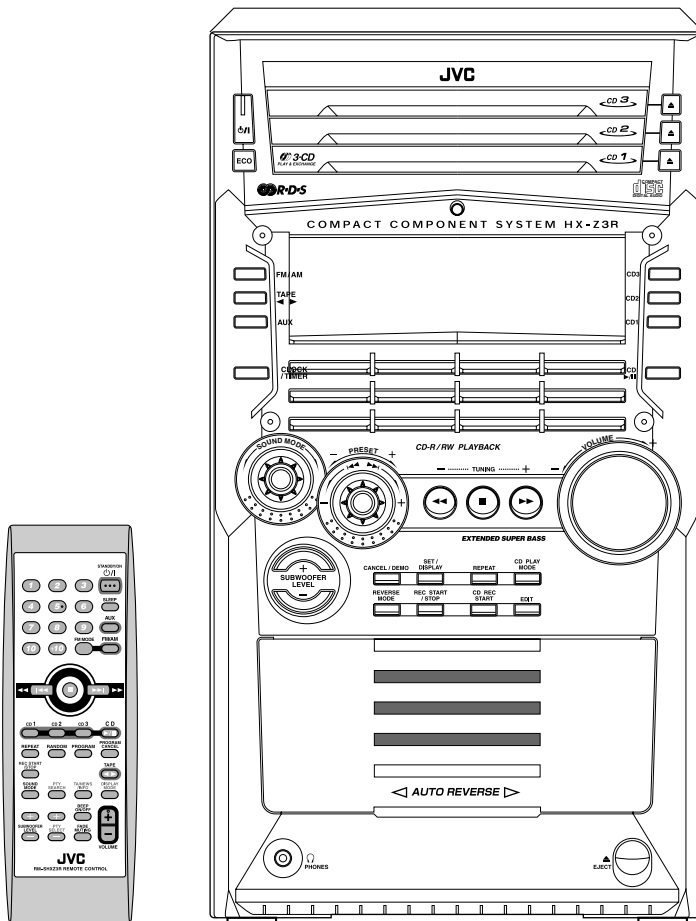


# JVC



## COMPACT COMPONENT SYSTEM

# CA-HXZ3R



COMPACT  
**disc**  
DIGITAL AUDIO



## INSTRUCTIONS

### For Customer Use:

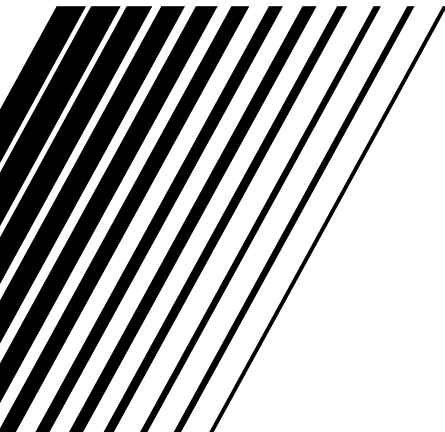
Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

GVT0086-008A

[B]



# Warnings, Cautions and Others

## IMPORTANT for the U.K.

**DO NOT** cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

**BE SURE** to replace the fuse only with an identical approved type, as originally fitted.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not supplied fitted with a mains plug then follow the instructions given below:

### IMPORTANT:

**DO NOT** make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:

Blue : Neutral  
Brown : Live


As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

**IF IN DOUBT—CONSULT A COMPETENT ELECTRICIAN.**

### Caution— (standby/on) button!

Disconnect the mains plug to shut the power off completely. The  (standby/on) button in any position does not disconnect the mains line. The power can be remote controlled.

### Caution

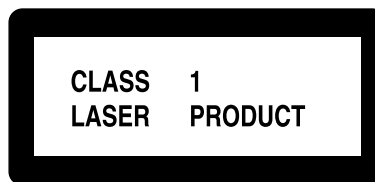
To reduce the risk of electrical shocks, fire, etc.:

1. Do not remove screws, covers or cabinet.
2. Do not expose this appliance to rain or moisture.

## IMPORTANT FOR LASER PRODUCTS

### REPRODUCTION OF LABELS

- ① CLASSIFICATION LABEL, PLACED ON EXTERIOR SURFACE



- ② WARNING LABEL, PLACED INSIDE THE UNIT

**DANGER** : Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

**VARNING** : Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Beträkta ej strålen. (s)

**ADVARSEL** : Usynlig laserstrålning ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgåudsætelse for stråling. (d)

**VARO** : Ävattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

1. CLASS 1 LASER PRODUCT
2. **DANGER**: Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION**: Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.

### CAUTION

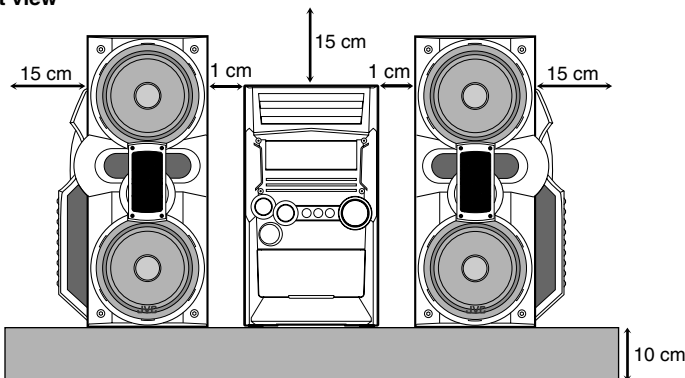
- Do not block the ventilation openings or holes. (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- When discarding batteries, environmental problems must be considered and local rules or laws governing the disposal of these batteries must be followed strictly.
- Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

### Caution: Proper Ventilation

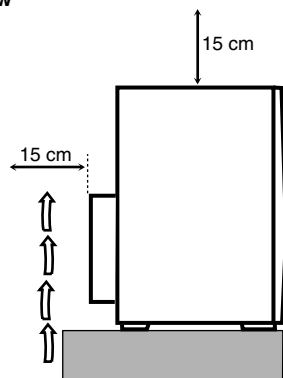
To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

1. Front: No obstructions and open spacing.
2. Sides/ Top/ Back: No obstructions should be placed in the areas shown by the dimensions below.
3. Bottom: Place on the level surface. Maintain an adequate air path for ventilation by placing on a stand with a height of 10 cm or more.

Front view



Side view



## **SAFETY INSTRUCTIONS**

### **“SOME DOS AND DON'TS ON THE SAFE USE OF EQUIPMENT”**

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

☆☆

Do read the operating instructions before you attempt to use the equipment.

Do ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

Do consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

Do be careful with glass panels or doors on equipment.

☆☆

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way—switch off, withdraw the mains plug and consult your dealer.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode.

Switch off using the switch on the equipment and make sure that your family know how to do this.

Special arrangements may need to be made for infirm or handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T listen to headphones at high volume as such use can permanently damage your hearing.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishings.

Overheating will cause damage and shorten the life of the equipment.

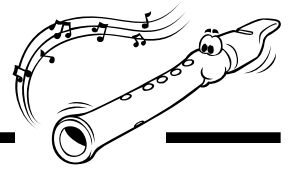
DON'T use makeshift stands and NEVER fix legs with wood screws—to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

#### **ABOVE ALL**

- NEVER let anyone, especially children, push anything into holes, slots or any other opening in the case—this could result in a fatal electrical shock.
  
- NEVER guess or take chances with electrical equipment of any kind—it is better to be safe than sorry!

# Introduction



We would like to thank you for purchasing one of our JVC products. Before operating this unit, read this manual carefully and thoroughly to obtain the best possible performance from your unit, and retain this manual for future reference.

## About This Manual

This manual is organized as follows:

- The manual mainly explains operations using the buttons and controls on the unit. You can also use the buttons on the remote control if they have the same or similar names (or marks) as those on the unit. If operation using the remote control is different from that using the unit, it is then explained.
- Basic and common information that is the same for many functions is grouped in one place, and is not repeated in each procedure. For instance, we do not repeat the information about turning on/off the unit, setting the volume, changing the sound effects, and others, which are explained in the section “Common Operations” on pages 9 to 12.
- The following marks are used in this manual:



Gives you warnings and cautions to prevent from damage or risk of fire/electric shock. Also gives you information which is not good for obtaining the best possible performance from the unit.



Gives you information and hints you had better know.

## Precautions

### Installation

- Install in a place which is level, dry and neither too hot nor too cold—between 5°C and 35°C.
- Install the unit in a location with adequate ventilation to prevent internal heat buildup in the unit.
- Leave sufficient distance between the unit and the TV.
- Keep the speakers away from the TV to avoid interference with TV.



DO NOT install the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or vibration.

### Power sources

- When unplugging from the wall outlet, always pull the plug, not the AC power cord.



DO NOT handle the AC power cord with wet hands.

### Moisture condensation

Moisture may condense on the lens inside the unit in the following cases:

- After heating starts in the room
  - In a damp room
  - If the unit is brought directly from a cold to a warm place
- Should this occur, the unit may malfunction. In this case, leave the unit turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

### Internal heat

A cooling fan is mounted on the rear panel to prevent heat buildup inside the unit.



**For safety, observe the following carefully:**

- Make sure there is good ventilation around the unit. Poor ventilation could overheat and damage the unit.
- DO NOT block the cooling fan and the ventilation openings or holes. If they are blocked by a newspaper or cloth, etc., the heat may not be able to get out.

### Others

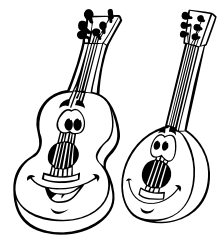
- Should any metallic object or liquid fall into the unit, unplug the unit and consult your dealer before operating any further.
- If you are not going to operate the unit for an extended period of time, unplug the AC power cord from the wall outlet.



DO NOT disassemble the unit since there are no user serviceable parts inside.

If anything goes wrong, unplug the AC power cord and consult your dealer.

# Contents

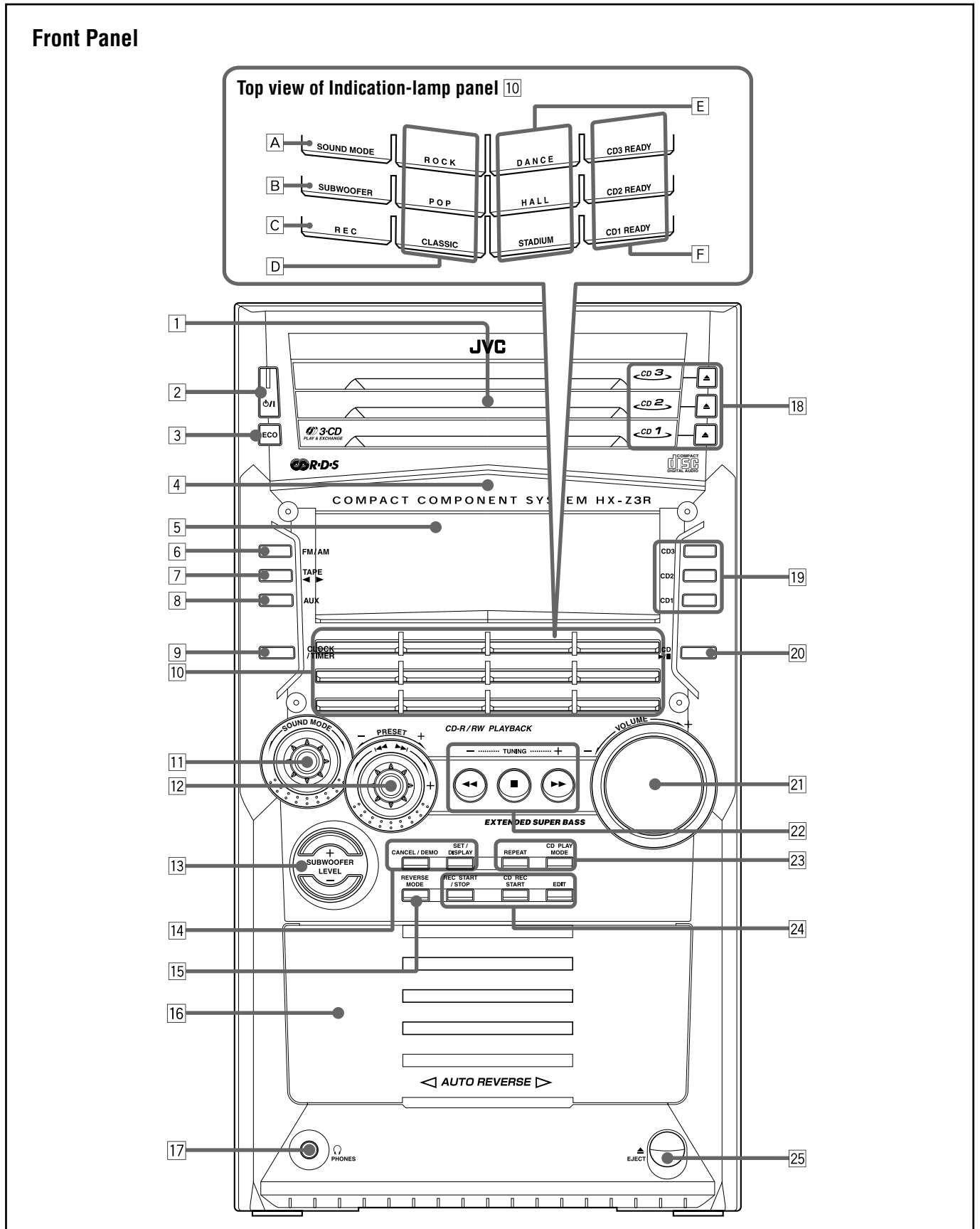


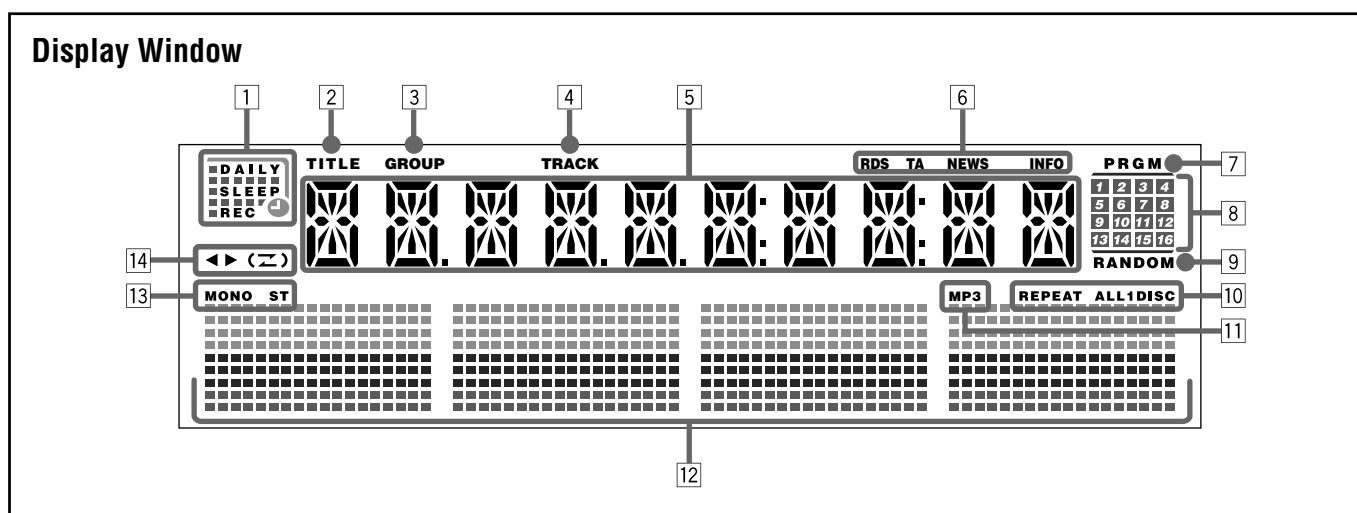
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# Location of the Buttons and Controls

Become familiar with the buttons and controls on your unit.

## Front Panel





See pages in the parentheses for details.

## Front Panel

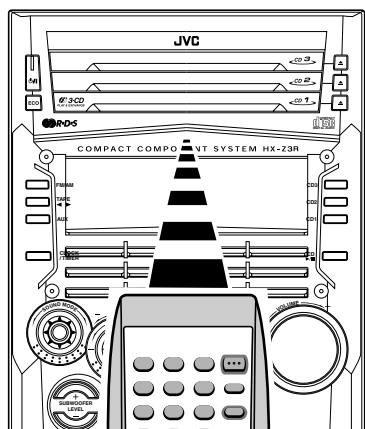
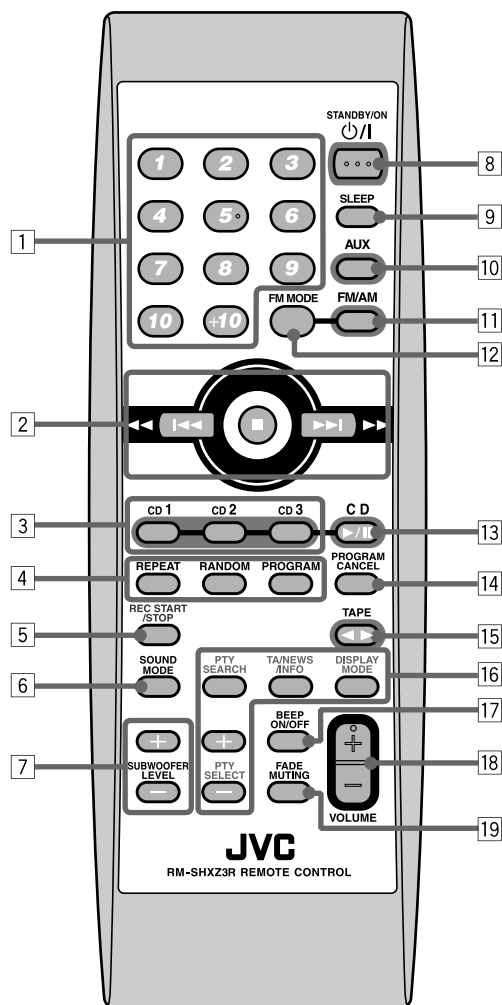
- 1 Disc trays
- 2 (standby/on) button and lamp (9, 28, 29)
- 3 ECO (Ecology) button (9)
- 4 Remote sensor
- 5 Display window
- 6 FM/AM button (9, 13)  
*Pressing this button also turns on the unit.*
- 7 TAPE button (9, 23, 24)  
*Pressing this button also turns on the unit.*
- 8 AUX button (9)  
*Pressing this button also turns on the unit.*
- 9 CLOCK/TIMER button (10, 27 – 30)
- 10 Indication-lamp panel
  - A SOUND MODE lamp (11)
  - B SUBWOOFER lamp (11)
  - C REC (recording) lamp (24 – 26)
  - D SEA (Sound Effect Amplifier) mode lamps (11)
    - ROCK, POP, and CLASSIC lamps
  - E Surround mode lamps (11)
    - DANCE, HALL, and STADIUM lamps
  - F CD ready lamps (16)
    - CD1 READY, CD2 READY, and CD3 READY lamps
- 11 SOUND MODE control (11)
- 12 PRESET + / – control (13)
  - (reverse skip/forward skip) control (10, 12, 19 – 21, 25 – 29)
- 13 SUBWOOFER LEVEL + / – buttons (11)
- 14 Setting buttons (8, 10, 12, 13, 20, 21, 26 – 30, 33)
  - CANCEL/DEMO and SET/DISPLAY buttons
- 15 REVERSE MODE button (23 – 26)
- 16 Cassette holder (23 – 26)
- 17 PHONES () jack (10)
- 18 (Disc tray open/close) (CD1, CD2, and CD3) buttons (16, 18, 19, 22)  
*Pressing one of these buttons also turns on the unit.*
- 19 Disc number (CD1, CD2, and CD3) buttons (18 – 21, 25, 26)  
*Pressing one of these buttons also turns on the unit.*
- 20 CD button (9, 19 – 21, 25)  
*Pressing this button also turns on the unit.*
- 21 VOLUME + / – control (10)
- 22 TUNING + / – buttons (13)
  - (reverse search/forward search) buttons (12, 19, 23)
  - (stop) button (19 – 26, 29)
- 23 Disc play mode buttons (20 – 22)
  - REPEAT and CD PLAY MODE buttons
- 24 Recording buttons (24 – 26, 29)
  - REC START/STOP, CD REC START, and EDIT buttons
- 25 EJECT button for cassette deck (23 – 25)

## Display Window

- 1 Timer indicators
  - DAILY (Daily Timer), SLEEP (Sleep Timer), REC (Recording Timer), and (Timer) indicators
- 2 TITLE indicator
- 3 GROUP indicator
- 4 TRACK indicator
- 5 Main display
  - Shows the source name, frequency, etc.
- 6 RDS operation indicators  
RDS, TA, NEWS, and INFO indicators
- 7 PRGM (program) indicator
- 8 Disc track number (1 – 16) indicators
- 9 RANDOM indicator
- 10 REPEAT (ALL/1/DISC) indicators
- 11 MP3 indicator
- 12 Audio level indicator  
*When one of the 6 preset sound modes is activated, these will function as illumination display. For details, see “Selecting the Sound Modes” on page 11.*
- 13 Tuner operation indicators
  - MONO and ST (stereo) indicators
- 14 Tape operation indicators
  - (tape direction) and (reverse mode) indicators



## Remote Control



When using the remote control, point it at the remote sensor on the front panel.

