aiwa

COMPACT DISC STEREO SYSTEM
SISTEMA ESTEREO CON REPRODUCTOR DE DISCOS COMPACTOS
CHAINE STEREO AVEC LECTEUR DE DISQUES COMPACTS

NSX-AJ70

OPERATING INSTRUCTIONS
MANUAL DE INSTRUCCIONES
MODE D'EMPLOI

En (English)

E (Español)

F (Français)

Owner's record

For your convenience, record the model number and serial number (you will find them on the rear of your set) in the space provided below. Please refer to them when you contact your Aiwa dealer in case of difficulty.

Model No. _____   Serial No. _____

For assistance and information
call toll free 1-800-BUY-AIWA (United States and Puerto Rico)

U

COMPACT
disc
DIGITAL AUDIO

WARNING

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

⚡	**CAUTION** RISK OF ELECTRIC SHOCK DO NOT OPEN	！

"CAUTION:TO REDUCE THE RISK OF
ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL."

Explanation of Graphical Symbols:

The lightning flash with arrowhead symbol,
within an equilateral triangle, is intended to
alert the user to the presence of uninsulated
"dangerous voltage" within the product's
enclosure that may be of sufficient magnitude
to constitute a risk of electric shock to persons.

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

NOTE
This equipment has been tested and found to comply with the
limits for a Class B digital device, pursuant to Part 15 of the FCC
Rules. These limits are designed to provide reasonable protection
against harmful interference in a residential installation.
This equipment generates, uses, and can radiate radio frequency
energy and, if not installed and used in accordance with the
instructions, may cause harmful interference to radio
communications. However, there is no guarantee that interference
will not occur in a particular installation. If this equipment does
cause harmful interference to radio or television reception, which
can be determined by turning the equipment off and on, the user
is encouraged to try to correct the interference by one or more of
the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on circuit different from
  that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician
  for help.

CAUTION
Modifications or adjustments to this product, which are not
expressly approved by the manufacturer, may void the user's
right or authority to operate this product.

PRECAUTIONS

Read the Operating Instructions carefully and completely before
operating the unit. Be sure to keep the Operating Instructions
for future reference. All warnings and cautions in the Operating
Instructions and on the unit should be strictly followed, as well
as the safety suggestions below.

Installation
1 **Water and moisture** — Do not use this unit near water, such
  as near a bathtub, washbowl, swimming pool, or the like.
2 **Heat** — Do not use this unit near sources of heat, including
  heating vents, stoves, or other appliances that generate heat.
  It also should not be placed in temperatures less than 5°C
  (41°F) or greater than 35°C (95°F).
3 **Mounting surface** — Place the unit on a flat, even surface.
4 **Ventilation** — The unit should be situated with adequate
  space around it so that proper heat ventilation is assured.
  Allow 10 cm (4 in.) clearance from the rear and the top of the
  unit, and 5 cm (2 in.) from each side.
  - Do not place the unit on a bed, rug, or similar surface that
    may block the ventilation openings.
  - Do not install the unit in a bookcase, cabinet, or airtight rack
    where ventilation may be impeded.
5 **Objects and liquid entry** — Take care that objects or liquids
  do not get inside the unit through the ventilation openings.
6 **Carts and stands** — When placed
  or mounted on a stand or cart, the
  unit should be moved with care.
  Quick stops, excessive force, and
  uneven surfaces may cause the
  unit or cart to overturn or fall.
7 **Condensation** — Moisture may form on the CD pickup lens
  when:
  - The unit is moved from a cold spot to a warm spot
  - The heating system has just been turned on
  - The unit is used in a very humid room
  - The unit is cooled by an air conditioner
  When this unit has condensation inside, it may not function
  normally. Should this occur, leave the unit for a few hours,
  then try to operate again.
8 **Wall or ceiling mounting** — The unit should not be mounted
  on a wall or ceiling, unless specified in the Operating
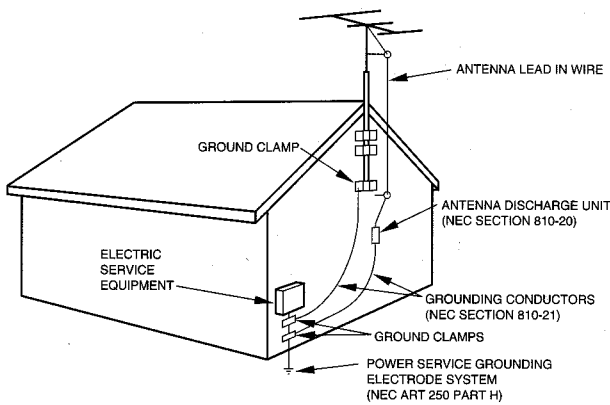 Instructions.

Electric Power
1 **Power sources** — Connect this unit only to power sources
  specified in the Operating Instructions, and as marked on the
  unit.
2 **Polarization** — As a safety feature, some units are equipped
  with polarized AC power plugs which can only be inserted
  one way into a power outlet. If it is difficult or impossible to
  insert the AC power plug into an outlet, turn the plug over and
  try again. If it still does not easily insert into the outlet, please
  call a qualified service technician to service or replace the
  outlet. To avoid defeating the safety feature of the polarized
  plug, do not force it into a power outlet.
3 **AC power cord**
  - When disconnecting the AC power cord, pull it out by the
    AC power plug. Do not pull the cord itself.
  - Never handle the AC power plug with wet hands, as this
    could result in fire or shock.
  - Power cords should be firmly secured to avoid being severely
    bent, pinched, or walked upon. Pay particular attention to
    the cord from the unit to the power outlet.
  - Avoid overloading AC outlets and extension cords beyond
    their capacity, as this could result in fire or shock.

4 **Extension cord** — To help prevent electric shock, do not use a polarized AC power plug with an extension cord, receptacle, or other outlet unless the polarized plug can be completely inserted to prevent exposure of the blades of the plug.

5 **When not in use** — Unplug the AC power cord from the power outlet if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Outdoor Antenna

1 **Power lines** — When connecting an outdoor antenna, make sure it is located away from power lines.

2 **Outdoor antenna grounding** — Be sure the antenna system is properly grounded to provide protection against unexpected voltage surges or static electricity build-up. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information on proper grounding of the mast, supporting structure, and the lead-in wire to the antenna discharge unit, as well as the size of the grounding unit, connection to grounding terminals, and requirements for grounding terminals themselves.

Antenna Grounding According to the National Electrical Code

ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT
(NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS
(NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM
(NEC ART 250 PART H)
NEC-NATIONAL ELECTRICAL CODE

Maintenance

Clean the unit only as recommended in the Operating Instructions.
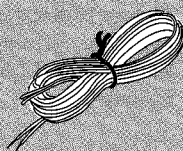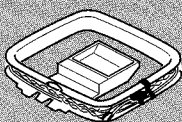
Damage Requiring Service

Have the units serviced by a qualified service technician if:
- The AC power cord or plug has been damaged
- Foreign objects or liquid have gotten inside the unit
- The unit has been exposed to rain or water
- The unit does not seem to operate normally
- The unit exhibits a marked change in performance
- The unit has been dropped, or the cabinet has been damaged
DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

Check your system and accessories

NSX-AJ70

CX-NAJ70 Compact disc stereo cassette receiver
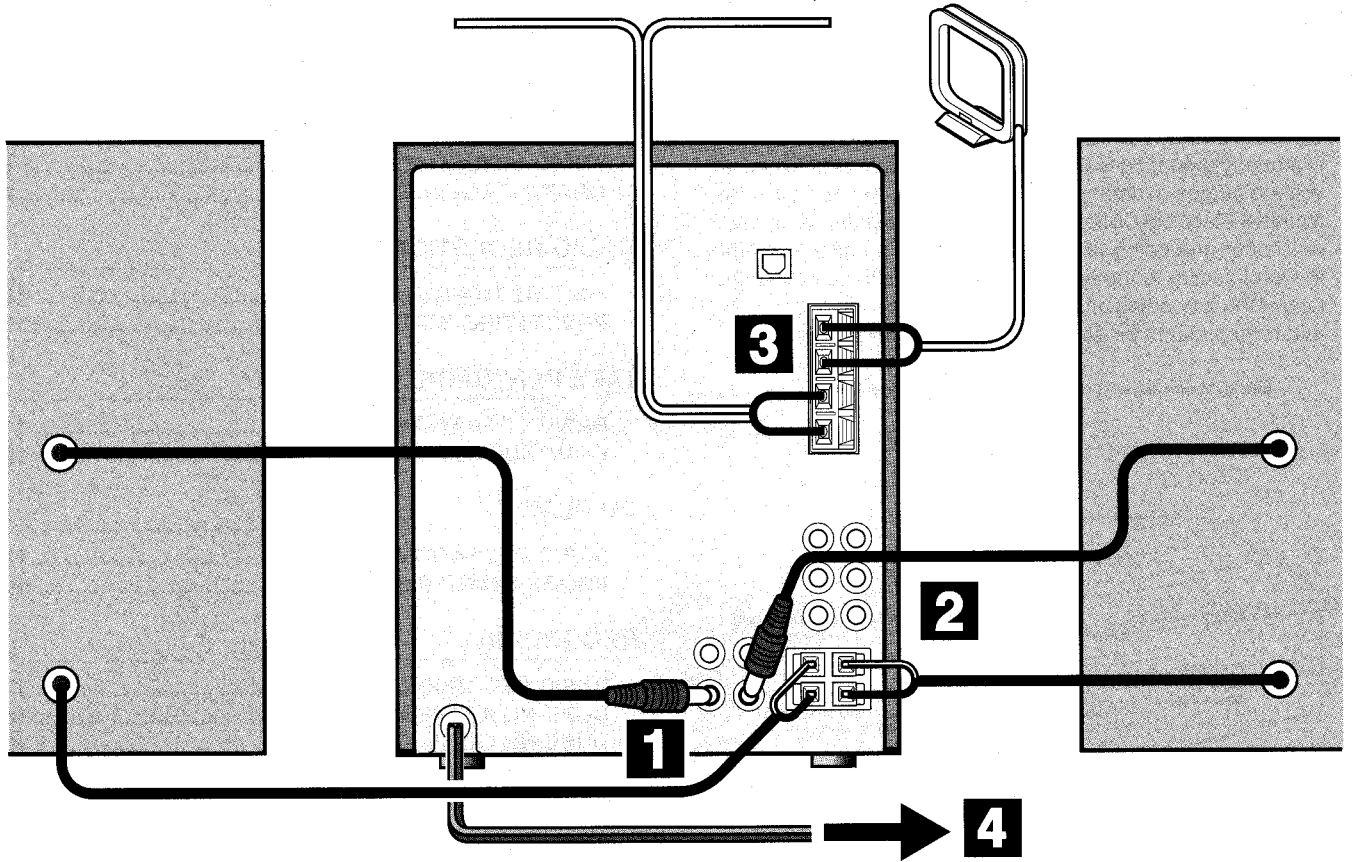SX-WNAJ70 Front speakers

Remote control   AM antenna   FM antenna


TABLE OF CONTENTS

En

CONNECTIONS

IMPORTANT
Connect the speakers, antennas, and all optional equipment first.
Then connect the AC cord.

1 Connect the right speaker to the main unit.

① Connect the speaker cord with the plug to the **SPEAKERS HIGH FREQ R** terminal.
② Connect the speaker cord with the white stripe to the **SPEAKERS LOW FREQ R ⊕** terminal and the black cord to the **⊖** terminal.
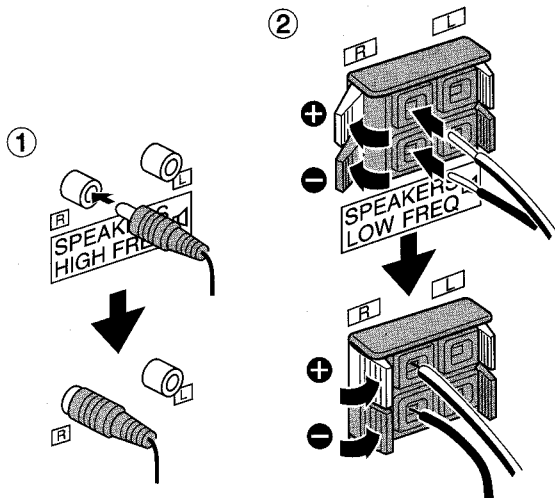
NOTE
• Be sure to connect the speaker cords correctly. Improper connections can cause short circuits in the **SPEAKERS** terminals.
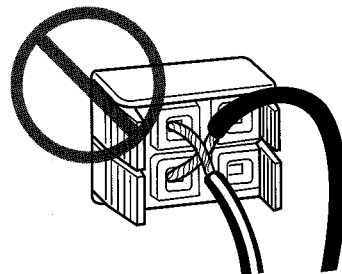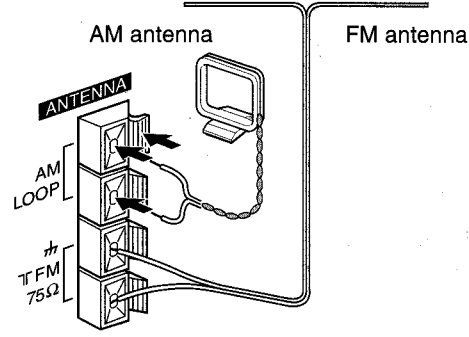

2 Connect the left speaker to the main unit.

Connect the speaker cord with plug to the **SPEAKERS HIGH FREQ L** terminal, and the other speaker cord to the **SPEAKERS LOW FREQ L** terminals in the same manner as step 1.

