

# SHARP

## AUDIO TOWER SYSTEM

MODEL

# CD-RW5000

OPERATION MANUAL

Thank you for purchasing this SHARP product.  
To obtain the best performance from this product, please read this manual carefully. It will guide you in operating your SHARP product.

CD-RW5000 Audio Tower System consisting of CD-RW5000 (main unit) and CP-RW5000 (speaker system).



COMPACT  
disc  
DIGITAL AUDIO

COMPACT  
disc  
DIGITAL AUDIO  
TEXT

COMPACT  
disc  
DIGITAL AUDIO  
Recordable

COMPACT  
disc  
DIGITAL AUDIO  
ReWritable

# Special Notes



**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.**

**Explanation of Graphical Symbols:**



The lightning flash with arrowhead symbol, within an equilateral triangle, 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.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

**CAUTION:**  
THIS PRODUCT IS A CLASS 1 LASER PRODUCT.  
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.  
AS THE LASER BEAM USED IN THIS PRODUCT IS HARMFUL TO THE EYES. DO NOT ATTEMPT TO DISASSEMBLE THE CABINET.  
REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

**NOTE**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

**WARNING**

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

**NOTE**

It is the intent of Sharp that this product be used in full compliance with the copyright laws of the United States and that prior permission be obtained from copyright owners whenever necessary.

**FOR YOUR RECORDS**

For your assistance in reporting this unit in case of loss or theft, please record below the model number and serial number which are located on the rear of the unit.

Please retain this information.

**Model number** .....

**Serial number** .....

**Date of purchase** .....

**Place of purchase** .....



# Important Safeguards

## CAUTION

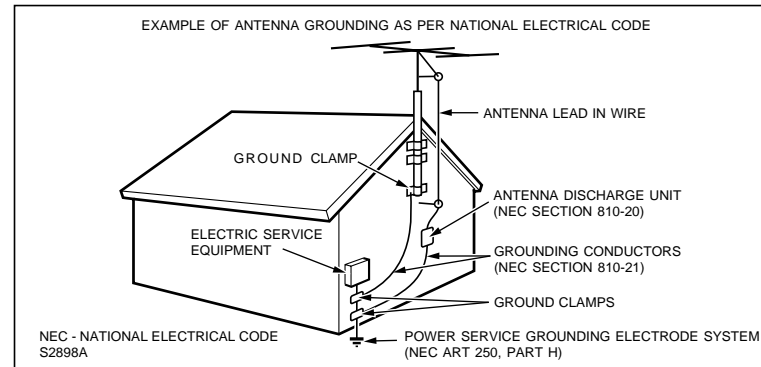
All the safety and operating instructions should be read before the appliance is operated, and should be retained for future reference.

Electrical energy can perform many useful functions. This unit has been engineered and manufactured to assure your personal safety. Improper use can result in potential electrical shock or fire hazards. In order not to defeat the safeguards, observe the following basic rules for its installation, use and servicing.

- 1 Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
- 2 Follow Instructions - All operating and use instructions should be followed.
- 3 Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
- 4 Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.
  - An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- 5 Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 6 Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- 7 Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 8 Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- 9 Power-Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- 10 Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 11 Power Lines - An outdoor antenna should be located away from power lines.



- 12 Outdoor Antenna Grounding - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



- 13 Nonuse Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 14 Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 15 Damage Requiring Service - The appliance should be serviced by qualified service personnel when:
  - A The power-supply cord or the plug has been damaged; or
  - B Objects have fallen, or liquid has been spilled into the appliance; or
  - C The appliance has been exposed to rain; or
  - D The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - E The appliance has been dropped, or the enclosure damaged.
- 16 Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
- 17 Grounding or Polarization - Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

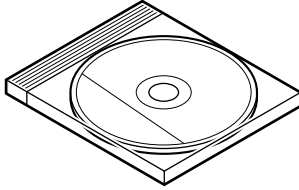
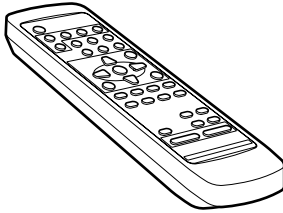
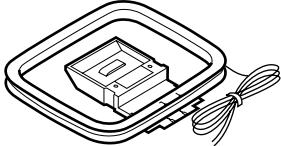
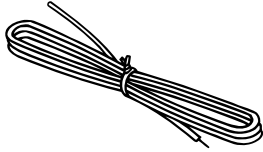
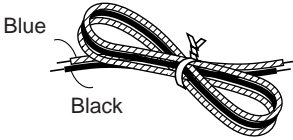
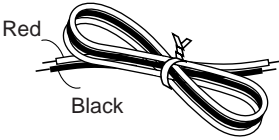
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# Accessories

Please confirm that the following accessories are included.

 <p><b>CD-R × 1</b> (UDSKR0001AFZZ)</p>	 <p><b>Remote control × 1</b> (RRMCG0242AWSA)</p>
 <p><b>AM loop antenna × 1</b> (QANTL0009AWZZ)</p>	 <p><b>FM antenna × 1</b> (92LANT1746A)</p>
 <p><b>Speaker wire for MAIN terminals × 2</b> (92LD2576BBK)</p>	 <p><b>Speaker wire for SUBWOOFER terminals × 2</b> (92LD2583RB)</p>

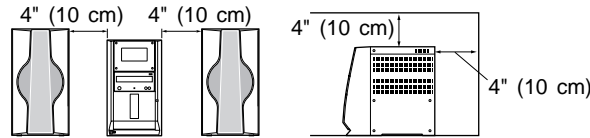
**Note:**  
Only the above accessories are included.



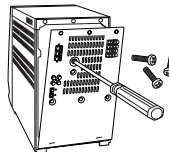
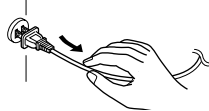
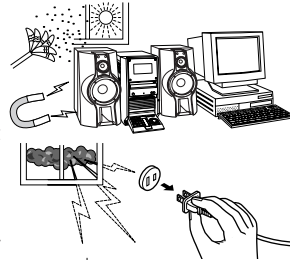
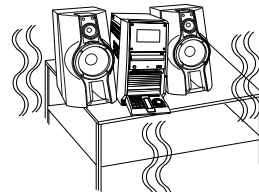
# Precautions

## ■ General

- Please ensure that the equipment is positioned in a well ventilated area and ensure that there is at least 4" (10 cm) of free space along the sides and back. There must also be a minimum of 4" (10 cm) of free space on the top of the unit.



- Use the unit on a firm, level surface free from vibration.
- Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic/electrical equipment (home computers, facsimiles, etc.) which generates electrical noise.
- Do not place anything on top of the unit.
- Do not expose the unit to moisture, to temperatures higher than 140°F (60°C) or to extreme low temperatures.
- If your system does not work properly, disconnect the AC power cord from the AC outlet. Plug the AC power cord back in, and then turn on your system.
- In case of an electrical storm, unplug the unit for safety.
- Hold the AC power plug by the head when removing it from the AC outlet, as pulling the cord can damage internal wires.
- **Do not remove the outer cover, as this may result in electric shock. Refer internal service to your local SHARP service facility.**



### Warning:

The voltage used must be the same as that specified on this unit.

Using this product with a higher voltage other than that which is specified is dangerous and may result in a fire or other type of accident causing damage. SHARP will not be held responsible for any damage resulting from use of this unit with a voltage other than that which is specified.

## ■ Volume control

The sound level at a given volume setting depends on speaker efficiency, location and various other factors.

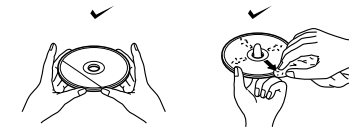
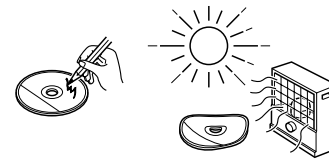
It is advisable to avoid exposure to high volume levels, which occur while turning the unit on with the volume control setting up high, or while continually listening at high volumes.

## ■ Care of compact discs

Compact discs are fairly resistant to damage, however mistracking can occur due to an accumulation of dirt on the disc surface.

Follow the guidelines below for maximum enjoyment from your CD collection and player.

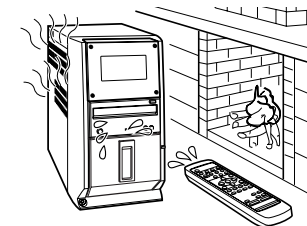
- Do not write on either side of the disc, particularly the non-label side from which signals are read. Do not mark this surface.
- Keep your discs away from direct sunlight, heat, and excessive moisture.
- Always hold the CDs by the edges. Fingerprints, dirt, or water on the CDs can cause noise or mistracking. If a CD is dirty or does not play properly, clean it with a soft, dry cloth, wiping straight out from the center, along the radius.



## ■ Condensation

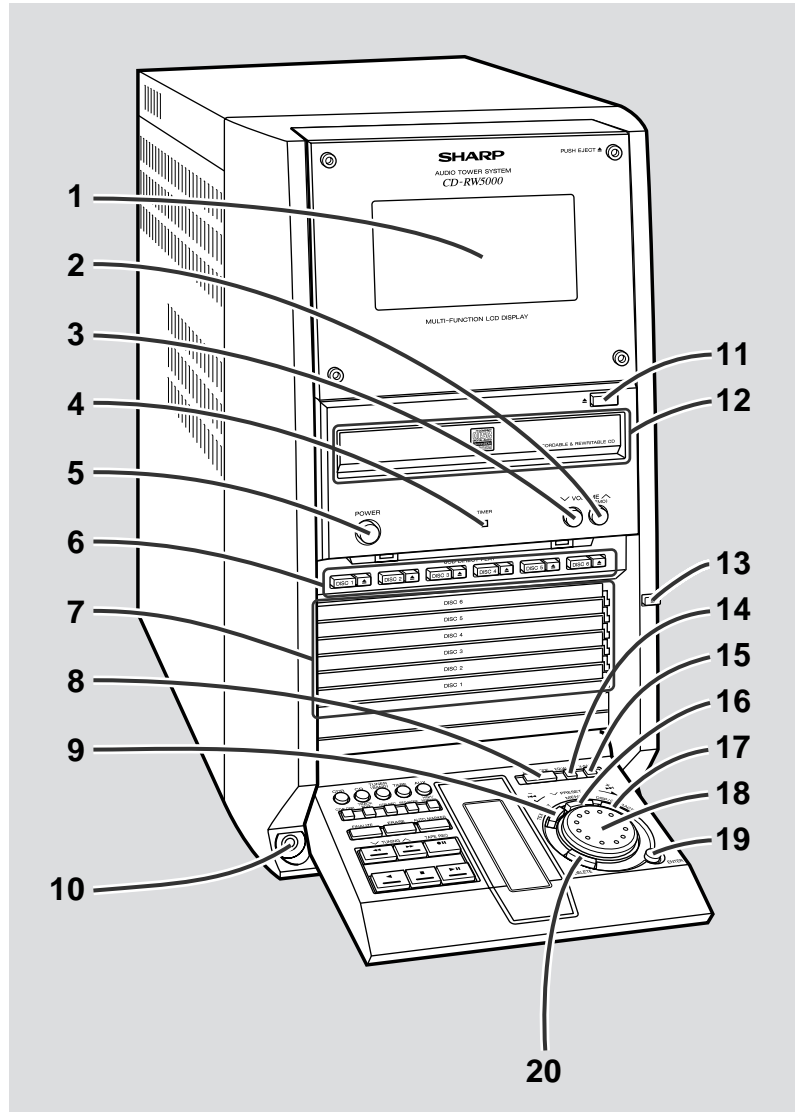
Sudden temperature changes, storage or operation in an extremely humid environment may cause condensation inside the cabinet (CD pickup, tape heads, etc.) or on the transmitter LED on the remote control.

Condensation can cause the unit to malfunction. If this happens, leave the power on with no disc (or cassette) in the unit until normal playback is possible (about 1 hour). Wipe off any condensation on the transmitter LED with a soft cloth before operating the unit.





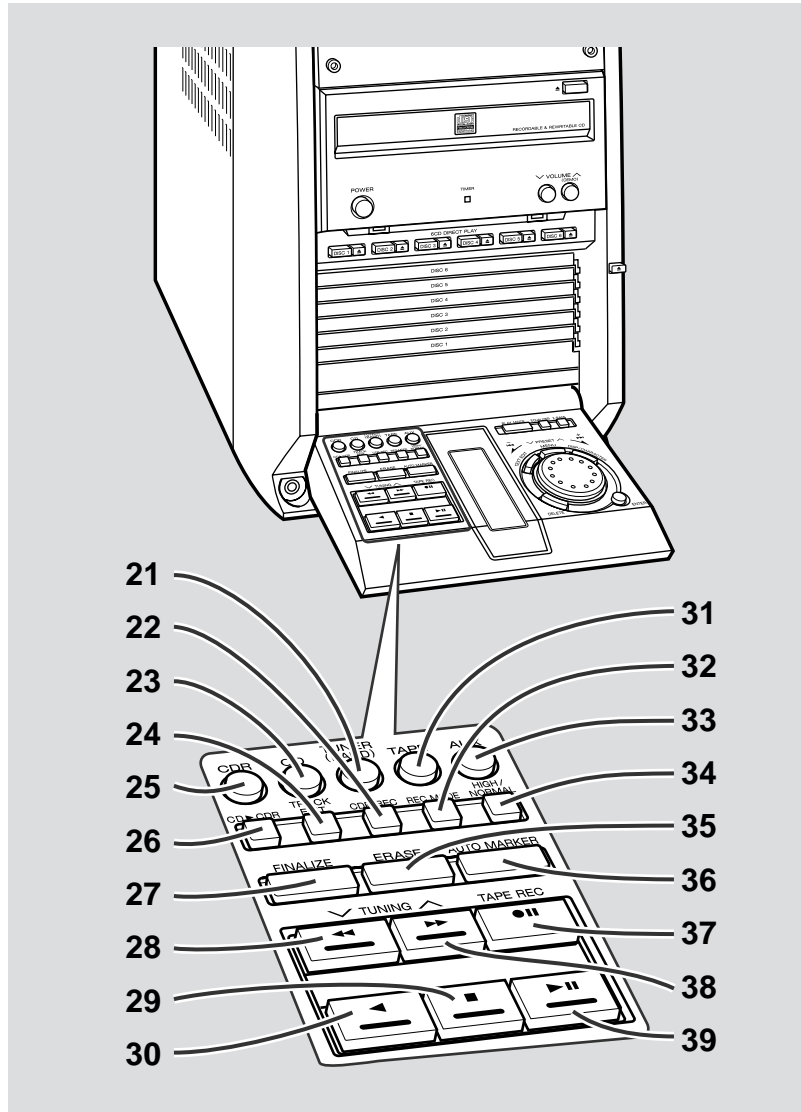
# Controls and Indicators



## ■ Front panel

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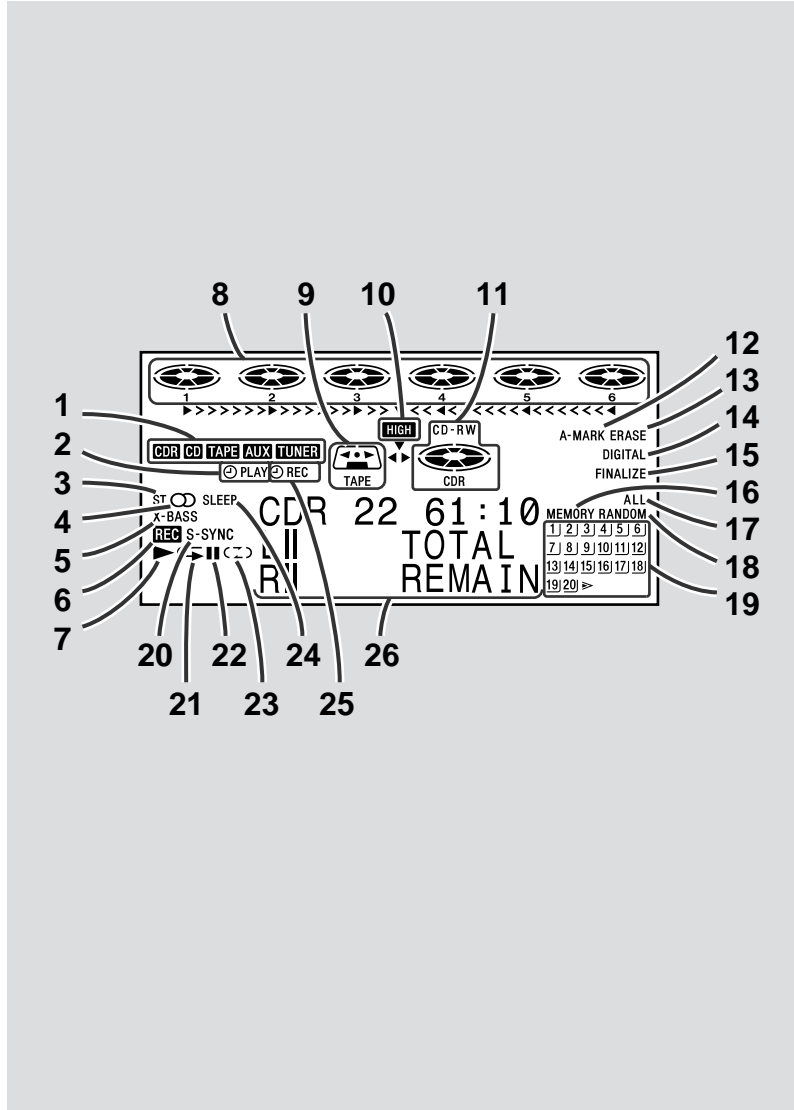