## Remote Control

- 1 Number buttons (13, 19, 20)
- 2 ◀◀ (◀◀) (reverse skip/reverse search) button (13, 19, 21, 23)
  - (stop) button (19 – 21, 23 – 26, 29)
  - ▶▶ (▶▶) (forward skip/forward search) button (13, 19, 21, 23)
- 3 Disc number (CD1, CD2, and CD3) buttons (18 – 21)
- 4 Disc play mode buttons (20 – 22)
  - REPEAT, RANDOM, and PROGRAM buttons
- 5 REC START/STOP button (24, 26, 29)
- 6 SOUND MODE button (11)
- 7 SUBWOOFER LEVEL + / – buttons (11)
- 8 STANDBY/ON ⏻/⏻ button (9)
- 9 SLEEP button (30)
- 10 AUX button (9)
- 11 FM/AM button (9, 13)
- 12 FM MODE button (13)
- 13 CD ▶/|| button (9, 19 – 21)
- 14 PROGRAM CANCEL button (21)
- 15 TAPE ◀▶ button (9, 23, 24)
- 16 RDS operation buttons
  - PTY SEARCH button (14)
  - TA/NEWS/INFO button (15)
  - DISPLAY MODE button (14)
  - PTY SELECT + / – buttons (14)
- 17 BEEP ON/OFF button (8, 9)
- 18 VOLUME + / – button (10)
- 19 FADE MUTING button (10)



## Supplied Accessories

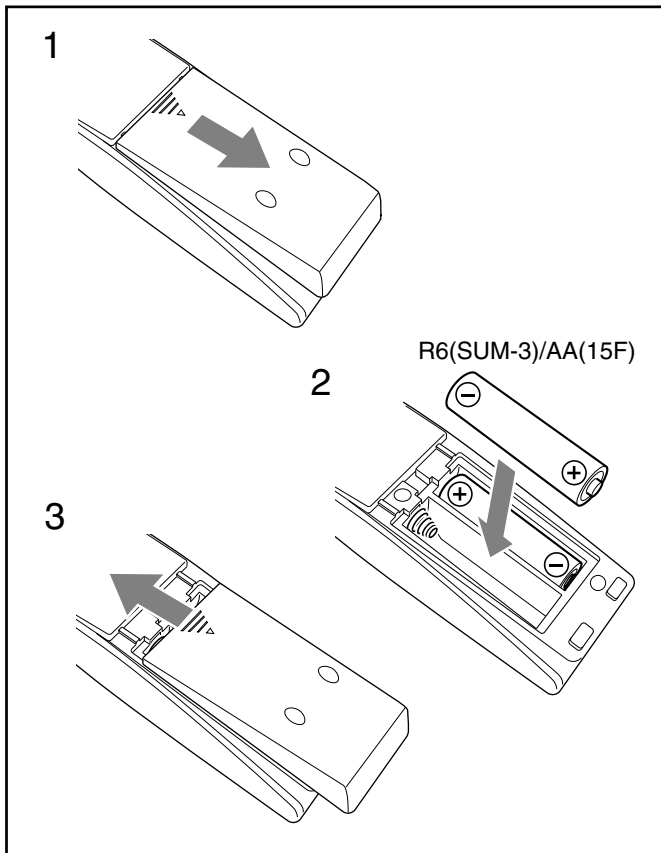
Make sure that you have all the following items. The number in the parentheses indicates the quantity of the pieces supplied.

- AM (MW/LW) loop antenna (1)
- FM antenna (1)
- Remote control (1)
- Batteries (2)

If anything is missing, consult your dealer immediately.

## Putting the Batteries into the Remote Control

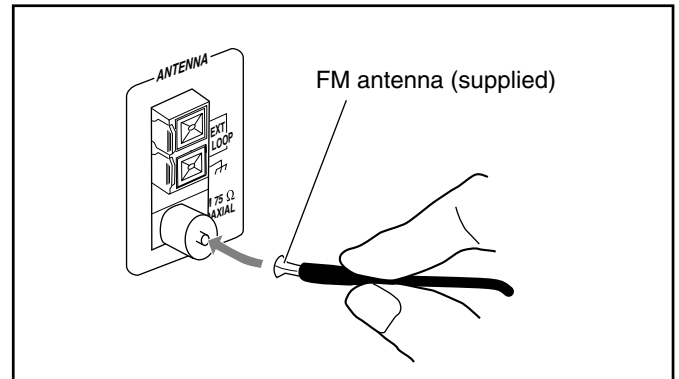
Insert the batteries—R6(SUM-3)/AA(15F)—into the remote control, by matching the polarity (+ and –) on the batteries with the + and – markings on the battery compartment. When the remote control can no longer operate the unit, replace both batteries at the same time.



- DO NOT use an old battery together with a new one.
- DO NOT use different types of batteries together.
- DO NOT expose batteries to heat or flame.
- DO NOT leave the batteries in the battery compartment when you are not going to use the remote control for an extended period of time. Otherwise, it will be damaged from battery leakage.

## Connecting Antennas

### FM antenna



- 1 Attach the FM antenna to the FM 75 Ω COAXIAL terminal.
- 2 Extend the FM antenna.
- 3 Fasten it up in the position which gives you the best reception, then fix it on the wall, etc.

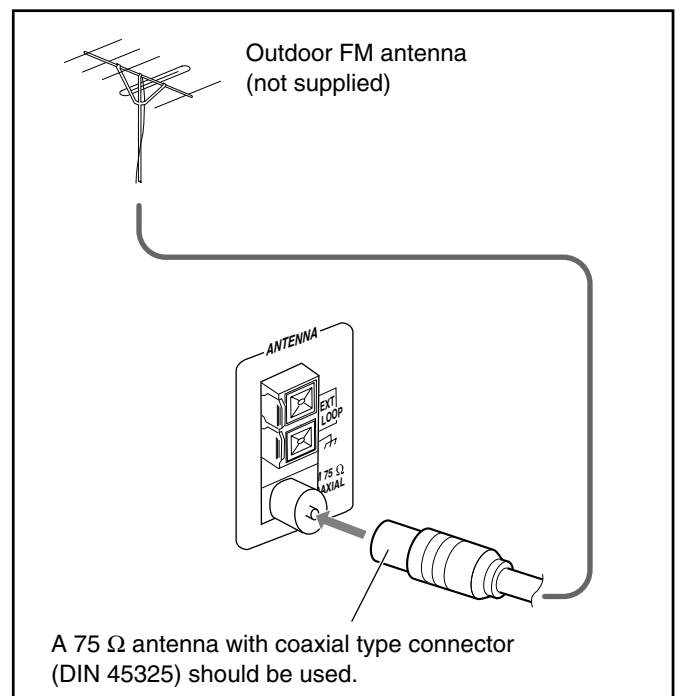


#### About the supplied FM antenna

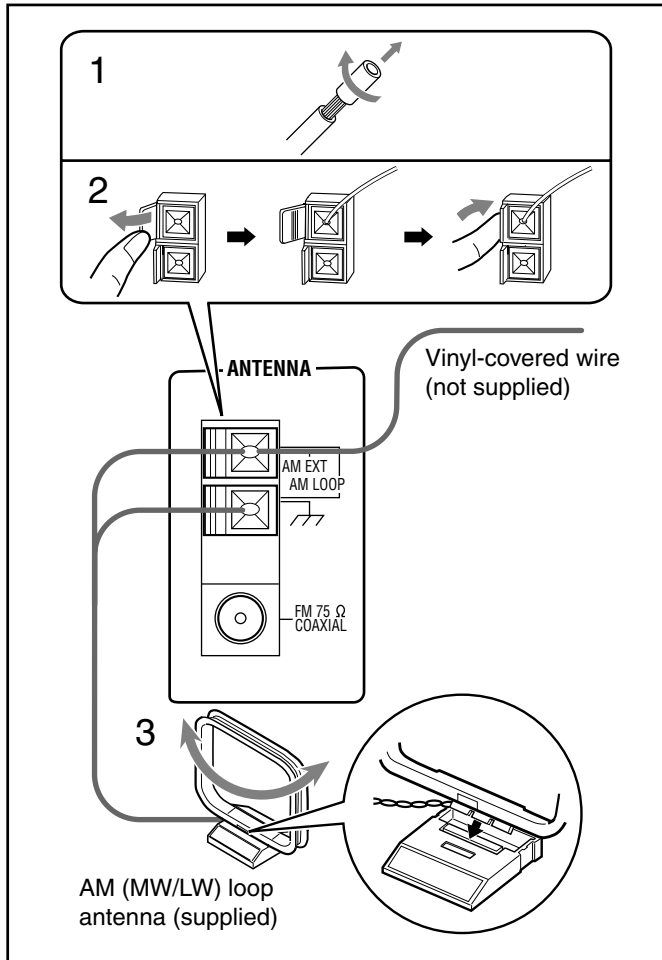
The FM antenna supplied with this unit can be used as temporary measure. If reception is poor, you can connect an outdoor FM antenna.

### To connect an outdoor FM antenna

Before connecting it, disconnect the supplied FM antenna.



## AM (MW/LW) antenna



- 1 If cords are covered with insulation, twist the core of the cord at the end of each cord, then remove the insulation.
- 2 Connect the AM (MW/LW) loop antenna to the AM LOOP terminals as illustrated.
- 3 Turn the AM (MW/LW) loop antenna until you have the best reception.

### To connect an outdoor AM (MW/LW) antenna

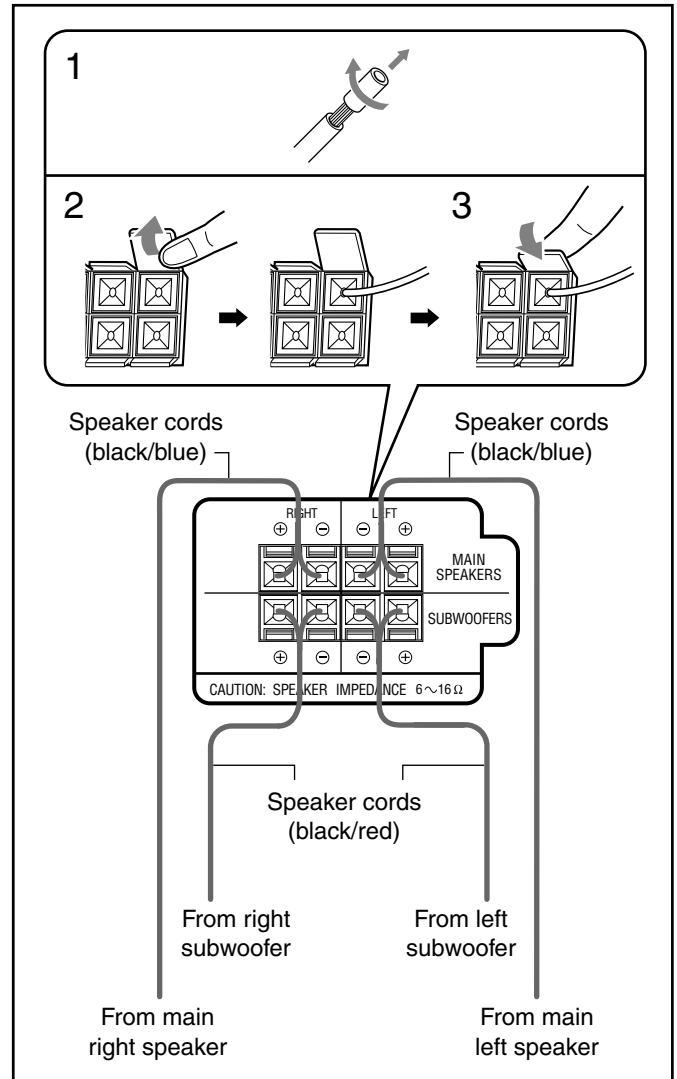
When reception is poor, connect a single vinyl-covered wire to the AM EXT terminal and extend it horizontally. The AM (MW/LW) loop antenna must remain connected.



#### For better reception of both FM and AM (MW/LW)

- Make sure the antenna conductors do not touch any other terminals and connecting cords.
- Keep the antennas away from metallic parts of the unit, connecting cords, and the AC power cord.

## Connecting Speakers



- 1 If cords are covered with insulation, twist the core of the cord at the end of each cord, then remove the insulation.
- 2 Insert the end of the speaker cord into the terminal as illustrated.  
Match the same polarity: (+) to (+) and (-) to (-).
- 3 Close the speaker terminals.

**IMPORTANT:** Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the unit.



- DO NOT connect more than one speaker to each speaker terminal.
- DO NOT push or pull the speakers as this will damage the foot spacers at the bottom of the speakers.



## Connecting Other Equipment

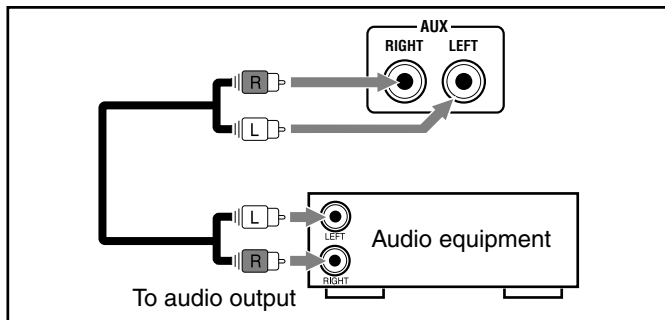
You can connect both analog and digital equipment.



- DO NOT connect any equipment while the power is on.
- DO NOT plug in any equipment until all connections are complete.

### To connect an analog component

Be sure that the plugs of the audio cords are colored: White plugs and jacks are for left audio signals, and red ones for right audio signals.

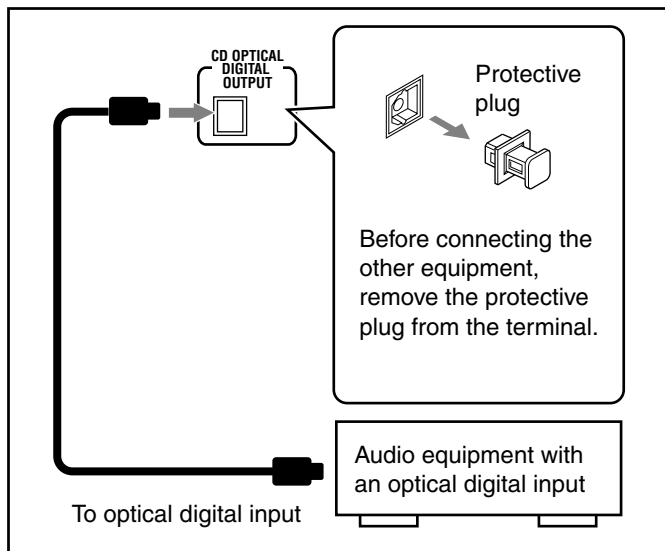


For playing the other equipment through this unit, connect between the audio output jacks on the other equipment and AUX jacks by using an audio cord (not supplied).

### To connect audio equipment with an optical digital input terminal

You can record audio CD sound onto the connected digital equipment.

- If the disc played back is an MP3 disc, no sound can be output from the unit to the connected digital equipment.



Connect an optical digital cord (not supplied) between the optical digital input terminal on the other equipment and the CD OPTICAL DIGITAL OUTPUT terminal.

## Now, you can plug the AC power cord.

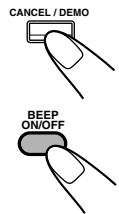
**IMPORTANT:** Be sure to check all connections to be done before plugging the AC power cord into a wall outlet.

## Canceling the Demonstration

When connecting the AC power cord into a wall outlet, the unit automatically starts the demonstration.

To cancel the demonstration, press and hold CANCEL/DEMO until "DEMO OFF" appears on the display.

- To cancel only beep sounds during the demonstration, press BEEP ON/OFF on the remote control.



### When you press other buttons



The demonstration stops temporarily. It will start automatically again (if no operation is done for 2 minutes) unless you cancel it by pressing CANCEL/DEMO.

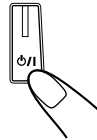
### To start the demonstration manually

Press and hold CANCEL/DEMO again until "DEMO START" appears on the display.



# Common Operations

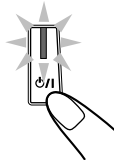
## Turning On or Off the Power

To turn on the unit, press  (or STANDBY/ON  on the remote control) so that the lamp on the button goes off.



POWER ON

To turn off the unit (on standby), press  (or STANDBY/ON  on the remote control) again so that the lamp on the button lights up.



- A little power is always consumed even while the unit is on standby.

To switch off the power supply completely, unplug the AC power cord from the AC outlet.



**When you unplug the AC power cord or if a power failure occurs**

The clock is reset to “0:00” right away, while the tuner preset stations (see page 13) will be erased in a few days.

## Turning On or Off the Key-touch Tone

If you do not want the key-touch tone to beep each time you press a button, you can deactivate it.

**On the remote control ONLY:**

Press BEEP ON/OFF.



BEEP OFF

- Each time you press the button, the key-touch tone turns on (“BEEP ON”) and off (“BEEP OFF”) alternately.

BEEP OFF ↔ BEEP ON

## Saving the Power Consumption while on Standby —Ecology Mode

You can save the power consumption while the unit is turned off (on standby).

- You can set Ecology Mode whether the unit is on or off.

**On the unit ONLY:**

To activate the Ecology Mode, press ECO. “ECO” appears on the display for 2 seconds (and the demonstration is canceled temporarily if you have pressed the button while the unit is off).



ECO

To deactivate the Ecology Mode, press ECO again.