❸ Connect the supplied antennas.

Connect the FM antenna to **FM 75 Ω** terminals and the AM antenna to **AM LOOP** terminals.

AM antenna   FM antenna

❹ Connect the AC cord to an AC outlet.

The DEMO will begin when the AC cord is plugged into an AC outlet for the first time. To deactivate the DEMO, set the clock.

NOTE

• Do not leave objects generating magnetism, such as credit cards, near the speakers, as these objects may be damaged.
• Do not bring the FM antenna near metal objects or curtain rails.
• Do not bring the AM antenna near other optional equipment, the stereo system itself, the AC cord or speaker cords, since noise will be picked up.
• Do not unwind the AM antenna wire.
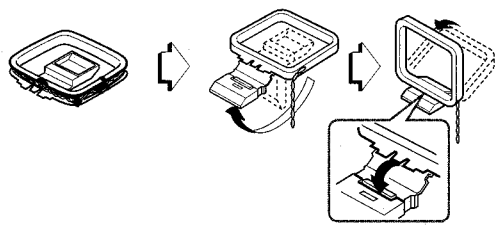
To position the antennas
FM feeder antenna:
Extend this antenna horizontally in a T-shape and fix its ends to the wall.
AM antenna:
Position and rotate this annenna to find the best possible reception.
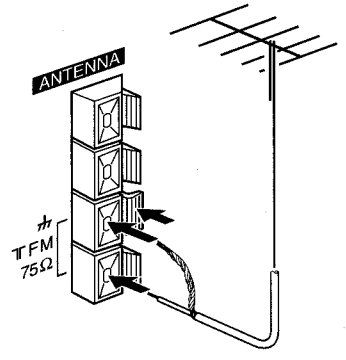
To stand the AM antenna on a surface
Fix the claw to the slot.

CONNECTING AN OUTDOOR ANTENNA

For better FM reception, use of an outdoor antenna is recommended.
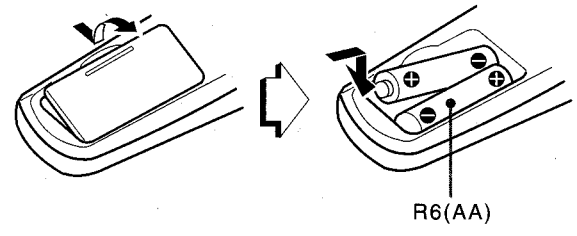Connect the outdoor antenna to **FM 75 Ω** terminals.

To connect other optional equipment → page 24.

REMOTE CONTROL

Inserting batteries
Detach the battery cover on the rear of the remote control and insert two R6 (size AA) batteries.

R6(AA)

When to replace the batteries
The maximum operational distance between the remote control and the sensor on the main unit should be approximately 5 meters (16 feet). When this distance decreases, replace the batteries with new ones.

To use SHIFT on the remote control
Buttons ① have two different functions. One of these functions is indicated on the button, and the other on the plate above the button.
To use the function on the button, simply press the button.
To use the function on the plate above the button, press the button while pressing **SHIFT**.

To use FUNCTION on the remote control
FUNCTION substitutes for the function buttons (**TAPE/DECK 1/2, TUNER/BAND, VIDEO/AUX, CD, MD**) on the main unit.
Each time **FUNCTION** is pressed, the next function is selected cyclically. When tapes are inserted in both decks, each deck is selected with **FUNCTION**.

▶/◀▶ PRESET on the remote control
The function is the same as that of ◀▶ on the main unit.

① —
SHIFT —
FUNCTION
▶/◀▶
PRESET
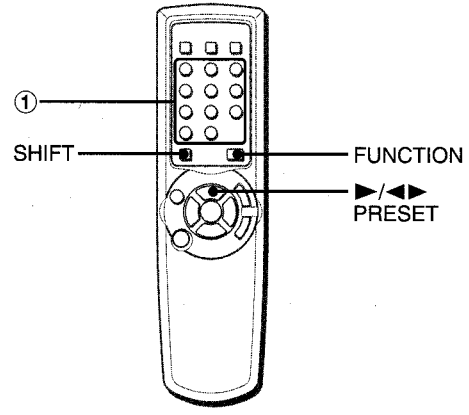
NOTE

• If the remote control is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.
• The remote control may not operate correctly when:
  - The line of sight between the remote control and the remote sensor inside the display window is exposed to intense light, such as direct sunlight
  - Other remote controls are used nearby (those of a television, etc.)

TAPE/DECK 1/2,TUNER/BAND,
VIDEO/AUX,CD,MD
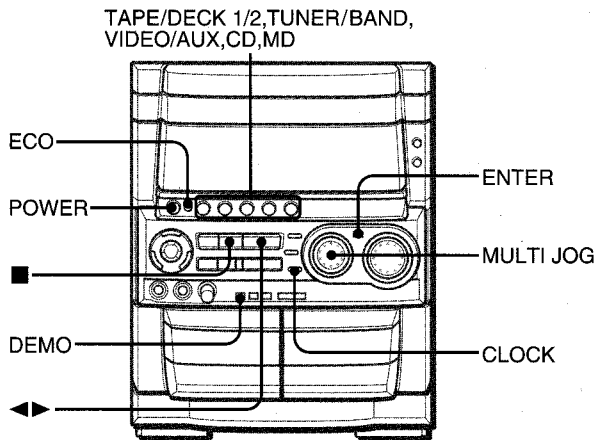
To turn the power on
Press one of the function buttons (**TAPE/DECK 1/2, TUNER/BAND, VIDEO/AUX, CD, MD**). Playback of the inserted disc or tape begins, or the previously tuned station is received (Direct Play Function).
POWER is also available.

NOTE

When the power is turned on, the disc compartment may open and close to reset the unit.

To turn the power off
Press **POWER**.

DEMO(Demonstration)

When the AC cord is plugged into an AC outlet for the first time after purchase, the DEMO will begin in the display. When the power is turned on, the DEMO will end. When the power is turned off, the DEMO will begin again.
When the clock is set, the DEMO will not begin even if the power is turned off.

To deactivate or activate DEMO
Press **CLOCK**, and clock is displayed in place of the DEMO.
Press **DEMO** to activate.
(For more about the DEMO, see page 23)

SETTING POWER ECONOMIZING MODE

When you set power economizing mode to "ECO ON" or "ECO AUTO", the unit reduces power consumption by conducting four ECO operations as follows.

ECO ON
• The unit (all the illumination of the display and the buttons) blacks out when the power is turned off. Only the red indicator lights up.
• If DIMMER (1-3) is selected, the illumination of the display and the buttons brighten for 10 seconds only when you press a button or turn **VOLUME** or **MULTI JOG**.
• The display dimmer mode is set to the dimmest, the button illumination lights off, and the volume is set to the minimum (0) when the unit turns on by timer recording.

ECO AUTO
• In addition to the three operations of ECO ON, the unit automatically turns itself off if you do not operate it and the sound source is mute for 10 minutes.

ECO OFF
The power economizing mode does not function.

1 **Press ECO.**
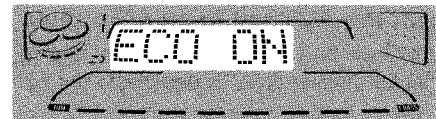"ECO MODE" will be displayed.

2 **Press ENTER within 4 seconds.**
The current power-economizing mode status will be displayed.

3 **Turn MULTI JOG within 4 seconds to select one of the power-economizing modes.**
Example : When "ECO ON" is selected.


4 **Press ENTER within 4 seconds.**

NOTE

If the clock is not set, the unit does not black out.
Instead, the DEMO will begin when the power is turned off.

DIMMER MODE

To change the display dimmer mode
1 Press **ECO** repeatedly until "DIM MODE" is displayed.
2 Within 4 seconds, press **ENTER**.
3 Within 4 seconds, turn **MULTI JOG** to select one of the dimmer modes changed cyclically as below.
4 Within 4 seconds, press **ENTER**.

DIM-OFF ↔ DIMMER 1 ↔ DIMMER 2 ↔ DIMMER 3
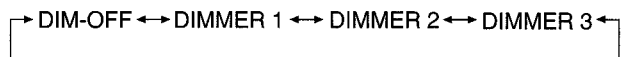
"DIM-OFF" mode is the brightest and "DIMMER 3" mode is the dimmest. In "DIMMER 3" mode, the spectrum analyzer, the window of the unit top, and the button illumination light off in addition.

FLASH WINDOW

The window on the top of the unit lights up or flashes and the inside of the cassette holders light up while the unit is being powered on.
To turn off the light of the top window, press ■ while pressing **CD**. To turn off the light inside the cassette holders, press ■ while pressing **TAPE**. To turn either light back on, repeat the operation, respectively.
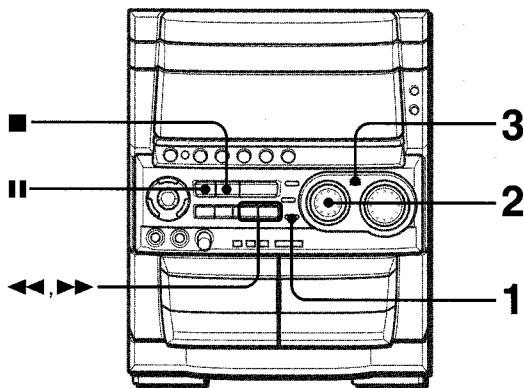
1 Press CLOCK.

When using the remote control, press **CLOCK** while pressing **SHIFT**.

The clock is displayed. (The ":" between the hours and minutes flashes.)

2 Within 4 seconds, turn MULTI JOG to designate the hour and the minute.

Turning **MULTI JOG** changes both the hour and the minute.
◄◄ or ►► is also available in place of **MULTI JOG**. Holding these buttons down will vary the time rapidly.

3 Press ENTER or ❚❚.

The clock starts from 00 seconds.

To restore an original clock setting
Press **CLOCK** before completing step 3 to restore the previous time setting. This cancels any new setting.

To view the clock when another display is in the display
Press **CLOCK**. The time is displayed for 4 seconds and then the original display reappears. However, the clock cannot be displayed during recording.

To switch to the 24-hour standard
Press **CLOCK** and then press ■ within 4 seconds.
Repeat the same procedure to restore the 12-hour standard.

In the 12-hour standard, "AM 12:00" indicates midnight and "PM 12:00" indicates noon.

If the clock display flashes
If the display flashes when the clock is displayed, it indicates that the clock has stopped due to a power failure or the removal of the power cord. The current time needs to be reset.

NOTE

If the power-economizing mode (page 6) is on, the unit blacks out when the power is turned off. To view the clock, press **CLOCK** so that the time is displayed for 4 seconds.

4-Channel Multi-Amplifier System

To provide reinforcement for the ultra-low frequencies, in addition to the Left/Right 2-channel amplifier used to reproduce mid-to-high-range frequencies, this system incorporates a second L/R 2-channel amplifier just for reproduction of ultra-low frequencies — making it, in effect, a 4-amplifier system. By utilizing discrete amplifiers for mid to-high-frequencies and low frequencies, high-quality sonic reproduction that is virtually free from distortion can be realized.

This Multi Amplifier System, which utilizes independent circuitry for the different frequency ranges, enables superb sonic reproduction free from distortion.