## ■ Front panel

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or Tuning Up Button (with Indicator) ..... 19, 23, 29, 34, 42
- 39. CD/CD-R/CD-RW Play or Pause/  
Tape Forward Play Button (with Indicator) ..... 19, 22, 25, 31, 32, 42

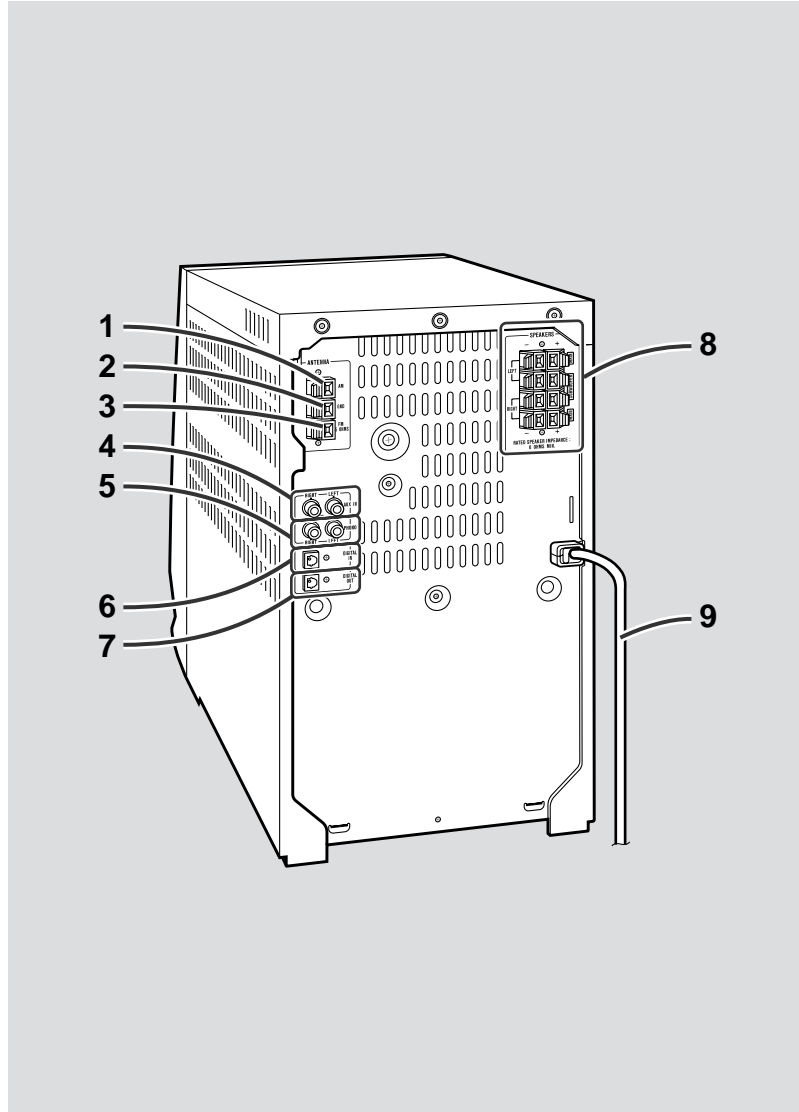
## Controls and Indicators (continued)



### Multi-function LCD display

1. Function Indicator
2. Timer Play Indicator
3. FM Stereo Mode Indicator
4. FM Stereo Indicator
5. Extra Bass Indicator
6. Record Indicator
7. CD/CD-R/CD-RW Play Indicator
8. CD Indicators
9. Cassette Indicator
10. CD ► CD-R High Speed Record Indicator
11. CD-R/CD-RW Indicator
12. Auto Mark Indicator
13. Erase Indicator
14. Digital Source Indicator
15. Finalize Indicator
16. Memory Indicator
17. CD All Disc Play Indicator
18. Random Play Indicator
19. Music Schedule Indicator
20. Synchronized Recording Indicator
21. CD/CD-R/CD-RW Repeat Indicator
22. CD/CD-R/CD-RW Pause Indicator
23. Tape Reverse Mode Indicator
24. Sleep Indicator
25. Timer Recording Indicator
26. Character Information Display



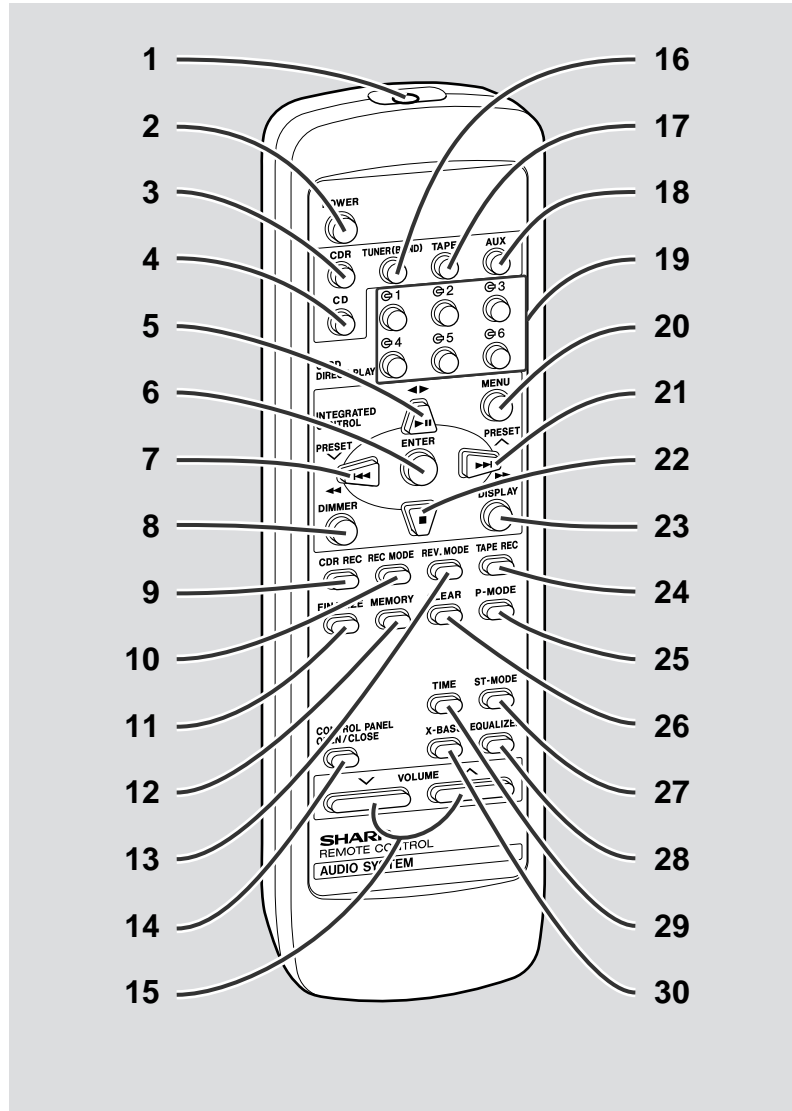


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### Remote control

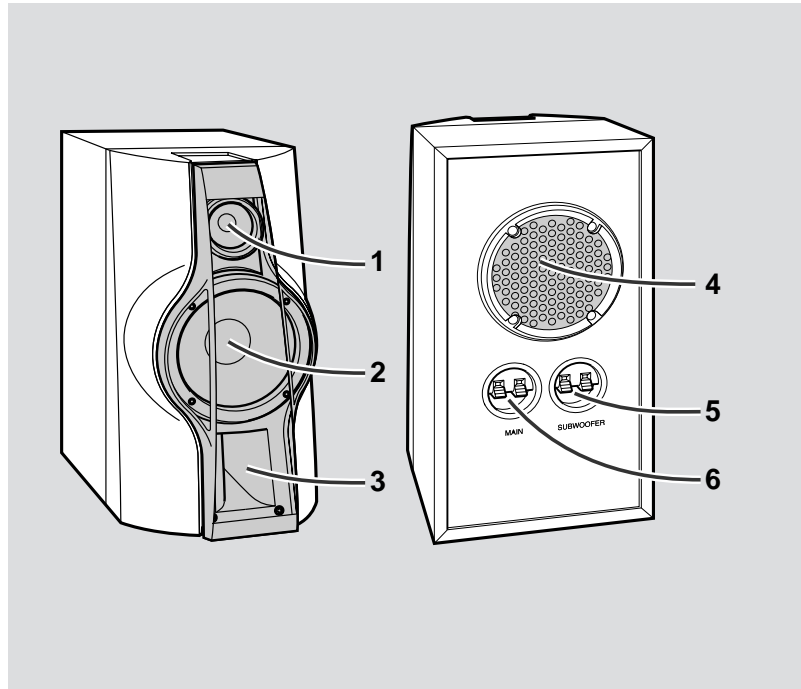
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- 4. CD Button (No. 23)
- 5. CD/CD-R/CD-RW Play or Pause/Tape Play Button (No. 30, 39)
- 6. Enter Button (No. 19)
- 7. CD/CD-R/CD-RW Fast Reverse, Tape Fast Wind or Preset Down Button ..... 19, 20, 24, 29
- 8. Dimmer Button ..... 15
- 9. CD-R/CD-RW Record Button (No. 22)
- 10. CD-R/CD-RW Record Mode Button (No. 32)
- 11. CD-R/CD-RW Finalize Button (No. 27)
- 12. Memory Button ..... 20
- 13. Tape Reverse Mode Select Button ..... 22, 25
- 14. Control Panel Open/Close Button (No. 13)
- 15. Volume Up or Down Buttons (No. 2, 3)
- 16. Tuner (Band) Button (No. 21)
- 17. Tape Button (No. 31)
- 18. Auxiliary Button (No. 33)
- 19. CD Direct Play Buttons (No. 6)
- 20. Menu Button (No. 16)
- 21. CD/CD-R/CD-RW Fast Forward, Tape Fast Wind or Preset Up Button ..... 19, 20, 24, 29
- 22. Stop Button (No. 29)
- 23. Display Button ..... 15, 17, 32
- 24. Tape Record Pause Button (No. 37)
- 25. CD/CD-R/CD-RW Play Mode Select Button (No. 8)
- 26. Clear Button ..... 20, 24
- 27. FM Stereo Mode Button ..... 23
- 28. Equalizer Mode Select Button (No. 14)
- 29. Time Button ..... 21
- 30. Extra Bass Button (No. 15)

This number (No. ○○) indicates the same function button on the main unit (see pages 6 -7). Buttons with no number are on the remote control only. To show common buttons, illustrations of the main unit are used.



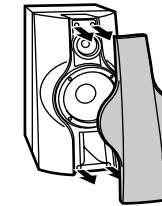
## Speaker system



- 1. Tweeter
- 2. Woofer
- 3. Bass Reflex Duct
- 4. Subwoofer
- 5. Subwoofer Terminals
- 6. Main Speaker Terminals

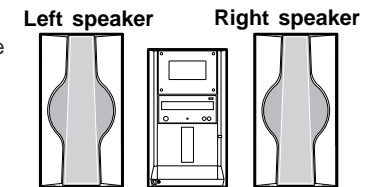
### Speaker grilles are removable:

Make sure nothing comes into contact with the speaker diaphragms when you remove the speaker grilles.



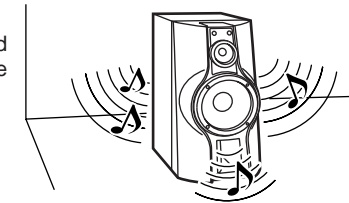
### Placing the speaker system:

There is no distinction between the right and the left speakers.



### There are two sounds from the subwoofer.

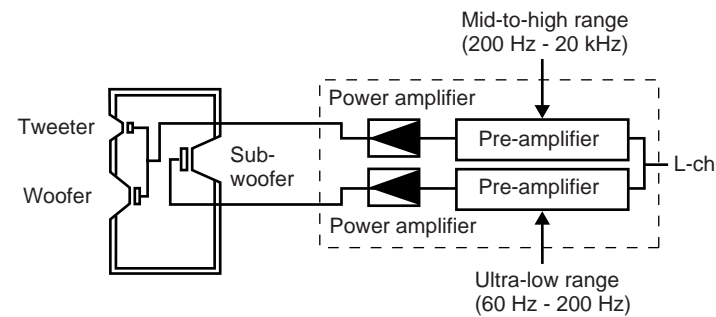
One comes out from the bass reflex duct and the other rebounds from the wall behind the speaker.



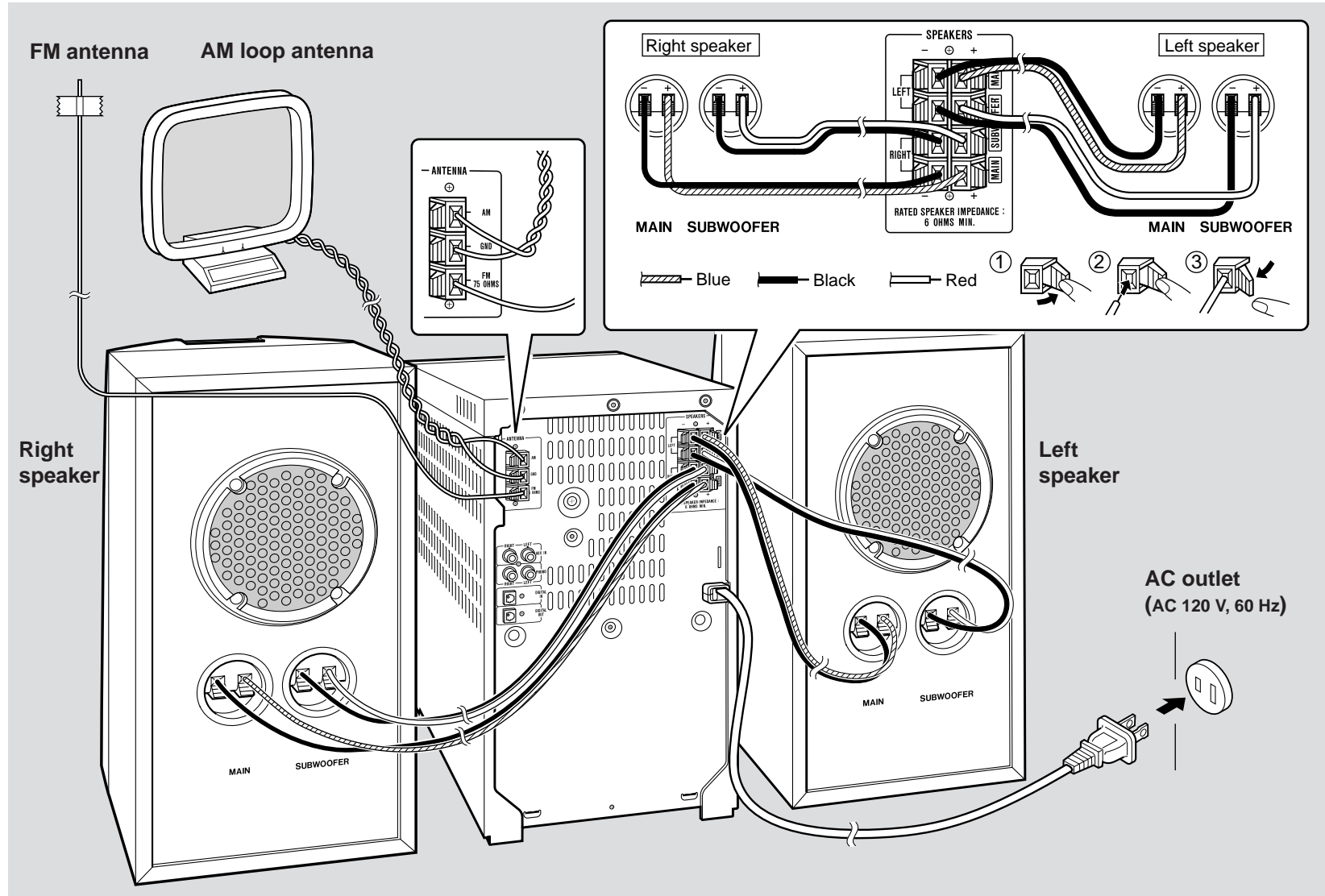
### Bi-amp system:

This product drives the built-in subwoofer unit and the speaker unit composed of the tweeter and woofer for mid-to-high range frequencies with independent amplifiers which have individual frequency characteristics.

By amplifying separately the two frequency bands, clearer sound is achieved.



# System Connections





## ■ Speaker connection

### Main terminals (left side of the rear):

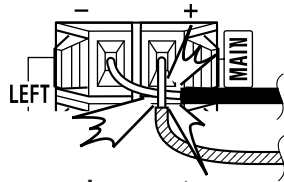
Connect the blue wire to the (+) and the black one to the (-).

### Subwoofer terminals (right side of the rear):

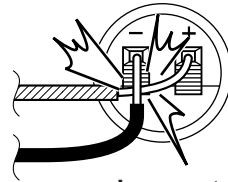
Connect the red wire to the (+) and the black one to the (-).

### Caution:

- Connect the speaker wires to the speakers first, then to the unit.
- Never mistake the MAIN and the SUBWOOFER terminals. The stereo system or the speakers may be damaged.
- Only the included speakers should be used with this product. Do not use other speakers with this unit or use the supplied speakers with other units.
- Do not mistake the right and the left channels. The right speaker is the one on the right side when you face the unit.
- Do not let the bare speaker wires touch each other.



Incorrect



Incorrect

- Do not stand or sit on the speakers. You may be injured.

## ■ Antenna connection

### Supplied FM antenna:

Connect the FM antenna wire to the FM 75 OHMS terminal and position the FM antenna wire in the direction where the strongest signal can be received.