“NORMAL” appears (and the demonstration starts if the unit is turned off).

NORMAL

- Each time you press the button, “ECO” and “NORMAL” appear alternately on the display.



**When you turn off the unit with Ecology Mode activated** “ECO” flashes on the display, and the clock time will not be shown while the unit is turned off.

## Selecting the Sources



To listen to the FM/AM (MW/LW) broadcasts, press FM/AM. (See page 13.)

To play back discs, press CD .

To play back tapes, press TAPE .

To select the external equipment as the source, press AUX.



When you press the play button for a particular source (FM/AM, CD , TAPE , and AUX), the unit turns on and starts playing the source if it is ready.

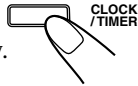
## Setting the Clock

You can set the clock whether the unit is on or off; however, if Ecology Mode is activated, you cannot set the clock while the unit is off (on standby).  
If Ecology Mode is not in use while the unit is turned off (on standby), "0:00" flashes on the display until you set the clock.

### On the unit ONLY:

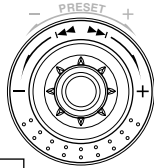
#### 1 Press CLOCK/TIMER.

The hour digits start flashing on the display.



#### 2 Turn / to adjust the hour, then press SET/DISPLAY.

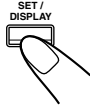
The minute digits start flashing on the display.



If you want to correct the hour after pressing SET/DISPLAY, press CANCEL/DEMO.



The hour digits start flashing again.



#### 3 Turn / to adjust the minute, then press SET/DISPLAY.



### To check the clock time while playing a source

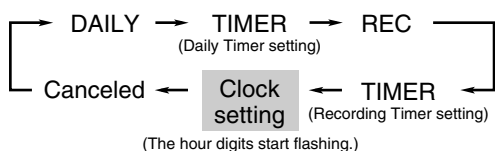
Press and hold SET/DISPLAY.

- Each time you press and hold the button, the source indication and the clock time alternate on the display.

### To adjust the clock again

If you have set the clock before, press CLOCK/TIMER repeatedly until the clock setting mode is selected.

- Each time you press the button, the clock/timer setting modes change as follows:



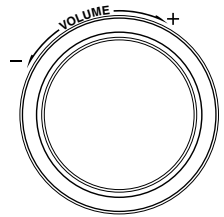
**When you unplug the AC power cord or if a power failure occurs**

The clock loses the setting and is reset to "0:00." If this happens, set the clock again.

## Adjusting the Volume

You can adjust the volume level only while the unit is turned on. The volume level can be adjusted in 32 steps (VOLUME MIN, VOLUME 1 – VOLUME 30, and VOLUME MAX).

Turn VOLUME + / – clockwise (+) to increase the volume or counterclockwise (–) to decrease it.



When using the remote control, press VOLUME + to increase the volume or VOLUME – to decrease it.



### For private listening

Connect a pair of headphones to the PHONES (📞) jack. No sound comes out of the speakers. Be sure to turn down the volume before connecting or putting on headphones.



DO NOT turn off (on standby) the unit with the volume set to an extremely high level; otherwise, a sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the unit or start playing any source next time. REMEMBER, you cannot adjust the volume level while the unit off (on standby).

### To turn down the volume level temporarily

#### On the remote control ONLY:

#### Press FADE MUTING.

The volume level gradually decreases to "VOLUME MIN."



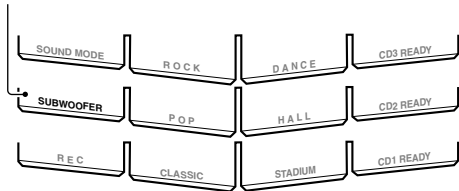
To restore the sound, press the button again.

## Reinforcing the Bass Sound

You can select one of the 5 subwoofer levels. This function only affects the playback sound, but does not affect your recording. The subwoofer level can be adjusted in 5 steps—LEVEL 0 (MIN LEVEL), LEVEL 1, LEVEL 2, LEVEL 3, and LEVEL 4 (MAX LEVEL).

Press **SUBWOOFER LEVEL +** to increase the subwoofer level or **SUBWOOFER LEVEL -** to decrease it.

SUBWOOFER lamp lights up in red.

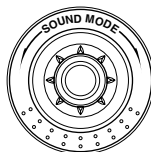


- The SUBWOOFER lamp lights up in red when LEVEL 1 to LEVEL 4 (MAX LEVEL) is selected. The lamp turns off when LEVEL 0 (MIN LEVEL) is selected.

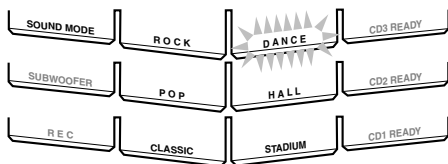
## Selecting the Sound Modes

You can select one of the 6 preset sound modes (3 surround modes and 3 SEA—Sound Effect Amplifier—modes) and 3 user modes. This function only affects the playback sound, but does not affect your recording. Each Sound Mode has its own illumination display.

To select the sound modes, turn **SOUND MODE** (or press **SOUND MODE** on the remote control) until the sound mode you want appears on the display.

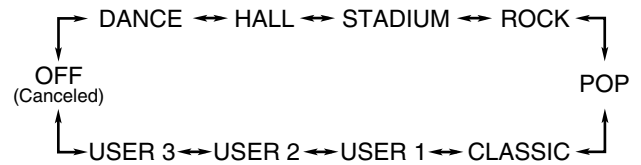


- When a sound mode is selected, the lamp for the selected sound mode (in this example, DANCE) flashes while the **SOUND MODE** and the other sound mode lamps light up.



- When one of the user modes (USER 1, USER 2, or USER 3) is selected, only the **SOUND MODE** lamp lights up.
- When the sound mode is canceled (“OFF” is selected), all sound mode lamps including the **SOUND MODE** lamp go off.

The sound modes change as follows:



When using the remote control, the sound mode changes only clockwise in the above sequence.

### Surround modes\*

- DANCE:** Increases resonance and bass.
- HALL:** Adds depth and brilliance to the sound.
- STADIUM:** Adds clarity and spreads the sound, like in an outdoor stadium.

### SEA (Sound Effect Amplifier) modes

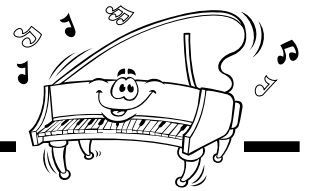
- ROCK:** Boosts low and high frequency. Good for acoustic music.
- POP:** Good for vocal music.
- CLASSIC:** Good for classical music.

### User Modes

**USER 1/2/3:** Your individual mode stored in memory. See “Creating Your Own Sound Mode—User Mode” on page 12.

**OFF:** The sound mode is canceled.

\* Surround elements are added to the SEA elements to create a being-there feeling in your room.



## Creating Your Own Sound Mode—User Mode

You can change SEA pattern to suit your preference. The SEA pattern can be adjusted using 5 frequency ranges—LOW1, LOW2, MID, HIGH1, and HIGH2. These changed settings can be stored in the USER 1, USER 2, and USER 3 modes.

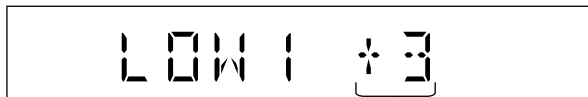
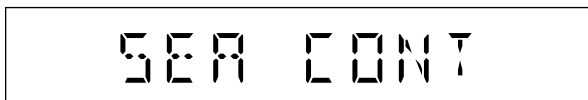
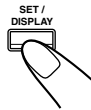
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

### On the unit ONLY:

#### 1 Select one of the preset sound modes.

- If you want to add the surround elements in your SEA pattern, select one of the surround modes (DANCE, HALL, or STADIUM) before starting the procedure below. (See “Selecting the Sound Modes” on page 11.)

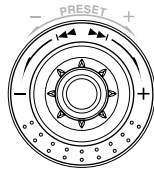
#### 2 Press SET/DISPLAY while the selected sound mode is still shown on the display.



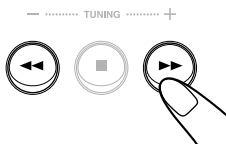
Current level appears.

#### 3 Adjust the SEA pattern.

- 1) Turn ◀◀ / ▶▶ to select the frequency range (LOW1, LOW2, MID, HIGH1, or HIGH2).

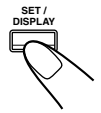
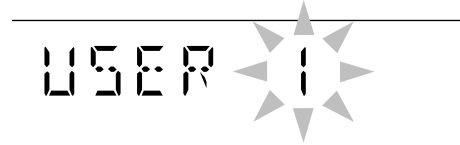


- 2) Press ◀◀ or ▶▶ to adjust the level (-3 to +3) of the selected frequency range.

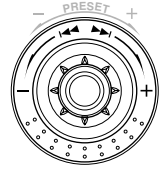


- 3) Repeat steps 1) and 2) to adjust the level of the other frequency ranges.

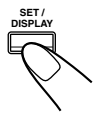
#### 4 Press SET/DISPLAY again.



#### 5 Turn ◀◀ / ▶▶ to select one of the user modes (USER 1, USER 2, or USER 3) in which you want to store your SEA pattern.



#### 6 Press SET/DISPLAY again.



The SEA pattern you have created are stored into the user mode selected in step 5.

### To use your own sound mode

Select USER 1, USER 2, or USER 3 mode when using the sound modes. See “Selecting the Sound Modes” on page 11.



**When you unplug the AC power cord or if a power failure occurs**

The setting will be erased in a few days. If this happens, set the user modes again.

# Listening to FM and AM (MW/LW) Broadcasts

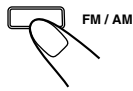


## Tuning in to a Station

### 1 Press FM/AM.

The unit automatically turns on and tunes in to the previously received station (either FM or AM—MW/LW).

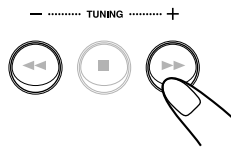
- Each time you press the button, the band alternates between FM and AM (MW/LW).



### 2 Start searching for stations.

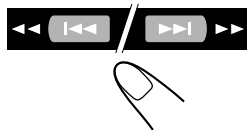
**On the unit:**

Press and hold TUNING + or TUNING – for more than 1 second.



**On the remote control:**

Press and hold >>> (▶▶▶) or <<<< (◀◀◀) for more than 1 second.



The unit starts searching for stations and stops when a station of sufficient signal strength is tuned in.

- If a program is broadcast in stereo, the ST (stereo) indicator lights up.

To stop searching, press TUNING + or TUNING – (or >>> (▶▶▶) / <<<< (◀◀◀) on the remote control).



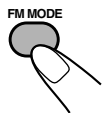
When you press TUNING + or TUNING – (or >>> (▶▶▶) / <<<< (◀◀◀) on the remote control) briefly and repeatedly

The frequency changes step by step.

## To change the FM reception mode

**On the remote control ONLY:**

When an FM stereo broadcast is hard to receive or noisy, press FM MODE so that the MONO indicator lights up on the display. Reception improves.



To restore the stereo effect, press FM MODE again so that the MONO indicator goes off. In this stereo mode, you can hear stereo sounds when a program is broadcasted.

## Presetting Stations

You can preset 30 FM and 15 AM (MW/LW) stations.

In some cases, test frequencies have been already memorized for the tuner since the factory examined the tuner preset function before shipment. This is not a malfunction. You can preset the stations you want into memory by following the presetting method.

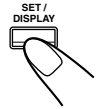
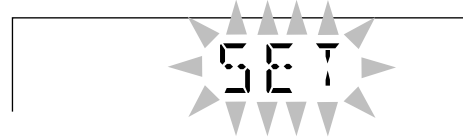
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 2 again.

**On the unit ONLY:**

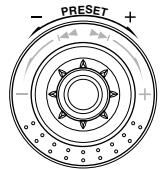
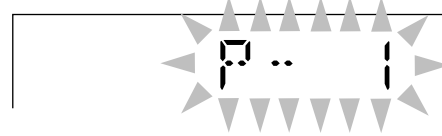
### 1 Tune in to the station you want to preset.

- See “Tuning in to a Station.”

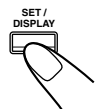
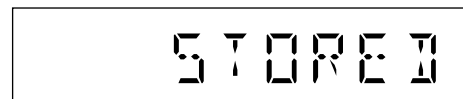
### 2 Press SET/DISPLAY.



### 3 Turn PRESET + / – to select a preset number.



### 4 Press SET/DISPLAY again.



The tuned station in step 1 is stored in the preset number selected in step 3.

- Storing a new station on a used number erases the previously stored one.



When you unplug the AC power cord or if a power failure occurs

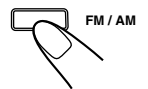
The preset stations will be erased in a few days. If this happens, preset the stations again.

## Tuning in to a Preset Station

### 1 Press FM/AM.

The unit automatically turns on and tunes in to the previously received station (either FM or AM—MW/LW).

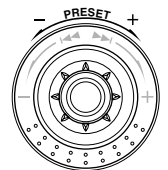
- Each time you press the button, the band alternates between FM and AM (MW/LW).



### 2 Select a preset number.

**On the unit:**

Turn PRESET + / –.



**On the remote control:**

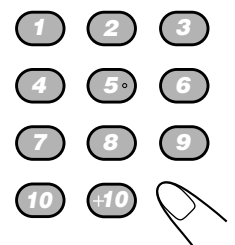
Press the number buttons.

Ex.: For preset number 5, press 5.

For preset number 15, press +10, then 5.

For preset number 25, press +10, +10, then 5.

For preset number 30, press +10, +10, then 10.





RDS (Radio Data System) allows FM stations to send an additional signal along with their regular program signals. For example, the stations send their station names, as well as information about what type of program they broadcast, such as sports or music, etc. When tuning in to an FM station which provides the RDS service, the RDS indicator lights up on the display.

With the unit, you can receive the following types of RDS signals.

**PS (Program Service):**

Shows commonly known station names.

**PTY (Program Type):**

Shows types of broadcast programs.

**RT (Radio Text):**

Shows text messages the station sends.

**Enhanced Other Networks:**

Provides the information about the types of the programs sent by other RDS stations.



**More about RDS**

- Some FM stations do not provide RDS signals.
- RDS services vary among FM RDS stations. For details on RDS services in your area, check with local radio stations.
- RDS may not work correctly if the received station is not transmitting the signals properly or if the signal strength is weak.

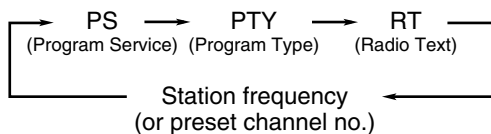
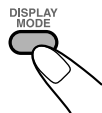
## Changing the RDS Information

You can see RDS information on the display while listening to an FM station.

**On the remote control ONLY:**

**Press DISPLAY MODE.**

- Each time you press the button, the display changes to show the following information:



- **If no PS, PTY, or RT signals are sent by a station** “NO PS,” “NO PTY,” or “NO RT” appears on the display.
- **If the unit takes time to show the RDS information received from a station** “WAIT PS,” “WAIT PTY,” or “WAIT RT” may appear on the display.

## Searching for Programs by PTY Codes (PTY Search)

One of the advantages of RDS is that you can locate a particular kind of program by specifying the PTY codes.

- For details on the PTY codes, see “Additional Information” on page 31.

**To search for a program using the PTY codes**

**REMEMBER** you must preset FM RDS stations to use the PTY codes. If not yet done, see page 13.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

**On the remote control ONLY:**

**1 Press PTY SEARCH.**

“PTY SELECT” appears on the display.



**2 Press PTY SELECT + or PTY SELECT - until the PTY code you want appears on the display.**



- Each time you press the button, the PTY codes change as follows:

NEWS ⇄ AFFAIRS ⇄ INFO ⇄ SPORT ⇄  
 EDUCATE ⇄ DRAMA ⇄ CULTURE ⇄  
 SCIENCE ⇄ VARIED ⇄ POP M ⇄ ROCK M ⇄  
 EASY M ⇄ LIGHT M ⇄ CLASSICS ⇄  
 OTHER M ⇄ WEATHER ⇄ FINANCE ⇄  
 CHILDREN ⇄ SOCIAL ⇄ RELIGION ⇄  
 PHONE IN ⇄ TRAVEL ⇄ LEISURE ⇄ JAZZ ⇄  
 COUNTRY ⇄ NATION M ⇄ OLDIES ⇄  
 FOLK M ⇄ DOCUMENT ⇄ TEST ⇄ ALARM ⇄  
 (back to the beginning)

**3 Press PTY SEARCH once again.**

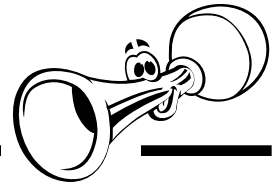
While searching, “SEARCH” and the selected PTY code appear alternately on the display.

The unit searches 30 preset FM stations, stops when it finds the one you have selected (“FOUND” appears), and tunes in to that station.

- If no program is found, “NOT FOUND” appears on the display and the unit returns to the last received station.



**To stop searching any time during the process, press PTY SEARCH while searching.**



## Switching to a Program Type of Your Choice Temporarily

The Enhanced Other Networks function allows the unit to switch temporarily to a broadcast program of your choice (TA, NEWS, or INFO) from a different station.

- The Enhanced Other Networks function only works when you are listening to a preset FM RDS stations providing the data required for this function.

### To activate the Enhanced Other Networks function

REMEMBER you must preset FM RDS stations to use the function. If not yet done, see page 13.

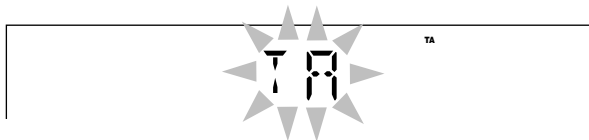
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

### On the remote control ONLY:

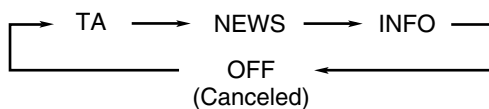
**1 Press TA/NEWS/INFO until the data type you want appears on the display.**



The selected data type indicator lights up on the display.



- Each time you press the button, the data types change as follows:



**TA:** Traffic announcement

**NEWS:** News

**INFO:** Program the purpose of which is to impart advice in the widest sense.

**OFF:** The function is canceled. The data type indicator (TA, NEWS, INFO) goes off.

**2 Wait for about 5 seconds after specifying the data type.**

The data type goes off from the display, and the selected data type indicator remains lit.

Now, the function is activated. See “How the Enhanced Other Networks function actually works.”

## How the Enhanced Other Networks function actually works:

### CASE 1

**If there is no station broadcasting the program you have selected**

The unit continues tuning in to the current station.



When a station starts broadcasting the program you have selected, the unit automatically switches to the station. The indicator of selected PTY code starts flashing.



When the program is over, the unit goes back to the previously tuned station, but the function still remains activated.

### CASE 2

**If there is a station broadcasting the program you have selected**

The unit tunes in to the program. The indicator of selected PTY code starts flashing.



When the program is over, the unit goes back to the previously tuned station, but the function still remains activated.

### CASE 3

**If the FM station you are listening to is broadcasting the program you have selected**

The unit continues to receive the station but the indicator of selected PTY code starts flashing.



When the program is over, the indicator of selected PTY code stops flashing and remains lit, but the function still remains activated.