Built-in Subwoofer System

The built-in subwoofer system has a separate subwoofer cavity area that is part of the loudspeaker cabinet structure, which acts as a sonic filter to cut distortion components. (In the Multi Amplifier System, the ultra-low frequency signals transmitted from their own independent amplifier are reproduced in this area.) This separate construction gives a clear, rich definition to bass reproduction and it can realize clear, well-defined mid-to-high frequency signals.

And AIWA's built-in subwoofer system incorporates a subwoofer capable of powerful, satisfying bass performance with true stereo separation.

Subwoofer Cavity area   Amplifiers for Low frequencies
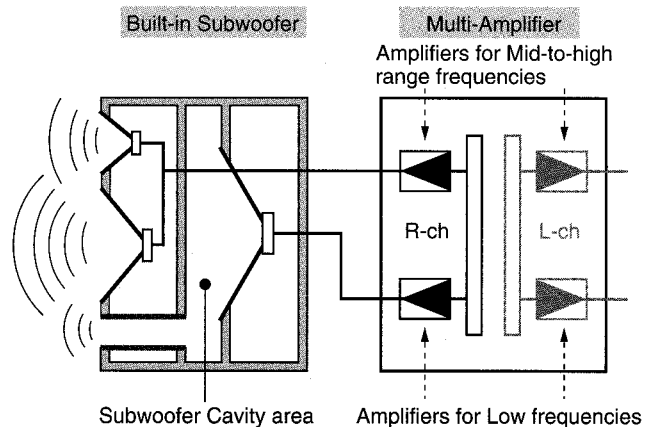
AUDIO ADJUSTMENTS
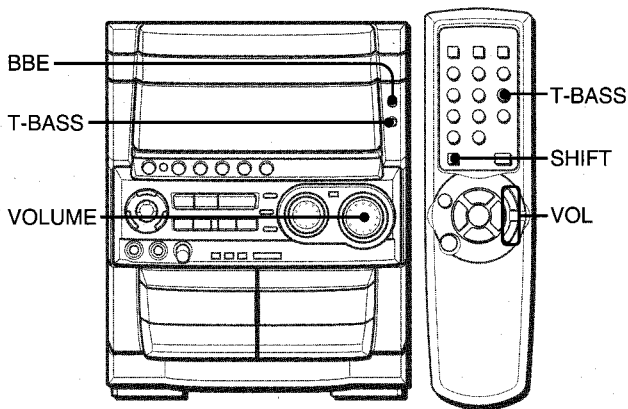
VOLUME

**Turn VOLUME on the main unit, or press VOL on the remote control.**
The volume level is displayed as a number from 0 to MAX (50).
The volume level is automatically set to 20 when the power is turned off with the volume level set to 21 or more.

BBE SYSTEM

The BBE system enhances the clarity of high-frequency sound. It also enriches the Karaoke function to make your voice sound clear and pleasant.
Press BBE.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.
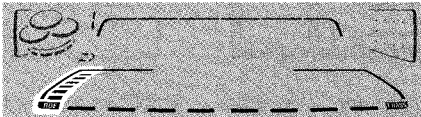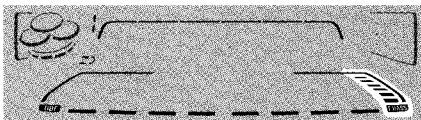

SUPER T-BASS SYSTEM

The T-BASS system enhances the realism of low-frequency sound.
Press T-BASS.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.

To select with the remote control
Press **T-BASS** while pressing **SHIFT**.

NOTE

• Low frequency sound may be distorted when the T-BASS system is used for a disc or tape in which low frequency sound is originally emphasized. In this case, cancel the T-BASS system.
• When playing back a tape recorded with BBE, it is recommended that BBE be set to off to avoid distorted high frequency sound.

8 *ENGLISH*

GRAPHIC EQUALIZER

SELECTING THE PROGRAMMED EQUALIZATION CURVE

This unit provides the following 5 different programmed equalization curves.
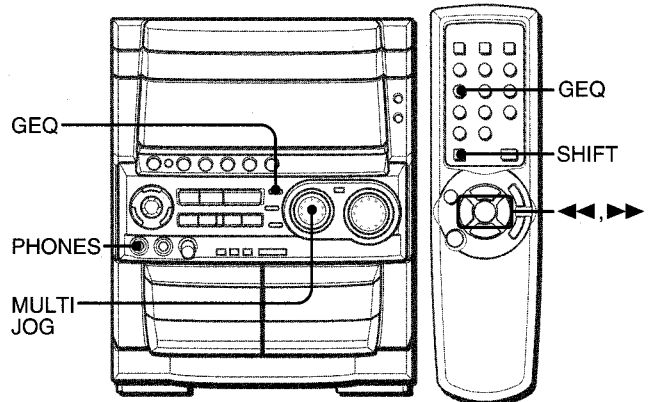**ROCK:** Powerful sound emphasizing treble and bass
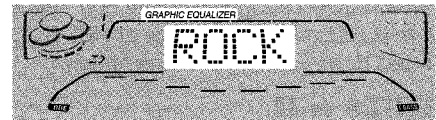**POP:** More presence in the vocals and midrange
LATIN: Accented higher frequencies for latin music.
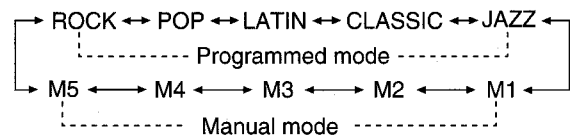**CLASSIC:** Enriched sound with heavy bass and fine treble.
JAZZ: Accented lower frequencies for jazz-type music

Press GEQ, and turn MULTI JOG to select one of the programmed equalization curves within 4 seconds.

"GRAPHIC EQUALIZER" appears and the GEQ mode is displayed cyclically as follows.

ROCK ↔ POP ↔ LATIN ↔ CLASSIC ↔ JAZZ
---------- Programmed mode ----------
M5 ↔ M4 ↔ M3 ↔ M2 ↔ M1
---------- Manual mode ----------

To display the current GEQ mode
Press **GEQ.** The current mode is displayed for 4 seconds.
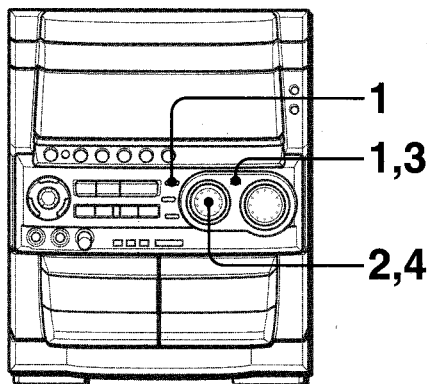
To cancel the selected mode
Press **GEQ** twice.
"GEQ OFF" appears and "GRAPHIC EQUALIZER" disappears.

To select with the remote control
Press **GEQ** while pressing **SHIFT**, and within 4 seconds press ◄◄ or ►► repeatedly. The GEQ mode is displayed cyclically as above.

SETTING A NEW EQUALIZATION CURVE MANUALLY

The equalization curve can be customized to suit your preference.

1 Press GEQ, followed by ENTER within 4 seconds.
Your customized setting will be based on the currently selected curve. To select a different curve to work on, turn **MULTI JOG** before pressing **ENTER**.
The display will be switched to read "GEQ LOW."

2 Within 8 seconds, turn MULTI JOG to adjust the level of the lowest frequency.
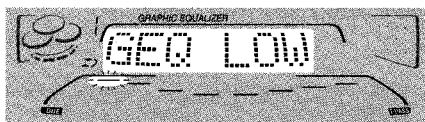
3 Press ENTER to let "GEQ HIGH" show.
The highest level frequency indicator flashes for 8 seconds.

4 Within 8 seconds, turn MULTI JOG to adjust the level of the highest frequency.

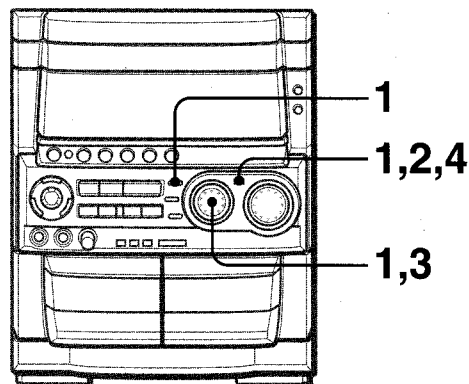

The frequency level indicators of between the lowest and the highest are adjusted accordingly.

NOTE

If you do not store your customized equalization curve, it will be lost when you switch to a different curve or press **GEQ**. To store the new curve, see below.

Using the headphones
Connect headphones to the **PHONES** jack with a standard stereo plug (ø6.3 mm, 1/4 inch).
No sound is output from the speakers while the headphones are plugged in.

Sound adjustment during recording
The **VOLUME** control has no effect on recording, while the BBE affects recording.

STORING THE NEW EQUALIZATION CURVES

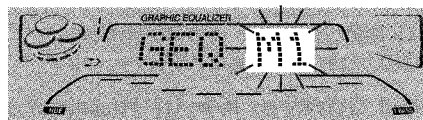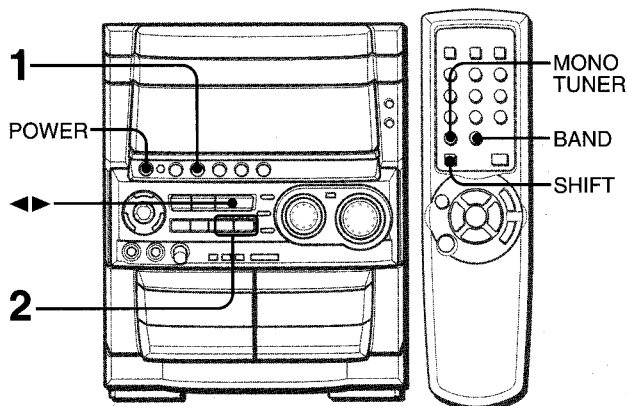

Up to 5 customized equalization curves can be stored as the manual modes M1 - M5.

1 Go through steps of "Setting a New Equalization Curve Manually".
The created curve is displayed for 8 seconds.

2 Within 8 seconds, press ENTER.
"M 1" flashes on the display for 8 seconds.

• If this step is not completed within 8 seconds, press **GEQ** first to display "GEQ ON". Then within 4 seconds press **ENTER** repeatedly until "M1" flashes.

3 Within 8 seconds, turn MULTI JOG to select one of the manual modes M1 - M5 to store the curve.

4 Within 8 seconds, press ENTER.
The new equalization curve is stored.

To select the stored equalization curve
Press **GEQ**, and turn **MULTI JOG** to select one of the manual modes M1 - M5 within 4 seconds.

MANUAL TUNING

1 Press TUNER/BAND repeatedly to select the desired band.

```
┌──→ FM ──→ AM ──┐
└─────────────────┘
```
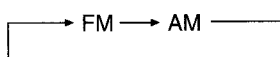
When **TUNER/BAND** is pressed while the power is off, the power is turned on directly.

To select a band with the remote control
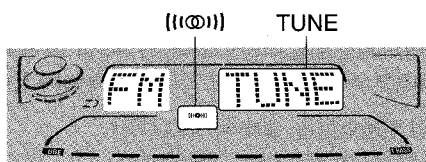Press **BAND** while pressing **SHIFT**.

2 Press ◄◄ DOWN or ►► UP to select a station.
Each time the button is pressed, the frequency changes.
When a station is received, "TUNE" is displayed for 2 seconds.
During FM stereo reception, ((co))) is displayed.

To search for a station quickly (Auto Search)
Keep **◄◄ DOWN** or **►► UP** pressed until the frequency starts to change rapidly. After tuning in to a station, the search stops.
To stop the Auto Search manually, press **◄◄ DOWN** or **►► UP**.
• The Auto Search may not stop at stations with very weak signals.

When an FM stereo broadcast contains noise
Press **MONO TUNER** while pressing **SHIFT** on the remote control so that "MONO" appears on the display.
Noise is reduced, although reception is monaural.
To restore stereo reception, repeat the above so that "MONO" disappears.

To change the AM tuning interval
The default setting of the AM tuning interval is 10 kHz/step. If you use this unit in an area where the frequency allocation system is 9 kHz/step, change the tuning interval.
Press **POWER** while pressing **TUNER/BAND**.
To reset the interval, repeat this procedure.

NOTE
When the AM tuning interval is changed, all preset stations are cleared. The preset stations have to be set again.

