW750:
　　　　2.3 W + 2.3 W (at 3.2 ohm, 10 % harmonic
　　　　distortion in AC operation)
　　CFD-ZW770:
　　　　3.8 W + 3.8 W (at 6 ohm, 10 % harmonic
　　　　distortion in AC operation)
Power requirements
　　For CD radio cassette-corder:
　　120 V AC, 60 Hz
　　9 V DC, 6 size D (R20) batteries
　　For memory back-up:
　　4.5 V DC, 3 size AA (R6) batteries
　　For remote controller (CFD-ZW750/ZW770 only):
　　3 V DC, 2 size AA (R6) batteries
Power consumption
　　CFD-ZW700/ZW705/ZW750: AC 15 W
　　CFD-ZW770: AC 28 W
Battery life
　　For CD radio cassette-corder:

FM recording	CFD-ZW700/ ZW705/ZW750	CFD-ZW770
Sony R20P:	approx. 7.5 h	approx. 3.5 h
Sony alkaline LR20: approx. 22 h		approx. 10 h
Tape playback		
Sony R20P:	approx. 7 h	approx. 1.5 h
Sony alkaline LR20: approx. 20 h		approx. 5 h
CD playback		
Sony R20P:	approx. 3 h	approx. 1.5 h
Sony alkaline LR20: approx. 10 h		approx. 4 h

　　For memory back-up: approx. 1 year
Dimensions
　　Approx. 630 × 268 × 256 mm (w/h/d)
　　(24 ⁷⁄₈ × 10 ⁵⁄₈ × 10 ¹⁄₈ inches) (incl. projecting parts)
Mass
　　CFD-ZW700/ZW705/ZW750:
　　Approx. 6.7 kg (14 lb. 12 oz) (incl. batteries)
　　CFD-ZW770:
　　Approx. 7.9 kg (17 lb. 7 oz) (incl. batteries)
Supplied accessory
　　AC power −cord (1)
　　Remote controller (1) (CFD-ZW750/ZW770 only)

Design and specifications are subject to change without
notice.

Optional accessories

Sony MDR headphone series

Index

Sony on line   http://www.world.sony.com/

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com