### More about the Enhanced Other Networks function

- The data sent from some stations may not be compatible with this unit. In this case, the function may not work correctly.
- While listening to a program tuned in by the function, the station does not change even if another network station starts broadcasting a program of the same data.
- The function is canceled when you change the source to CD, TAPE, or AUX, while it is temporarily canceled when you change the source to AM (MW/LW).
- This function is also canceled when you turn off the unit.

This unit has been designed to play back the following discs:

- CD (Audio CD)
- CD-R (CD-Recordable)
- CD-RW (CD-ReWritable)
- MP3 disc (MP3 files recorded on a CD-R or CD-RW)

## When playing a CD-R or CD-RW

User-edited CD-Rs (CD-Recordable) and CD-RWs (CD-ReWritable) can be played back only if they are already “finalized.”

- You can play back your original CD-Rs or CD-RWs recorded in music CD format or in MP3 format. (However, they may not be played back depending on their characteristics or recording conditions.)
- Before playing back CD-Rs or CD-RWs, read their instructions or cautions carefully.
- Some CD-Rs or CD-RWs may not be played back on this unit because of their disc characteristics, damage or stain on them, or if the player’s lens is dirty.
- CD-RWs may require a longer readout time. This is caused by the fact that the reflectance of CD-RWs is lower than for regular discs.

### About the CD ready lamps

Each CD ready lamp corresponds to the disc tray of the same number.

- **When and why they light up?**
  - When you turn on the unit for the first time after plugging into a wall outlet, all CD ready lamps (CD1 READY, CD2 READY, and CD3 READY) light up. From the next time on, CD ready lamp(s) light(s) up according to the previous condition.
  - Each time you press the disc tray open/close buttons —▲ (CD1, CD2, and CD3), the corresponding CD ready lamp lights up.
- **When and why they go off?**

Only when the unit detects there is no disc loaded on a certain tray, the corresponding CD ready lamp goes off. (“NO DISC 1,” “NO DISC 2,” or “NO DISC 3” appears on the display.)
- **When and why they flash?**

The corresponding CD ready lamp flashes during playback and pause.



#### If the loaded disc is an MP3 disc

The corresponding CD ready lamp and the MP3 indicator will light up.

## MP3 Introduction

### What is MP3?

MP3 is an abbreviation of Motion Picture Experts Group 1 (or MPEG-1) Audio Layer 3. MP3 is simply a file format with a data compression ratio of 1:10 (128 kbps\*). By using MP3 format, one CD-R or CD-RW can contain 10 times as much data volume as a regular CD can.

- \* Bit rate is the average number of bits that one second of audio data will consume. The unit uses kbps (1,000 bits per second). To get a better audio quality, choose a higher bit rate. The most popular bit rate for encoding (recording) is 128 kbps.

### MP3 disc structure

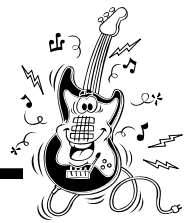
On an MP3 disc, each song (material) is recorded as a file. Files are grouped into a directory (or folder). Directories can also include other directories, creating hierarchical directory layers. (See “How are MP3 files recorded and played back?” on page 17.)

This unit manages files and directories as “tracks” and “groups.” This unit can recognize up to 255 tracks per disc, up to 64 groups per disc. The unit ignores those exceeding the maximum numbers and cannot play them back.



#### About MP3 discs

- MP3 discs (either CD-R or CD-RW) require a longer readout time. (It varies due to the complexity of the recording configuration.)
- When making an MP3 disc, select ISO 9660 Level 1 or Level 2 as the disc format.
- This unit does not support multisession recording.
- This unit can play MP3 files only with the following file extensions—“.MP3,” “.Mp3,” “.mP3,” and “.mp3.”
- Files other than MP3 are ignored.
- Some MP3 discs may not be played back because of their disc characteristics or recording conditions.



## How are MP3 files recorded and played back?

MP3 “tracks (files)” can be recorded in “group”—folders or directories, in PC terminology.

During recording, the tracks and groups can be arranged similarly to the tracks and folders/directories of computer data. “Root” is similar to the root of a tree. Every track and group can be linked to the root.

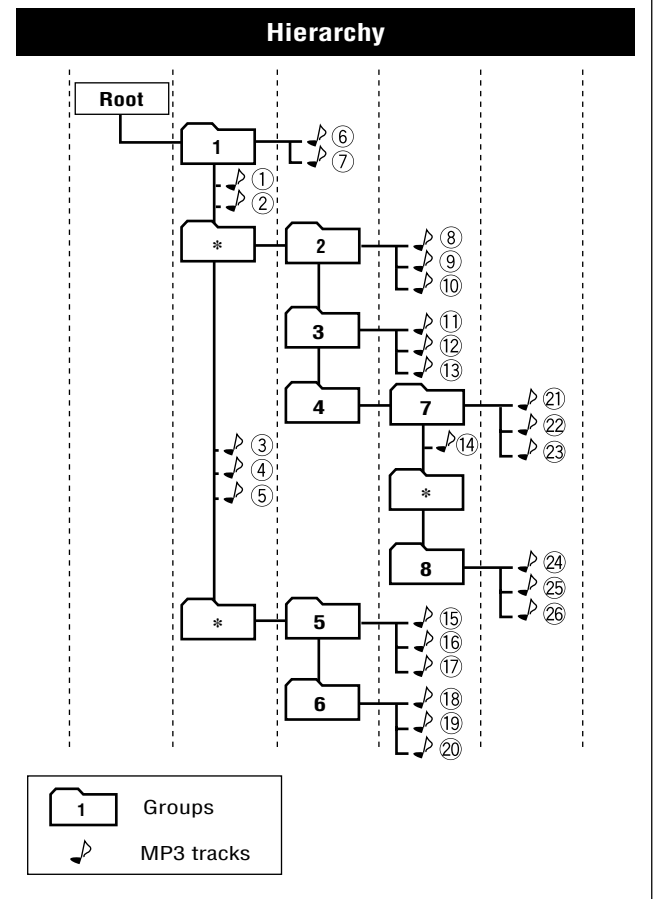
In compliance with ISO 9660, the maximum allowable depth of nested directories—so called “hierarchy”—is eight (inclusive of the root).

Playback order, track search order, and group search order of the MP3 tracks recorded on a disc are determined by the writing (or encoding) application; therefore, playback order may be different from the one you have intended while recording the groups and the tracks.

The illustration shows an ordinary example of how MP3 tracks are recorded on a CD-R or CD-RW, how they are played back and how they are searched for on this unit.


- The numbers in circles next to the MP3 tracks (♪) indicate the playback order and search order of the MP3 tracks. Normally this unit plays back MP3 tracks in the recorded order.
- The numbers inside the groups indicate the playback order and search order of the groups on an MP3 disc. Normally this unit plays back MP3 tracks in the groups in the recorded order. The groups marked with asterisk (\*) will be skipped since they do not include any MP3 tracks.

### MP3 group/track configuration:

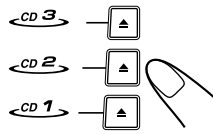


## Loading Discs

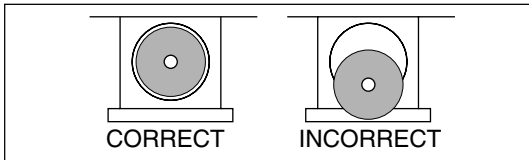
**On the unit ONLY:**

**1 Press  for the disc tray (CD1, CD2, or CD3) you want to load a disc onto.**

The unit automatically turns on and the disc tray comes out.



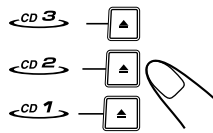
**2 Place a disc correctly on the circle of the disc tray, with its label side up.**



- When using a CD single (8 cm), place it on the inner circle of the disc tray.

**3 Press the same  you have pressed in step 1.**


The disc tray closes.



**4 Repeat steps 1 to 3 to place other discs.**



### When loading more than one disc

When you press  for the next tray you want to place another disc onto, the first disc tray automatically closes and then the next tray comes out.

## Playing Back the Entire Discs—Continuous Play

You can play discs continuously.

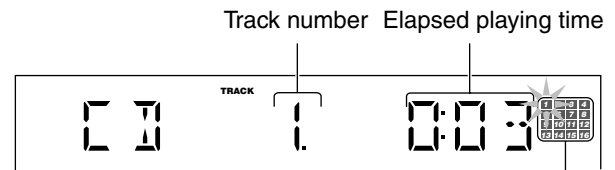
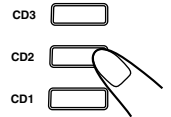
- If you start Continuous Play with an MP3 disc, you can select a track you want to start playback with.

### For audio CDs

**1 Load discs.**

**2 Press one of the disc number (CD1, CD2, or CD3) buttons for the disc you want to play.**

The unit searches for the disc, and starts playing with the first track of the selected disc.



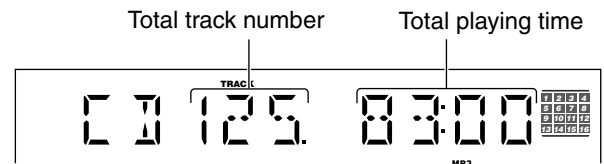
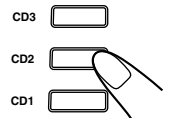
Tracks of the currently playing CD (Track numbers exceeding 16 are not displayed.)

### For MP3 discs

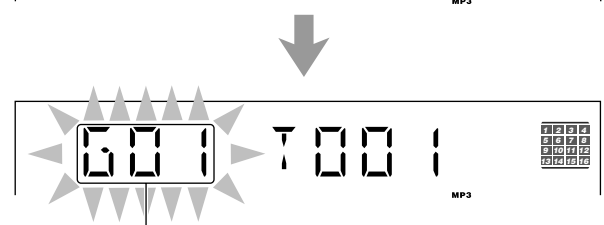
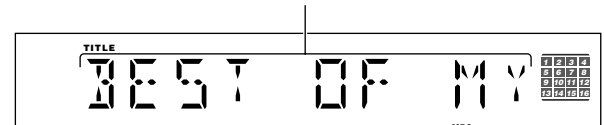
**1 Load discs.**

**2 Press one of the disc number (CD1, CD2, or CD3) buttons for the disc you want to play.**

The unit searches for the disc (it may take time), and the following information appears on the display.



Group title of the 1st group\*



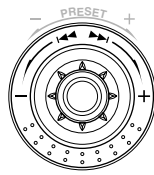
Group number flashes.

\* If the group title cannot be shown at a time (exceeding 10 characters), the title scrolls.

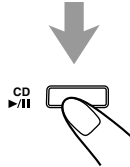
### 3 Select a track to start playing with.

1) Turn ◀◀◀ / ▶▶▶ (or press ◀◀◀ (◀◀◀) / ▶▶▶ (▶▶▶) on the remote control) to select a group you want, then press CD ▶/||.

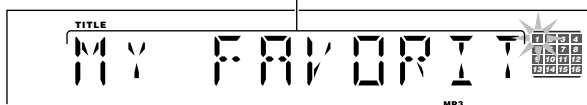
The track number starts flashing.



2) Turn ◀◀◀ / ▶▶▶ (or press ◀◀◀ (◀◀◀) / ▶▶▶ (▶▶▶) on the remote control) to select a track you want to start playback with, then press CD ▶/|| again.

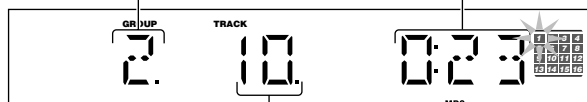


Track title\*\*



Group number

Elapsed playing time



Track number

\*\* Only a maximum of 10 characters (including spaces between words) can be shown on the display. The exceeding characters will be ignored.

Playback starts with the selected track of the selected group.

To stop playing, press ■.

To remove the disc, press ▲ for the corresponding disc tray.

### Disc playback sequence

When 3 discs\* are loaded on the disc trays, they are played in one of the following sequences.

- When CD1 is pressed: CD1 ⇒ CD2 ⇒ CD3 (then stops)
- When CD2 is pressed: CD2 ⇒ CD3 ⇒ CD1 (then stops)
- When CD3 is pressed: CD3 ⇒ CD1 ⇒ CD2 (then stops)

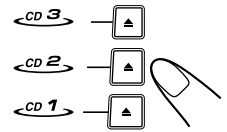
\* When no disc is loaded on the tray, that disc number is skipped. "NO DISC 1," "NO DISC 2," or "NO DISC 3" appears on the display if the selected disc tray is empty.

## Basic Disc Operations

While playing a disc, you can do the following operations.

### To exchange discs during playback of another

Press ▲ corresponding to a disc, not playing or selected currently, to eject and exchange the disc.

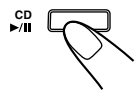


If you exchange discs during play, the current play will not stop until all discs you have exchanged are played.

### To stop play for a moment

Press CD ▶/||.

While pausing, the elapsed playing time flashes on the display.



To resume playing, press CD ▶/|| again.

### To go to another track

**For audio CDs:** Before or during play

**For MP3 discs:** During play

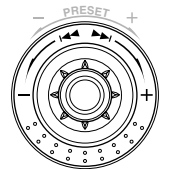
Turn ◀◀◀ / ▶▶▶ (or press ◀◀◀ (◀◀◀) / ▶▶▶ (▶▶▶) on the remote control).

- ◀◀◀ (or ◀◀◀ (◀◀◀)):

Goes back to the beginning of the current or previous tracks.

- ▶▶▶ (or ▶▶▶ (▶▶▶)):

Skips to the beginning of the next or succeeding tracks.



### To locate a particular point in a track

During play, press and hold ◀◀ or ▶▶ (or ◀◀◀ (◀◀◀) / ▶▶▶ (▶▶▶) on the remote control).



- ◀◀ (or ◀◀◀ (◀◀◀)): Fast-reverses the disc.
- ▶▶ (or ▶▶▶ (▶▶▶)): Fast-forwards the disc.

### To go to another track directly using the number buttons

**On the remote control ONLY:**

Pressing the number button(s) before or during play allows you to start playing the track number you want.

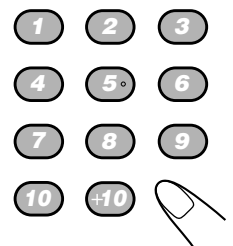
Ex.: For track number 5, press 5.

For track number 15, press +10, then 5.

For track number 20, press +10, then 10.

For track number 32, press +10 three times, then 2.

For track number 132, press +10 thirteen times, then 2.



## Programming the Playing Order of the Tracks —Program Play

You can arrange the playing order of the tracks before you start playing. **You can program up to 50 tracks.**

- To use Repeat Play (see page 22) for Program Play, press REPEAT after starting Program Play. Only REPEAT 1 and REPEAT ALL can be selected for Program Play.
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 2 again.

### 1 Load discs.

- If the current playing source is not the CD player, press CD ►/||, then ■ before going to the next step.

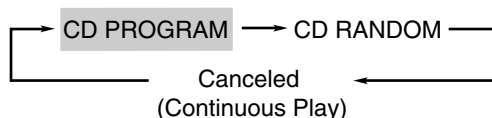
### 2 Activate the Program Play mode.

**On the unit:**

Press CD PLAY MODE repeatedly until “CD PROGRAM” appears on the display.

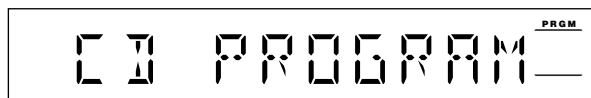
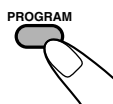


- Each time you press the button, the play mode changes as follows:



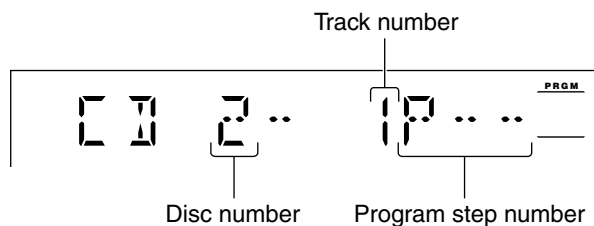
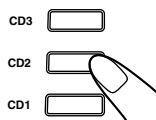
**On the remote control:**

Press PROGRAM so that “CD PROGRAM” appears on the display.



- The PRGM (program) indicator lights up on the display.

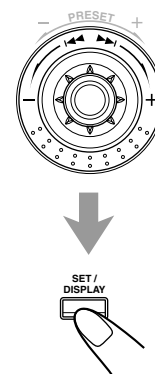
### 3 Press one of the disc number (CD1, CD2, or CD3) buttons to select the disc you want to play.



### 4 Select a track from the selected disc in step 3.

**On the unit:**

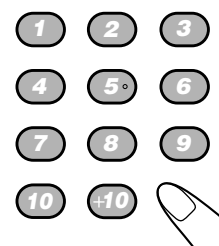
Turn |◀◀ / ▶▶| to select the track number, then press SET/DISPLAY.



**On the remote control:**

Press the number buttons.

- For how to use the number buttons, see “To go to another track directly using the number buttons” on page 19.



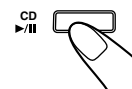
### 5 Program other tracks you want.

- To program tracks from the same disc, repeat step 4.
- To program tracks from a different disc, repeat steps 3 and 4.

### 6 Press CD ►/||.

The tracks are played in the order you have programmed.

- If the playing disc is an MP3 disc, the MP3 indicator lights up.



To stop playing, press ■.



To exit from Program Play mode, press CD PLAY MODE repeatedly until the PRGM (program) indicator goes off (or press PROGRAM on the remote control) after playback stops.





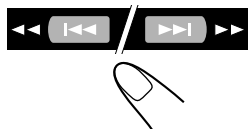
- If you try to program a 51st track, “CD FULL” will be flashing on the display.
- If you have tried to program a track from an empty tray, “NO DISC 1,” “NO DISC 2,” or “NO DISC 3” will appear on the display for 2 seconds.
- If the track number you have programmed does not exist on the disc, it will be skipped during play.

## To check the program contents

### On the remote control ONLY:

Before playing, you can check the program contents by pressing  (◀◀) or .

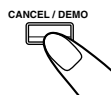
-  (◀◀) : Shows the programmed tracks in the reverse order.
-  (▶▶) : Shows them in the programmed order.




## To modify the program

Before or after playing, you can erase the last programmed tracks by pressing CANCEL/DEMO (or press PROGRAM CANCEL on the remote control).

- Each time you press the button, the last programmed track is erased from the program.



**To add tracks in the program before playing**, simply select the track numbers you want to add by following step 4 of the programming procedure. If you want to add tracks from another disc, follow steps 3 and 4.

**To erase the entire program before or after playing**, press and hold  until “CD PROGRAM” appears on the display.

- The program you have made will be erased,
  - when you exit from Program Play mode,
  - when you unplug the AC power cord, or
  - when a power failure occurs.

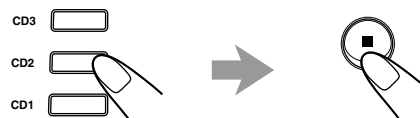
## Playing at Random—Random Play

The tracks of the currently selected disc will be played at random.

- To use Repeat Play (see page 22) for Random Play, press REPEAT after starting Random Play. Only REPEAT 1 and REPEAT ALL can be selected for Random Play.