### Supplied AM loop antenna:

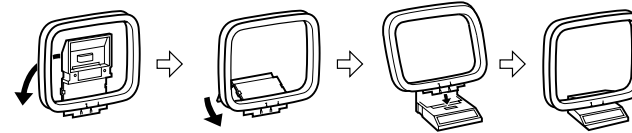
Connect the AM loop antenna wire to the AM and GND terminals. Position the AM loop antenna for optimum reception. Place the AM loop antenna on a shelf, etc., or attach it to a stand or a wall with screws (not supplied).

### Note:

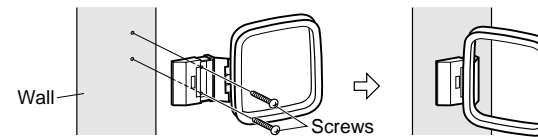
- Placing the antenna on the stereo system or near the AC power cord may cause noise pickup. Place the antenna away from the stereo system for better reception.

### Installing the AM loop antenna:

#### Assembling



#### Attaching to the wall

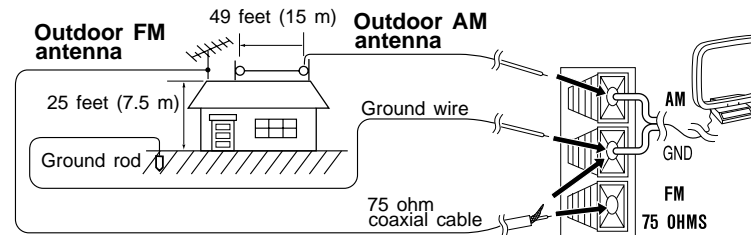


### Outdoor FM antenna

Use an outdoor FM antenna (75 ohm coaxial cable) if you require better reception. Consult your dealer.

### Outdoor AM antenna

Use an outdoor AM antenna if you need better reception. Consult your dealer.



### Notes:

- When an outdoor FM antenna is used, disconnect the supplied FM antenna wire from the FM 75 OHMS terminal.
- When using an outdoor AM antenna, be sure to keep the wire of the AM loop antenna connected.

## ■ Connecting the AC power cord

After making all connections, plug the unit.

If you plug the unit first, the unit will enter the demonstration mode (see page 15).

### Note:

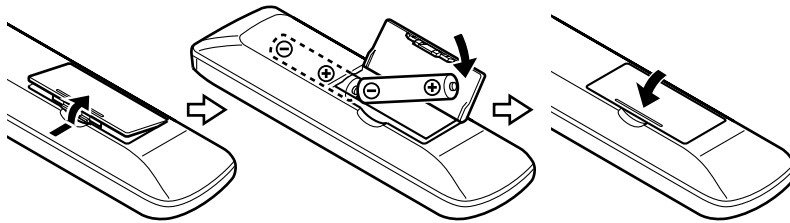
Unplug the unit if it will not be used for a prolonged period of time.

# Remote Control

## ■ Battery installation

Use 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar).  
Batteries are not included.

1. Open the battery cover.
2. Insert the batteries according to the direction indicated in the battery compartment.
  - When inserting or removing the batteries, push them toward the ⊖ battery terminals.
3. Close the battery cover.



### Precautions for battery use:

- Replace all old batteries with new ones at the same time.
- Do not mix old and new batteries.
- Remove the batteries if the unit will not be used for long periods of time. This will prevent potential damage due to battery leakage.

### Caution:

- Do not use rechargeable batteries (nickel-cadmium battery, etc.).
- Installing the batteries incorrectly may cause the unit to malfunction.

### Notes concerning use:

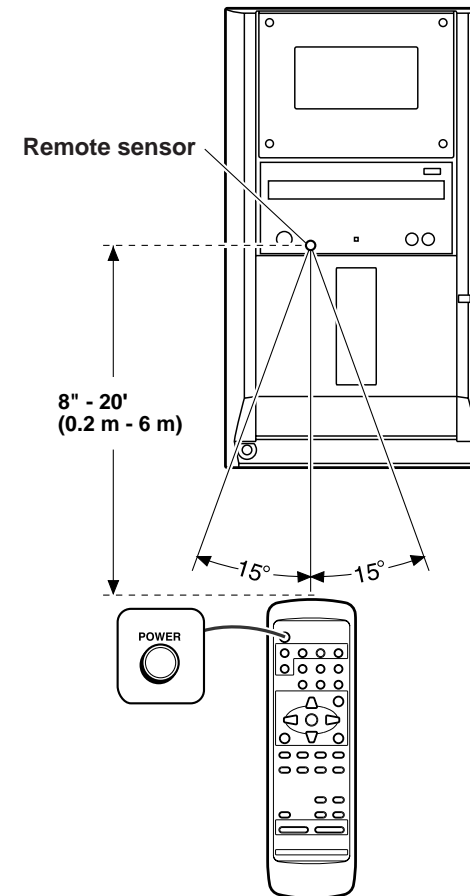
- Replace the batteries if the operating distance is reduced or if the operation becomes erratic.
- Periodically clean the transmitter on the remote control and the sensor on the stereo system with a soft cloth.
- Exposing the sensor on the stereo system to strong light may interfere with operation. Change the lighting or the direction of the stereo system.
- Keep the remote control away from moisture, heat, shock, and vibrations.

## ■ Test of the remote control

Face the remote control directly to the remote sensor on the unit.

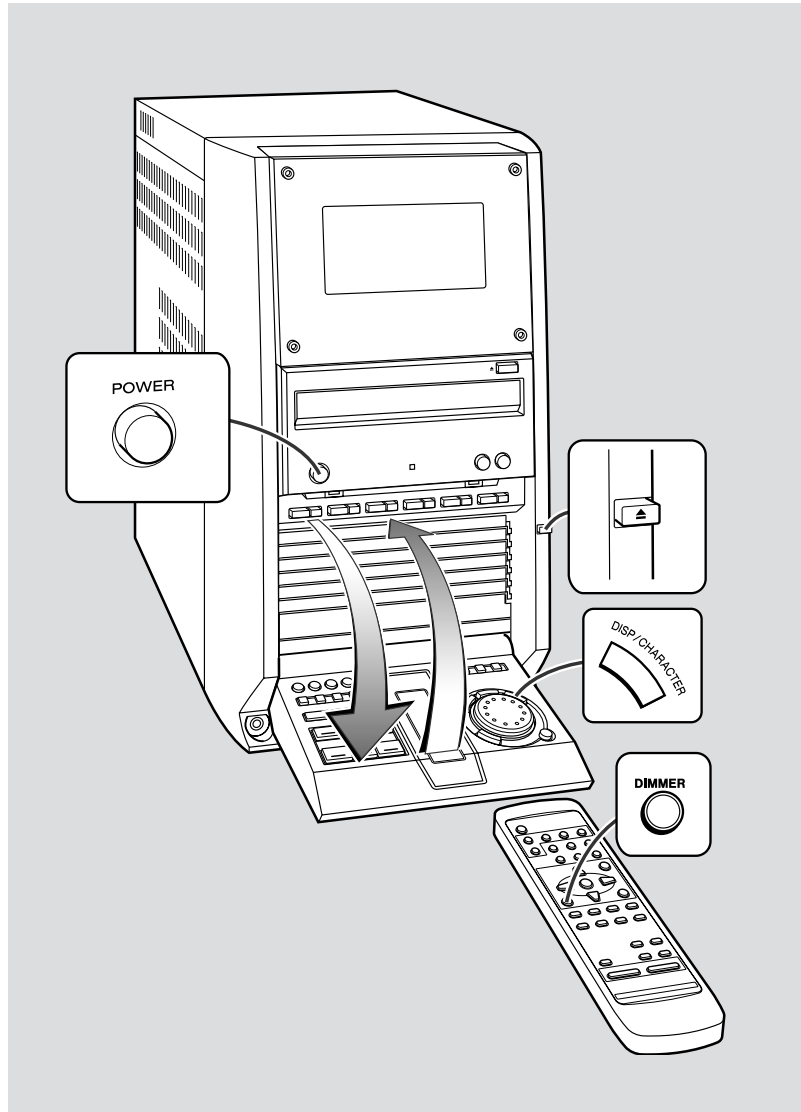
**The remote control can be used within the range shown below:**

Press the POWER button. Does the power turn on? Now, you can enjoy the music.





# General Control



## ■ Demonstration Mode

The first time the unit is plugged, the unit will enter the demonstration mode. You will see words scroll.



### To cancel the demonstration mode:

When the unit is in the power stand-by mode (demonstration mode), press the DEMO button. The unit will enter the low power consumption mode.

### To return to the demonstration mode:

When the unit is in the power stand-by mode, press the DEMO button again.

## ■ Opening and closing the control panel

The control panel is motorized.

The control panel automatically opens when the power is turned on, and closes when the unit is set to the power stand-by mode.

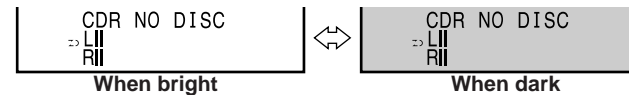
When the power is turned on, you can open or close the control panel by pressing the control panel open/close ▲ button.

### Caution:

- Do not push the control panel while it is opening or closing.
- Do not press buttons on the control panel strongly. The hinge of the panel may be broken.
- Be careful not to jam your fingers in the control panel.

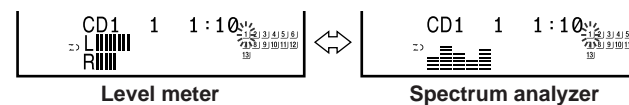
## ■ Display Brightness (2 levels)

You can switch the display brightness by pressing the DIMMER button.



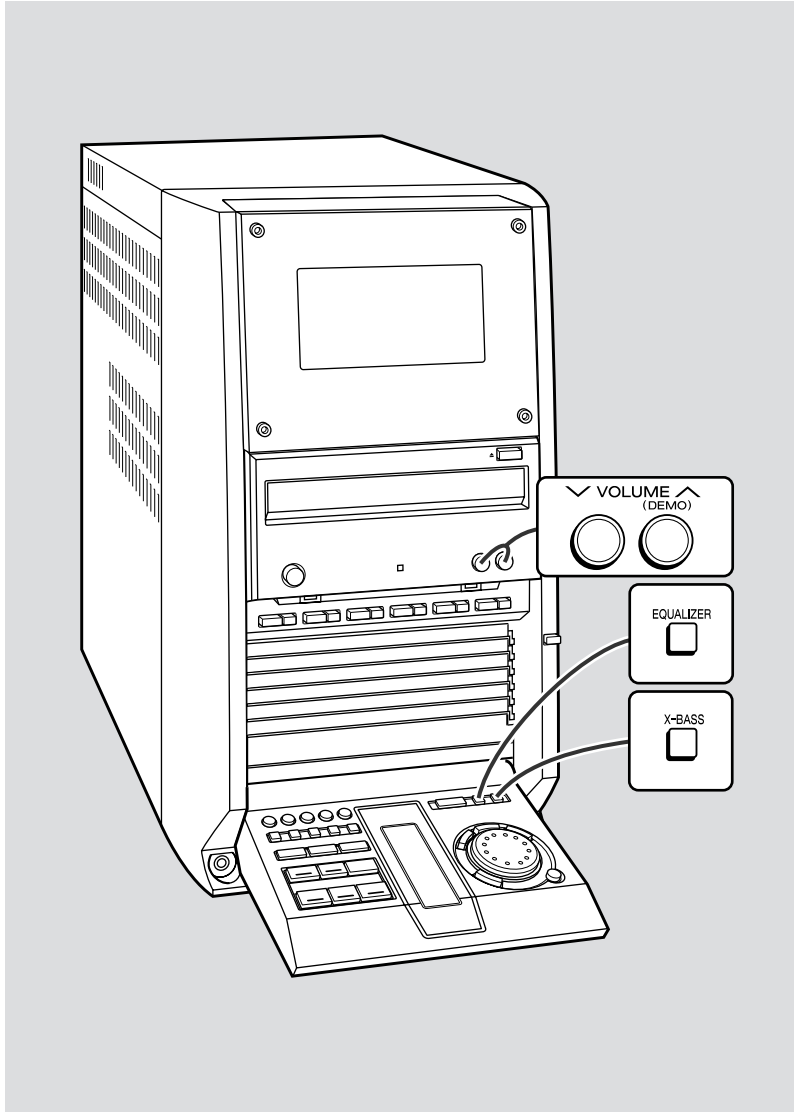
## ■ Switching the display

Press the DISP/CHARACTER button repeatedly to switch the display.



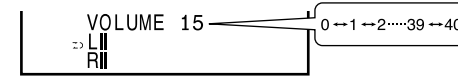
- When you loaded a CD with text data, the display will show the following information in turn: Playing time → Artist name → Title name → Playing time

# Sound Control



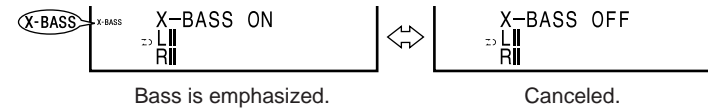
## ■ Volume control

Press the VOLUME  $\wedge$  button to increase the volume and the VOLUME  $\vee$  button for decreasing.



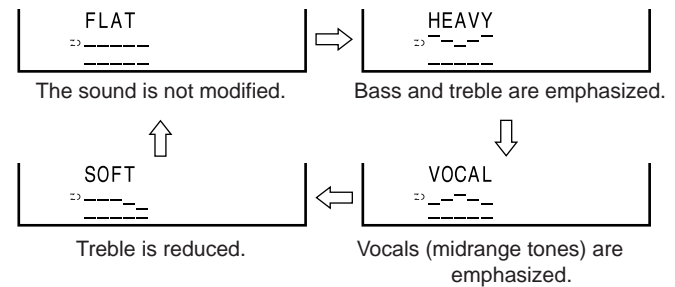
## ■ Bass control

When the power is first turned on, the unit will enter the extra bass mode which emphasizes the bass frequencies, and "X-BASS" will appear. To cancel the extra bass mode, press the X-BASS button.



## ■ Equalizer

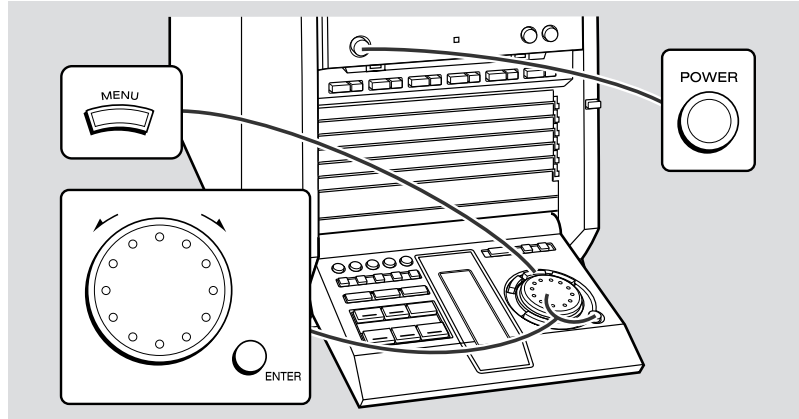
When the EQUALIZER button is pressed, the current mode setting will be displayed. To change to a different mode, press the EQUALIZER button repeatedly until the desired sound mode appears.







# Setting the Clock



In this example, the clock is set for the 12-hour (AM12:00) display.

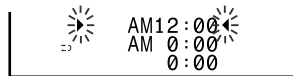
**1 Press the POWER button to turn the power on.**

**2 Press the MENU button.**

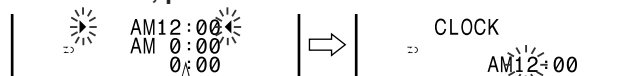
**3 Turn the jog dial to select "CLOCK" and within 10 seconds, press the ENTER button.**



**4 Within 2 minutes, press the ENTER button again.**

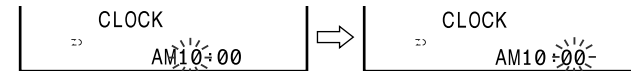


**5 Turn the jog dial to select the 12-hour or 24-hour display and within 2 minutes, press the ENTER button.**



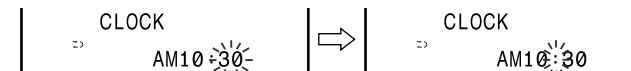
- "AM 12:00" → The 12-hour display will appear. (AM 12:00 - PM 11:59)
- "AM 0:00" → The 12-hour display will appear. (AM 0:00 - PM 11:59)
- "0:00" → The 24-hour display will appear. (0:00 - 23:59)

**6 Turn the jog dial to adjust the hour and within 2 minutes, press the ENTER button.**



- When the 12-hour display is selected, "AM" will change automatically to "PM".

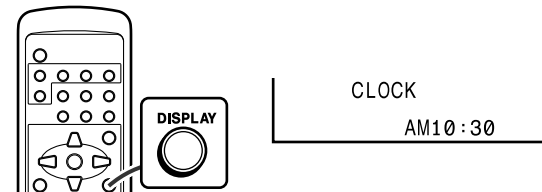
**7 Turn the jog dial to adjust the minutes and within 2 minutes, press the ENTER button.**



- The hour will not advance even if minutes advance from "59" to "00".
- The clock starts from "0" second. (Seconds are not displayed.)
- The time display will disappear after a few seconds.

## To confirm the time display in the stand-by mode:

Press the DISPLAY button on the remote control. The time display will appear for about 3 seconds.



## Note:

"CLOCK" will appear or time will flash at the push of the DISPLAY button when the AC power supply is restored after a power failure or after unplugging the unit. Reset the clock as follows.