PRESETTING STATIONS
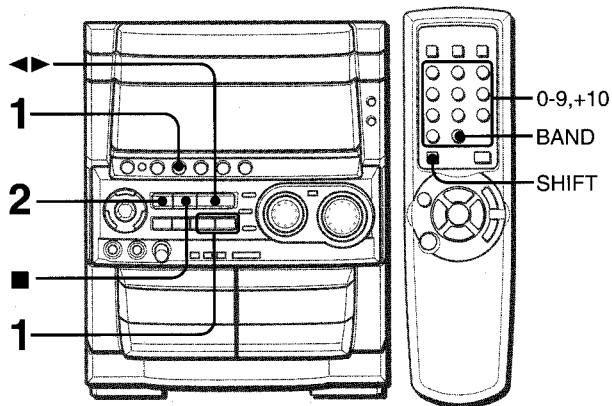
The unit can store a total of 32 preset stations. When a station is stored, a preset number is assigned to the station. Use the preset number to tune in to a preset station directly.

1 Press TUNER/BAND to select a band, and press ◄◄ DOWN or ►► UP to select a station.

2 Press II SET to store the station.
A preset number beginning from 1 in consecutive order for each band is assigned to the station.
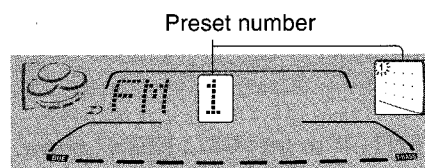
Preset number

3 Repeat steps 1 and 2.
The next station will not be stored if a total of 32 preset stations for all the bands have already been stored.

NOTE
"FULL" is displayed if you attempt to store more than 32 preset stations.

PRESET NUMBER TUNING

Use the remote control to select the preset number directly.

1 Press BAND while pressing SHIFT to select a band.

2 Press numbered buttons 0-9 and +10 to select a preset number.
Example:
To select preset number 20, press **+10, +10** and **0**.
To select preset number 15, press **+10** and **5**.

Selecting a preset number on the main unit
Press **TUNER/BAND** to select a band. Then, press ◄► repeatedly or turn **MULTI JOG**.
Each time ◄► is pressed, the next ascending number is selected.

To clear a preset station
Select the preset number of the station to be cleared. Then, press ■ **CLEAR**, and press **II SET** within 4 seconds.
The preset numbers of all other stations in the band with higher numbers are also decreased by one.

BASIC OPERATIONS

PUSH
EJECT▲

PUSH
EJECT▲

◄◄,►►
REV MODE
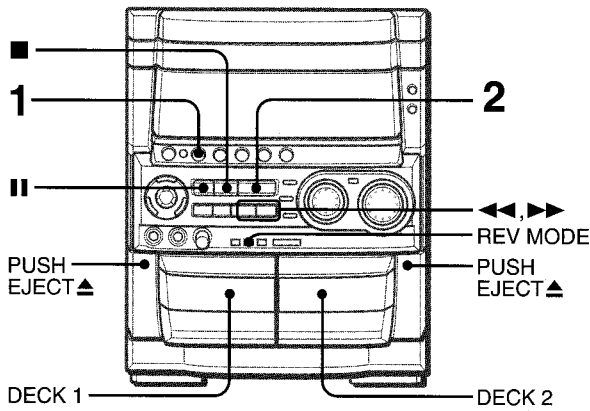
DECK 1

DECK 2

- On deck 1, tapes are always played back on both sides.
  On deck 2, you can select a reverse mode to play back one or both sides.
- Use Type I (normal), Type II (high/CrO₂) or Type IV (metal) tapes for playback.

1 Press TAPE/DECK 1/2 and press PUSH EJECT ▲ to open the cassette holder.

PUSH EJECT
▲
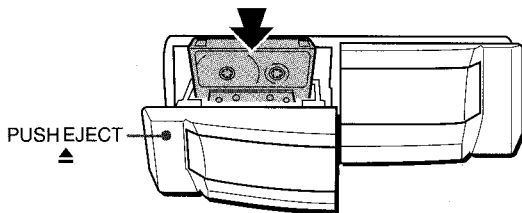
Insert a tape with the exposed side down. Push the cassette holder to close.

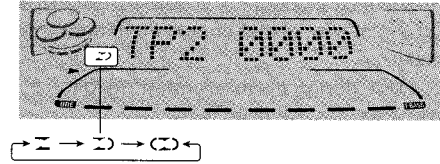### 2 Press ◄► to start play.

Selected deck number   The tape counter
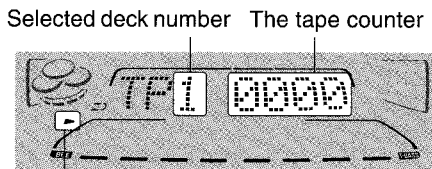
Playback side indicator

►: The front side is being played (forward).
◄: The back side is being played (reverse).

To select a reverse mode (deck 2 only)
Each time **REV MODE** is pressed, the reverse mode changes.

To play one side only, select ⊐.
To play from front side to reverse side once only, select ⊐⊃.
To play both sides repeatedly, select ⊂⊃.
- When tapes are loaded in both decks, ⊐⊃ on the display indicates Continuous Play.

To select a playing deck
When tapes are loaded in both decks, press **TAPE/DECK 1/2** first to select a deck.
The selected deck number is displayed.

To stop play, press ■.
To pause play (deck 2 only), press **II**. To resume play, press again.
To change the playback side, press ◄► in play or pause mode.
To fast forward or rewind, press ◄◄ or ►►. Then press ■ to stop the tape.

To start play when the power is off (Direct Play Function)
Press **TAPE/DECK 1/2**. The power is turned on and play of the inserted tape begins.

To set the tape counter to 0000
Press ■ **CLEAR** in stop mode.
The counter is also set to 0000 when the cassette holder is opened and closed.

MUSIC SENSOR

If there is a 4-second or longer blank between each track, a search for the beginning of the current or next track during playback can be done easily.

Press ◄◄ or ►► during playback referring to the playback side indicator (◄ or ►) on the display.

For example, when ►► is pressed while ► is displayed, playback of the next track starts.

Music sensor function may not be able to detect tracks under the following conditions:
• Blanks of less than 4 seconds between tracks
• Noisy blanks
• Long passages of low-end sound
• Low overall recording levels

CONTINUOUS PLAY
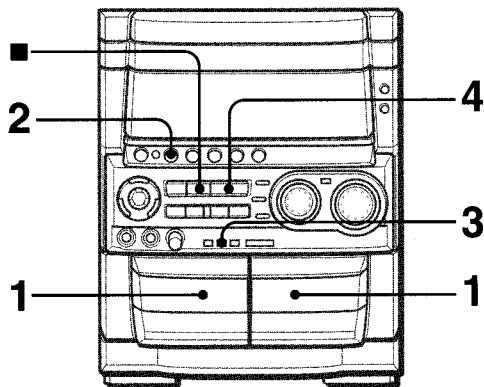

After playback on one deck finishes, the tape in the other deck will start to play without interruption.

1 Insert tapes into deck 1 and deck 2.

2 Press TAPE/DECK1/2 to select the deck to be played back first.

3 Press REV MODE to select ⊃.

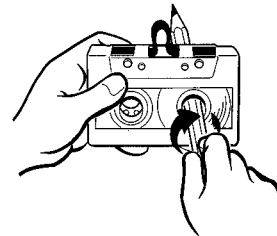**4 Press ◄► to start playback.**
Playback continues until ■ is pressed.

About cassette tapes
• **To prevent accidental erasure,** break off the plastic tabs on the cassette tape after recording with a screwdriver or other pointed tool.

Side A

Type II tape detection slot ————— Tab for side A
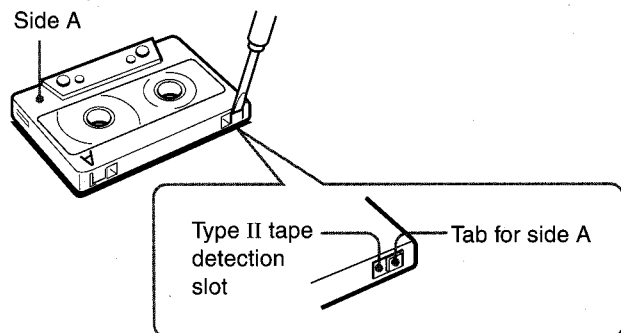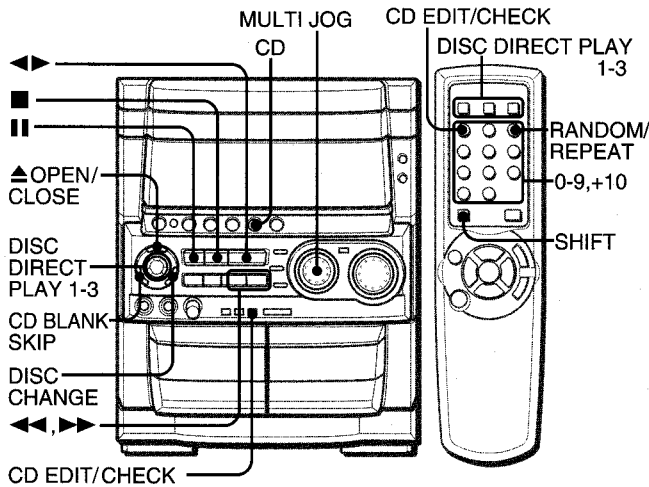
To record on the tape again, cover the tab openings with adhesive tape, etc. (On Type II tapes, take care not to cover the Type II tape detection slot.)
• **120-minute or longer tapes** are extremely thin and easily deformed or damaged. They are not recommended.
• **Take up any slack in** the tape with a pencil or similar tool before use. Slack tape may break or jam in the mechanism.
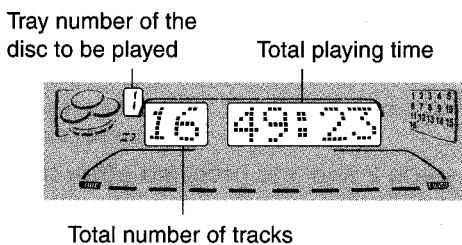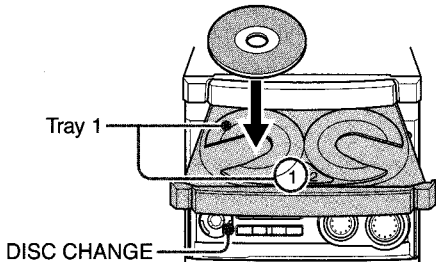
BASIC OPERATIONS

MULTI JOG CD EDIT/CHECK
CD
DISC DIRECT PLAY
1-3
◄►
■
II
RANDOM/
REPEAT
▲OPEN/
CLOSE
0-9,+10
DISC
DIRECT
PLAY 1-3
SHIFT
CD BLANK-
SKIP
DISC
CHANGE
◄◄,►►

CD EDIT/CHECK

LOADING DISCS

Press CD, then press ▲ OPEN/CLOSE to open the disc compartment. Load disc(s) with the label side up.

To play one or two discs, place the discs on tray 1 and 2.
To play three discs, press DISC CHANGE to rotate the trays after placing two discs. Place the third disc on tray 3.
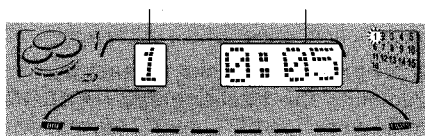Close the disc compartment by pressing ▲ OPEN/CLOSE.

Tray 1

DISC CHANGE

Tray number of the
disc to be played   Total playing time

Total number of tracks

PLAYING DISCS

Load discs.

To play all discs in the disc compartment, press ◄►.
Play begins with the disc on tray 1.

Number of track being played   Elapsed playing time

To play one disc only, press DISC DIRECT PLAY 1-3.
The selected disc is played once.

To stop play, press ■.
To pause play, press II. To resume play, press again.
To search for a particular point during playback, keep ◄◄ or **►► pressed and release it at the desired point.**
To skip to the beginning of a track during playback, press ◄◄ or ►► repeatedly or turn **MULTI JOG.**
To remove discs, press ▲ OPEN/CLOSE.

To start play when the power is off (Direct Play Function)
Press **CD**. The power is turned on and play of the loaded disc(s) begins.
When ▲ **OPEN/CLOSE** is pressed, the power is also turned on and the disc compartment is opened.

To check the remaining time
During play (except random play or programmed play), press **CD EDIT/CHECK**. The amount of time remaining until all tracks finish playing is displayed. To restore the playing time display, repeat the above.
When using the remote control, press **CD EDIT/CHECK** while pressing **SHIFT**.