### 1 Load a disc.

### 2 Press the corresponding disc number (CD1, CD2, or CD3) button where a disc is loaded in step 1, then press .

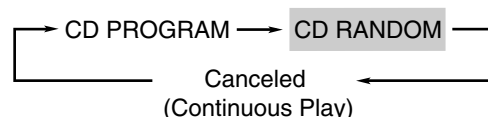


### 3 Activate the Random Play mode.

#### On the unit:

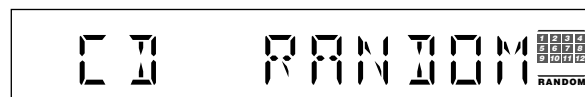
Press CD PLAY MODE repeatedly until “CD RANDOM” appears on the display.

- Each time you press the button, the play mode changes as follows:



#### On the remote control:

Press RANDOM so that “CD RANDOM” appears on the display.






- The RANDOM indicator also lights up on the display.




### 4 Press CD /II.

The tracks are randomly played. Random Play ends when all the tracks of the current disc are played once.



**To skip the currently playing track**, turn  /  to the right (or press  (▶▶) on the remote control).



**If you turn  /  to the left (or press  (◀◀) on the remote control)**

You cannot go back to the previous tracks during Random Play.

**To stop playing**, press .

**To exit from Random Play mode**, press CD PLAY MODE repeatedly until the RANDOM indicator goes off (or press RANDOM on the remote control) after playback stops.



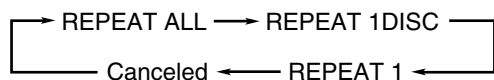


## Repeating Tracks or Discs—Repeat Play

You can have all the discs, the program or the individual track currently playing repeat as many times as you like.

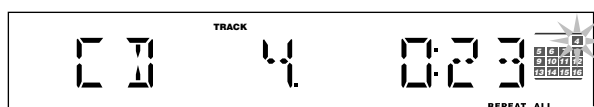
**To repeat playing,** press REPEAT during or before play.

- Each time you press the button, Repeat Play mode changes as follows:

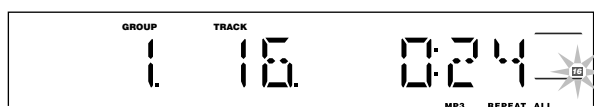


The Repeat Play mode indicator lights up on the display.

### For audio CDs:



### For MP3 discs:



- REPEAT ALL:**
- During Continuous Play**  
Repeats all the tracks on all the loaded discs continuously.
  - During Program Play**  
Repeats the program.
  - During Random Play**  
Repeats all the tracks on all the loaded discs randomly.
- REPEAT 1DISC:** Repeats all the tracks on the current disc continuously.
- REPEAT 1:** Repeats the currently playing track.

**To cancel Repeat Play,** press REPEAT repeatedly until the Repeat Play mode indicators go off from the display.



- “REPEAT 1DISC” cannot be selected for Program Play or Random Play  
It is canceled when you select Program Play or Random Play.
- “REPEAT ALL” cannot function  
Place discs on all disc trays.

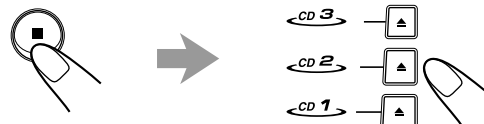
## Prohibiting Disc Ejection—Tray Lock

You can prohibit disc ejection from the unit and lock discs.

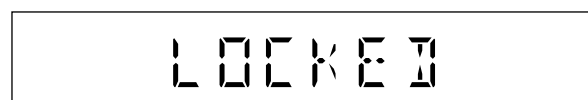
- This operation is possible only when the source is the CD player.

### On the unit ONLY:

**To prohibit disc ejection,** press ▲ for any disc tray while holding down ■. (If there is any disc tray opened, close it first.)

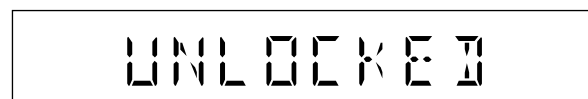


“LOCKED” appears for a while on the display, and the loaded discs are locked.



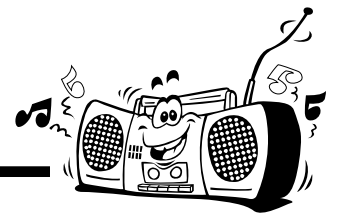
**To cancel the prohibition and unlock the discs,** press ▲ for any disc tray while holding down ■.

“UNLOCKED” appears for a while on the display, and the loaded discs are unlocked.



**If you try to eject discs while Tray Lock is in use** “LOCKED” appears to inform you that the disc trays are locked.

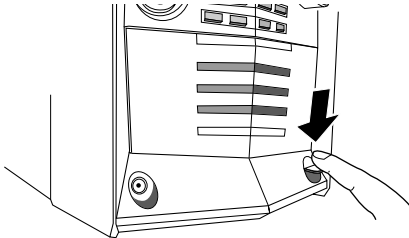
# Playing Back Tapes



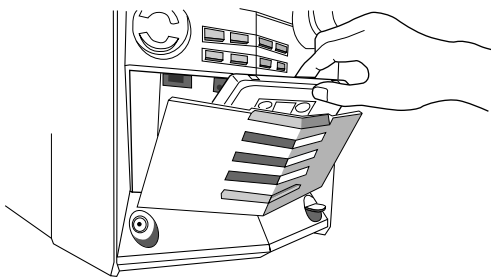
You can play back type I tapes without changing any settings.

## Playing Back a Tape

**1** Press **EJECT** for the cassette deck.



**2** Insert a cassette with the exposed part of the tape down.



**3** Close the cassette holder gently.

**4** Press **TAPE** **◀▶**.

The tape play starts and the tape direction indicator (▶ or ◀) starts flashing slowly to indicate the tape running direction.

- Each time you press the button, the tape direction changes and “REVERSE” appears for a while on the display.
  - ▶ : plays the front side.
  - ◀ : plays the reverse side.
- If no cassette is inserted, “NO TAPE” appears on the display.

When the tape plays to the end, the deck automatically stops if the Reverse Mode is off. (See “To play both sides repeatedly—Reverse Mode.”)

**To stop playing**, press **■**.

**To fast-wind to the left or to the right**, press **◀◀** or **▶▶** (or **◀◀◀** (**◀◀**) / **▶▶▶** (**▶▶**)) on the remote control) while the tape is not running.

The tape direction indicator (▶ or ◀) starts flashing quickly on the display.

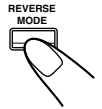
**To remove the cassette**, press **EJECT** to open the cassette holder.

**To play both sides repeatedly—Reverse Mode**

When using Reverse Mode, the tape automatically reverses at the end of one side, starts playing the other side of the tape, and repeats the same process.

**On the unit ONLY:**

**To use Reverse Mode**, press **REVERSE MODE** so that the Reverse Mode indicator lights up on the display like **◄◄**.



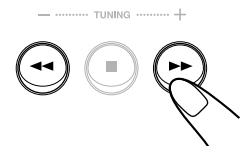
**To cancel Reverse Mode**, press the button again so that the Reverse Mode indicator lights up on the display like **◄**.

## Locating the Beginning of a Song—Music Scan

You can use Music Scan to locate the beginning of a song. Music Scan searches for blank portions that usually separate recorded songs, then plays the next song.

**To find the beginning of the current song**

During play, press **◀◀** or **▶▶** (or **◀◀◀** (**◀◀**) / **▶▶▶** (**▶▶**)) on the remote control) in the **opposite direction** to the tape play.

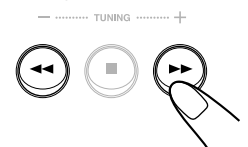


The tape direction indicator of the opposite direction to the tape play starts flashing intermittently.

Searching stops automatically at the beginning of the current song, and it starts automatically.

**To find the beginning of the next song**

During play, press **◀◀** or **▶▶** (or **◀◀◀** (**◀◀**) / **▶▶▶** (**▶▶**)) on the remote control) in the **same direction** as the tape play.



The tape direction indicator of the same direction as the tape play starts flashing intermittently.

Searching stops automatically at the beginning of the next song, and it starts automatically.



**Music Scan works by detecting a 4-second long blank between each song, so it will not work well in the following cases**

- No blank at the beginning of a song.
- Noise (often caused by much use or poor quality dubbing) which fills the blank.
- Long, very soft passages or pauses in a song.



The use of the C-120 or thinner tape is not recommended, since characteristic deterioration may occur and this tape easily jams in the pinch-rollers and the capstans.

## IMPORTANT:

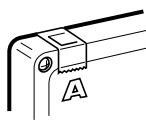
- It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable program and in any literary, dramatic, musical, or artistic embodied therein.
- The recording level is automatically set correctly, so it is not affected by the VOLUME, the SUBWOOFER LEVEL, and the SOUND MODE controls. Thus, during recording you can adjust the sound you are actually listening to without affecting the recording level.
- If there are excessive noise or static in the recording you have made, the unit may be too close to a TV. Increase the distance between the TV and the unit.
- You can use type I tape for recording.

## To protect your recording

Cassettes have two small tabs on the back to protect from unexpected erasure or re-recording.

To protect your recording, remove these tabs.

To re-record on a protected tape, cover the holes with adhesive tape.



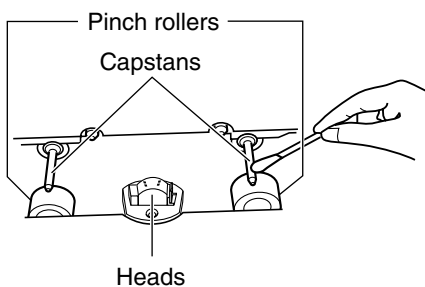
## To keep the best recording and playback sound quality

If the heads, capstans, and pinch rollers of the cassette deck become dirty, the following will occur:

- Impaired sound quality
- Discontinuous sound
- Fading
- Incomplete erasure
- Difficulty in recording

## To clean the heads, capstans, and pinch rollers

Use a cotton swab moistened with alcohol.

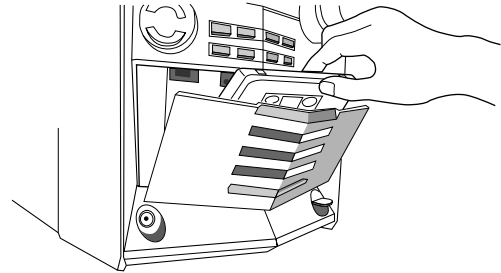


## To demagnetize the heads

Turn off the unit, and use a head demagnetizer (available at electronics and audio shops).

## Recording on a Tape




- 1 Press  EJECT and insert a recordable cassette with the exposed part of the tape down.



- 2 Close the cassette holder gently.

- If you want to record on both sides of a tape, see “To record on both sides—Reverse Mode.”

- 3 Check the tape direction of the cassette deck.

- If the tape direction is not correct, press TAPE   twice then  to change the tape direction.

- 4 Start playing the source—FM, AM (MW/LW), CD player, or auxiliary equipment connected to AUX jacks.

- When the source is the CD player, you can also use Direct Recording—(see page 25), and Auto Edit Recording (only for audio CDs)—(see page 26).

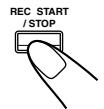
- 5 Start recording.



**On the unit:**

Press REC START/STOP.


**On the remote control:**


Press and hold REC START/STOP for more than 1 second.



The REC (recording) lamp flashes when recording starts, and the tape direction indicator ( or ) starts flashing slowly.


- If no cassette is inserted, “NO TAPE” appears on the display. If a protected tape is inserted, “NO REC” appears on the display.

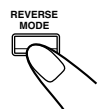
**To stop recording immediately**, press REC START/STOP or  (or press and hold REC START/STOP on the remote control for more than 1 second).


**To remove the cassette**, press  EJECT to open the cassette holder.


## To record on both sides—Reverse Mode

**On the unit ONLY:**

Press REVERSE MODE so that the Reverse Mode indicator lights up on the display like—.



- When using the Reverse Mode for recording, start recording in the forward () direction first. Otherwise, recording will stop when only one side (reverse) of the tape is recorded.

**To cancel Reverse Mode**, press the button again so that the Reverse Mode indicator lights up on the display like—.

## Synchronized Recording

By using Synchronized Recording methods, you can start and stop both disc play and tape recording at the same time.

Synchronized Recording consists of the following:

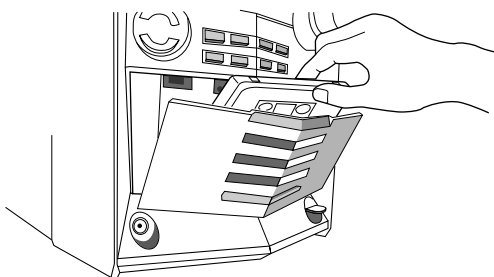
- Direct Recording
- Auto Edit Recording (only for audio CDs)

### ■ Direct Recording

Everything on the disc goes onto the tape in the order it is on the disc, or according to the order you have made for Program Play.

#### On the unit ONLY:

- 1** Press **▲ EJECT** and insert a recordable cassette with the exposed part of the tape down.

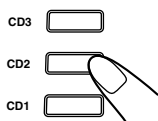


- 2** Load a disc.

- 3** Select a disc.

#### For audio CDs:

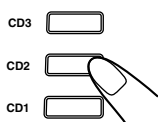
Press the corresponding disc number (CD1, CD2, or CD3) button where a disc is loaded in step 2, then press ■.



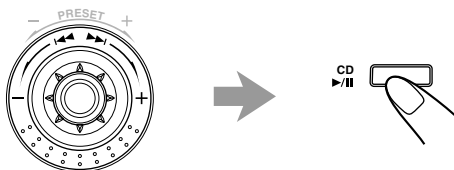
#### For MP3 discs:

You can select a track to start recording with.

- 1)** Press the corresponding disc number (CD1, CD2, or CD3) button where a disc is loaded in step 2.



- 2)** Turn **◀◀ / ▶▶** to select the group, then press **CD ▶ / II**.



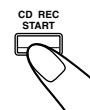
- 3)** Turn **◀◀ / ▶▶** to select the track.

- 4** Press **CD REC START**.

“CD REC” appears on the display and the REC (recording) lamp flashes when recording starts.

The cassette deck starts recording while the CD player starts playing.

When the recording is done, “CD REC FINISHED” appears scrolling on the display, and the REC (recording) lamp turns off. Both the cassette deck and the CD player stop automatically.



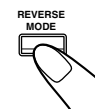
**To stop recording**, press ■ to create a 4-second blank portion on the recording tape. (Remember, a 4-second blank is important when using Music Scan—see page 23.)



### To record on both sides—Reverse Mode

#### On the unit ONLY:

Press **REVERSE MODE** so that the Reverse Mode indicator lights up on the display like—**(Z)**.



- When using the Reverse Mode for Direct Recording, start recording in the forward (▶) direction first. When the tape reaches its end while recording a song in the forward direction (▶), the last song will be re-recorded at the beginning of the reverse side (◀). If you start recording on the reverse side (◀) first, recording will stop when only one side (reverse) of the tape is recorded.

**To cancel Reverse Mode**, press the button again so that the Reverse Mode indicator lights up on the display like—**Z**.



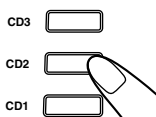
## ■ Auto Edit Recording (only for audio CDs)

Using Auto Edit Recording, you can record the tracks on a CD onto both sides of the tape. However, if the tracks are recorded segmentally starting from track 1, the track recorded on the end portion of the front side of the tape may be cut off; to prevent this, the unit automatically selects an appropriate-length track so it fits the remaining tape length properly.

### On the unit ONLY:

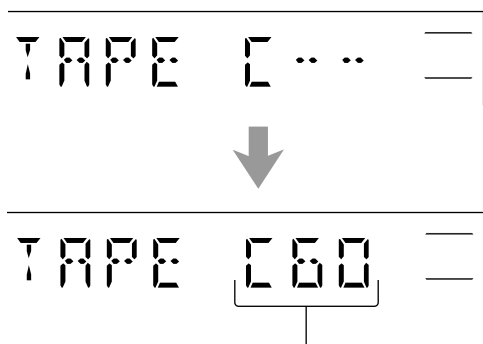
#### 1 Load a disc.

#### 2 Press the corresponding disc number (CD1, CD2, or CD3) button where a disc is loaded in step 1, then press ■.



- If there is no disc on the selected disc tray, “NO DISC 1,” “NO DISC 2,” or “NO DISC 3” appears, and the unit continues to search for a disc from another disc tray.

#### 3 Press EDIT.



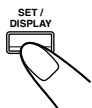
The optimum tape length for the disc appears.

#### To change the tape length manually

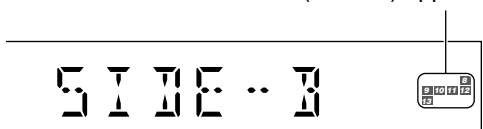
If the tape length selected is not satisfactory, you can change the tape length by turning ◀◀ / ▶▶ on the unit. You can select the tape length among the following—40, 46, 50, 54, 60, 64, 70, 74, 80, 84, and 90.

#### 4 Press SET/DISPLAY.

- Each time you press the button, the tracks to be recorded on the front side (“SIDE-A”) and on the reverse side (“SIDE-B”) appear alternately on the display.



Tracks to be recorded on the reverse side (SIDE-B) appear.



#### 5 Insert a recordable cassette of appropriate length into the cassette deck.

#### 6 Press REVERSE MODE so that the Reverse Mode indicator lights up like—(Z).



- Without turning on the Reverse Mode, recording will stop when the front side of the tape is recorded.

#### 7 Press CD REC START.

“CD REC” appears, then “TAPE SIDE-A STAND-BY” scrolls on the display, and the REC (recording) lamp flashes.



The cassette deck starts recording. About 10 seconds later, the CD player starts playing.

When the recording is done, “CD REC FINISHED” scrolls on the display and the REC (recording) lamp turns off. Both the cassette deck and CD player stop automatically.

- If a tape has not been rewound, the cassette deck will rewind the tape before it starts recording.
- A 10-second blank portion is automatically created at the beginning of each side of the tape.

#### To stop during Auto Edit Recording

Press REC START/STOP or ■ to create a 4-second blank portion on the recording tape. (Remember, a 4-second blank is important when using Music Scan—see page 23.)

#### To cancel Auto Edit Recording

Press CANCEL/DEMO before or after recording.

# Using the Timers

There are three timers available—DAILY (Daily Timer), REC (Recording Timer), and SLEEP (Sleep Timer).

You can set the timers whether the unit is on or off; however, if Ecology Mode is activated, you cannot set the timers while the unit is off.

Before using the timers, set the clock built in the unit. (See page 10.)

## Using Daily Timer

With Daily Timer, you can be wake up with your favorite music or radio program.

### How Daily Timer actually works

The unit automatically turns on, sets the volume level to the preset level, and starts playing the specified source when the on-time comes. (“DAILY” and the DAILY indicator flash just before the on-time, and the DAILY indicator continues flashing while the timer is operating.) Then, when the off-time comes (“DAILY OFF” flashes just before the off-time), the unit automatically turns off (on standby).

The Daily Timer works everyday automatically. If you do not want to use the Daily Timer, turn it off. (See “To turn on or off Daily Timer after its setting is done” on page 28.) The timer setting remains in memory until you change it.

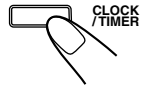
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- To correct a misentry while setting the timer, press CANCEL/DEMO.

#### Before you start...

- *When using a disc as the source to play—*
  - Make sure there is a disc on the selected disc tray.
- *When using a tape as the source to play—*
  - Make sure that a tape is in the cassette deck.
  - Make sure that the tape direction is correct.
- *When using the external component as the source to play—*
  - Set the timer equipped on the external component at the same time.