## To reset the clock:

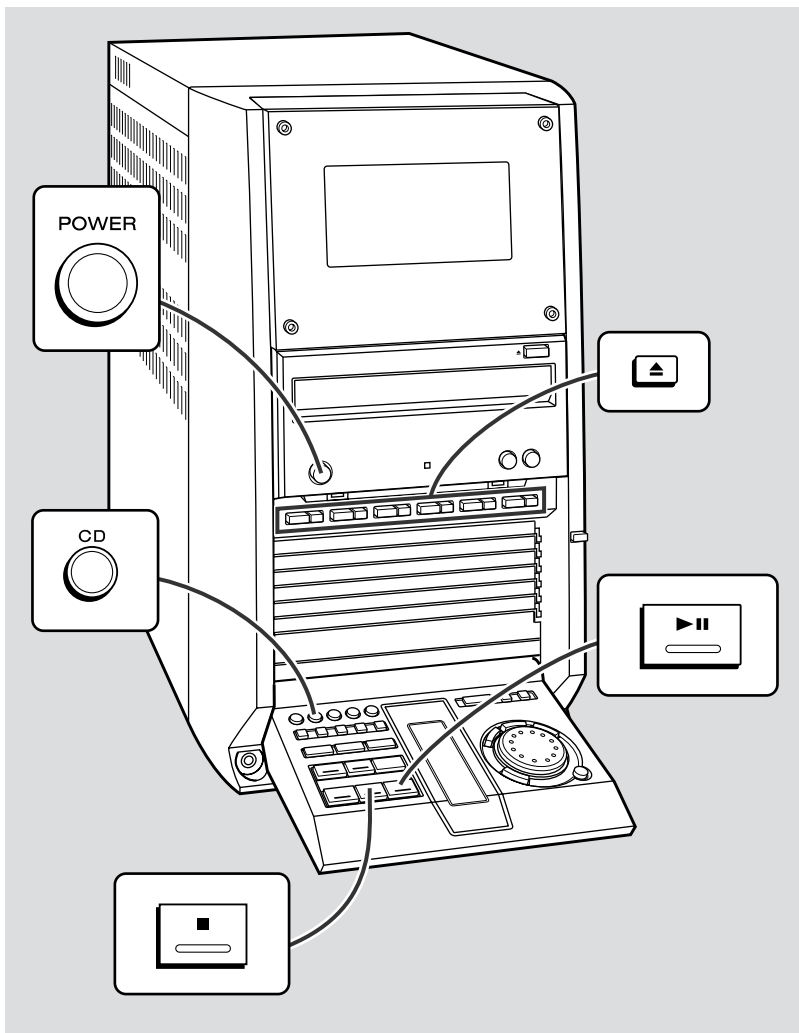
Perform "Setting the Clock" from the beginning. At this time, step 5 (for selecting the 12-hour or 24-hour display) will be skipped.

## To change the 12-hour or 24-hour display:

- Clear all the programmed contents. [Refer to "If trouble occurs (reset)" on page 44 for details.]
- Perform "Setting the Clock" from the beginning.

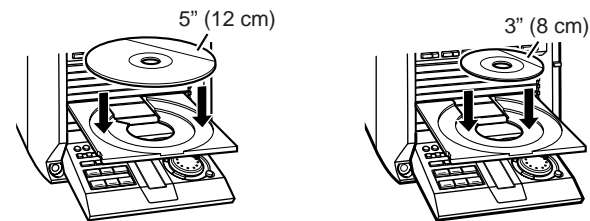
# Listening to a CD (CDs)

This system can play audio CD-R and CD-RW discs just as CD discs. You can play CD TEXT logo carrying discs whose text information is displayed during playback.

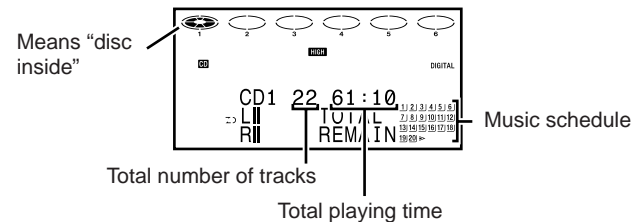


## ■ To play discs in turn (from Disc 1 to Disc 6)

- 1 Press the **POWER** button to turn the power on.
- 2 Press the **CD** button.
- 3 Press the **DISC 1** ▲ button to open the disc tray 1.
- 4 Place the CD on the disc tray 1, label side up.
  - Be sure to place 3" (8 cm) CD in the middle of the disc trays.



- 5 Press the **DISC 1** ▲ button to close the disc tray 1.



- The music schedule will display only the number of tracks on the disc.
- If the CD contains more than 20 tracks, "▶" will appear.

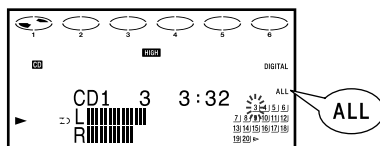
- 6 You can place discs on the trays 2 - 6 by following the steps 3 - 5.

**Note:**

The system will search CD trays until it finds a CD and will not search the rest of the trays.



## 7 Press the ►|| button to start playback.



- Playback will begin from track 1 on the DISC 1. After that disc finishes playing, the next disc will automatically play.
- When there is no CD in one of the disc tray 1 - 6 positions, that position will be skipped and the next CD will be played.
- When the last track on the DISC 6 has finished playing, the CD player will stop automatically.

### To interrupt playback:

Press the ►|| button.

To resume playback from the same point, press the ►|| button again.

### To stop playback:

Press the ■ button.

### To exchange other CDs while playing a disc:

Press the CD tray eject button for the stopped disc and exchange discs.

### To remove the CDs:

While in the stop mode, press the desired CD tray eject button.

- While playing a disc, you can change other discs.

### After use:

Press the POWER button to enter the power stand-by mode.

### Caution:

- Do not place two CDs in one disc tray.
- Do not push the disc tray while it is moving.
- If the power fails while the tray is open, wait until the power is restored.
- If the disc tray is stopped forcibly, "E-CD20" will appear in the display and the unit will not function. If this occurs, press the POWER button to enter the power stand-by mode and then turn the power on again.
- If TV or radio interference occurs during CD operation, move the unit away from the TV or radio.
- If a disc is damaged, dirty, or loaded upside down, the disc will be skipped.

## Advanced CD Playback

### ■ To locate the beginning of a track

#### To move to the beginning of the next track:

Slightly turn the jog dial clockwise during playback.



- You can also skip to the desired track by turning the jog dial.

#### To restart the track being played:

Slightly turn the jog dial counterclockwise during playback.



- You can also skip to the desired track by turning the jog dial.

### Notes:

- You can locate the beginning of a track on a single disc only.
- The ◀◀ or ▶▶ button on the remote control allows you to locate the beginning of a track.

### ■ To locate the desired portion

#### For audible fast forward:

Press and hold down the ►► button during playback.



#### For audible fast reverse:

Press and hold down the ◀◀ button during playback.



### Notes:

- Normal playback will resume when the ◀◀ or ►► button is released.
- When the end of the last track is reached during fast forward, "DISC END" will appear in the display and CD operation will be paused. When the beginning of the first track is reached during fast reverse, the unit will enter the playback mode.
- You can locate the desired portion on a single disc only.

## Advanced CD Playback (continued)

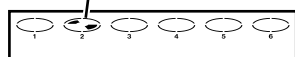
### ■ To specify a disc to play

You can play a disc by specifying the disc number.

Press one of the DISC 1 - DISC 6 buttons to select the desired disc.



Selected disc number



- Only the chosen disc will be played and stopped automatically.

#### Note:

When one of the DISC 1 - DISC 6 buttons is green, it is ready to play that disc. If there is not a disc on the tray, playback will not begin and the button will turn dark.

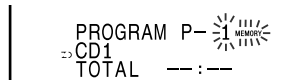
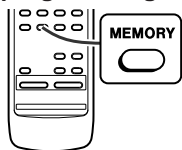
#### To stop playback:

Press the ■ button.

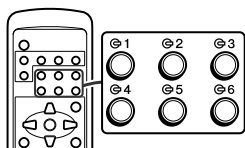
### ■ Programmed play

By specifying discs from 1 to 6, and tracks from 1 to 99, you can choose up to 32 selections for playback in the order you like.

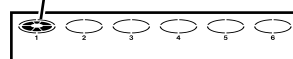
**1** While in the stop mode, press the MEMORY button to enter the programming save mode.



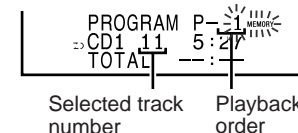
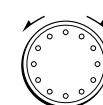
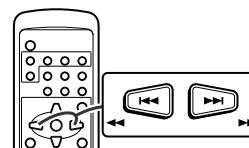
**2** Press one of the Ⓞ 1 - Ⓞ 6 buttons to select the desired disc.



Selected disc number

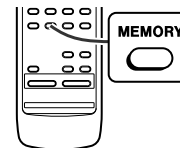


**3** Use the ◀◀ or ▶▶ button on the remote control or the jog dial on the main unit to select the desired track.



Selected track number Playback order

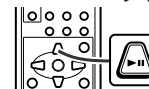
**4** Press the MEMORY button to save the track number.



Playback time

**5** Repeat steps 2 - 4 for other tracks. Up to 32 tracks can be programmed.

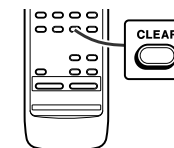
**6** Press the ▶|| button to start playback.



- At this time, playback will not begin even if one of the DISC 1 - DISC 6 buttons is pressed.

#### To cancel the programmed play mode:

While in the stop mode, press the CLEAR button. The MEMORY indicator will disappear and all the programmed content will be cleared.



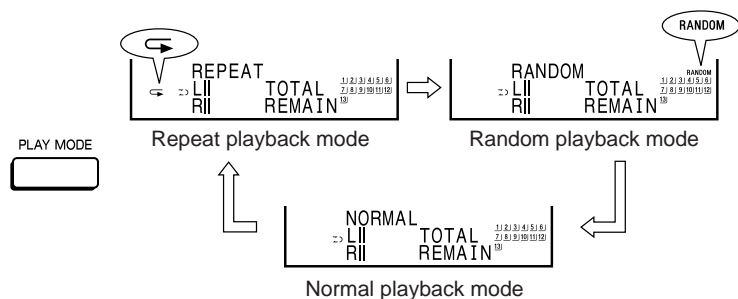
#### Notes:

- Opening any tray of the programmed discs automatically cancels the programmed sequence.
- Even if you press the POWER button to enter the stand-by mode or change the function from CD to another function, the programmed selections will not be cleared.
- During program operation, random play is not possible.

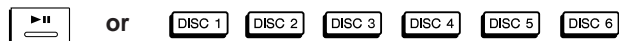


## Repeat or Random play

- 1 Press the PLAY MODE button repeatedly to select the playback mode.



- 2 Press the ►|| or one of the DISC 1 - DISC 6 buttons to start playback.



- If playback is started by pressing the ►|| button, repeat or random play will be performed on all discs.
- If playback is started by pressing one of the DISC 1 - DISC 6 buttons, repeat or random play will be performed on that disc.

### To repeat a programmed sequence:

Perform steps 1 - 6 in the “Programmed play” section and then select the repeat playback.

#### Notes:

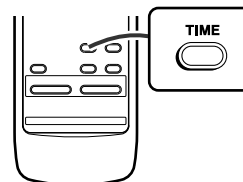
- After using repeat or random play, be sure to press the ■ button. Otherwise, the disc(s) will play continuously.
- In random play, the CD player will select and play tracks automatically. (You cannot select the order of the tracks.)

### To cancel repeat or random play:

Press the PLAY MODE button repeatedly to select the normal play mode.

## Switching the time display

Each time the TIME button on the remote control is pressed during playback or in the pause mode, the display will change.



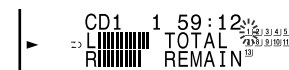
The elapsed playing time for the current track will be displayed.



The remaining playing time for the current track will be displayed.



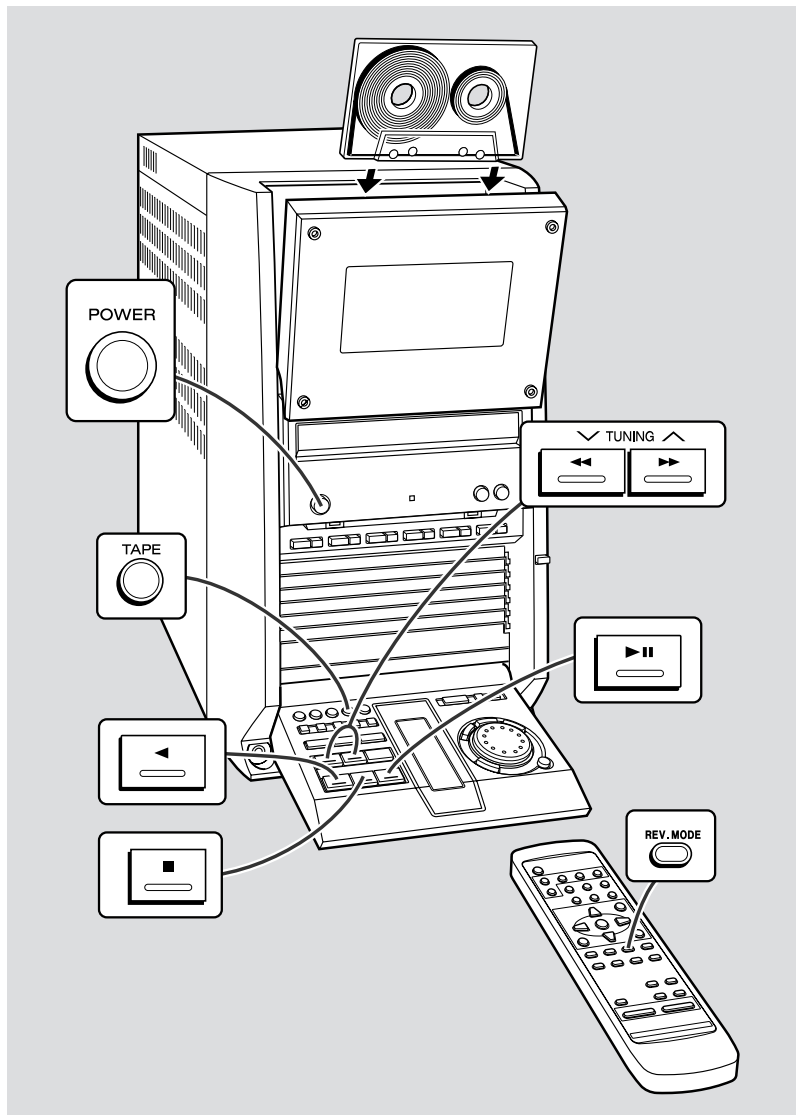
The total remaining playing time for the disc will be displayed.



#### Notes:

- During random play, the total remaining playing time will not be displayed.
- Depending on the CD, the playing time display may not match the total playing time which is indicated on the CD jacket, as the time between tracks is not included.

## Listening to a Cassette Tape



- 1** Press the **POWER** button to turn the power on.
- 2** Press the **TAPE** button.
- 3** Open the cassette door by pushing the area marked "PUSH EJECT ▲".
- 4** Load the cassette into the compartment with side A facing you.
- 5** Press the **REV. MODE** button to choose one side or both sides.
  - ⌂... To listen to both sides.
  - ⌂... For endless repeat play of both sides.
  - ⌂ ... To listen to one side.

TAPES

⇒ LI  
RI SIDE A
- 6** Press the **▶||** button to listen to side A, or the **◀** button for side B.
  - To play both sides (⌂), start from side A. When playback starts from side B, side A will not be played.
  - To play side B using the remote control, press the **■** button to switch the playback side. Then, press the **▶||** button.

### To stop playback:

Press the **■** button.

### Fast forward/rewind on side A:

To advance the tape, press the **▶▶** button.

To rewind it, press the **◀◀** button.

### Fast forward/rewind on side B:

To advance the tape, press the **◀◀** button.

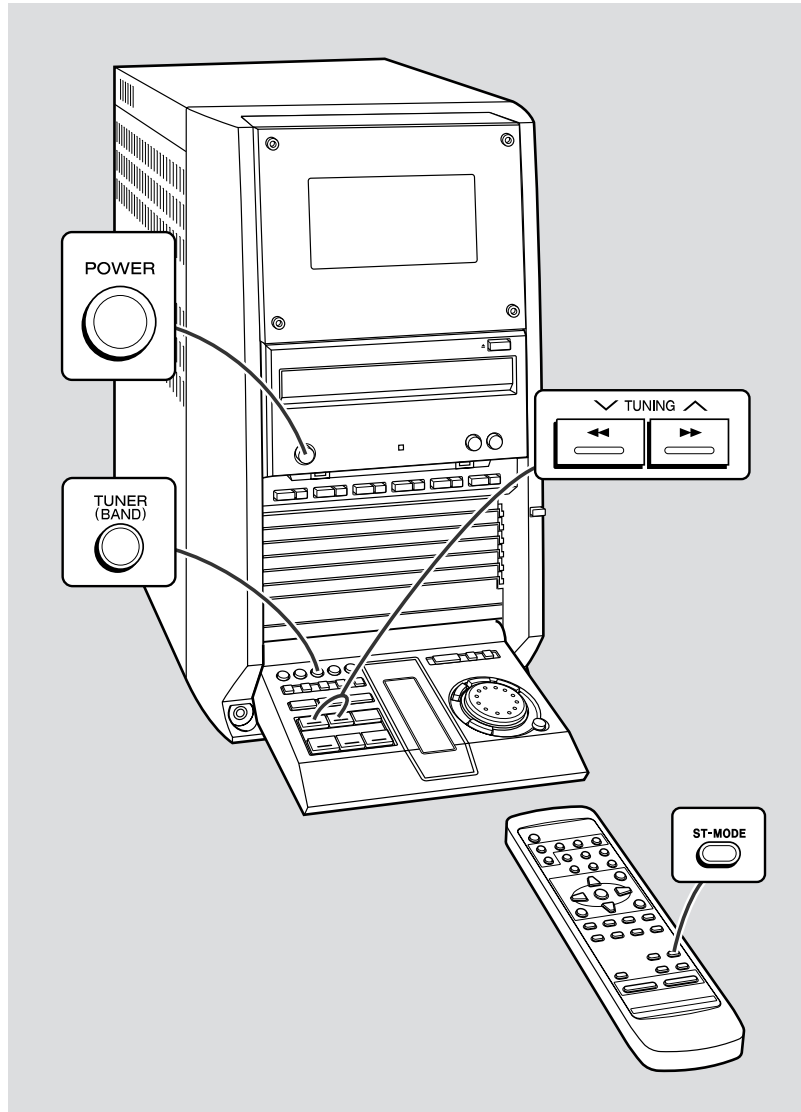
To rewind it, press the **▶▶** button.