Selecting a track with the remote control
1 Press **DISC DIRECT PLAY 1-3** to select a disc.
2 Press numbered buttons **0-9** and **+10** to select a track.
    Example:
    To select the 25th track, press **+10, +10** and **5.**
    To select the 10th track, press **+10** and **0.**
    The selected track starts to play and continues to the end of that disc.

Replacing discs during play
While one disc is playing, the other discs can be replaced without interrupting play.
1 Press **DISC CHANGE.**
2 Remove the discs and replace with other discs.
3 Press ▲ **OPEN/CLOSE** to close the disc compartment.

NOTE

- When loading an 8-cm (3-inch) disc, put it onto the inner circle of the tray.
- Do not place more than one compact disc on one disc tray.
- Do not tilt the unit with discs loaded. Doing so may cause malfunctions.
- Do not use irregular shape CDs (example: heart-shaped, octagonal ones). It may result in malfunctions.
- The unit may not play a CD-R/RW disc that is recorded on persona computers or some kinds of CD-R/RW recorders because of differences in recording platforms.
- Do not attach any seal or label to either side (the recordable side or the labeled side) of a CD-R/RW disc. It may cause malfunction.

TAPE PLAYBACK

CD PLAYING

En

RANDOM/REPEAT PLAY

Use the remote control.

RANDOM play
All the tracks on the selected disc or all the discs can be played randomly.

REPEAT play
A single disc or all the discs can be played repeatedly.

Press RANDOM/REPEAT while pressing SHIFT .
Each time it is pressed, the function can be selected cyclically.
　　RANDOM play — RANDOM lights up on the display.
　　REPEAT play — ↻ lights up on the display.
　　RANDOM/REPEAT play — RANDOM and ↻ light up on the display.
　　Cancel — RANDOM and ↻ disappear from the display.

To play all discs, press ◀▶ to start play.
To play a single disc, press one of **DISC DIRECT PLAY 1-3** to start play.
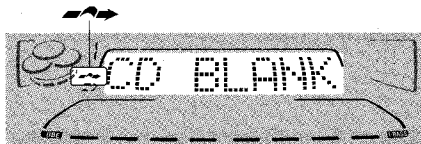
NOTE

During random play it is not possible to skip to the previously played track with ◀◀.

BLANK SKIP PLAY

The silent portions between tracks recorded on a CD can be skipped during playback.

1 Press CD BLANK SKIP.
"CD BLANK SKIP ON" is displayed and "⌇⌇" appears in the display.

2 Press ◀▶ to start playback.
The silent portions between tracks will be skipped, and the sound will be played back without interruption. If a track fades out (ends with the sound gradually decreasing), the fadeout portion also will be skipped.

To return to normal playback
Press **CD BLANK SKIP** again, and "CD BLANK SKIP OFF" is displayed and "⌇⌇" in the display disappears.

NOTE

• There may be a case where BLANK SKIP PLAY does not function correctly.
• BLANK SKIP PLAY is automatically canceled when performing AI EDIT RECORDING (page 17), PROGRAMMED EDIT RECORDING (page 18), or recording during PROGRAMMED PLAY (below) or RANDOM PLAY (above).
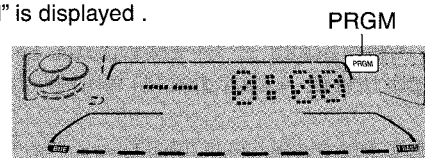
PROGRAMMED PLAY

Up to 30 tracks can be programmed from any of the inserted discs.
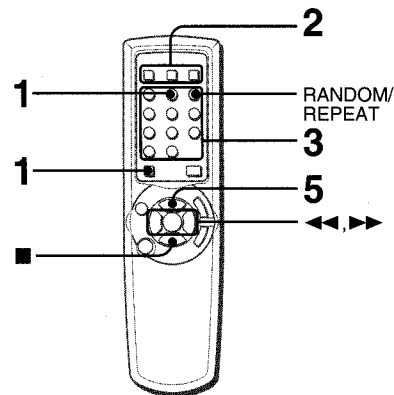
Use the remote control.

1 Press PRGM twice while pressing SHIFT in stop mode.
"PRGM" is displayed .

• When **PRGM** is pressed once in step 1, the unit enters the KARAOKE PROGRAM (page 20).

2 Press DISC DIRECT PLAY 1-3 to select a disc.
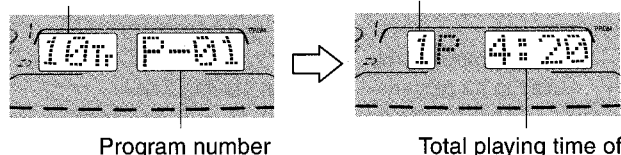Go to the next step when the tray stops rotating.

3 Press numbered buttons 0-9 and +10 to program a track.
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.

Selected track number　　Total number of selected tracks

　　Program number　　　　Total playing time of the selected tracks

4 Repeat steps 2 and 3 to program other tracks.

5 Press ◀▶ to start play.

To check the program
Each time ◀◀ or ▶▶ is pressed in stop mode, a disc number, track number, and program number will be displayed.

To clear the program
Press ■ **CLEAR** in stop mode.

To add tracks to the program
Repeat steps 2 and 3 in stop mode. The track will be programmed after the last track.

To change the programmed tracks
Clear the program and repeat all the steps again.

To play the programmed tracks repeatedly
After programming the tracks, press **RANDOM/REPEAT** repeatedly while pressing **SHIFT** until ↻ appears on the display.

NOTE

• During programmed play, you cannot perform random play, check the remaining time, and select a disc or track. "CAN'T USE" is displayed if you attempt to select a track.
• "FULL" is displayed if you attempt to program more than 30 tracks.

BASIC RECORDING

This section explains how to record from the tuner, CD player, or external equipment.

Preparation
• Use Type I (normal) and Type II (high/CrO₂) tapes for recording.
• Set the tape to the point where recording will start.

1 Insert the tape to be recorded on into deck 2.
Insert the tape with the side to be recorded on first facing out from the unit.

PUSH EJECT

2 Press REV MODE to select the reverse mode.
To record on one side only, select ⊐.
To record on both sides, select ⊐⊃ or ⊂⊃.

3 Press function (TUNER/BAND, VIDEO/AUX, CD or MD) and prepare the source to be recorded.
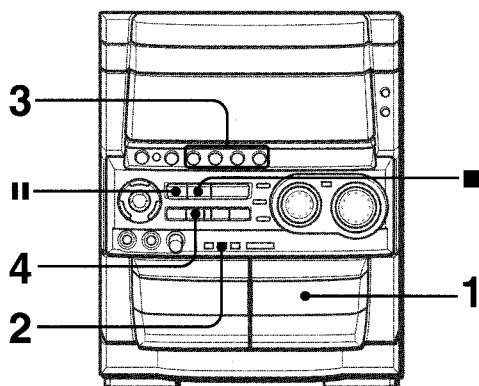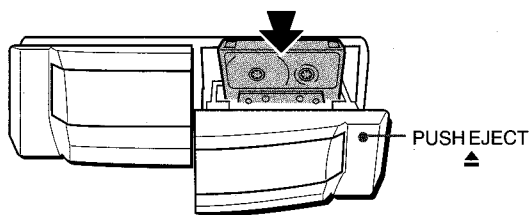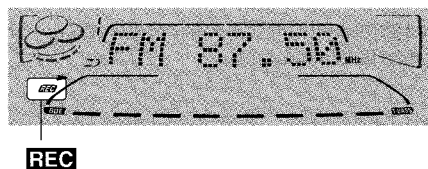To record from a CD, press CD and load the disc(s).
To record from a radio broadcast, press TUNER/BAND and tune in to a station.
To record from a connected source, press VIDEO/AUX or MD.

4 Press ● REC/REC MUTE to start recording.
When recording from a connected source, start playback of the source.

REC

When the selected function is CD, playback and recording start simultaneously.

To stop recording, press ■.
To pause recording, press ❙❙. (Applicable when the source is TUNER, VIDEO/AUX or MD) To resume recording, press it again.

Sound adjustment during recording
The VOLUME control has no effect on recording, while the BBE affects recording.

INSERTING BLANK SPACES

Insertion of 4-second blank spaces enables you to activate the Music Sensor function. (Applicable when the source is TUNER/BAND, VIDEO/AUX or MD.)

1 **Press ● REC/REC MUTE during recording or while in recording pause mode.**
REC on the display flashes for 4 seconds and 4-second blank space is made. Then, the deck enters the recording pause mode.
2 **Press ❙❙ to resume recording.**

To insert a blank space of less than 4 seconds, press ● REC/REC MUTE again while REC is flashing.
To insert blank spaces of more than 4 seconds, after the deck enters recording pause mode, press ● REC/REC MUTE again. Each time the button is pressed, a 4-second blank space is added.

NOTE

"Can't REC" is displayed if you attempt to record on a tape with the plastic tabs broken off.

To erase a recording
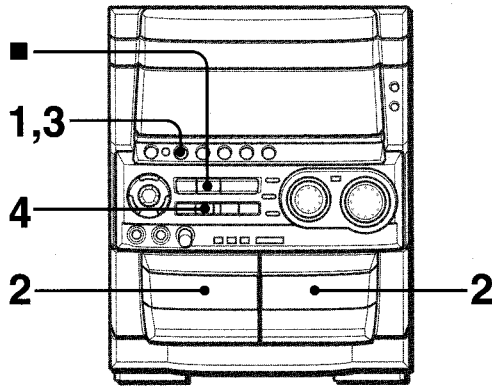Make sure the microphone is not connected to this unit and turn MIC MIXING control to MIN (page 19).
1 Insert the tape to be erased into deck 2 and press TAPE/DECK 1/2 to display "TP 2".
2 Set the tape to the point where the erasure is to be started.
3 Set the reverse mode by pressing REV MODE.
4 Press ● REC/REC MUTE to start the erasure.

DUBBING A TAPE MANUALLY

NOTE
• Set the tape to the point where recording will start.
• The reverse mode is automatically set to ⊏.
  Note that recording will be done on one side of the tape only.

1 Press TAPE/DECK 1/2.

2 Insert the original tape into deck 1 and the tape to be recorded on into deck 2.
Insert the tapes with the sides to be played back or recorded on facing out from the unit.

3 Press TAPE/DECK 1/2 to select deck 1.
"TP 1" is displayed.

4 Press ● REC/REC MUTE to start recording.
Playing and recording start simultaneously.

To stop dubbing
Press ■.

DUBBING THE WHOLE TAPE
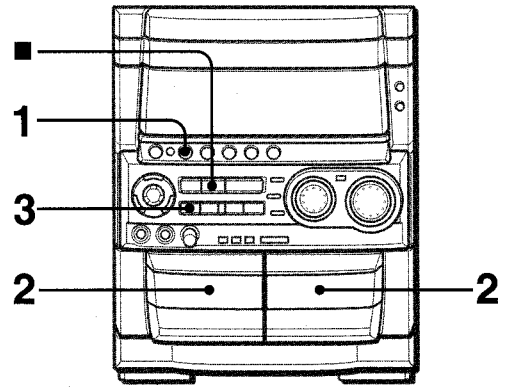
This function allows you to make exact copies of both sides of the original tape. The reverse side of both tapes will start simultaneously as soon as the longer tape has been reversed.

NOTE
• Dubbing does not start from a point halfway in the tape.
• The reverse mode is automatically set to ⊏⊃.

1 Press TAPE/DECK 1/2.

2 Insert the original tape into deck 1 and the tape to be recorded on into deck 2.
Insert each tape with the side to be played back or recorded on facing out from the unit.

3 Press SYNC DUB once or twice to start recording.
① **For recording at normal speed,** press it once to display NORM-DUB.
② **For recording at high speed,** press it twice to display HIGH-DUB.

①   ②
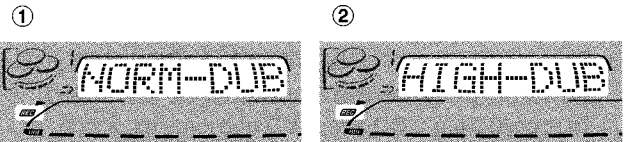
The tapes are rewound to the beginning of the front sides, and recording starts.

To stop dubbing
Press ■.

NOTE
Recording does not start if the erasure prevention tab on either side of the tape is broken off.