### On the unit ONLY:

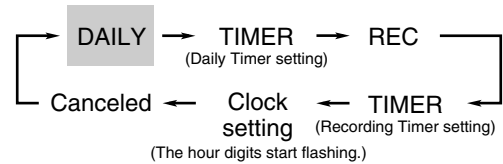
- 1 Press **CLOCK/TIMER** repeatedly until “DAILY” appears on the display.



The (Timer) indicator lights up and the DAILY (Daily Timer) indicator also starts flashing on the display.

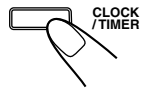


- Each time you press the button, the timer setting modes change as follows:



- 2 Press **CLOCK/TIMER** again.

“TIMER” appears for 2 seconds, then the unit enters on-time setting mode.



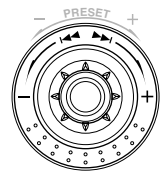
- 3 Set the on-time you want the unit to turn on at.

1) Turn |◀◀ / ▶▶| to set the hour, then press SET/DISPLAY.

“SET” appears for 1 second.

2) Turn |◀◀ / ▶▶| to set the minute, then press SET/DISPLAY.

“SET” appears for 1 second, then the unit enters off-time setting mode.

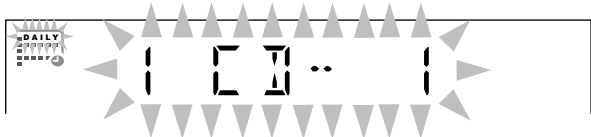


SET / DISPLAY



#### 4 Set the off-time you want the unit to turn off (on standby) at.

- 1) Turn **◀◀ / ▶▶** to set the hour, then press SET/DISPLAY.  
“SET” appears for 1 second.
- 2) Turn **◀◀ / ▶▶** to set the minute, then press SET/DISPLAY.  
“SET” appears for 1 second, then the unit enters source selecting mode.



#### 5 Turn **◀◀ / ▶▶** to select the source to play, then press SET/DISPLAY.

- “SET” appears for 1 second.
- The source changes as follows:



TUNER FM: tunes in to a specified preset FM station.

→ Go to step 6.

TUNER AM: tunes in to a specified preset AM (MW/LW) station. → Go to step 6.

1 CD-- 1: plays from a specified track of a specified disc. → Go to step 6.

TAPE: plays a tape in the cassette deck. → Go to step 7.

AUX IN: plays an external source. → Go to step 7.

#### 6 When selecting “TUNER FM” or “TUNER AM”

Turn **◀◀ / ▶▶** to select the preset station number, then press SET/DISPLAY.

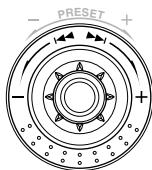
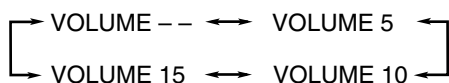
The unit enters volume setting mode.

##### When selecting “1 CD-- 1”

- 1) Turn **◀◀ / ▶▶** to select the disc number, then press SET/DISPLAY.  
“SET” appears for 1 second.
- 2) Turn **◀◀ / ▶▶** to set the track number, then press SET/DISPLAY.  
“SET” appears for 1 second, then the unit enters volume setting mode.

#### 7 Turn **◀◀ / ▶▶** to set the volume level.

- The volume level changes as follows:

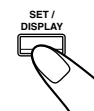


- If you select “VOLUME --,” the volume is set to the last level when the unit has been turned off.

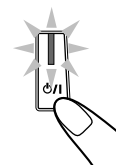
#### 8 Press SET/DISPLAY to complete the Daily Timer setting.

The DAILY (Daily Timer) indicator stops flashing and remains lit. “OK ✓” appears on the display for 2 seconds.

The settings you have done are shown on the display in sequence for your confirmation.



#### 9 Press **⏻/|** to turn off the unit (on standby) if you have set the Daily Timer with the unit turned on.

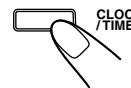


- If the unit is turned on before the on-time comes Daily Timer does not work.
- Even if you unplug the AC power cord or if a power failure occurs  
Once you set the timer, the timer setting may remain stored in memory in a few days. In this case, check whether the timer setting still remains or not.

#### To turn on or off Daily Timer after its setting is done

##### 1 Press CLOCK/TIMER repeatedly until “DAILY” appears on the display.

The DAILY (Daily Timer) indicator starts flashing on the display and **⏻** (Timer) indicator remains lit.



##### 2 To turn off the Daily Timer, press CANCEL/DEMO.

The DAILY (Daily Timer) and **⏻** (Timer) indicators go off from the display (“DAILY OFF” appears for a while).

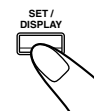
The Daily Timer is canceled, but the setting for the Daily Timer remains in memory.



##### Or

##### To turn on the Daily Timer, press SET/DISPLAY.

“OK ✓” appears on the display for 2 seconds. The settings you have done are shown on the display in sequence for your confirmation.



## Using Recording Timer

With Recording Timer, you can make a tape of a radio broadcast automatically.

### How Recording Timer actually works

The unit automatically turns on, tunes in to the specified station, sets the volume level to "VOLUME MIN," and starts recording when the on-time comes ("REC" and the REC indicator flash just before the on-time, and the REC indicator continues flashing while the timer is operating). Then, when the off-time comes ("REC OFF" flashes just before the off-time), the unit automatically turns off (on standby).

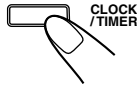
The timer setting remains in memory until you change it.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 2 again.
- To correct a misentry while setting the timer, press CANCEL/DEMO.

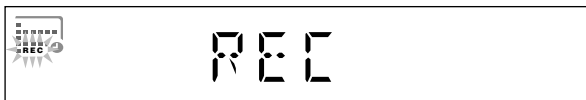
### On the unit ONLY:

**1** Insert a recordable cassette with the exposed part of the tape down.

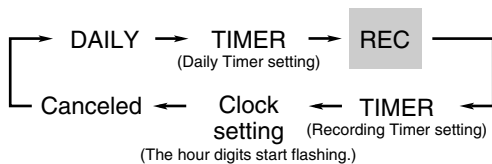
**2** Press CLOCK/TIMER repeatedly until "REC" appears on the display.



The (Timer) indicator lights up and the REC (Recording Timer) indicator also starts flashing on the display.

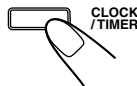


- Each time you press the button, the timer setting modes change as follows:



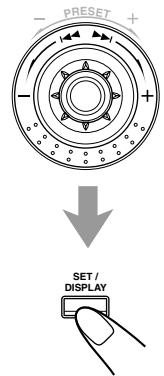
**3** Press CLOCK/TIMER again.

"TIMER" appears for 2 seconds, then the unit enters on-time setting mode.



**4** Set the on-time you want the unit to turn on at.

- 1) Turn ◀◀ / ▶▶ to set the hour, then press SET/DISPLAY. "SET" appears for 1 second.
- 2) Turn ◀◀ / ▶▶ to set the minute, then press SET/DISPLAY. "SET" appears for 1 second, then the unit enters off-time setting mode.



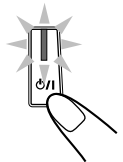
**5** Set the off-time you want the unit to turn off (on standby) at.

- 1) Turn ◀◀ / ▶▶ to set the hour, then press SET/DISPLAY. "SET" appears for 1 second.
- 2) Turn ◀◀ / ▶▶ to set the minute, then press SET/DISPLAY. "SET" appears for 1 second, then the unit enters preset station selecting mode.

**6** Select the preset station.

- 1) Turn ◀◀ / ▶▶ to select the band ("TUNER FM" or "TUNER AM"), then press SET/DISPLAY. "SET" appears for 1 second.
- 2) Turn ◀◀ / ▶▶ to select a preset channel number, then press SET/DISPLAY. The REC (Recording Timer) indicator stops flashing and remains lit. "OK ✓" appears on the display for 2 seconds. The settings you have done are shown on the display in sequence for your confirmation.

**7** Press ⏻/⏷ to turn off the unit (on standby) if necessary.




- **If you want to listen to another source while recording**  
Press REC START/STOP or ■ to stop recording. Without stopping it, you cannot change the source.
- **Even if you unplug the AC power cord or if a power failure occurs**  
Once you set the timer, the timer setting may remain stored in memory for a few days. In this case, check whether the timer setting still remains or not.

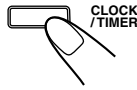




## To turn on or off Recording Timer after its setting is done

### 1 Press CLOCK/TIMER repeatedly until “REC” appears on the display.

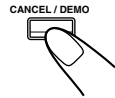
The REC (Recording Timer) indicator starts flashing on the display and the  (Timer) indicator remains lit.



### 2 To turn off the Recording Timer, press CANCEL/DEMO.

The REC (Recording Timer) indicator goes off from the display (“REC OFF” appears on the display for 2 seconds).

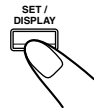
The Recording Timer is canceled, but the setting for the Recording Timer remains in memory.



Or

### To turn on the Recording Timer, press SET/DISPLAY.

“OK ✓” appears on the display for 2 seconds. The settings you have done are shown on the display in sequence for your confirmation.



## Using Sleep Timer

With Sleep Timer, you can fall asleep to music. You can set Sleep Timer only while the unit is turned on.

### How Sleep Timer actually works

The unit automatically turns off after the specified time length passes.

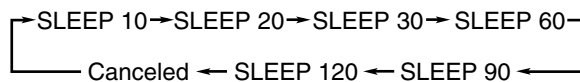
### On the remote control ONLY:

#### 1 Press SLEEP.

The time length until the shut-off time appears and the SLEEP indicator starts flashing on the display.



- Each time you press the button, the time length changes as follows:



- If the built-in clock has not been set, “CLOCK ADJUST” appears on the display.

#### 2 Wait for about 5 seconds after specifying the time length.

The SLEEP indicator stops flashing and remains lit.

To check the remaining time until the shut-off time, press SLEEP once so that the remaining time (minute) until the shut-off time appears for about 5 seconds.

To change the shut-off time, press SLEEP repeatedly until the desired time length appears on the display.

To cancel the setting, press SLEEP repeatedly so that the SLEEP indicator goes off.

- Sleep Timer is also canceled when you turn off the unit.

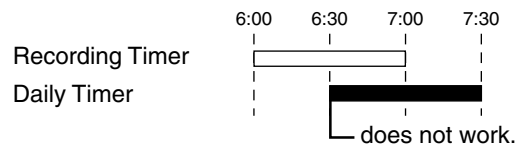
## Timer Priority

Since each timer can be set separately, you may wonder what happens if the settings for these timers overlap.

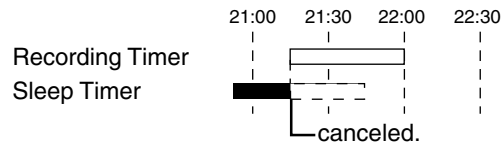
Below are some examples.

Recording Timer has priority over Daily Timer and Sleep Timer.

- If Daily Timer is set to come on while Recording Timer is operating, Daily Timer will not come on at all.



- If Recording Timer is set to come on while Sleep Timer is operating, Sleep Timer will be canceled.



# Additional Information



## Description of the PTY codes:

<b>NEWS:</b>	News.
<b>AFFAIRS:</b>	Topical program expanding or enlarging upon the news—debate, or analysis.
<b>INFO:</b>	Program the purpose of which is to impart advice in the widest sense.
<b>SPORT:</b>	Program concerned with any aspect of sports.
<b>EDUCATE:</b>	Educational programs.
<b>DRAMA:</b>	All radio plays and serials.
<b>CULTURE:</b>	Programs concerning any aspect of national or regional culture, including language, theatre, etc.
<b>SCIENCE:</b>	Programs about natural sciences and technology.
<b>VARIED:</b>	Used for mainly speech-based programs like quizzes, panel games and personality interviews.
<b>POP M:</b>	Commercial music of current popular appeal.
<b>ROCK M:</b>	Rock music.
<b>EASY M:</b>	Current contemporary music considered to be “easy-listening.”
<b>LIGHT M:</b>	Instrumental music, and vocal or choral works.
<b>CLASSICS:</b>	Performances of major orchestral works, symphonies, chamber music, etc.
<b>OTHER M:</b>	Music not fitting into any of the other categories.
<b>WEATHER:</b>	Weather reports and forecasts.

<b>FINANCE:</b>	Stock Market reports, commerce, trading etc.
<b>CHILDREN:</b>	Programs targeted at a young audience.
<b>SOCIAL:</b>	Programs about sociology, history, geography, psychology and society.
<b>RELIGION:</b>	Religious programs.
<b>PHONE IN:</b>	Involving members of the public expressing their views either by phone or at a public forum.
<b>TRAVEL:</b>	Travel information.
<b>LEISURE:</b>	Programs about recreational activities.
<b>JAZZ:</b>	Jazz music.
<b>COUNTRY:</b>	Songs which originate from, or continue the musical tradition of the American Southern States.
<b>NATION M:</b>	Current popular music of the nation or region in that country’s language.
<b>OLDIES:</b>	Music from the so-called “golden age” of popular music.
<b>FOLK M:</b>	Music which has its roots in the musical culture of a particular nation.
<b>DOCUMENT:</b>	Program concerning factual matters, presented in an investigative style.
<b>TEST:</b>	Broadcasts for testing emergency broadcast equipment or receiver.
<b>ALARM:</b>	Emergency announcement.

**Classification of the PTY codes for some FM stations may be different from the above list.**

# Maintenance



To get the best performance of the unit, keep your discs, tapes, and mechanism clean.

## General Notes

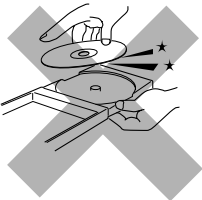
In general, you will have the best performance by keeping your discs and the mechanism clean.

- Store discs in their cases, and keep them in cabinets or on shelves.
- Keep the unit's disc trays closed when not in use.

## Handling discs



- Remove the disc from its case by holding it at the edge while pressing the center hole lightly.
- Do not touch the shiny surface of the disc, or bend the disc.
- Put the disc back in its case after use to prevent warping.

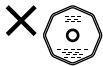
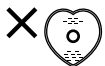


- Be careful not to scratch the surface of the disc when placing it back in its case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.



### To clean the disc

Wipe the disc with a soft cloth in a straight line from center to edge.

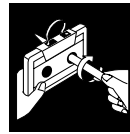


Continued use of irregular shape discs (heart-shape, octagonal, etc.) can damage the unit.

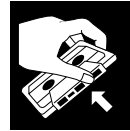


DO NOT use any solvent—such as conventional record cleaner, spray, thinner, or benzine—to clean the disc.

## Handling cassette tapes



- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose, it may get stretched, cut, or caught in the cassette.



- Be careful not to touch the tape surface.



- Avoid the following places to store the tape:
  - In dusty places
  - In direct sunlight or heat
  - In moist areas
  - Near a magnet

## Cleaning the unit

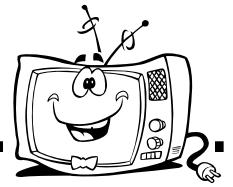
### Stains on the unit

Should be wiped off with a soft cloth. If the unit is heavily stained, wipe it with a cloth soaked in water diluted neutral detergent and wrung well, then wipe clean with a dry cloth.

### Since the unit may deteriorate in quality, become damaged or get its paint peeled off, be careful about the following.

- DO NOT wipe it with a hard cloth.
- DO NOT wipe it strong.
- DO NOT wipe it with thinner or benzine.
- DO NOT apply any volatile substance such as insecticides to it.
- DO NOT allow any rubber or plastic to remain in contact with it for a long time.

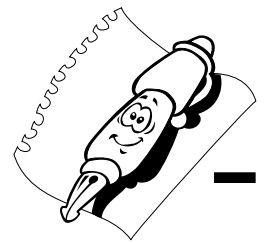
# Troubleshooting



If you are having a problem with your unit, check this list for a possible solution before calling for service. If you cannot solve the problem from the hints given here, or the unit has been physically damaged, call a qualified person, such as your dealer, for service.

	Symptom	Cause	Action
GENERAL	Unable to cancel the demonstration.	The button other than CANCEL/DEMO is pressed to cancel the demonstration temporarily.	Press CANCEL/DEMO on the unit. (See page 8.)
	No sound is heard.	Connections are incorrect or loose.	Check all connections and make corrections. (See pages 6 to 8.)
	Operations are disabled.	The built-in microprocessor may malfunction due to external electrical interference.	Unplug the AC power cord and then plug it back in.
	Unable to operate the unit from the remote control.	<ul style="list-style-type: none"> <li>The path between the remote control and the remote sensor on the unit is blocked.</li> <li>The batteries are exhausted.</li> <li>Antennas are disconnected.</li> </ul>	<ul style="list-style-type: none"> <li>Remove the obstruction.</li> <li>Replace the batteries.</li> </ul>
TUNER	Hard to listen to broadcasts because of noise.	<ul style="list-style-type: none"> <li>The AM (MW/LW) loop antenna is too close to the unit.</li> <li>The FM antenna is not properly extended and positioned.</li> </ul>	<ul style="list-style-type: none"> <li>Reconnect the antennas correctly and securely.</li> <li>Change the position and direction of the AM (MW/LW) loop antenna.</li> <li>Extend the FM antenna at the best position.</li> </ul>
AUDIO CD	The disc sound is discontinuous.	The disc is scratched or dirty.	Clean or replace the disc. (See page 32.)
	The disc trays will not open or close.	<ul style="list-style-type: none"> <li>The AC power cord is not plugged in.</li> <li>Trays are locked.</li> </ul>	<ul style="list-style-type: none"> <li>Plug the AC power cord.</li> <li>Unlock the trays. (See page 22.)</li> </ul>
MP3 DISC	The disc does not play.	The disc is placed upside down.	Place the disc with the label side up.
	The disc does not play.	<ul style="list-style-type: none"> <li>No MP3 files are recorded on the disc.</li> <li>MP3 files do not have the file extension—.MP3, .Mp3, .mP3, or .mp3 in their file names.</li> <li>MP3 files are not recorded in the format compliant with ISO 9660 Level 1 or Level 2.</li> </ul>	Replace the disc.
TAPE	The disc readout time is too long.	The readout time varies with the complexity of the recording configuration.	Do not use too many hierarchies and directories when recording. Also, do not record any other types of audio tracks together with MP3 files. (See page 17.)
	The cassette holders cannot be opened.	Power supply from the AC power cord has been cut off while the tape was running.	Turn on the unit.
REC	Impossible to record.	Small tabs on the back of the cassette are removed.	Cover the holes with adhesive tape. (See page 24.)

# Specifications



## Amplifier section

Output Power (IEC 268-3/DIN)

SUBWOOFERS: 100 W per channel, min. RMS, both channels driven into 6  $\Omega$  at 63 Hz with no more than 0.9% total harmonic distortion.

MAIN SPEAKERS: 30 W per channel, min. RMS, both channels driven into 6  $\Omega$  at 1 kHz with no more than 0.9% total harmonic distortion.