### Caution:

- To remove the cassette, press the **■** button, and then open the compartment.
- If a power failure occurs during tape operation, the tape head will remain engaged with the tape and the cassette door will not open. Wait until power is restored.
- Even if the **▶||** button is pressed during tape playback, the unit will not enter the pause mode.



# Listening to the Radio



## ■ Tuning

- 1 Press the **POWER** button to turn the power on.
- 2 Press the **TUNER (BAND)** button to select the desired frequency band (FM or AM).
- 3 Press the **TUNING** (∨ or ∧) button to tune into the desired station.

### Manual tuning:

Press the TUNING (∨ or ∧) button as many times as required to tune into the desired station.

### Auto tuning:

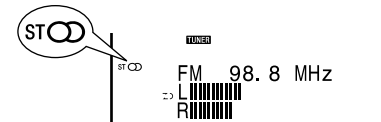
When the TUNING (∨ or ∧) button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.

### Notes:

- When radio interference occurs, auto scan tuning may stop automatically at that point.
- Auto scan tuning will skip weak signal stations.
- To stop the auto tuning, press the TUNING (∨ or ∧) button again.

- 4 To receive an FM stereo transmission, press the **ST-MODE** button on the remote control. The "ST" indicator lights up.

- "ST" will appear when an FM broadcast is in stereo.
- If the FM reception is weak, press the ST-MODE button. The "ST" indicator goes out. The reception changes to monaural, and the sound becomes clearer.



### After use:

Press the **POWER** button to enter the power stand-by mode.

## Listening to the Radio (continued)

### ■ Preset tuning

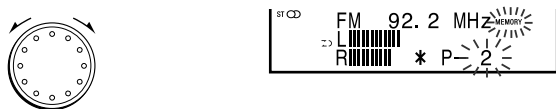
You can store 40 AM and FM stations in memory and recall them at the push of a button.

**1** Perform steps 1 - 4 in the “Tuning” section on page 23.

**2** Press the ENTER button to enter the preset tuning saving mode.



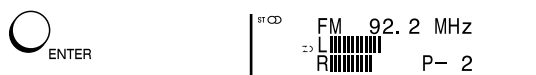
**3** Within 5 seconds, turn the jog dial to select the preset channel number.



- Store the stations in memory, in order, starting with preset channel 1.
- When \* is displayed, a station has already been stored in memory.

**4** Within 5 seconds, press the ENTER button to store that station in memory.

- If the “MEMORY” and preset number indicators go out before the station is memorized, repeat the operation from step 2.



**5** Repeat steps 1 - 4 to set other stations, or to change a preset station.

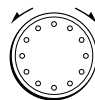
- When a new station is stored in memory, the station previously memorized will be erased.

**Note:**

The backup function protects the memorized stations for a few hours should there be a power failure or the AC power cord disconnection.

### ■ To recall a memorized station

Turn the jog dial to select the desired station.



**Note:**

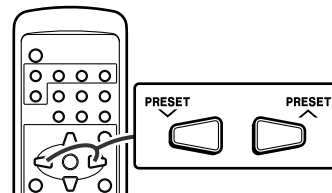
The PRESET (∨ or ∧) button on the remote control allows you to recall a memorized station.

### ■ Preset memory scan

The stations saved in memory can be scanned automatically.

**1** To scan the preset stations, press the PRESET (∨ or ∧) button on the remote control for more than 0.5 seconds.

- The preset number will flash and the programmed stations will be tuned in sequentially, for 5 seconds each.



**2** Press the PRESET (∨ or ∧) button again when the desired station is located.

### ■ To erase all the contents of the preset memory

1. Press the TUNER (BAND) button.
2. Press the ENTER button.
3. Press the CLEAR button on the remote control.
4. Press the ENTER button.



**To erase only one station:**

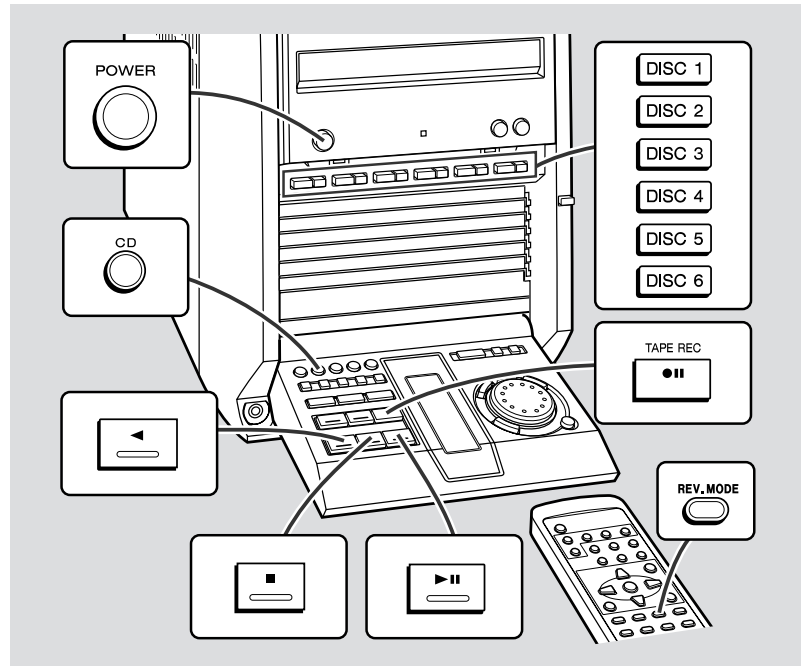
Recall the memorized station. While it is displayed, press the CLEAR button on the remote control, then press the ENTER button.





# Recording to a Cassette Tape

- When recording important selections, make a preliminary test to ensure that the desired material is properly recorded.
- The volume and sound controls can be adjusted with no effect on the recorded signal (Variable Sound Monitor).
- Do not use metal and CrO<sub>2</sub> tapes for recording.



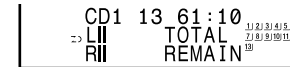
## Recording from a CD

You can record the desired CD using the DISC 1 - DISC 6 buttons.

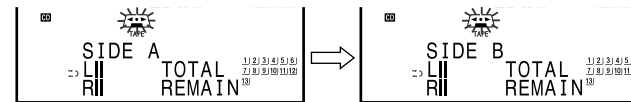
- 1 Press the POWER button to turn the power on.**
- 2 Press the CD button and load the desired disc.**
- 3 Load a cassette into the compartment with side A facing you.**

### 4 Press the REV. MODE button to choose one side or both sides.

- Σ) .... To record on both sides.
- Σ) .... To record on only one side.

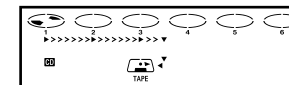


### 5 Press the TAPE REC button repeatedly to switch to the side you record on.



- Recording will be paused.
- To record on both sides, begin on side A. (If recording is started from side B, the tape will not switch over to side A.)

### 6 Press one of the DISC 1 - DISC 6 buttons to start recording.



- When the CD reaches the end, recording will stop.

### Recording from several CDs continuously:

1. Follow the above steps 1 - 5.
2. Regardless of the tape setting (step 5), press the ►|| button to record on side A, or the ◀ button for side B.
  - Recording will start from the lowest numbered disc.

### To perform programmed recording:

1. Program discs and tracks (page 20).
2. Press the TAPE REC button.
3. Regardless of the tape setting (step 5), press the ►|| button to record on side A, or the ◀ button for side B.

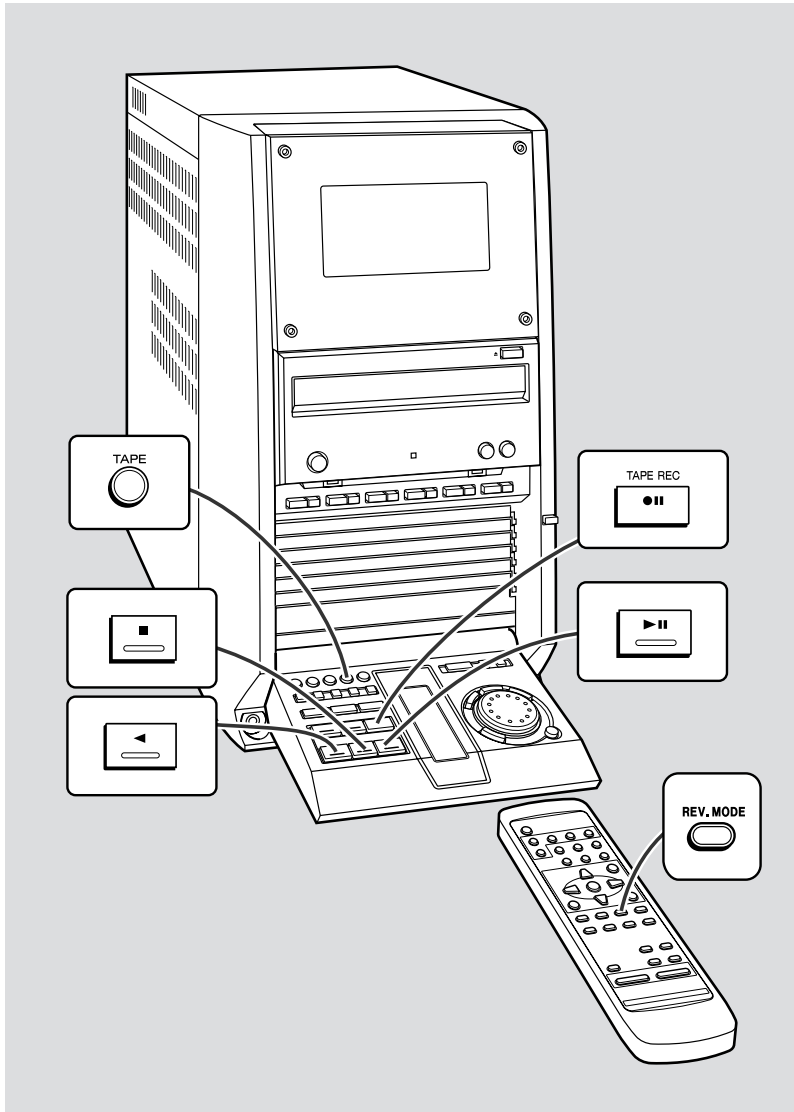
### To stop recording:

Press the ■ button.  
The CD and tape will stop.

### Auto restart function:

If the recording side is switched from side A to B during recording, the system will record the interrupted track on side B from its beginning.  
The recording will be made without cutting the beginning of the track on side B.

## Recording to a Cassette Tape (continued)



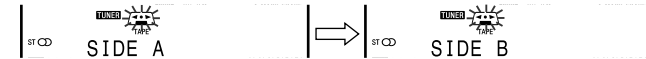
### ■ Recording from the radio

- 1** Tune in to the desired station. (See page 23.)
- 2** Load a cassette into the compartment with side A facing you.
- 3** Press the REV. MODE button to choose a recording mode, one side or both sides.

ΣD .... To record on both sides.  
 Σ .... To record on only one side.



- 4** Press the TAPE REC button repeatedly to switch to the side you record on.



- Recording will be paused.
- To record on both sides, begin on side A. (If recording is started from side B, the tape will not switch over to side A.)

- 5** Press the ►|| button to record on side A, or the ◀ button for side B.



- When you press the ►|| button on the remote control, the system will record on the side specified in step 4.

#### To interrupt recording:

Press the TAPE REC button. To resume recording, press the same recording button you pressed in step 5. Other buttons do not allow resuming.

#### To stop recording:

Press the ■ button.

#### Note:

If you hear a whistling noise while recording an AM station, move the AM loop antenna.

### ■ Erasing recorded tapes

1. Press the TAPE button.
2. Follow steps 2 - 5 in "Recording from the radio".



# What is CD-R or CD-RW?

## Recordable discs

For recording, use audio discs only.

This player is compatible with CD-R discs, CD-RW discs, and audio CDs with either mark below.



CD-R: Compact Disc-Recordable



CD-RW: Compact Disc-ReWritable

## Differences between the CD-R disc and the CD-RW disc

	CD-R	CD-RW
Playback	Can be played on a standard CD player when it is finalized after recording.	Cannot be played on a standard CD player. If it is finalized after recording, it can be played only on a CD-RW compatible player.
Erasing	Erasing is impossible.	Recorded tracks can be deleted. A finalized disc can be restored.

## Finalizing process

### What is the Finalizing Process?

It is the final process to make the recorded CD-R disc playable on a standard CD player.

### Once finalized:

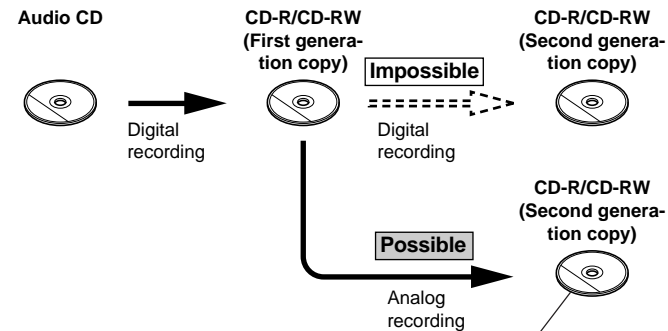
You cannot make another recording on that CD-R disc. On the other hand, a CD-RW disc can be re-recorded or unfinalized after tracks are erased.

CD-R discs have a reading limit. Each time the unfinalized disc is read, it is counted as once. Do not open (close) the disc tray or turn on (off) the power unnecessarily with an unfinalized disc in the player.

## Serial Copy Management System (SCMS)

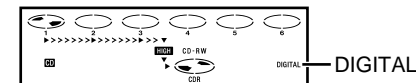
This player is equipped with a digital copy prevention mechanism which complies with the SCMS. The SCMS limits the production of digital copies to one generation for copyright protection. If a digital copy (first generation copy) is made from a copyright-protected digital source (audio CD or the like), no further digital copying (from the second generation) is allowed.

The SCMS does not affect analog recording.



When you make a recording using the CD ▶ CDR button (page 29), this player displays "COPY PROTECT" and automatically performs analog recording. (The CDR REC button does not allow you to make a recording. "CAN'T COPY" appears.)

You can check if digital recording is being performed. "DIGITAL" lights up during digital recording. (During analog recording, "DIGITAL" turns off.)

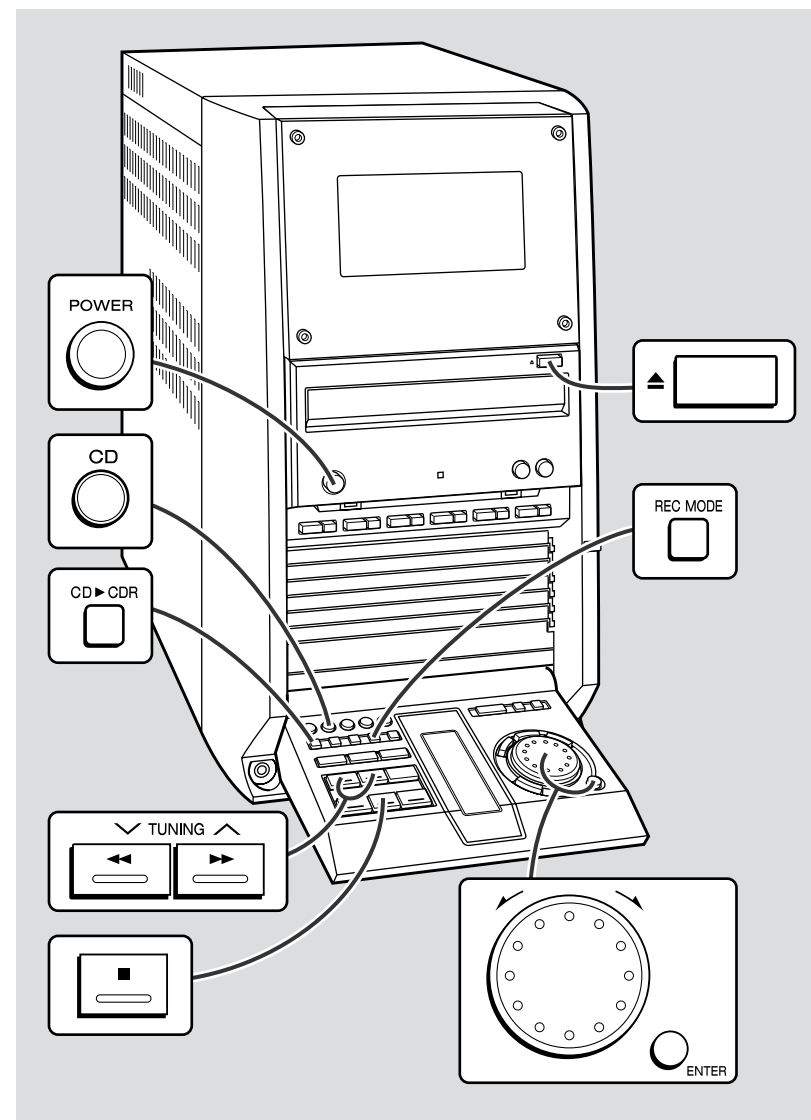


## Precautions

- Avoid getting fingerprints, dust, or stains on the recording side of the disc. This is particularly important, prior to recording.
- Do not apply labels, protective sheets, or any coating fluids to the disc.
- Write titles and other information in the specified area on the label using a felt-tipped pen. Do not use writing instruments with a hard tip, such as ball point pens.
- Do not expose the disc to excessive heat, humidity, and direct sunlight.
- Supplied disc meets the Orange Book Part II.