MULTI JOG   CD EDIT/CHECK

2
■
4
6
◄◄,►►
3
1

SHIFT
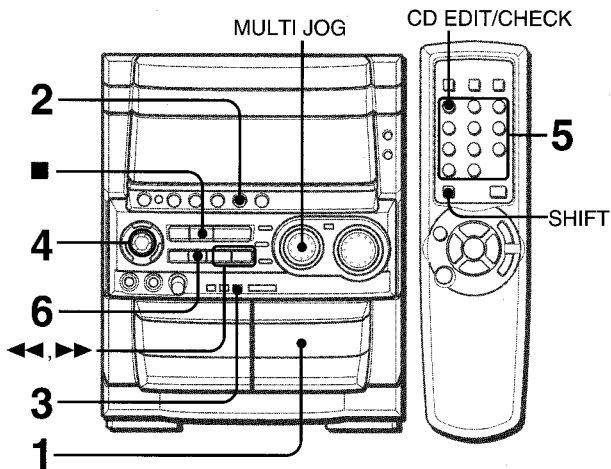
The AI edit recording function enables CD recording without worrying about tape length and track length. When a CD is inserted, the unit automatically calculates the total track length. If necessary, the order of tracks is rearranged so that no track is cut short.
(AI: Artificial Intelligence)

NOTE

AI edit recording will not start from a point halfway into the tape. The tape must be recorded from the beginning of either side.

1 Insert the tape into deck 2.
Insert the tape with the side to be recorded on first facing out from the unit.

2 Press CD and load the disc(s).

3 Press CD EDIT/CHECK once.
When using the remote control, press CD EDIT/CHECK once while pressing SHIFT.
"EDIT" and "AI" are displayed.
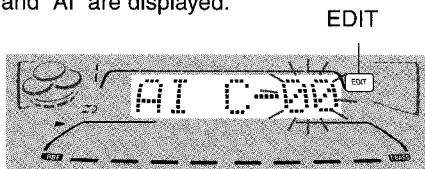
EDIT

• When "PRGM" is displayed, press CD EDIT/CHECK.

4 Press DISC DIRECT PLAY 1-3 to select a disc.

5 Press numbered buttons 0-9 on the remote control to designate the tape length.
10 to 99 minutes can be specified.
Example: When using a 60-minute tape, press 6 and 0.
In a few seconds, the tracks to be recorded on each side of the tape are determined.
• ◄◄, ►► or MULTI JOG are also available to designate the tape length.

Tape length

Remaining time Programmed
of recording   tracks for side A
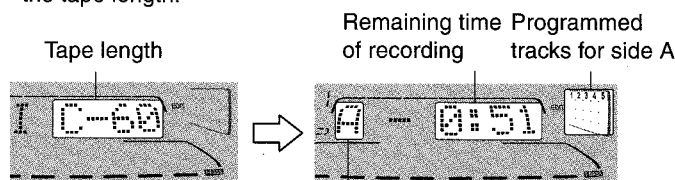
Tape side
A: First recording side
B: Second recording side

6 Press ● REC/REC MUTE to start recording on the first side.
The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front (side A) ends, recording on the back (side B) starts.

To stop recording
Press ■. Recording and CD play stop simultaneously.

To clear the edit program
Press ■ CLEAR twice so that "EDIT" disappears on the display.

To check the order of the programmed track numbers
Before recording, press CD EDIT/CHECK to select side A or B, and press ◄◄ or ►► repeatedly.

Track number

Programmed
track numbers

Tape side   Program number
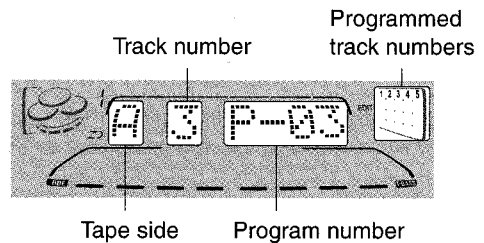
To add tracks from other discs to the edit program
If there is any time remaining on the tape after step 5, you can add tracks from other discs in the CD compartment.
1 Press CD EDIT/CHECK to select side A or B.
2 Press DISC DIRECT PLAY 1-3 to select a disc.
3 Press numbered buttons on the remote control to select tracks. A track whose playing time is longer than the remaining time cannot be programmed.
4 Repeat steps 2 and 3 to add more tracks.

Time on cassette tapes and editing time
The actual cassette recording time is usually a little longer than the specified recording time printed on the label. This unit can program tracks to use the extra time. When the total recording time is a little longer than the tape's specified recording time after editing, the display shows the extra time (without a minus mark), instead of the time remaining on the tape (with the minus mark).

NOTE

• The AI edit recording function cannot be used with discs containing 31 tracks or more. "TR OVER" is displayed if this is attempted.
• Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

PROGRAMMED EDIT RECORDING

MULTI JOG   CD EDIT/CHECK

2

5

8

◄◄, ►►

3,7

1

SHIFT

4,5
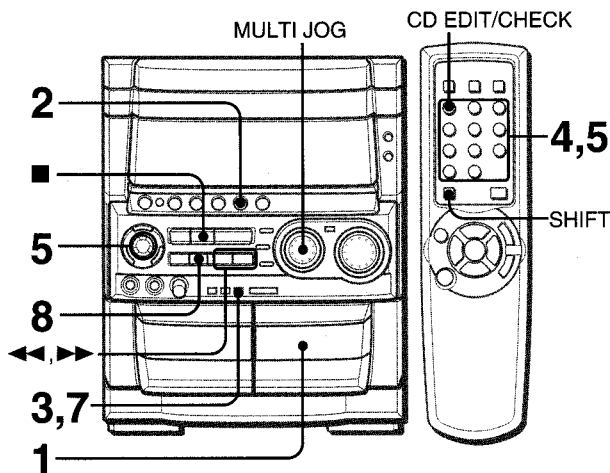
In the programmed edit recording function the tracks can be programmed while checking the remaining time on each side of the tape.

NOTE

The programmed edit recording will not start from a point halfway in the tape. The tape must be recorded on from the beginning of either side.

1 Insert the tape into deck 2.

Insert the tape with the side to be recorded on first facing out from the unit.

2 Press CD and load the disc(s).

3 Press CD EDIT/CHECK twice.

When using the remote control, press **CD EDIT/CHECK** twice while pressing **SHIFT**.
"EDIT" and "PRGM" are displayed.
• When "AI" is displayed, press **CD EDIT/CHECK** again.

4 Press numbered buttons on the remote control to designate the tape length.

10 to 99 minutes can be specified.
• The ◄◄, ►► or **MULTI JOG** are also available to designate the tape length.

Tape length   Tape side A (front side)

 ⟹

Maximum recording time for side A
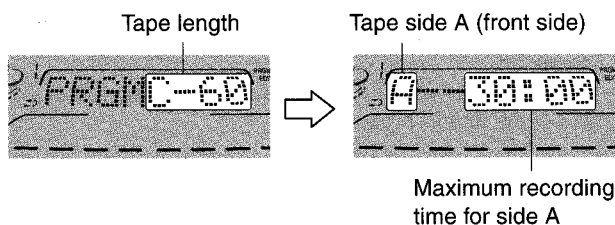
5 Press DISC DIRECT PLAY 1-3 to select a disc. Then, press numbered buttons 0-9 and +10 on the remote control to program a track.

Example: To select the 10th track of disc 2, press **DISC DIRECT PLAY 2**, then press +10 and 0.

Selected track number   Remaining time on side A   Programmed tracks

 ⟹

Program number

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6 Repeat step 5 for the rest of the tracks for side A.

A track whose playing time is longer than the remaining time cannot be programmed.

7 Press CD EDIT/CHECK to select side B and program the tracks for side B.

After confirming "B" on the display, repeat step 5.

Tape side B (reverse side)

8 Press ●REC/REC MUTE to start recording.

The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front side (A) ends, recording on the back side (B) starts.
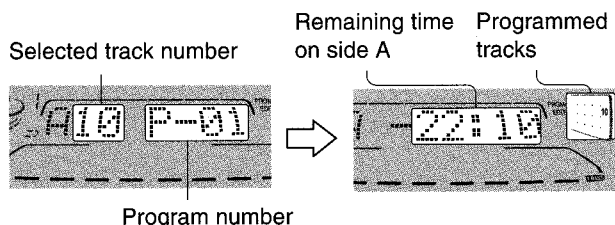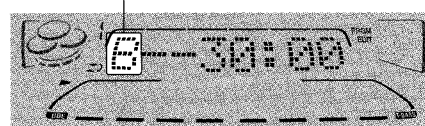
To stop recording
Press ■. Recording and CD play stop simultaneously.

To check the order of the programmed track numbers
Before recording, press **CD EDIT/CHECK** to select side A or B, and press ◄◄ or ►► repeatedly.

Disc number   Track number   Programmed track numbers

Tape side   Program number
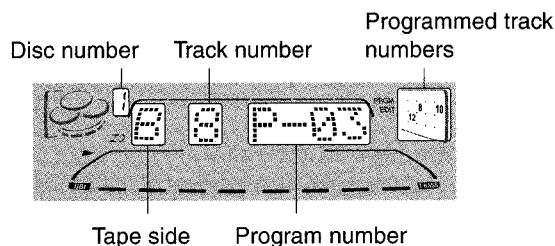
To change the program of each side
Press **CD EDIT/CHECK** to select side A or B, and press ■ **CLEAR** to clear the program on the selected side. Then program tracks again.

To clear the edit program
Press ■ **CLEAR** twice so that "EDIT" disappears on the display.

NOTE

• Up to 30 tracks can be programmed from any of the inserted discs.
• "FULL" is displayed if you attempt to program more than 30 tracks.
• Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.

MICROPHONE MIXING

KARAOKE

A microphone (not supplied) can be connected to this unit, allowing you to sing along to music sources.
Use a microphone with standard plugs (ø6.3 mm, ¼ inch).

1 Connect your microphones to the MIC jack.

MIC

2 Press one of the function buttons to select the source to be mixed, and play the source.

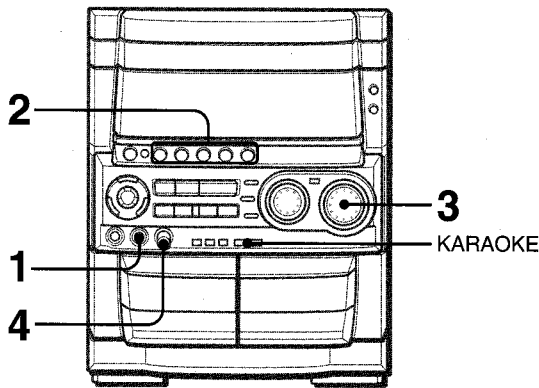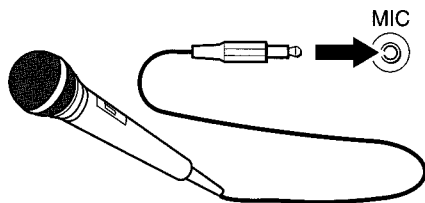## 3 Adjust the volume and tone of the source.

4 Turn MIC MIXING control to adjust the microphone volume.

To record microphone sound mixed with source sound
Follow the procedure for recording from the sound source (see page 15).
SYNC DUB cannot be used for mixing recording.

When not using the microphone
Turn **MIC MIXING** control to **MIN** and remove the microphone from **MIC** jack.

NOTE
• If a microphone is held too near the speakers, a howling sound may be produced. In this case, hold the microphone away from the speakers, or decrease the microphone volume.
• If sound through the microphone is extremely loud, it may be distorted. In this case, decrease the microphone volume.

Recommended microphones
The use of unidirectional type microphones is recommended to prevent howling. Contact your local Aiwa dealer for details.

VOCAL FADER/MULTIPLEX FUNCTIONS

This unit can use discs or tapes as Karaoke sources.
Use the vocal fader function for ordinary discs or tapes.
Use the multiplex function for multi audio discs or tapes.

Press KARAOKE repeatedly to select the vocal fader or multiplex function.
Each time **KARAOKE** is pressed, one of these functions is selected cyclically.
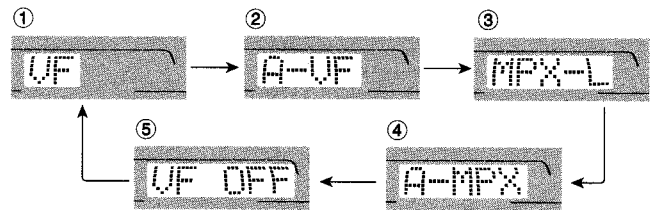
① **Vocal Fader**
The singer's voice becomes softer than the accompaniment.