Audio input sensitivity/Impedance

(Measured at 1 kHz, with tape recording signal 300 mV)

AUX: 390 mV/50 k $\Omega$

Digital output: CD OPTICAL DIGITAL OUTPUT

Signal wave length: 660 nm

Output level: -15 dBm to -12 dBm

Speakers/Impedance:

SUBWOOFERS: 6  $\Omega$  - 16  $\Omega$

MAIN SPEAKERS: 6  $\Omega$  - 16  $\Omega$

## Tuner

FM tuning range: 87.50 MHz - 108.00 MHz

AM tuning range: MW: 522 kHz - 1 629 kHz

LW: 144 kHz - 288 kHz

## CD player

CD capacity: 3 CDs

Dynamic range: 85 dB

Signal-to-noise ratio: 90 dB

Wow and flutter: Immeasurable

MP3 recording format: MPEG 1/2 Audio Layer 3

Max. Bit rate: 320 kbps

## Cassette deck

Frequency response

Normal (type I): 50 Hz - 14 000 Hz

Wow and flutter: 0.15% (WRMS)

## General

Power requirement: AC 230 V  $\sim$ , 50 Hz

Power consumption: 200 W (at operation)

24 W (on standby with Ecology Mode off)

1.2 W (on standby with Ecology Mode on)

Dimensions (approx.): 205 mm  $\times$  370 mm  $\times$  370 mm (W/H/D)

Mass (approx.): 10.0 kg

## Supplied accessories

See page 6.

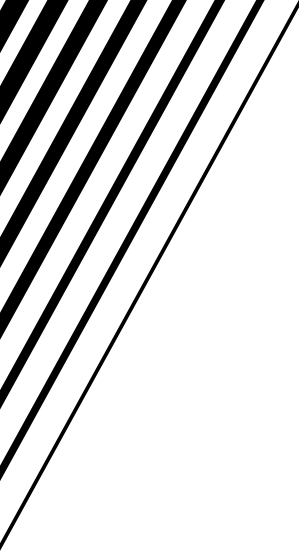
*Design and specifications are subject to change without notice.*

# MEMO

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A series of horizontal dashed lines for writing.

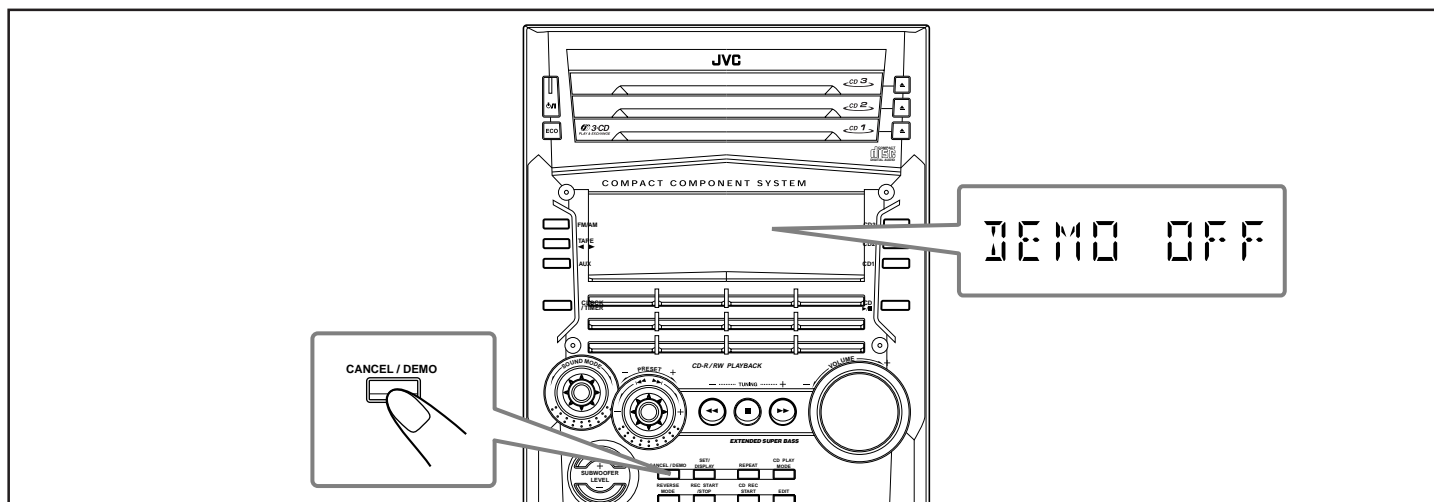




**JVC**  
VICTOR COMPANY OF JAPAN, LIMITED



# NOTICE/ BEMERKUNG/ AVIS/ OPMERKING/ NOTIS/ HUOMIO/ BEMÆRKE/ AVISO/ AVVISO



## English

### Demonstration

When connecting the AC power cord into a wall outlet, the unit automatically starts the demonstration.

**To cancel the demonstration**, press and hold CANCEL/DEMO until "DEMO OFF" appears on the display.

- For more detailed information about the demonstration, refer to the Instructions manual on page 9.

## Deutsch

### Demonstration

Wenn Sie das Netzkabel mit einer Netzsteckdose verbinden, startet das Gerät automatisch eine Demonstration.

**Wenn Sie die Demonstration deaktivieren möchten**, halten Sie die Taste CANCEL/DEMO, bis „DEMO OFF“ im Display angezeigt wird.

- Siehe Seite 8 in der Bedienungsanleitung bzgl. ausführlicherer Informationen über die Demonstration.

## Français

### Démonstration

Quand vous connectez le cordon d'alimentation secteur sur une prise secteur murale, l'appareil commence automatiquement de démonstration.

**Pour annuler la démonstration**, maintenez pressée CANCEL/DEMO jusqu'à ce que "DEMO OFF" apparaisse sur l'affichage.

- Pour plus d'informations à propos de la démonstration, référez-vous à Manuel d'instructions aux page 8.

## Nederlands

### Demonstratie

Wanneer u het netsnoer in een wandcontact steekt, wordt de demonstratie automatisch gestart.

**Druk als u de demonstratie wilt stoppen**, net zolang op CANCEL/DEMO tot de vermelding "DEMO OFF" op de display wordt weergegeven.

- Zie Gebruiksaanwijzing op pagina 8 voor meer informatie over de demonstratie.

## Svenska

### Demonstration

När nätsladden ansluts till vägguttaget startar enheten automatiskt en demonstration i indikeringsfönstret.

**För att inaktivera demonstrationen** trycker du på CANCEL/DEMO och håll tills det står "DEMO OFF" i indikeringsfönstret.

- För mer detaljerad information om demonstrationen, se sidan 8 i bruksanvisningen.

## Suomi

### Näyttödemo

Kun verkkojohto kytketään pistorasiaan, laite aloittaa automaattisesti demon.

**Kun haluat peruuttaa näyttödemo**, pidä CANCEL/DEMO-näppäintä, kunnes näyttöön tulee "DEMO OFF".

- Lisätietoja demoesityksestä on käyttöohjeen sivulla 8.

## Dansk

### Demonstrationen

Ved tilslutning af netledningen til en stikkontakt begynder der automatisk en demonstration.

**Demonstrationen annulleres** hold CANECL/DEMO indtil "DEMO OFF" fremkommer på displayet.

- For mere detaljeret information om demonstrationen se Brugervejledningen på side 8.

## Español

### Demostración

Cuando enchufe el cable de alimentación de CA en un tomacorriente mural, la unidad iniciará automáticamente la demostración.

**Para cancelar la demostración**, pulse y mantenga pulsado CANCEL/DEMO hasta que "DEMO OFF" aparezca en la pantalla.

- Para una información más detallada sobre la demostración, consulte el Manual de instrucciones en la página 8.

## Italiano

### Demo

Quando si collega il cavo di alimentazione CA alla presa a muro, sul display dell'apparecchio vengono visualizzate automaticamente indicazioni dimostrative.

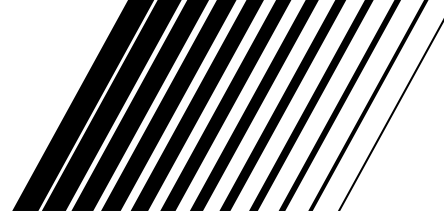
**Per annullare la demo**, premere senza lasciarlo CANCEL/DEMO fino a visualizzare "DEMO OFF" sul display.

- Per ulteriori informazioni sulla demo, consultare il manuale delle Istruzioni a pag. 8.

# JVC INSTRUCTIONS

## SPEAKER SYSTEM

### SP-HXZ3



**BEDIENUNGSANLEITUNG: LAUTSPRECHERSYSTEM**  
**MANUEL D'INSTRUCTIONS: SYSTEME DES ENCEINTES**  
**GEBRUIKSAANWIJZING: LUIDSPREKERSYSTEEM**  
**MANUAL DE INSTRUCCIONES: SISTEMA DE ALTAVOCES**  
**ISTRUZIONI: SISTEMA DI ALTOPARLANTI**  
**BRUKSANVISNING: HÖGTALARSYSTEM**  
**VEJLEDNING: HØJTTALERSYSTEM**  
**KÄYTTÖOHJE: KAIUTINJÄRJESTELMÄ**

Thank you for purchasing JVC speakers.  
Before you begin using them, please read the instructions carefully to be sure you get the best possible performance. If you have any questions, consult your JVC dealer.

Vielen Dank für den Kauf dieser JVC-Lautsprecher.  
Lesen Sie bitte diese Bedienungsanleitung vor Ingebrauchnahme sorgfältig durch, um stets optimale Ergebnisse zu erzielen. Wenden Sie sich bei etwaigen Fragen bitte an Ihren JVC Händler.

Nous vous remercions pour l'achat de ces enceintes JVC.  
Avant de les utiliser, lire ces instructions avec attention pour en obtenir les meilleures performances possibles. En cas de questions, consultez votre revendeur JVC.

Dank u voor de aanschaf van deze JVC luidsprekers.  
Lees alvorens over te gaan tot aansluiten, deze gebruiksaanwijzing door zodat u de best mogelijke prestaties zult verkrijgen. Neem contact op met de JVC dealer indien u vragen heeft.

Le estamos muy agradecidos por haber adquirido estos altavoces de JVC.  
Antes de utilizarlos, sírvase leer las instrucciones detenidamente a fin de obtener el mejor rendimiento posible. Si tienenaluna pregunta, acuda a su agente de JVC.

Grazie per aver acquistato questi altoparlanti della JVC.  
Prima di cominciare l'uso degli altoparlanti, leggete attentamente le istruzioni per assicurare le migliori prestazioni. Qualora sorgessero dei dubbi, rivolgetevi al vostro rivenditore JVC.

Tack för ditt val av dessa JVC-högtalare.  
Innan du kopplar in högtalarna i din ljudanläggning bör du för att få maximala prestanda från högtalarna läsa igenom bruksanvisningen noggrant. Kontakta din JVC-återförsäljare om du har frågor eller känner dig osäker.

Tak for købet af JVC-højttalerne.  
Gennemlæs venligst vejledningen omhyggeligt før de tages i brug, så De kan opnå den bedst mulige ydelse. Forhør hos Deres JVC forhandler hvis De har nogen spørgsmål.

Kiitos siitä että päädyit valinnassasi JVC-kaiuttimiin.  
Ennen kuin alat käyttää niitä, lue käyttöohje huolellisesti, jotta ne toimisivat parhaalla mahdollisella tavalla. Jos Sinulla on kysyttävää ota yhteys JVC-edustajaan.

#### — SAFETY INSTRUCTIONS — “SOME DOS AND DON'TS ON THE SAFE USE OF EQUIPMENT”

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

Do read the operating instructions before you attempt to use the equipment.

Do ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

Do consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

Do be careful with glass panels or doors on equipment.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way — switch off, withdraw the mains plug and consult your dealer.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode.

Switch off using the switch on the equipment and make sure that your family know how to do this.

Special arrangements may need to be made for infirm or handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T listen to headphones at high volume as such use can permanently damage your hearing.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishing.

Overheating will cause damage and shorten the life of the equipment.

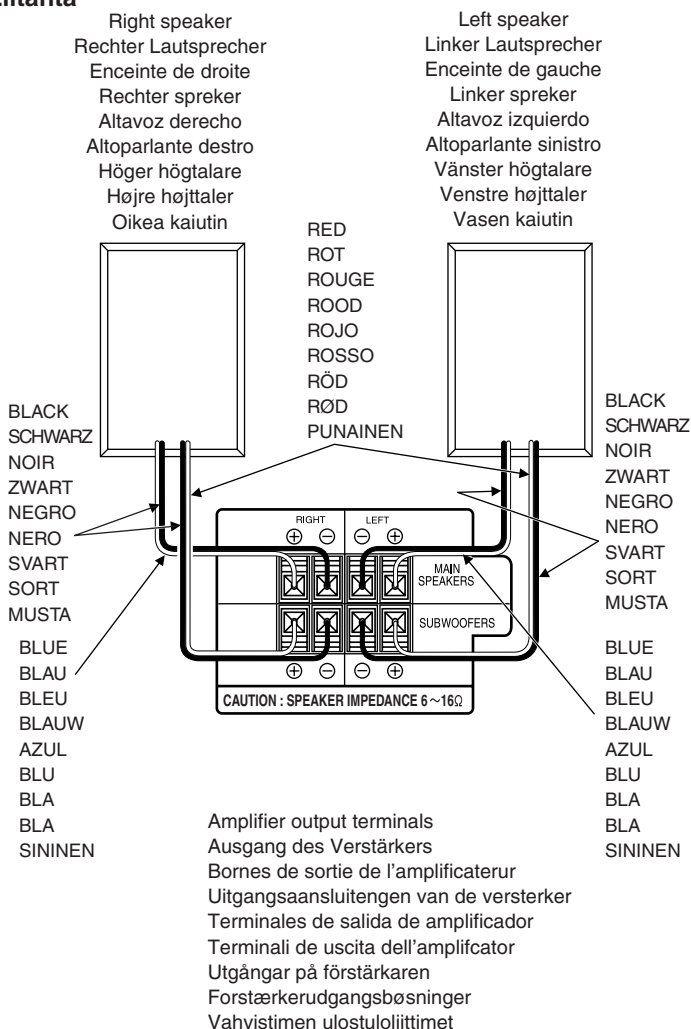
DON'T use makeshift stands and NEVER fix legs with wood screws — to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL

- NEVER let anyone, especially children, push anything into holes, slots or any other opening in the case.
- this could result in a fatal electrical shock;
- NEVER guess or take chances with electrical equipment of any kind
- it is better to be safe than sorry!

**Connection**  
**Anschluß**  
**Raccordement**  
**Aansluiting**  
**Conexión**  
**Collegamento**  
**Ansluiting**  
**Tilslutning**  
**Liitântä**



**CONNECTION**

- DON'T use other amplifier to operate this speaker system except for CA-HXZ3R.
- Turn off power to the whole system before connecting the speakers to the amplifier.
- The maximum power handling capacity of the SP-HXZ3 main speaker is 70 W/Subwoofer is 160 W. Excessive input will result in abnormal noise and possible damage. In cases where the signals described below are applied to the speakers, even if the signals are below the maximum allowable input, they may cause an overload and burn the wiring of the speakers. Be sure to lower the amplifier volume beforehand.
  - 1) Noise during FM tuning.
  - 2) High level signals containing high frequency components produced by a tape deck in the fast forward mode.
  - 3) Click noise produced when turning power of other components on and off.
  - 4) Click noise produced when connecting or disconnecting cords with the power on.
  - 5) Click noise produced when the cartridge is replaced with the power on.
  - 6) Click noise produced when operating amplifier switches.
  - 7) Continuous high frequency oscillation or high pitch electronically produced musical instrument sound.
  - 8) Howling when using a microphones.

**CAUTION**

Do not drag or push the speakers on the floor or table. Otherwise, the four feet at the bottom side of each speaker may peel off or drop from the speaker.

**SPECIFICATIONS**

Type	: 3-way 4-speaker Bass-Reflex Type Twin Hyper Power-Drive Subwoofers and Front Twin Woofer
Speakers	
Subwoofer	: 20.0 cm (7-7/8 in.) cone × 1
Main woofer	: 13.5 cm (5-3/8 in.) cone × 2
Tweeter	: 5.0 cm (2 in.) cone × 1
Power Handling Capacity	
Subwoofer	: 160 W
Main Speaker	: 70 W
Impedance	
Subwoofer	: 6 Ω
Main Speaker	: 6 Ω
Frequency Range	
Subwoofer	: 30 Hz – 320 Hz
Main Speaker	: 75 Hz – 32 000 Hz
Sound Pressure Level	
Subwoofer	: 80 dB/W-m
Speaker	: 88 dB/W-m
Dimensions (W × H × D)	: 232 mm × 450 mm × 400 mm (9-3/16 in. × 17-3/4 in. × 15-3/4 in.)
Mass	: 10 kg (22.1 lbs) each

*Design and specifications subject to change without notice.*

## ANSCHLUSS

- Verwenden Sie zum Betrieb dieses Lautsprechersystems keinen anderen Verstärker, ausgenommen CA-HXZ3R.
- Schalten Sie vor dem Anschluß der Lautsprecher an den Verstärker die Spannungsversorgung des gesamten Systems aus.
- Die maximale Belastbarkeit des SP-HXZ3-Hauptlautsprechers ist 70 W und die des Subwoofers ist 160 W. Eine Überlastung führt zu Verzerrungen und möglicherweise zu Beschädigungen. Signale der unten beschriebenen Art können, auch wenn sie unter dem maximal zulässigen Eingang liegen, eine Überlastung verursachen und die Lautsprecherwicklungen durchbrennen. Verringern Sie vorher die Lautstärke des Verstärkers.
  - 1) Geräusche beim Einstellen von UKW-Sendern.
  - 2) Hochpegelige Signale mit Hochfrequenz-Anteilen, die von Tonbanddecks beim Schnellvorspulen erzeugt werden.
  - 3) Klickgeräusche, wenn die Spannungsversorgung anderer Komponenten ein- und ausgeschaltet wird.
  - 4) Klickgeräusche, wenn Kabel angeschlossen oder abgetrennt werden, während die Spannungsversorgung eingeschaltet ist.
  - 5) Klickgeräusche, wenn der Tonabnehmer des Plattenspielers ausgewechselt wird, während die Spannungsversorgung eingeschaltet ist.
  - 6) Klickgeräusche, die beim Betätigen von Schaltern des Verstärkers erzeugt werden.
  - 7) Ständige Hochfrequenzschwingungen oder elektronisch erzeugte Töne von Musikinstrumenten mit hohen Tonhöhen.
  - 8) Rückkopplungen von Mikrofonen.

## VORSICHT

Ziehen oder schieben Sie die Lautsprecher nicht über den Boden oder den Tisch.

Anderenfalls können sich die vier Füße an der Unterseite jedes Lautsprechers lösen oder herunterfallen.