# Recording to a CD-R or a CD-RW

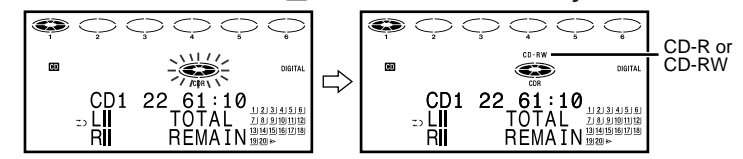


## ■ Recording from CDs

- 1 Press the POWER button to turn the power on.
- 2 Press the CD button and load the desired CD(s).
- 3 Press the CD-R/CD-RW button.
- 4 Place the CD-R or CD-RW disc on the CD-R/CD-RW tray, label side up.

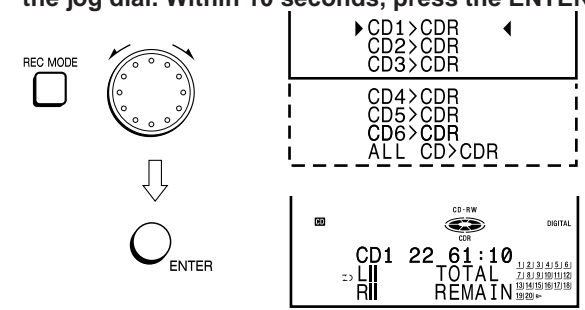


- 5 Press the CD-R/CD-RW button to close the tray.



● While the system reads the CD-R or CD-RW disc, mark flashes. Wait until it lights up.

- 6 Press the REC MODE button and select the desired CD using the jog dial. Within 10 seconds, press the ENTER button.



- ▶ CD1 > CDR to CD6 > CDR : Records the selected CD only.
- ▶ ALL CD > CDR : Records all CDs.



In steps 8 - 9, operate within 5 seconds. Otherwise, the system will go to the next step automatically.

- For just checking, perform step 7 only.
- To change the setting, follow the procedure.

### 7 Press the CD ▶ CDR button.



### 8 Select "AUTO" using the jog dial to finalize the disc. Then press the ENTER button.

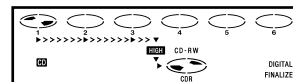


- ▶ AUTO : Automatically finalizes the disc after recording.
- ▶ MANUAL : Does not finalize the disc. Refer to page 36 for manual finalizing. (An unfinalized disc cannot be played on a CD player.)

### 9 Select "HIGH" using the jog dial to record at high speed. Then press the ENTER button to start recording.



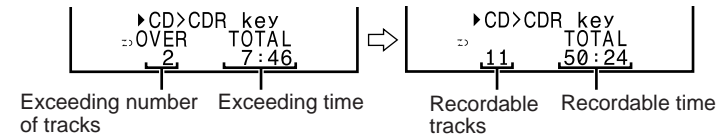
- ▶ HIGH : High speed recording.
- ▶ NORMAL : Normal speed recording.
- You can also change the recording speed using the HIGH/NORMAL button.



- When the CD reaches the end, recording will stop.

### "OVER" indication in step 9:

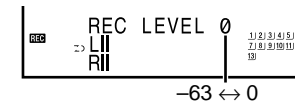
If the recording time is longer than the recordable time of the CD-R/CD-RW disc, "OVER" appears. Then, the system displays the following information.



- You can record only the "recordable tracks" by pressing the CD ▶ CDR button again.

### Adjusting the recording level:

You can lower the level if the level of the recording source is high. During recording or while recording is paused, adjust the recording level using the ◀◀ or ▶▶ button.



### Note for high speed recording:

High speed recording is possible only during digital recording. If the CD-R/CD-RW disc you record from is copyright-protected by the SCMS (page 27), the system will perform analog recording automatically. The disc will be recorded at normal speed.

### To stop recording:

Press the ■ button. The CD and CD-R/CD-RW disc will stop.

### After use:

Press the POWER button to enter the power stand-by mode.

### Note:

The unit may take longer to shut off depending on the condition of the CD-R unit.

## Recording to a CD-R or a CD-RW (continued)

### ■ Recording the first several tracks of the CDs

Create your own hit collection. For example, you can record the first track of all six CDs in turn.

**1** Press the CD button and load the desired CD(s).

---

**2** Load the CD-R or CD-RW disc. (See page 28.)

---

**3** Press the REC MODE button and turn the jog dial to select "1 CD T-EDIT" or "ALL T-EDIT". Within 10 seconds, press the ENTER button.

▶ 1CD T-EDIT: Programs 1 CD (the current CD).  
 ▶ ALL T-EDIT : Programs all CDs continuously.  
 (Example: Recording the first track of all CDs.)

**4** Press the TRACK EDIT button repeatedly to select the desired tracks to be recorded.

- Because the system reads the CD, wait for a while. Then, the total recording time for track editing will appear.

**Example) Selected: 1CD T-EDIT**

Total recording tracks: 4, Total recording time: 20:16

**Example) Selected: ALL T-EDIT**

Total recording tracks: 6, Total recording time: 33:24

- Each time you press the TRACK EDIT button, one track will be added to the total recording tracks.

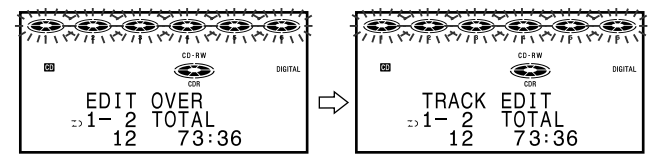
**5** Press the CD ▶ CDR button to start recording. (Perform steps 8 - 9 on page 29.)

**Recording order of track editing:**

DISC 1		DISC 2		DISC 3		DISC 6	
Track 1	Track 2	Track 1	Track 2	Track 1	Track 1	Track 2	Track 2

- When the CD reaches the end, recording will stop.

**"EDIT OVER" indication in step 4:**  
 If the recording time is longer than the recordable time of the CD-R/CD-RW disc or if the recording tracks reach 32, "EDIT OVER" appears and the system does not accept further editing.  
 Record tracks selected before "EDIT OVER" appears.



**To stop recording:**  
 Press the ■ button.  
 When you stop the recording, the memory of the selected tracks will be erased.



## ■ Programmed recording from CDs

Programmed play lets you select the desired discs and tracks.

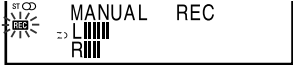
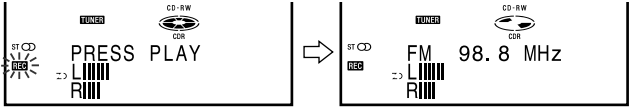
- 1 Program the desired tracks from CD(s). (See page 20.)
- 2 Load the CD-R or CD-RW disc. (See page 28.)
- 3 Press the CD ► CDR button to start recording. (Perform steps 8 - 9 on page 29.)
  - When the CD reaches the end, recording will stop.
  - While tracks are programmed, the REC MODE and TRACK EDIT buttons do not work. (See pages 28 and 30.)

### To stop recording:

Press the ■ button.

The programmed content will not be erased when the recording is stopped.

## ■ Recording from the radio

- 1 Tune into the desired station. (See page 23.)
- 2 Load the CD-R or CD-RW disc. (See page 28.)
- 3 Press the CDR REC button.
 
- 4 After "PRESS PLAY" appears, press the ►|| button to start recording.
 

### To mark track numbers while recording from the radio:


Press the CDR REC button during recording. It will be marked and the track number will be increased by one.

### To stop recording:

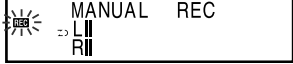
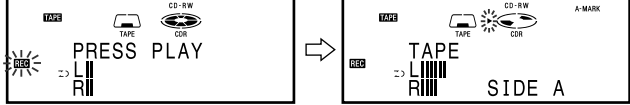
Press the ■ button.

## ■ Recording from cassettes

Recording starts automatically when the cassette is played.

- 1 Load the cassette. (See page 22.)
- 2 Load the CD-R or CD-RW disc. (See page 28.)
- 3 Press the REC MODE button.
 
  - S. SYNC REC: When sound signal is input after pressing the ►|| button, recording will start automatically.
  - MANUAL REC: After pressing the ►|| button, recording will start.
    - Select one of the above recording types using the jog dial. Then, press the ENTER button.
- 4 If you have selected "MANUAL REC", you can turn on or off it using the AUTO MARKER button. (When you have selected "S.SYNC REC", auto mark function will be turned on and no switching operation is possible.)
 

A. MARK ON	↔	A. MARK OFF
------------	---	-------------

  - A. MARK ON: Marks track numbers when sound stops for 3 seconds or longer.
  - A. MARK OFF: Does not mark track numbers.
    - The auto mark function may not work correctly if you record a tape with much noise.
- 5 Press the CDR REC button.
 
- 6 After "PRESS PLAY" appears, press the ►|| button to start recording.
 
  - If the tape or CD-R or CD-RW disc stops, recording will stop.

### To stop recording:

Press the ■ button.

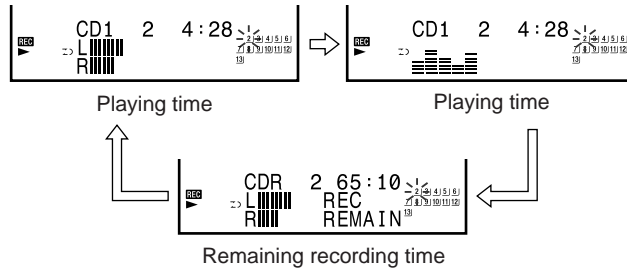




## Recording to a CD-R or a CD-RW (continued)

To check the remaining recording time on the CD-R or CD-RW discs:

Press the DISP/CHARACTER button while recording. Each time you press the button, the display switches as follows.

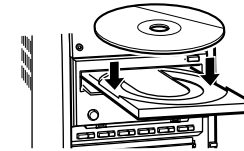


### ■ Sampling rate converter

This system is equipped with a sampling rate converter, which automatically converts the sampling frequencies of the connected DSS tuners or DAT decks (32 kHz, 48 kHz) to 44.1 kHz. You can digitally record from equipment with different sampling frequencies.

## Playing discs on the CD-R tray

- 1 Press the CDR button.
- 2 Load the CD, CD-R or CD-RW disc. (See page 28.)



- 3 Press the ►|| button to start playback.

### To interrupt playback:

Press the ►|| button.

To resume playback from the same point, press the ►|| button again.

### To stop playback:

Press the ■ button.

### The following playbacks are possible as on CDs.

Page

- To locate the beginning of a track ..... 19
- To locate the desired portion ..... 19
- Programmed play ..... 20
- Repeat or Random play ..... 21
- Switching the time display ..... 21

### Notes:

- The operation "To locate the beginning of a track" on a disc on the CD-R tray plays from the beginning of the previous track.
- During "Programmed play" on a disc on the CD-R tray, the programmed content will be erased when the system enters the stand-by mode or when the function is changed to a function other than CDR.
- Random play using the CD-R tray stops when all tracks have played once.

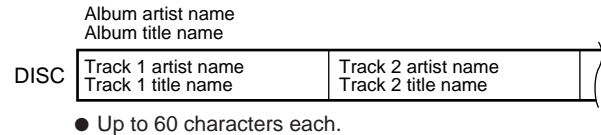




# Text editing on a CD-R or a CD-RW

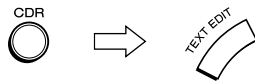
## ■ Naming discs and tracks

You can enter an album artist name and an album title for the disc. For each track, you can enter an artist name and a track title.



**1** Load a CD-R or CD-RW disc. (See page 28.)

**2** Press the CDR button, then press the TEXT EDIT button.



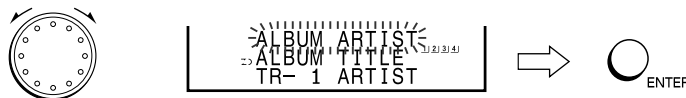
- If it is a finalized CD-R disc, "FINALIZED CD" appears. You can not perform text editing on the disc.
- If it is a CD-RW disc, "UNFINALIZE ?" appears. Press the ENTER button to unfinalize it.

**3** Select "TEXT EDIT" using the jog dial, then press the ENTER button.



- If no track is recorded, "NO TRACKS" appears.

**4** Select the item to name using the jog dial, then press the ENTER button.



**5** Select the desired character using the jog dial, then press the ENTER button.



- To correct a character, move the cursor using the ◀ or ▶ button to the one you want to correct and re-enter it.
- Each time you press the DISP/CHARACTER button instead of using the jog dial, you can skip 12 characters (see the table).

DISP/CHARACTER	␣	A	B	C	D	E	F	G	H	I	J	K
	L	M	N	O	P	Q	R	S	T	U	V	W
	X	Y	Z	0	1	2	3	4	5	6	7	8
	9	a	b	c	d	e	f	g	h	i	j	k
	l	m	n	o	p	q	r	s	t	u	v	w
	x	y	z	(	)	-	'	.	␣			

␣ : indicates a space.

**6** Press the TEXT EDIT button.



**7** To enter other artist names or titles, repeat steps 4 and 6.

- For the track artist name, the album artist name will be entered automatically. Change it if you want to.

**8** Press the ■ button to finish.





- If it is an unfinalized disc, re-finalize it. (See page 36.)
- If you open the tray without finalizing the disc you edited, "MEMORY \*\*\*%" (0 - 99) will appear and the used amount of the text memory will be shown.
- If "MEMORY FULL" appears, follow "Text memory view" (see page 35) and make room in the memory.

## Text editing on a CD-R or a CD-RW (continued)

### To change a character:

Example) To change "BEET" to "BEST"

1. Perform steps 1 - 4 in the "Naming discs and tracks" section on page 33.
2. Press the ◀◀ or ▶▶ button on the unit to flash the character to change. 
3. Select a character to enter using the jog dial, then press the ENTER button. 
4. Press the ■ button to finish.

### To add a character:

1. Perform steps 1 - 4 in the "Naming discs and tracks" section on page 33.
2. Press the ◀◀ or ▶▶ button on the unit to flash the character before which you want to add a new character.
3. To enter a space, press the ENTER button.
4. Select a character to enter using the jog dial, then press the ENTER button.
5. Press the ■ button to finish.

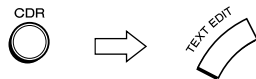
### To delete a character:

1. Perform steps 1 - 4 in the "Naming discs and tracks" section on page 33.
2. Press the ◀◀ or ▶▶ button on the unit to flash the character to delete.
3. Press the DELETE button.
4. Press the ■ button to finish.

## Erasing disc and track names

**1** Load a CD-R or CD-RW disc. (See page 28.)

**2** Press the CDR button, then press the TEXT EDIT button.



- If it is a finalized CD-R disc, "FINALIZED CD" appears. You can not perform text erasing on the disc.
- If it is a CD-RW disc, "UNFINALIZE ?" appears. Press the ENTER button to unfinalize it.

**3** Select "TEXT ERASE" using the jog dial, then press the ENTER button.



- "No Text" appears if no names are entered.
- To cancel the operation, press the ■ button.

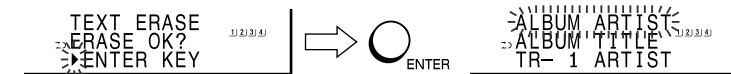
**4** Select the item you want to erase using the jog dial, then press the ENTER button.



- "No Text" appears if no names are entered.
- To cancel the operation, press the ■ button.

**5** Press the ENTER button again.

Example) Album artist



- If no name is written, "No Text" appears. After 2 seconds, the display returns to step 4.

**6** To erase other artist or title names, repeat steps 4 and 5.

**7** Press the ■ button to finish.



- If it is an unfinalized disc, re-finalize it. (See page 36.)

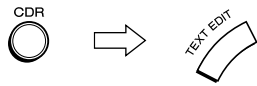


## Text memory view

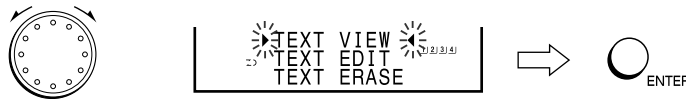
The text data written to the CD-R or CD-RW disc will remain in the main unit memory, if the disc is removed without finalizing.

**1** Load a CD-R or a CD-RW disc. (See page 28.)

**2** Press the CDR button, then press the TEXT EDIT button.



**3** Select "TEXT VIEW" using the jog dial, then press the ENTER button.



- To cancel the operation, press the ■ button.