② **Auto Vocal Fader**
The singer's voice becomes softer only while there is audio input through a microphone.

③ **Multiplex**
Only the sound on the left channel is heard from both speakers, and the sound on the right channel is muted.

④ **Auto Multiplex**
The sound on the left channel is heard from both speakers, and the sound on the right channel is muted only while there is audio input through a microphone.

⑤ **Cancel**

To change the time lag setting in Auto Vocal Fader or Auto Multiplex function
The muted singer's voice can be restored faster.
When Auto Vocal Fader or Auto Multiplex is selected, "A-VF" or "A-MPX" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, keep pressing **KARAOKE** until FAST is displayed.
To return to the initial setting, select SLOW.
When the power is turned off, SLOW is restored.

To change the audible channel in Multiplex function
When Multiplex is selected, "MPX -L" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, keep pressing **KARAOKE** until MPX-R is displayed.
To return to the initial setting, select MPX-L.
When the power is turned off, MPX-L is restored.

NOTE
• The Karaoke functions may not operate correctly with the following kinds of CDs or tapes.
  - Those with monaural sound
  - Those recorded with strong echoes
  - Those with the vocal part recorded on the right or left side of the sound width
• While the Karaoke function is on, the sound is output as monaural.
• When the function is changed, the Karaoke function is canceled.

RECORDING

KARAOKE

En

KARAOKE PROGRAM
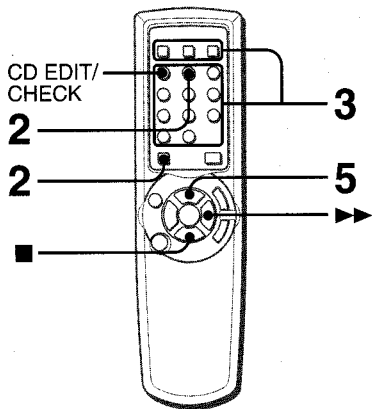
Before or during CD play, you can reserve up to 15 tracks to be played after the current track. Each reservation is cleared when it finishes playing.

Use the remote control.

1 Press CD and load the discs.

2 Press PRGM once while pressing SHIFT.

3 Press DISC DIRECT PLAY 1-3 to select a disc. Then, press numbered buttons 0-9 and +10 to program a track.

Reserved disc number   Reserved track number
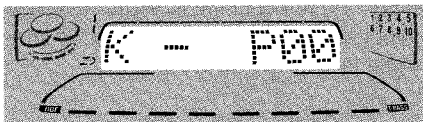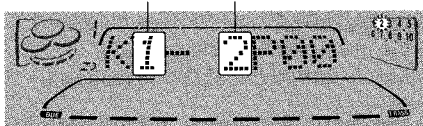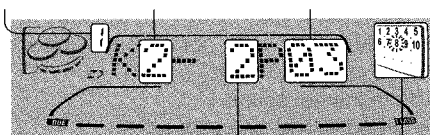

4 Repeat step 3 to reserve other tracks.

5 Press ◄► to start play.
After a track is played, it is cleared from the program.

Currently   Disc number of the   Number of remaining
playing disc   last reservation   reserved tracks

Track number of   Currently playing
the last reservation   track number
                         flashes

To add a reservation during play
Repeat step 3.

To check the reserved tracks
Press **CD EDIT/CHECK** on the main unit or **CD EDIT/CHECK** while pressing **SHIFT** on the remote control repeatedly. Each time it is pressed, the disc number and track number are displayed in the reserved order.

To stop play
Press ■.
When ◄► is pressed, the play starts from the last track again.

To skip a current track
Press ►►. The skipped track is cleared from the program.

To clear all the reservations
Press ►► repeatedly until "K - P00" is displayed.
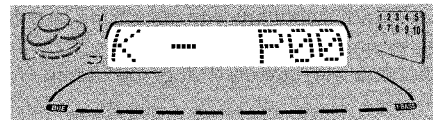
Press it once more to cancel the Karaoke programs. The display returns to that of CD play.

NOTE

- If the reserved track number does not exist on the selected disc, the unit stops playing and the display flashes.
  In this case, press ►► to skip the error track. Then press ◄► to start play with the next reserved track.
- When **PRGM** is pressed repeatedly in step 2, PRGM is displayed and the unit enters CD program play mode (page 14).
  To cancel program play, press ■ **CLEAR**.

SETTING THE SLEEP TIMER
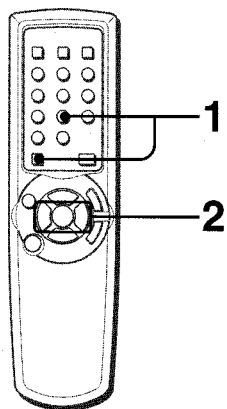
The unit can be turned off automatically at a specified time.

Use the remote control.

1 Press SLEEP while pressing SHIFT.

2 Within 4 seconds, press ◄◄ DOWN or ►► UP to specify the time until the power is turned off.
The time changes between 5 and 240 minutes in 5-minute steps.
MULTI JOG is also available in place of ◄◄ or ►►.

Specified time

While the timer is in operation, the display indication is dimmer than usual.

To check the time remaining until the power is turned off
Press **SLEEP** once while pressing **SHIFT**. The remaining time is displayed for 4 seconds.

To cancel the sleep timer
Press **SLEEP** twice while pressing **SHIFT** so that "SLEEP oFF" appears on the display.

SETTING THE TIMER
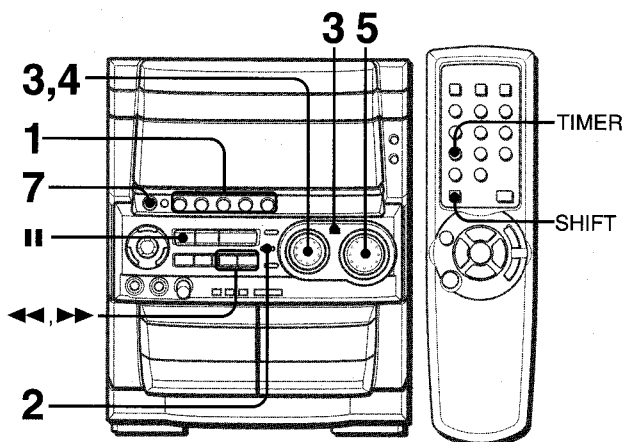
The unit can be turned on at a specified time every day with the built-in timer.

Preparation
Make sure the clock is set correctly.

1 Press one of the function buttons to select a source.

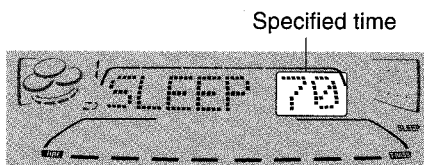**2 Press TIMER repeatedly until ⊕ appears on the display.**
When using the remote control, press **TIMER** while pressing **SHIFT**.
Time and audio source name flash alternately.
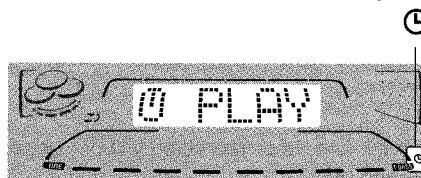
3 Within 6 seconds, turn MULTI JOG to designate the timer-on time, then press ENTER or II.
Turning **MULTI JOG** changes both the hour and the minute.
◄◄ or ►► is also available in place of **MULTI JOG**. Holding these buttons down will vary the time rapidly.

4 Within 4 seconds, turn MULTI JOG to select the duration for the timer-activated period.
The duration can be set between 5 and 240 minutes in 5-minute steps.
◄◄ or ►► is also available in place of **MULTI JOG**.
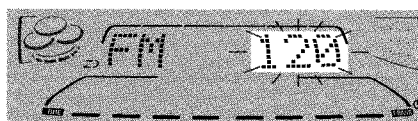
The duration will be automatically set after 4 seconds. It will also be set if **ENTER** or **II** is pressed within 4 seconds after step 4.

5 Adjust the volume.

The source sound will play at the volume level set in this step when the power is turned on by the timer.
If the volume level is set to 21 or higher, however, it will automatically be set to 20 when the power is turned on.

6 Prepare the source.

To listen to a CD, load the disc to be played first on tray 1.
To listen to a tape, insert the tape into deck 1 or 2.
To listen to the radio, select the band and tune in to a station.

7 Press POWER to turn off the power.

When the timer-on time is reached, the unit turns on and begins play with the selected source.

NOTE

You can change the source that was selected in step 1 by pressing one of the function buttons before pressing **ENTER** or **II** in step 3.

To check the timer setting
Press **TIMER**.
The timer-on time, the selected source, and the duration for the timer-activated period will be displayed for 4 seconds.

To change any of the previous setting
Carry out from step 1.
However, if you do not change the timer-on time, in step 3 just press **ENTER** twice and continue from step 4.

To cancel the timer standby mode temporarily
Press **TIMER** repeatedly so that ⊕ disappears.
To restore the timer standby mode, press again to display ⊕.

Using the unit while the timer is set
You can use the unit normally after setting the timer.
Before turning off the power, carry out steps 5 and 6.

NOTE

- Timer playback and timer recording will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this unit. Use an external timer.

TIMER RECORDING

Timer recording is applicable for TUNER and VIDEO/AUX (with an external timer) sources only.

Press either **TUNER/BAND** or **VIDEO/AUX** to select a source, then **press TIMER repeatedly until ⊕ REC appears on the display.** Within 6 seconds, carry out the steps of "SETTING THE TIMER" from step 3 and insert the tape to be recorded on into deck 2 after step 6.

NOTE

- If the timer recording is done with the economizing mode (page 6) set to "ECO ON" or "ECO AUTO" and the power turns off, the dimmer mode will be set to dimmest and the volume level will be 0 (minimum level) the next time the power is turned on.
- You cannot use the timer function to record from a CD or tape.

OTHER FEATURES

DEMO (Demonstration)
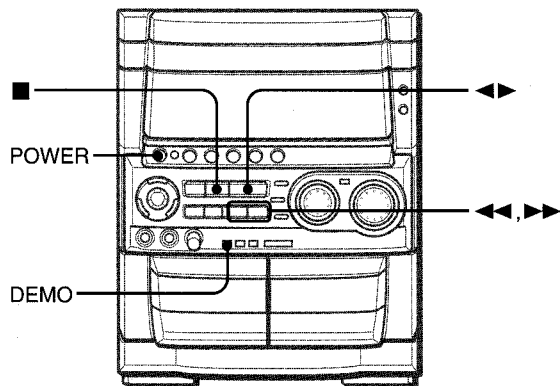
POWER

DEMO

You can enjoy two kinds of DEMO modes on this unit.
One is *demo*, the other one is *game demo*.
In the demo mode, colorful illumination demonstrates in the display.
In the game demo mode, you can play a game.

To switch the two modes to each other, press **POWER** while pressing **DEMO** when the power is off.

To play the game Demo

1 Press DEMO whether the unit is turned on or off, and whether the clock has been set or not.

2 Press ◄►.
Three numbers on the display start to run.

3 Press ■ once.
The number on the left side stops.

4 Press ■ twice to stop the remaining two numbers.
Scoring:
20 points are given to start the game.
If all the numbers are equal, 50 points are added to the score.
If not equal, one point is subtracted.
If the gained points reach 9999, you win.
If the gained points fall to 0, you lose.

To cancel the game Demo
Press **DEMO**.

To reset the game Demo
Press **DEMO** twice.

To change the probability of equalizing the three numbers
Press ◄◄ or ►► repeatedly to select one of the three probability levels when playing the game Demo. The tray number indicator in the display changes between 1 and 3. As the tray number increases from 1 to 3, the higher the probability of equalizing.
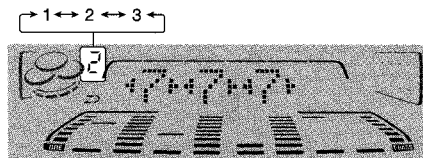
NOTE
• During playing the game Demo, ■, ◄◄, ►► and ◄► are available only for the game Demo. Cancel the game Demo to use these buttons for the functions such as CD playing, etc.
• During the game Demo, some indicators unrelated with the actual operation light up on the display.
• DEMO is locked out during recording and is not operative.
• The game Demo is automatically canceled if the volume is adjusted while the unit is turned on.