## TECHNISCHE DATEN

Typ	: 3-Weg, 4-Lautsprecher-Baßreflexbox Twin Hyper Power-Drive Subwoofers and Front Twin Woofer
Lautsprecher	
Subwoofer	: 20,0 cm Konus × 1
Hauptwoofer	: 13,5 cm Konus × 2
Hochtöner	: 5,0 cm konus × 1
Belastbarkeit:	
Subwoofer	: 160 W
Hauptlautsprecher	: 70 W
Impedanz:	
Subwoofer	: 6 Ω
Hauptlautsprecher	: 6 Ω
Frequenzbereich:	
Subwoofer	: 30 Hz – 320 Hz
Hauptlautsprecher	: 75 Hz – 32 000 Hz
Schalldruckpegel:	
Subwoofer	: 80 dB/W·m
Hauptlautsprecher	: 88 dB/W·m
Abmessungen (B × H × T)	: 232 mm × 450 mm × 400 mm
Gewicht	: Je 10 kg

*Technische Änderungen vorbehalten.*

## RACCORDEMENT

- NE PAS utiliser d'autre amplificateur que le CA-HXZ3R pour faire fonctionner les enceintes.
- Mettre hors circuit tout le système avant de raccorder les enceintes à l'amplificateur.
- La puissance maximale admissible par le haut-parleur principal du SP-HXZ3 est de 70 W, celle admissible par le haut-parleur d'extrêmes graves est de 160 W.  
En dépassant la puissance admissible, cela provoquera des bruits anormaux et détériorera les enceintes.  
Au cas où les signaux décrits ci-dessous sont envoyés aux enceintes, et même si ces signaux sont inférieurs à la puissance d'entrée maximum admissible, ils risquent de provoquer une surcharge ou même un incendie. S'assurer de bien diminuer le volume sonore de l'amplificateur.
  - 1) Parasites durant une syntonisation FM.
  - 2) Signaux de niveau élevé contenant des composants à haute fréquence, comme ceux générés par une platine d'enregistrement en mode avance rapide.
  - 3) Cliquetis se produisant lorsque d'autres appareils sont mis en ou hors circuit.
  - 4) Cliquetis se produisant lorsque des appareils sont branchés ou dé-branchés alors que leur alimentation est en circuit.
  - 5) Cliquetis se produisant lorsque la cellule d'une platine tourne-disque est changée alors que l'alimentation est en circuit.
  - 6) Cliquetis se produisant lorsque les commandes de l'amplificateur sont manipulées.
  - 7) Oscillations continues à haute fréquence ou sons très aigus provenant d'instruments de musique électroniques.
  - 8) Hurlements dus à l'utilisation de micros.

## ATTENTION

Ne pas tirer ni pousser les haut-parleurs sur le plancher ou sur la table. Sinon les quatre pieds sur le fond de chaque haut-parleur risquent de perdre leur revêtement ou de se détacher du haut-parleur.

## CARACTÉRISTIQUES

Typ	: Enceinte 3 voices, 4 haut-parleurs type à réflexion des basses Twin Hyper Power-Drive Subwoofers and Front Twin Woofer
Haut-parleurs	
Extrêmes graves	: conique de 20,0 cm × 1
Principal	: conique de 13,5 cm × 2
Aigus	: conique de 5,0 cm × 1
Puissance maximale admissible	
Haut-parleur d'extrêmes graves	: 160 W
Haut-parleur principal	: 70 W
Impédance	
Haut-parleur d'extrêmes graves	: 6 Ω
Haut-parleur principal	: 6 Ω
Bande passante	
Haut-parleur d'extrêmes graves	: 30 Hz – 320 Hz
Haut-parleur principal	: 75 Hz – 32 000 Hz
Pression sonore	
Haut-parleur d'extrêmes graves	: 80 dB/W·m
Haut-parleur principal	: 88 dB/W·m
Dimensions (L × H × P)	: 232 mm × 450 mm × 400mm
Masse	: 10 kg chaque

*Présentation et caractéristiques modifiables sans préavis.*

## AANSLUITINGEN

- Gebruik GEEN andere versterker dan de CA-HXZ3R om dit luidsprekersysteem aan te sturen.
- Schakel de spanning van alle aangesloten componenten uit alvorens de luidsprekers met de versterker te verbinden.
- Het maximale vermogen van de SP-HXZ3 hoofd-luidspreker is 70 W en van de subwoofer 160 W. Te hoge ingang kan in abnormale geluidsreproductie en in beschadigingen resulteren. Overbelasting en verbranding van de bedrading kan worden veroorzaakt, wanneer de hieronder beschreven signalen naar de luidsprekers worden gevoed, zelfs wanneer de signalen onder het maximaal toegestane ingangsvermogen zijn. Verminder eerst het volume van de versterker.
  - 1) Ruis, zoals dit optreedt tijdens afstemming op een FM-zender.
  - 2) Hoogfrequentie signalen van een hoog niveau, zoals die tijdens het vooruitspoelen van een tapedeck worden geproduceerd.
  - 3) Klikkende geluiden, die worden veroorzaakt door het in- en uitschakelen van de netspanning van andere componenten.
  - 4) Klikkende geluiden, zoals die worden geproduceerd bij het tot stand brengen of verbreken van aansluitingen terwijl de netspanning is ingeschakeld.
  - 5) Klikkende geluiden, zoals die optreden bij het vervangen van het element van een draaitafel terwijl de netspanning is ingeschakeld.
  - 6) Klikkende geluiden, zoals die worden geproduceerd door bediening van de schakelaars van de versterker.
  - 7) Voortdurende hoogfrequentie-oscillatie, of hoogtonige, elektronisch geproduceerde geluiden van muziekinstrumenten.
  - 8) Rondzingend geluid bij gebruik van microfoons.

## LET OP

Trek of duw de luidsprekers niet over de vloer of tafel. De luidsprekers zijn voorzien van vier voetjes aan de onderkant en deze kunnen hierdoor gemakkelijk van de luidspreker loskomen.

## TECHNISCHE GEGEVENS

Type	: 3-weg 4-luidsprekers bass reflex Twin Hyper Power-Drive Subwoofers and Front Twin Woofer
Luidsprekers	
Subwoofer	: 20,0 cm kegeltype × 1
Hoofdwoofer	: 13,5 cm kegeltype × 2
Tweeter	: 5,0 cm kegeltype × 1
Maximale vermogen	
Subwoofer	: 160 W
Hoofd-luidspreker	: 70 W
Impedantie	
Subwoofer	: 6 Ω
Hoofd-luidspreker	: 6 Ω
Frekventiebereik	
Subwoofer	: 30 Hz – 320 Hz
Hoofd-luidspreker	: 75 Hz – 32 000 Hz
Geluidsdruk-niveau	
Subwoofer	: 80 dB/W·m
Hoofd-luidspreker	: 88 dB/W·m
Afmetingen (B × H × D)	: 232 mm × 450 mm × 400 mm
Gewicht	: Elk 10 kg

*Veranderingen in technische gegevens et ontwerp onder voorbehoud.*

## CONEXIÓN

- NO utilice ningún otro amplificador para operar este sistema de altavoces excepto CA-HXZ3R.
- Desactive la alimentación de todo el sistema antes de conectar los altavoces al amplificador.
- La capacidad máxima de potencia del altavoz principal del SP-HXZ3 es de 70 W y la del altavoz de subgraves es de 160 W.  
Uná entrada excesiva resultará en ruido anormal y posibles daños.  
En casos donde las señales descritas más abajo se apliquen a los altavoces, aunque las mismas resulten menores que la entrada máxima permisible, pueden causar una sobrecarga y quemar el cableado de los altavoces. Asegúrese de disminuir el volumen del amplificador con anterioridad.
  - 1) Ruido durante la sintonía en FM.
  - 2) Señales de alto nivel que contengan componentes de alta frecuencia producidos por un magnetófono en el modo de avance rápido.
  - 3) Ruidos de conmutación provocados al encender y apagar otros componentes.
  - 4) Ruido de conmutación al conectar o desconectar cables con los componentes encendidos.
  - 5) Ruido de conmutación cuando se reemplaza la cápsula con los componentes encendidos.
  - 6) Ruido de conmutación provocados por la operación de los selectores del amplificador.
  - 7) Continua oscilación de alta frecuencia o de sonidos de tonos altos provocados por instrumentos electrónicos.
  - 8) Aullidos a utilizar micrófonos.

## PRECAUCIÓN

No arrastre ni empuje los altavoces sobre el piso o la mesa. De lo contrario, las cuatro patas del lado inferior de cada altavoz se podrían desprender o salir del altavoz.

## ESPECIFICACIONES

Tipo	: Reflex bajo con 3-altavoces y 4 vías Twin Hyper Power-Drive Subwoofers and Front Twin Woofer
Altavoces	
De subgraves	: Tipo cónico de 20,0 cm × 1
Principal	: Tipo cónico de 13,5 cm × 2
De agudos	: Tipo cónico de 5,0 cm × 1
Capacidad de potencia	
De subgraves	: 160 W
Principal	: 70 W
Impedancia	
De subgraves	: 6 Ω
Principal	: 6 Ω
Gama de frecuencias	
De subgraves	: 30 Hz – 320 Hz
Principal	: 75 Hz – 32 000 Hz
Nivel de presión acústica	
De subgraves	: 80 dB/W·m
Principal	: 88 dB/W·m
Dimensiones (An × Al × Prf)	: 232 mm × 450 mm × 400 mm
Peso	: 10 kg cada uno

*El diseño y las especificaciones están sujetos a cambio sin aviso.*

## COLLEGAMENTO

- NON usare un amplificatore diverso dal modello CA-HXZ3R per utilizzare questo sistema di altoparlanti.
- Spegnete la corrente dell'intero sistema prima di collegare gli altoparlanti all'amplificatore.
- La capacità di potenza massima dell'altoparlante principale del modello SP-HXZ3 è di 70 W e quella del subwoofer è di 160 W. Un ingresso eccessivo causerà un suono anormale e possibili danni.

Nel caso in cui i segnali descritti qui sotto vengono applicati agli altoparlanti, possono causare un sovraccarico e bruciare il cablaggio degli altoparlanti, anche se i segnali siano al di sotto dell'ingresso massimo ammesso.

Assicuratevi di diminuire il livello del volume dell'altoparlante prima di procedere.

- 1) Generazione di rumore durante la sintonizzazione FM.
- 2) Segnali di alto livello che contengono dei componenti ad alta frequenza riprodotti da una piastra a cassette nel modo di avanzamento rapido.
- 3) Si sentirà uno scatto quando accendete o spegnete la corrente degli altri componenti.
- 4) Si sentirà uno scatto quando collegate o scollegate i cavi con la corrente accesa.
- 5) Si sentirà uno scatto quando viene sostituita la cartuccia con la corrente accesa.
- 6) Si sentirà uno scatto quando vengono usati gli interruttori dell'amplificatore.
- 7) Oscillazione continua ad alta frequenza o suoni acuti da strumenti musicali elettronici.
- 8) Ululato quando usate i microfoni.

## CAUTELA

Non trascinare o spingere i diffusori sul pavimento o sul tavolo.

Altrimenti i quattro piedini sul fondo di ciascun diffusore possono staccarsi o cadere dal diffusore.

## SPECIFICAZIONI

Tipo	: Reflex basso con 3-altoparlanti e 4 vie Twin Hyper Power-Drive Subwoofers and Front Twin Woofer
Altoparlanti	
Subwoofer	: Cono da 20,0 cm × 1
Woofer principale	: Cono da 13,5 cm × 2
Tweeter	: Cono da 5,0 cm × 1
Capacità di potenza	
Subwoofer	: 160 W
Altoparlante principale	: 70 W
Impedenza	
Subwoofer	: 6 Ω
Altoparlante principale	: 6 Ω
Gamma di frequenza	
Subwoofer	: 30 Hz – 320 Hz
Altoparlante principale	: 75 Hz – 32 000 Hz
Livello di pressione sonora	
Subwoofer	: 80 dB/W·m
Altoparlante principale	: 88 dB/W·m
Dimensioni (L × A × P)	: 232 mm × 450 mm × 400 mm
Massa	: 10 kg ciascuno

*Il disegno e le specifiche sono soggetti a cambiamenti senza preavviso.*

## ANSLUTNING

- Använd INTE någon annan förstärkare än CA-HXZ3R till att driva detta högtalarsystem med.
- Slå av strömmen i alla apparater i ljudanläggningen innan högtalarna ansluts till förstärkaren.
- Maximal effekthanteringskapacitet för SP-HXZ3 är 70 W för huvudhögtalare/160 W för lågbashögtalare. Brus uppstår i ljudet och högtalarna kan skadas om de matas med för hög effekt. I situationerna som beskrivs nedan kan högtalarna också överbelastas och kabeltråden inne i högtalarna brännas sönder, fastän högtalarnas effekt inte har överskridits. Sänk därför ljudstyrkan på förhand.
  - 1) Brus under inställning av FM-radiostationer.
  - 2) Starka, högfrekventa signaler från ett kassettdäck under snabbspolning framåt.
  - 3) Ljudbangar som uppstår när andra apparater i anläggningen slås till och från.
  - 4) Skrapljud som uppstår när anslutningskablar ansluts eller kopplas från medan strömmen är på.
  - 5) Skrapljud som uppstår när pickupelementet på en skivspelare byts medan strömmen är på.
  - 6) Ljudbangar som uppstår när du använder förstärkarens omkopplare.
  - 7) Kontinuerliga, högfrekvenssvängningar eller högfrekvent ljud från elektroniska musikinstrument.
  - 8) Akustisk återkoppling (tjutande ljud) vid bruk av mikrofoner.

## OBSERVERA!

Dra eller skjut inte högtalarna över ett golv eller ett bord. Om så görs finns det risk för att de fyra fotkuddarna som sitter på undersidan av varje högtalare lossnar.

## TEKNISKA DATA

Typ	: 3-vägs, 4-elements basreflexhögtalare Twin Hyper Power-Drive Subwoofers and Front Twin Woofer
Högtalarelement	
Lågbaselement	: 20,0 cm kon × 1
Huvudbaselement	: 13,5 cm kon × 2
Diskantelement	: 5,0 cm kon × 1
Effekthanteringskapacitet	
Lågbashögtalare	: 160 W
Huvudhögtalare	: 70 W
Impedans	
Lågbashögtalare	: 6 Ω
Huvudhögtalare	: 6 Ω
Frekvensomfång	
Lågbashögtalare	: 30 Hz – 320 Hz
Huvudhögtalare	: 75 Hz – 32 000 Hz
Ljudtrycksnivå	
Lågbashögtalare	: 80 dB/W·m
Huvudhögtalare	: 88 dB/W·m
Yttermått (B × H × D)	: 232 mm × 450 mm × 400 mm
Vikt	: 10 kg perst.

*Rätt till ändringar av utförande och specifikationer förbehålles utan föregående meddelande.*

## TILSLUTNING

- Anvend IKKE anden forstærker end CA-HXZ3R til drift af dette højttalersystem.
- Sluk for strømmen til hele systemet før højttalerne forbindes til forstærkeren.
- Den maksimale belastningskapacitet for SP-HXZ3 hovedhøjttaleren er 70 W/for subwooferen 160 W.

For kraftigt indgangssignal vil resultere i unormal støj og muligvis beskadigelse.

I tilfælde hvor højttalerne udsættes for signaler beskrevet nedenfor, kan der forekomme overbelastning og overbrænding af ledningerne i højttalerne selv om signalstyrken er under den maksimale tilladte værdi. Husk derfor at sænke højttalerlydstyrken i forvejen.

- 1) Støj under FM-afstemning.
- 2) Signaler med høje niveauer der indeholder højfrekvente komponenter dannet af en båndoptager der er indstillet til hurtig fremspoling.
- 3) Klikstøj dannet når der tændes eller slukkes for strømmen til andre komponenter.
- 4) Klikstøj der dannes når ledninger tilsluttes eller tages ud af forbindelse mens der er tændt for strømmen.
- 5) Klikstøj der dannes når pickuppen udskiftes mens der er tændt for strømmen.
- 6) Klikstøj der dannes når forstærkerens omskiftere betjenes.
- 7) Fortsat høj frekvenssvingning, eller en højlyd dannet af et elektronisk instrument.
- 8) Hyletoner når der anvendes en mikrofon.

## FORSIGTIG

Træk eller skub ikke højttalerne hen over gulvet eller på et bord. Ellers kan de fire fødder på undersiden af hver højttaler blive revet af eller falde af højttaleren.

## SPECIFIKATIONER

Type	: 3-vejs basrefleks-højttaler med 4-elementer Twin Hyper Power-Drive Subwoofers and Front Twin Woofers
Højttalere	
Subwoofer	: 20,0 cm membran × 1
Hoved-højttaler	: 13,5 cm membran × 2
Diskantenhed	: 5,0 cm membran × 1
Belastningskapacitet	
Subwoofer	: 160 W
Hovedhøjttaler	: 70 W
Impedans	
Subwoofer	: 6 Ω
Hovedhøjttaler	: 6 Ω
Frekvensområde	
Subwoofer	: 30 Hz – 320 Hz
Hovedhøjttaler	: 75 Hz – 32 000 Hz
Lydtryksniveau	
Subwoofer	: 80 dB/W·m
Hovedhøjttaler	: 88 dB/W·m
Mål (B × H × D)	: 232 mm × 450 mm × 400 mm
Vægt	: 10 kg hver

Design og specifikationer kan blive ændret uden varsel.

## LIITÄNTÄ

- ÄLÄ käytä muuta vahvistinta tämän kaiutinjärjestelmän käyttöön paitsi mallille CA-HXZ3R.
- Katkaise koko järjestelmän virta ennen kuin suoritat liitännät kaiuttimista vahvistimeen.
- Mallin SP-HXZ3 pääkaiuttimen enimmäisteho on 70 W, apubassokaiuttimen 160 W. Liiallinen antoteho aiheuttaa epänormaalia kohinaa ja jopa vahinkoa.  
Tapauksissa, missä kaiuttimet joutuvat alla kuvattujen signaalien kohteeksi, vaikka signaalit olisivat alle sallitun maksimi antotehon, ne saattavat aiheuttaa ylikuormitusta ja polttaa kaiuttimien johdot.  
Vähennä siis vahvistimen äänenvoimakkuutta jo ennalta.
  - 1) Kohinaa FM-virityksen aikana.
  - 2) Kasettidekistä eteenpäinkelauksen aikana muodostuneet vahvat, korkeataajuuksisia komponentteja sisältävät signaalit.
  - 3) Klik-ääni, joka syntyy silloin kun toisten osien virta kytketään ja katkaistaan.
  - 4) Klik-ääni, joka syntyy silloin kun kytketään tai irrotetaan johtoja virran ollessa päällä.
  - 5) Klik-ääni, joka syntyy silloin kun vaihdetaan hylsy virran ollessa päällä.
  - 6) Klik-ääni, joka syntyy silloin kun käytetään vahvistimen kytkimiä.
  - 7) Jatkuva korkea värähtely tai elektronisesti tuotettu korkea soittimen ääni.
  - 8) Ulinaa mikrofonia käytettäessä.

## HUOMAUTUS

Älä vedä tai työnnä kaiuttimia lattialla tai pöydällä. Muuten kunkin kaiuttimen pohjassa olevat neljä jalkaa saattavat irrota kaiuttimista.

## TEKNISET TIEDOT

Tyyppi	: 3-tie, 4 kaiuttimen bassorefleksi Twin Hyper Power-Drive Subwoofers and Front Twin Woofers
Kaiuttimet	
Apubasso	: 20,0 cm karitomuotoinen × 1
Pääbasso	: 13,5 cm karitomuotoinen × 2
Diskantti	: 5,0 cm karitomuotoinen × 1
Enimmäisteho	
Apubasso	: 160 W
Pääkaiutin	: 70 W
Impedanssi	
Apubasso	: 6 Ω
Pääkaiutin	: 6 Ω
Taajuusala	
Apubasso	: 30 Hz – 320 Hz
Pääkaiutin	: 75 Hz – 32 000 Hz
Äänenpainetaso	
Apubasso	: 80 dB/W·m
Pääkaiutin	: 88 dB/W·m
Mitat (L × K × S)	: 232 mm × 450 mm × 400 mm
Paino	: 10 kg perst.

Oikeudet muutoksiin pidätetään.



EN. GE. FR. NL. SP. IT. SW. DA. FI.

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