**4** Turn the jog dial to check all the album titles in the memory.



**5** Press the ■ button to finish.



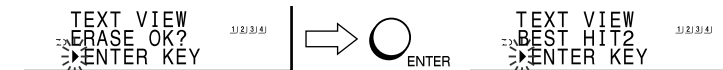
After viewing the text memory, you can erase it:

**1** Follow steps 1 - 4 in the "Text memory view".

**2** Choose the unnecessary album title using the jog dial. Then, press the ENTER button.



**3** Press the ENTER button again.



- The text data for the specified disc will be erased.
- If no name exists, "Memory Empty" appears.

**4** To erase the text data of other discs, repeat step 2 and 3.

**5** Press the ■ button to finish.




# Finalizing a CD-R or a CD-RW

## Finalizing manually




If you select the manual finalizing recording (pages 28 -29), the disc should be finalized after all tracks are recorded or characters are entered.

- 1 Place an unfinalized CD-R or CD-RW disc on the CD-R/CD-RW tray.




---

- 2 Press the CDR button.
 

---

- 3 Press the FINALIZE button.
 

  - To cancel finalizing, press the  button.

---

- 4 Press the ENTER button.
 


  - Finalizing starts and the remaining time appears.
  - During finalizing, no buttons work.

**Caution:**


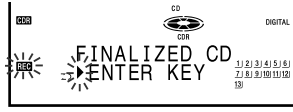

- Once a CD-R disc is finalized, you cannot make any alteration (additional recording).
- You can initialize or unfinalize a finalized CD-RW disc.
- Once you finalize the disc, the text data will be erased from the memory (main unit).
- Do not unplug the power cord and impart shock to the unit during finalizing. Finalizing will not be correctly performed, and consequently proper playback may not be possible. When you plug the cord again, "DISC RECOVER" appears and the disc can be recovered. If "DISC ERROR" appears, the disc is not recoverable.

## Unfinalizing a disc (CD-RW only)


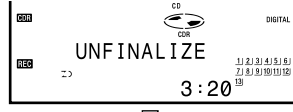

Canceling finalizing of CD-RW discs lets you record or edit text again.

- 1 Place a CD-RW disc on the CD-R/CD-RW tray.

---

- 2 Press the TEXT EDIT button.
 



---

- 3 Press the ENTER button.
 


  - Unfinalizing starts and the remaining time appears.
  - During unfinalizing, no buttons work.

**Notes:**

- Finalize or unfinalize CD-R or CD-RW discs which are recorded or finalized by this player only. The disc data may not be able to be restored with finalizing (unfinalizing) uncompleted.
- Finalizing or unfinalizing may not work properly on a disc with dust or scratches.



# Erasing (CD-RW only)

You can erase CD-RW discs only.  
Tracks recorded on CD-R discs cannot be erased.

## ■ Erasing a CD-RW track(s)

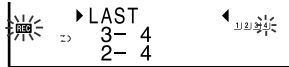
Example) 4 tracks recorded CD-RW

**1** Load a CD-RW disc. (See page 28.)

**2** Press the CDR button.

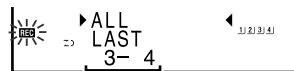
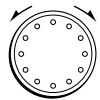


**3** Press the ERASE button.



- If it is a finalized CD-R disc, "FINALIZED CD" appears. You can not perform erasing on the disc.
- If it is a CD-RW disc, "UNFINALIZE ?" appears. Press the ENTER button to unfinalize it.

**4** Select the erasing type using the jog dial, then press the ENTER button.



- LAST ..... Erases the last track.
- 3 - 4 ..... Erases the 3rd and 4th tracks.
- 2 - 4 ..... Erases from the 2nd track to the 4th track.
- ALL ..... Erases all tracks.

Example) Selected: ALL ERASE



- To cancel the operation, press the ■ button.
- The music schedule's tracks to be erased flash.

**5** Press the ENTER button again.



Example) Selected: ALL ERASE



- The remaining time to complete erasing appears.



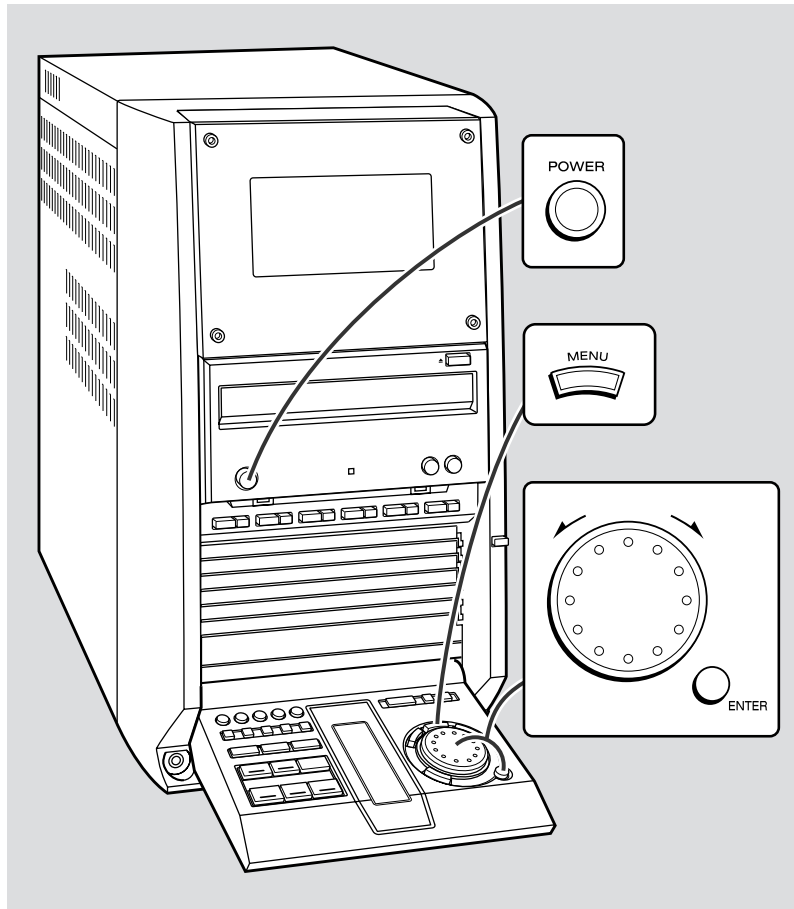
# Timer and Sleep Operation

### Timer playback:

The unit turns on and plays the desired source (CD, CD-R/CD-RW, tuner, tape) at the preset time. At the end time, the unit enters the power stand-by mode automatically.

### Timer recording:

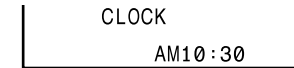
The unit turns on and starts recording from the tuner at the preset time. At the end time, the unit enters the power stand-by mode automatically.



## ■ Timer playback/Timer recording

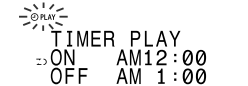
### Before setting timer:

While the power is turned off, press the DISPLAY button on the remote control to check that the clock is on time.



- 1 Press the POWER button to turn the power on.
- 2 Press the MENU button.
- 3 Turn the jog dial to select "TIMER PLAY" or "TIMER REC" mode and within 10 seconds, press the ENTER button.

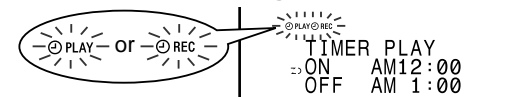
#### For timer playback:



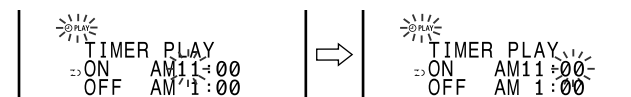
#### For timer recording:



- 4 "Ⓜ PLAY" or "Ⓜ REC" will flash for 5 seconds. Press the ENTER button during the flash.



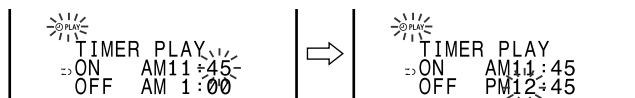
- 5 Turn the jog dial to specify the hour to start and within 10 seconds, press the ENTER button.



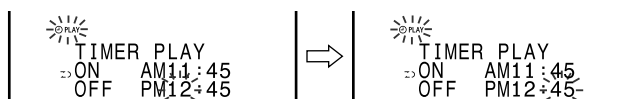
● The illustrations show the timer playback setting.



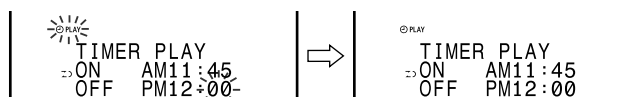
**6** Turn the jog dial to specify the minute and within 10 seconds, press the ENTER button.



**7** Turn the jog dial to specify the hour to stop and within 10 seconds, press the ENTER button.



**8** Turn the jog dial to specify the minute and within 10 seconds, press the ENTER button.



Timer play: Go to step 10.  
Timer recording: Go to step 9.

**9** For timer recording, turn the jog dial to select “CD-R REC” or “TAPE REC” and within 10 seconds, press the ENTER button.



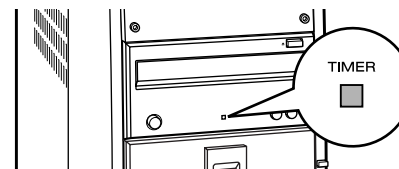
**10** Adjust the volume using the VOLUME buttons.

- Do not turn the volume up too high.

**11** Press the CD, CDR, TUNER (BAND) or TAPE button to select the desired function.

To select the timer playback source : CD, CD-R/CD-RW, TUNER (BAND) or TAPE.  
To select the timer recording source : TUNER (BAND).

**12** Press the POWER button to enter the timer stand-by mode.



**To cancel the timer playback/timer recording:**

- Press the POWER button to turn the power on.
- Press the MENU button.
- Turn the jog dial to select “TIMER OFF” and then press the ENTER button.

**To check the setting time:**

- Press the POWER button to turn the power on.
- Press the MENU button.
- Turn the jog dial to select “TIMER PLAY” or “TIMER REC” and then press the ENTER button.
- Press the POWER button to enter the timer stand-by mode.

**13** When the preset time is reached, playback or recording will start.

- The volume will increase gradually until it reaches the volume you were listening to before turning off your system.

**14** When the timer end time is reached, the system will enter the power stand-by mode automatically.

- If you press the CD ► CDR, TRACK EDIT, FINALIZE, ERASE or MENU button during timer operation, the timer mode will be cancelled and playback or recording will last even when the end time is reached.

**Notes:**

- The system will be turned on 2 minutes (no operation can be accepted during that time.) before the timer playback and recording preset time to prepare for them. Actual playback and recording will start from the set time.
- When performing timer playback or recording using another unit connected to the AUX IN jacks, select “AUX” in step 11. At this time, only this stereo system will be turned off automatically. (Another unit will not be turned off.)

**To change the setting time:**

Perform “Timer playback/Timer recording” from the beginning.

## Timer and Sleep Operation (continued)

### ■ Sleep operation

The radio, compact disc, cassette tape and CD-R/CD-RW disc can all be turned off automatically.

- 1** Play back the desired sound source.

---

- 2** Press the MENU button.

---

- 3** Turn the jog dial to select "SLEEP".  
Then press the ENTER button.

**To change the sleep time:**  
While the sleep time is displayed, turn the jog dial.  
(Maximum: 2 hours - Minimum: 30 minutes)

- 4** Press the ENTER button.

---

- 5** Your system will enter the power stand-by mode automatically after the preset time has elapsed.
  - The volume will be turned down when the sleep operation finishes.

**Note:**

Once the sleep time is set, it will remain unchanged until the setting is changed.

**To cancel the sleep operation:**

Press the POWER button while sleep operation is performed.

**To confirm the remaining sleep time:**

Perform the above steps 2 - 3.

You can also change the sleep time.

### ■ To use timer and sleep operation together

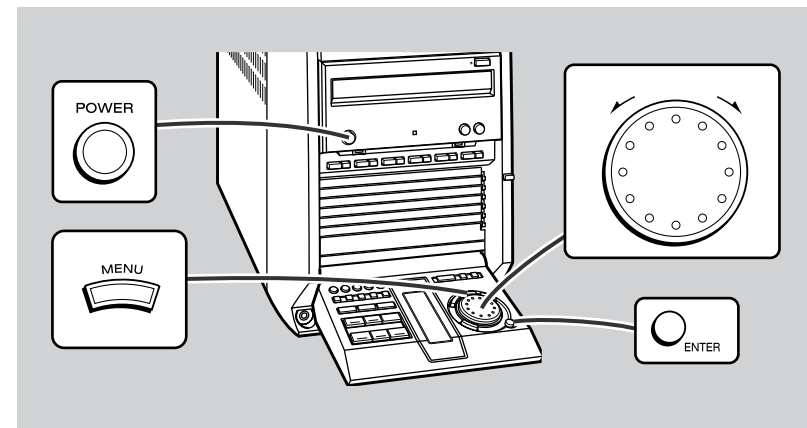
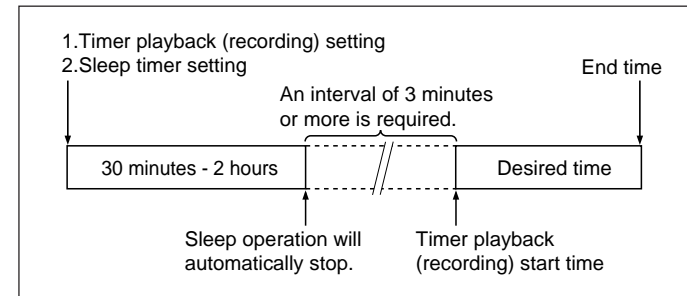
Example: To fall asleep and wake to the same radio station

You can play back the same source only (the function cannot be switched).

- 1** Set the desired playback or recording time (steps 1 - 9, pages 38 - 39).

---

- 2** While playing the desired source, set the sleep time (see left, steps 1 - 4).







# Enhancing Your Stereo System

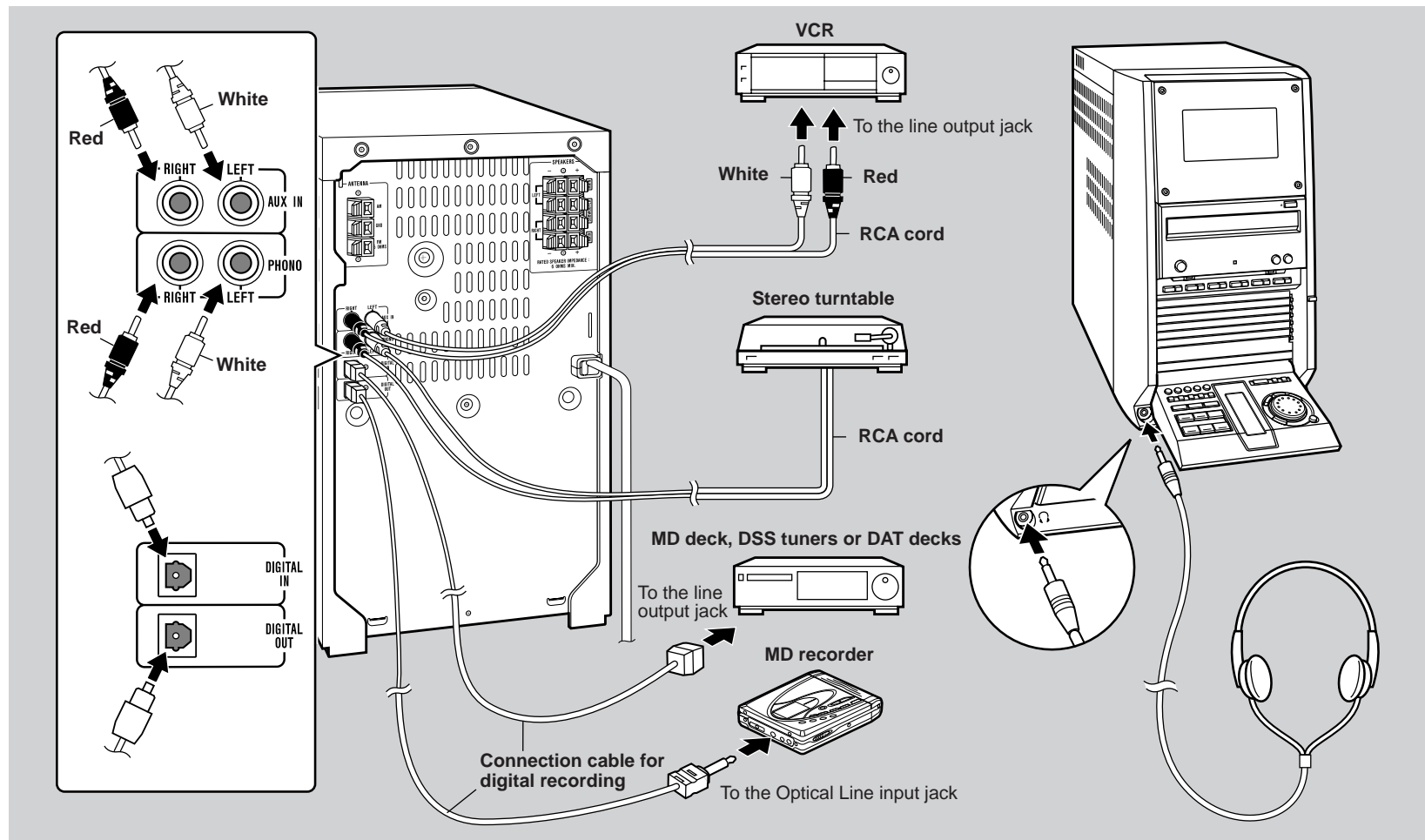
## Connecting your player to other audio equipment

**AUX IN/PHONO/DIGITAL IN:** To record playback sounds of external equipment using an analog or digital cable (separately available).