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CONNECTING OPTIONAL EQUIPMENT

CD DIGITAL OUT (OPTICAL)

VIDEO/AUX

MD

LINE OUT

SURROUND SPEAKERS
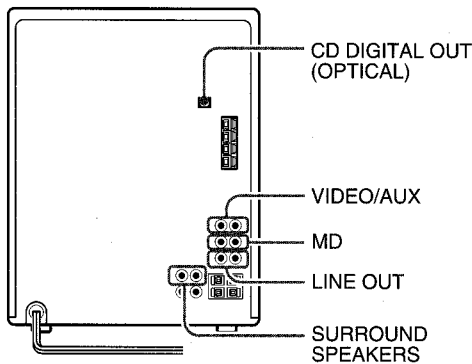
Refer to the operating instructions of the connected equipment for details.
• The connecting cords are not supplied. Obtain the necessary connecting cords.
• Consult your local Aiwa dealer for optional equipment.

VIDEO/AUX JACKS

This unit can input analog sound signals through these jacks.
Use a cable with RCA phono plugs to connect audio equipment (turntables, LD players, MD players, VCRs, TV, etc.).
Connect the red plug to the **VIDEO/AUX R** jack, and the white plug to the **VIDEO/AUX L** jack.

When connecting a turntable
Use an Aiwa turntable equipped with a built-in equalizer amplifier.

MD JACKS

This jack is recommended to connect with an MD player.
Use a cable with RCA phono plugs.
Connect the red plug to the **MD R** jack, and the white plug to the **MD L** jack.

LINE OUT JACKS

This unit can output analog sound signal through these jacks.
Use a cable with RCA phono plugs to connect audio equipment with **LINE IN** (analog input) jacks.
Connect the red plug of a cable to **LINE OUT R** jack, and the white plug to **LINE OUT L** jack.

NOTE

Do not connect an equipment to **LINE OUT** jacks and **VIDEO/AUX** jacks simultaneously. Otherwise, noise is generated and malfunction occurs.

CD DIGITAL OUT (OPTICAL) JACK

This unit can output CD digital sound signals through this jack.
Use an optical cable to connect digital audio equipment (DAT deck, MD recorder, etc.).
Remove the dust cap ⓐ from the **CD DIGITAL OUT (OPTICAL)** jack. Then, connect an optical cable plug to the **CD DIGITAL OUT (OPTICAL)** jack.
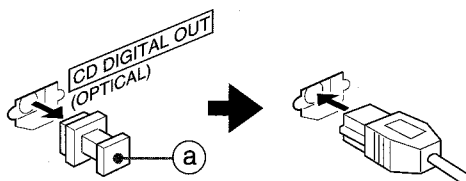
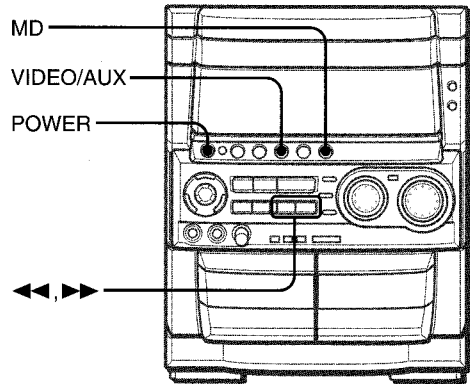**When the CD DIGITAL OUT (OPTICAL) jack is not being used**
Attach the supplied dust cap.

SURROUND SPEAKERS ◁ JACKS

Connect optional surround speakers with the 8 ohms to 16 ohms impedance to the jacks.
Be sure to connect both right and left surround speakers to the jacks to obtain the sound from them.

LISTENING TO EXTERNAL SOURCES

MD

VIDEO/AUX

POWER

◀◀ , ▶▶

To play equipment connected to **VIDEO/AUX** jacks or **MD** jacks, proceed as follows.

1 Press VIDEO/AUX or MD.
To play the equipment connected to VIDEO/AUX, press **VIDEO/AUX**. "VIDEO" appears on the display.
To play the equipment connected to MD, press **MD**. "MD" appears on the display.

2 Play the connected equipment.

To change a source name in the display
When **VIDEO/AUX** is pressed, "VIDEO" is displayed initially. It can be changed to "AUX" or "TV".
With the power on, press **POWER** while pressing **VIDEO/AUX**. Repeat the procedure to select one of the names.

To adjust the sound level of the external source
When the sound level of the external source is much higher or much lower than that of other function sources, adjust it as follows.
1 Press **VIDEO/AUX** or **MD** and play the equipment.
2 Press ◀◀ or ▶▶ so that the sound level becomes the same as that of other function sources.

NOTE

During recording, the sound level can not be adjusted.

CARE AND MAINTENANCE

Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

To clean the cabinet
Use a soft and dry cloth.
If the surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzine or thinner as these could damage the finish of the unit.

To clean the tape heads
When the tape heads are dirty;
- high frequency sound is not emitted
- the sound is not adequately high
- the sound is off-balance
- the tape cannot be erased
- the tape cannot be recorded on
After every 10 hours of use, clean the tape heads with a head cleaning cassette.
Refer to the instructions of the cleaning cassette for details.

To demagnetize the tape heads
The tape heads may become magnetized after long-term use. This may narrow the output range of recorded tapes and increase noise.
After every 20 to 30 hours of use, demagnetize the tape heads with a separately sold demagnetizing cassette.
Refer to the instructions of the demagnetizing cassette for details.

Care of discs
• When a disc becomes dirty, wipe the disc from the center out with a cleaning cloth.
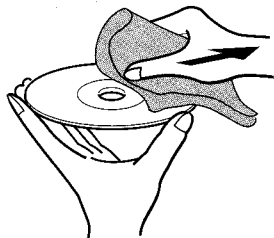
• After playing a disc, store the disc in its case. Do not leave the disc in places that are hot or humid.

Care of tapes
• Store tapes in their cases after use.
• Do not leave tapes near magnets, motors, television sets, or any source of magnetism. This will downgrade the sound quality and cause noise.
• Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

TROUBLESHOOTING GUIDE

If the unit fails to perform as described in these Operating Instructions, check the following guide.

GENERAL
There is no sound.
• Is the AC cord connected properly?
• Is there a bad connection? (→ page 4)
• There may be a short circuit in the speaker terminals.
  → Disconnect the AC cord, then correct the speaker connections.
• Was an incorrect function button pressed?
Sound is emitted from one speaker only.
• Is the other speaker disconnected?
The output sound is not stereo.
• Is the Karaoke function turned on? (→ page 19)
An erroneous display or a malfunction occurs.
  → Reset the unit as stated below.
The unit blacks out when the power is turned off.
• Is the power economizing mode set to "ECO ON" or "ECO AUTO"? (→ page 6)
The power is not turned on.
  → Disconnect the AC cord, and connect it again in a few seconds.

TUNER SECTION
There is constant, wave-like static.
• Is the antenna connected properly? (→ page 5)
• Is the signal weak?
  → Connect an outdoor antenna.
The reception contains noise interferences or the sound is distorted.
• Is the system picking up external noise or multipath distortion?
  → Change the orientation of the antenna.
  → Move the unit away from other electrical appliances.

CASSETTE DECK SECTION
The tape does not run.
• Is deck 2 in pause mode? (→ page 11)
The sound is off-balance or not adequately high.
• Is the playback head dirty? (→ above)
Recording is not possible.
• Is the erasure prevention tab on the tape broken off? (→ page 12)
• Is the recording head dirty? (→ above)
Erasure is not possible.
• Is the erasure head dirty? (→ above)
• Is a metal tape being used?
High frequency sound is not emitted.
• Is the recording/playback head dirty? (→ above)

CD PLAYER SECTION
The CD player does not play.
• Is the disc correctly placed? (→ page 13)
• Is the disc dirty? (→ above)
• Is the lens affected by condensation?
  → Wait approximately one hour and try again.

To reset
If an unusual condition occurs in the display window or the cassette decks, reset the unit as follows.
1 Press **POWER** to turn off the power.
2 Press **POWER** to turn the power back on while pressing ∎ **CLEAR**. Everything stored in memory after purchase is canceled.
If the power cannot be turned off in step 1 because of a malfunction, reset by disconnecting the AC cord, and connect it again. Then carry out step 2.

Main unit CX-NAJ70

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

AM tuner section

Tuning range	530 kHz to 1710 kHz (10 kHz step)
	531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 μV/m
Antenna	Loop antenna

Amplifier section

Mid-high frequency amplifier

Power output	25 W + 25 W (200 Hz -20 kHz, THD less than 1 %, 8 ohms)
Total harmonic distortion	0.1 % (10 W, 1 kHz, 8 ohms, DIN AUDIO)

Low frequency amplifier

Power output	75 W + 75 W (50 Hz -200 Hz, THD less than 1 %, 6 ohms)
Total harmonic distortion	0.1 % (35 W, 135 Hz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 316 mV (adjustable)
	MD: 316 mV (adjustable)
	MIC: 1.8 mV (10 k ohms)
Outputs	SPEAKERS HIGH FREQ: accept speakers of 8 ohms or more
	SPEAKERS LOW FREQ: accept speakers of 6 ohms or more
	SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms
	LINE OUT: 210 mV
	PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape: 50 Hz – 16000 Hz
	Normal tape: 50 Hz – 15000 Hz
Recording system	AC bias
Heads	Deck 1: Playback head × 1
	Deck 2: Recording/playback head × 1, erase head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

General

Power requirements	120 V AC, 60 Hz
Power consumption	135 W
Power consumption in standby mode	If the power-economizing mode is ECO OFF: 22 W
	If the power-economizing mode is ECO ON or ECO AUTO: 0.9 W
Dimensions (W × H × D)	260 × 330 × 360 mm (10 1/4 × 13 × 14 1/4 in.)
Weight	8.4 kg (18 lbs 8 oz.)

Speaker system SX-WNAJ70

Speaker system	3 way, Built-in subwoofer (magnetic shielded type)
Speaker units	Subwoofer: 160 mm (6 3/8 in.) cone type
	Full range: 100 mm (4 in.) cone type
	Super tweeter: 20 mm (13/16 in.) ceramic type
Impedance	6 ohms/8 ohms
Sensitivity	87 dB/W/m
Dimensions (W × H × D)	240 × 324 × 283 mm (9 1/2 × 12 7/8 × 11 1/4 in.)
Weight	5.0 kg (11 lbs)

Specifications and external appearance are subject to change without notice.

BBE SYSTEM

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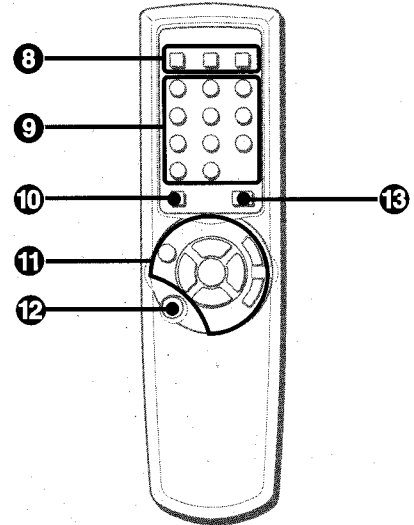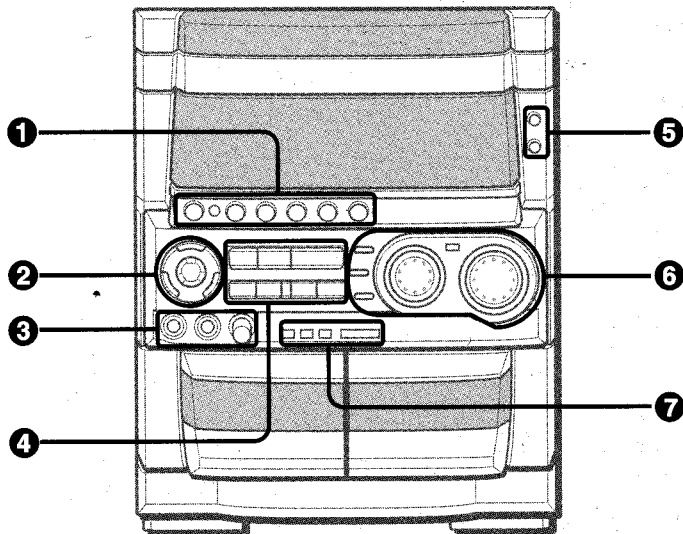Under license from BBE Sound, Inc.

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For assistance and information

call toll free 1-800-BUY-AIWA (United States and Puerto Rico)