**DIGITAL OUT:** To record this CD player's playback sounds using other equipment.

### Notes:

- This unit can not be used with a stereo turntable which has a ground connecting wire separated from RCA cord.
- No sound is heard during opening the CD-R tray or reading the disc if you have selected "AUX OPT."

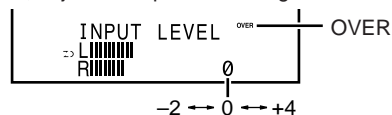


*Advanced Features*

## Enhancing Your Stereo System (continued)

### ■ Listening to the playback sounds from the connected equipment

1. Use a connection cable to connect the unit to the AUX IN, PHONO or DIGITAL IN jack.
2. Press the POWER button to turn the power on.
3. Press the AUX button to select "AUX", "PHONO" or "AUX OPT."
4. Play the connected equipment.
5. If you have selected "AUX", adjust the input level using the ◀◀ or ▶▶ button.



- The "OVER" indicator should not light at the maximum level.
- You cannot adjust the input level of the equipment connected to the "PHONO" or "AUX OPT." jack.

### ■ Recording on a tape

1. Use a connection cable to connect the unit to the AUX IN, PHONO or DIGITAL IN jack.
2. Press the POWER button to turn the power on.
3. Insert the cassette in the compartment.
4. Press the AUX button to select "AUX", "PHONO" or "AUX OPT."
5. Press the TAPE REC button.
6. Play the connected equipment.
7. If you have selected "AUX", adjust the input level using the ◀◀ or ▶▶ button.
  - You cannot adjust the input level of the equipment connected to the "PHONO" or "AUX OPT." jack.
8. Press the ▶|| or ◀ button to start recording.

### ■ Recording on a CD-R disc

1. Use a connection cable to connect the unit to the AUX IN, PHONO or DIGITAL IN jack.
2. Press the POWER button to turn the power on.
3. Press the AUX button to select "AUX", "PHONO" or "AUX OPT."
4. Press the CD-R/CD-RW eject button to open the tray.
5. Place the CD-R or CD-RW disc on the tray. Close the tray.

6. Press the REC MODE button.



**S. SYNC REC:** Recording starts automatically with sound input.

**MANUAL REC:** After pressing the ▶|| button, recording will start.

- Select one of the above recording types using the jog dial. Then, press the ENTER button.

7. If you have selected "MANUAL REC", you can turn on or off it using the AUTO MARKER button. (When you have selected "S.SYNC REC", auto mark function will be turned on and no switching operation is possible.)



**A. MARK ON:** Marks track numbers when sound stops for 3 seconds or longer.

**A. MARK OFF:** Does not mark track numbers.

8. Press the CDR REC button.
9. Press the ▶|| button to start recording.
  - When "S. SYNC REC" is selected, pressing the ▶|| button is unnecessary.

### To mark track numbers while recording from the connected equipment on the CD-R or CD-RW discs:

Press the CDR REC button during recording. The track number will be marked and the displayed number will be increased by one.

### ■ Recording CD, CD-R or CD-RW signal on MDs (digital output)

The digital signal from this unit can be recorded by MiniDisc recorders, etc.

1. Remove the DIGITAL OUT jack cover.
2. Use a connection cable for digital recording to connect the unit to the OPTICAL IN jack of a MiniDisc recorder, etc.
3. Press the POWER button to turn the power on.
4. Put the MiniDisc recorder, etc. in the recording mode.
5. Play a CD, CD-R or CD-RW disc on this unit.

### ■ Headphones

- Before plugging in or unplugging the headphones, reduce the volume.
- Be sure your headphones have a 1/8" (3.5 mm) diameter plug and are between 16 ohms and 50 ohms impedance. The recommended impedance is 32 ohms.
- Plugging in the headphones disconnects the speakers automatically. Adjust the volume using the VOLUME buttons.



# Troubleshooting Chart

Many potential “problems” can be resolved by the owner without calling a service technician. If something is wrong with this product, check the following before calling your authorized SHARP dealer or service center.

## ■ General

Symptom	Possible cause
<ul style="list-style-type: none"> <li>● The clock is not on time.</li> </ul>	<ul style="list-style-type: none"> <li>● Did a power failure occur? Reset the clock. (Refer to page 17.)</li> </ul>
<ul style="list-style-type: none"> <li>● When a button is pressed, the unit does not respond.</li> </ul>	<ul style="list-style-type: none"> <li>● Set this unit to the power stand-by mode and then turn it back on.</li> <li>● If the unit still malfunctions, reset it. (Refer to page 44.)</li> </ul>
<ul style="list-style-type: none"> <li>● No sound is heard.</li> </ul>	<ul style="list-style-type: none"> <li>● Is the volume level set to “0”?</li> <li>● Are the headphones connected?</li> <li>● Are the speaker wires disconnected?</li> </ul>

## ■ CD player

Symptom	Possible cause
<ul style="list-style-type: none"> <li>● Playback does not start.</li> <li>● Playback stops in the middle or is not performed properly.</li> </ul>	<ul style="list-style-type: none"> <li>● The disc is loaded up-side down.</li> <li>● The disc does not satisfy the standards.</li> <li>● The disc is distorted or scratched.</li> </ul>
<ul style="list-style-type: none"> <li>● Playback sounds are skipped, or stopped in the middle of a track.</li> </ul>	<ul style="list-style-type: none"> <li>● Is the unit located near excessive vibrations?</li> <li>● The disc is very dirty.</li> <li>● Has condensation formed inside the unit? (Refer to page 5.)</li> </ul>

## ■ Cassette deck

Symptom	Possible cause
<ul style="list-style-type: none"> <li>● Cannot record.</li> </ul>	<ul style="list-style-type: none"> <li>● Is the erase-protection tab removed?</li> </ul>
<ul style="list-style-type: none"> <li>● Cannot record tracks with proper sound quality.</li> <li>● Cannot erase completely.</li> </ul>	<ul style="list-style-type: none"> <li>● Is it a normal tape? (You cannot record on a metal or CrO<sub>2</sub> tape.)</li> </ul>
<ul style="list-style-type: none"> <li>● Sound skipping.</li> <li>● Cannot hear treble.</li> <li>● Sound fluctuation.</li> </ul>	<ul style="list-style-type: none"> <li>● Is there any slack? Is the tape stretched?</li> <li>● Are the capstan, pinch roller, or heads dirty?</li> </ul>
<ul style="list-style-type: none"> <li>● Cannot remove the tape.</li> </ul>	<ul style="list-style-type: none"> <li>● If a power failure occurs during playback, the heads remain engaged with the tape. Do not open the compartment forcibly. Wait until electricity resumes.</li> </ul>

## ■ Tuner

Symptom	Possible cause
<ul style="list-style-type: none"> <li>● Radio makes unusual noise consecutively.</li> </ul>	<ul style="list-style-type: none"> <li>● The stereo system is placed near the TV or computer.</li> <li>● FM/AM loop antenna is not placed properly. Move the AC power cord away from the antenna if located near.</li> </ul>

## ■ Remote control

Symptom	Possible cause
<ul style="list-style-type: none"> <li>● The remote control does not operate.</li> </ul>	<ul style="list-style-type: none"> <li>● Is the AC power cord of the stereo system plugged in?</li> <li>● The battery polarity is not respected.</li> <li>● The batteries are dead.</li> <li>● Incorrect distance or angle.</li> <li>● Does the remote control sensor receive strong light?</li> </ul>

## Troubleshooting Chart (continued)

### ■ CD-R/CD-RW recorder

#### Messages for CD-R/CD-RW disc loading

Message	Possible cause
? DISC	A disc other than an audio CD-R disc is loaded.
CDR NO DISC	No disc is loaded.
OPC ERROR	Cannot read the CD-R disc. (A CD-R disc cannot be read if loaded.)
NOT AUDIO	The disc is not an audio one.

#### Messages for CD-R/CD-RW disc recording or editing

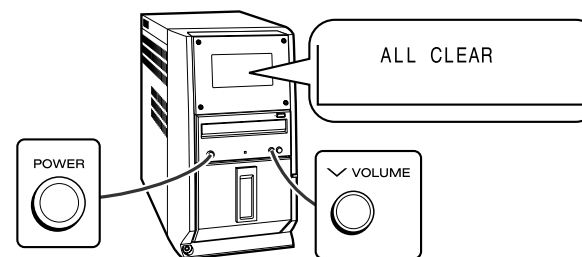
Message	Possible cause
COPY PROTECT CAN'T COPY	A copy prohibited signal was found by the SCMS. (See page 27.)
CAN'T REC	Error occurred during recording.
DISC ERROR	Error occurred during recording or editing.
DISC FULL	No space left on the CD-R.
FINALIZED CD	Performed recording or editing on a finalized CD-R. If it is a CD-RW disc, it can be unfinalized. (See page 36.)
NO SIGNAL	No signal is sent from the cable (AUX OPT. terminal).

### ■ If trouble occurs (reset)

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:

1. Press the **POWER** button to enter the power stand-by mode.
2. While pressing down the **VOLUME**  $\nabla$  button, press the **POWER** button until "ALL CLEAR" appears.

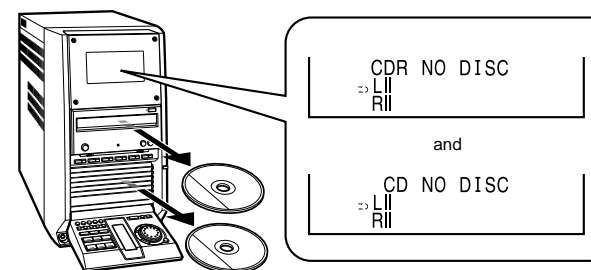


#### Caution:

This operation will erase all data stored in memory including clock and timer settings, and tuner and CD presets.

### ■ Before transporting the unit

Remove the CD-R/CD-RW disc and all CDs from the unit. Your unit checks whether there are any discs inside the unit when the tray is closed. "CDR NO DISC" and "CD NO DISC" appear if no disc is left. Then, set the unit to the power stand-by mode. Carrying the unit with discs left inside can damage it.

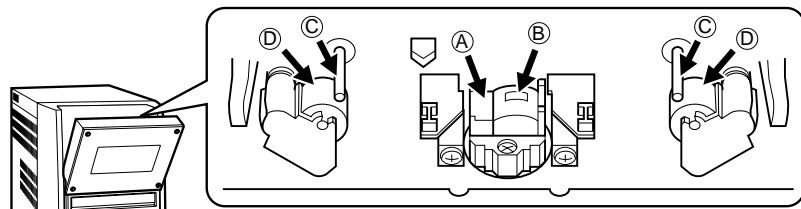




# Maintenance

## ■ Cleaning the tape-handling parts

- Dirty heads, capstans or pinch rollers can cause poor sound and tape jams. Clean these parts with a cotton swab moistened with commercial head/pinch roller cleaner or isopropyl alcohol.
- When cleaning the heads, pinch rollers, etc., unplug the unit which contains high voltages.



- (A) Erase head                      (C) Capstan
- (B) Recording/Playback head    (D) Pinch roller

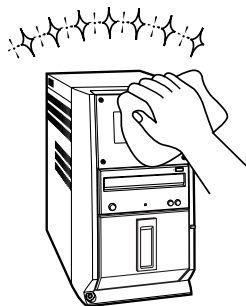
- After long use, the deck's heads and capstans may become magnetized, causing poor sound. Demagnetize these parts once every 30 hours of playing/recording time by using a commercial tape head demagnetizer. Read the demagnetizer's instructions carefully before use.
- In order to ensure proper operation of the CD player and CD-R/CD-RW recorder, preventative maintenance (cleaning of the laser pick-up lens) should be performed periodically.  
Lens cleaners are commercially available. Contact your local CD software dealer.

## ■ Cleaning the cabinet

Periodically wipe the cabinet with a soft cloth and a diluted soap solution, then with a dry cloth.

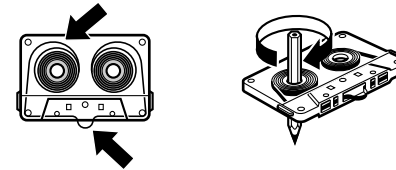
### Caution:

Do not use chemically treated cleaning cloths or other chemicals.

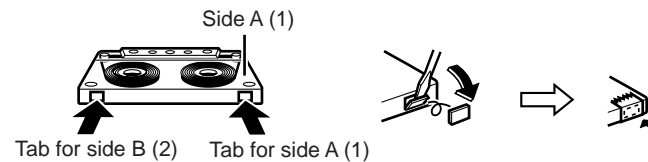


# Cassette tape

- For playback, use normal or low-noise tape for the best sound. (Metal or CrO<sub>2</sub> tape is not recommended.)  
**For recording, use only normal tape.**
- Do not use C-120 tapes or poor-quality tapes, as they may cause malfunctions.
- Before loading a tape into the cassette compartment, tighten the slack with a pen or pencil.



Cassettes have removable tabs which prevent accidental recording or erasing. Removing the tab will protect the corresponding side. Cover the tab holes with adhesive tape to erase or record again.



# Specifications

## ■ General

<b>Power source</b>	AC 120 V, 60 Hz
<b>Power consumption</b>	200 W
<b>Dimensions</b>	Width: 7-7/8" (200 mm) Height: 13-7/8" (352 mm) Depth: 14-7/8" (377 mm)
<b>Weight</b>	23.8 lbs (10.8 kg)

## ■ Amplifier

<b>Output power</b>	100 watts minimum RMS into 6 ohms from 60 Hz to 20 kHz, 10 % total harmonic distortion  Subwoofer : 60 W/ch (60 Hz - 200 Hz, 6 ohms, 10 % T.H.D.) Main : 40 W/ch (200 Hz - 20 kHz, 6 ohms, 10 % T.H.D.)
<b>Output terminals</b>	Speakers: 6 ohms Headphones: 16-50 ohms (recommended; 32 ohms) Digital output (optical)
<b>Input terminals</b>	Auxiliary: 500 mV/47 kohms Phono: 2.5 mV (1 kHz) Digital input (optical)

## ■ CD player

<b>Type</b>	6-disc multi-play compact disc changer player
<b>Signal readout</b>	Non-contact, 3-beam semiconductor laser pickup
<b>D/A converter</b>	1-bit D/A converter
<b>Frequency response</b>	20 - 20,000 Hz
<b>Dynamic range</b>	90 dB (1 kHz)

## ■ Cassette deck

<b>Frequency response</b>	50-14,000 Hz (Normal tape)
<b>Signal/noise ratio</b>	50 dB (recording/playback)
<b>Wow and flutter</b>	0.3 % (WRMS)

## ■ Tuner

<b>Frequency range</b>	FM: 87.5-108.0 MHz AM: 530-1,720 kHz
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## ■ CD-R

<b>Type</b>	1-disc compact disc recorder/player
<b>Signal readout</b>	Non-contact, 3-beam semiconductor laser pickup
<b>Rotational speed</b>	200-500 rpm CLV
<b>Error correction</b>	CIRC (Cross Interleave Reed-Solomon Code)
<b>Quantization</b>	16-bit linear
<b>Filter</b>	64 fs digital interpolation filter
<b>Frequency response</b>	20 - 20,000 Hz
<b>D/A converter</b>	1-bit D/A converter
<b>Dynamic range</b>	90 dB (1 kHz) playback 84 dB (1 kHz) recording



## ■ Speaker

<b>Type</b>	3-way type speaker system 2" (5 cm) Tweeter 5-1/4" (13 cm) Woofer 5-1/4" (13 cm) Subwoofer
<b>Maximum input power (Total)</b>	200 W
<b>Rated input power (Total)</b>	100 W
<b>Impedance</b>	6 ohms
<b>Dimensions</b>	Width: 8-1/4" (210 mm) Height: 15-7/16" (392 mm) Depth: 13-9/16" (345 mm)
<b>Weight</b>	11.2 lbs. (5.1 kg)/each

As part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.



## CONSUMER LIMITED WARRANTY

SHARP ELECTRONICS CORPORATION warrants to the first consumer purchaser that this Sharp brand product (the "Product"), when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period(s) set forth below.

This warranty does not apply to any appearance items of the Product nor to the additional excluded item(s) set forth below nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth below and provide proof of purchase to the servicer.

The limited warranty described herein is in addition to whatever implied warranties may be granted to purchasers by law. ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE PERIOD(S) FROM THE DATE OF PURCHASE SET FORTH BELOW. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time period described herein on behalf of Sharp.

The warranties described herein shall be the sole and exclusive warranties granted by Sharp and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Sharp to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall Sharp be liable, or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than an authorized servicer. Nor shall Sharp be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

### Model Specific Section

#### Your Product Model Number & Description:

#### **CD-RW5000 Audio Tower System**

(Be sure to have this information available when you need service for your Product.)

#### Warranty Period for this Product:

One (1) year parts and labor from the date of purchase.

#### Additional Item(s) Excluded from Warranty Coverage (if any):

Non-functional accessories, supplies, and consumable items.

#### Where to Obtain Service:

At a Sharp Authorized Servicer located in the United States.  
To find a location of the nearest Sharp Authorized Servicer, call Sharp toll free at 1-800-BE-SHARP.

#### What to do to Obtain Service:

Ship prepaid or carry in your Product to a Sharp Authorized Servicer.  
Be sure to have **Proof of Purchase** available. If you ship the Product, be sure it is insured and packaged securely.

TO OBTAIN SUPPLY, ACCESSORY OR PRODUCT INFORMATION, CALL **1-800-BE-SHARP**.

# SHARP

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