

# KENWOOD

MICRO HI-FI COMPONENT SYSTEM

## HD-7

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### INSTRUCTION MANUAL

KENWOOD CORPORATION



## 2 Before applying power

HD-7/EN

**⚠ Caution : Read this page carefully to ensure safe operation.**

**Units are designed for operation as follows.**

U.S.A. and Canada ..... AC 120 V only

Europe and U.K. .... AC 230 V only

### For the United Kingdom

#### **Factory fitted moulded mains plug**

1. The mains plug contains a fuse. For replacement, use only a 3-Amp ASTA-approved (BS1362) fuse.
2. The fuse cover must be refitted when replacing the fuse in the moulded plug.
3. 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 adapter, or consult your dealer.

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

**IMPORTANT :** The wires in the mains lead are coloured in accordance with the following code:

Blue : Neutral

Brown : Live

Do not connect those leads to the earth terminal of a three-pin plug.

Preparation

## Safety precautions

**WARNING :** TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	<b>CAUTION</b> 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.
	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.		

**CLASS 1  
LASER PRODUCT**

The marking of this product has been classified as Class 1. It means that there is no danger of hazardous radiation outside the product.

Location: Back panel

## ***Special features***

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### ***Playback of CD-R/RW discs***

The CD player is capable of playing both CD-R and CD-RW music discs, which have been recorded on a CD recorder.

### ***"Linear T.R.A.I.T." (for Europe and U.K.), "K-STAT" (for USA) power transistors***

Kenwood's amplifiers now feature Linear T.R.A.I.T., the world's first power transistor with built-in temperature detection and compensation circuitry. This advanced technology assures minimal distortion across all frequencies and gives an excellent three-dimensional sonic image.

### ***High-performance 24-bit D.R.I.V.E. II***

Kenwood's innovative high-resolution 24-bit D.R.I.V.E. II technology features two types of low pass filter that removes quantization distortion.

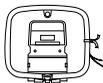
The result is an exceptionally pure and detailed sound from the loudest notes to the most subtle of harmonics.

## Accessories

### Unpacking

Unpack the unit carefully and make sure that all the accessories are present.

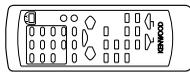
AM loop antenna (1)



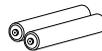
FM indoor antenna (1)



Remote control unit (1)



Batteries (R6/AA) (2)



Speaker cords (2)  
(provided in the speaker package)



If any accessories are missing, or if the unit is damaged or fails to operate, notify your dealer immediately. If the unit was shipped to you directly, notify your shipper immediately. Kenwood recommends that you retain the original carton and packing materials in case you need to move or ship the unit in the future.

**Keep this manual handy for future reference.**

### For the U.S.A.

#### FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

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

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

### For the U.S.A.

#### CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

In compliance with Federal Regulations, the following are reproductions of labels on, or inside the product relating to laser product safety.

**KENWOOD CORPORATION**  
**2967-3, ISHIKAWA-MACHI,**  
**HACHIOJI-SHI,**  
**TOKYO, JAPAN**

**KENWOOD CORP. CERTIFIES THIS EQUIPMENT**  
**CONFORMS TO DHHS REGULATIONS NO. 21**  
**CFR 1040.10, CHAPTER 1, SUBCHAPTER J.**

**Location: Back Panel**

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As an ENERGY STAR® Partner, Kenwood Corporation has determined that this products meets the ENERGY STAR® guidelines for energy efficiency. This product can save energy. Saving energy reduces air pollution and lowers utility bills.

Please read all of the safety and operating instructions before operating this appliance. Adhere to all warnings on the appliance and in the instruction manual. Follow all the safety and operating instructions. These safety and operating instructions should be retained for future reference.

**1. Power sources** – The appliance should be connected to a power supply only of the type described in the instruction manual or as marked on the appliance. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For appliances intended to operate from battery power, or other sources, refer to the instruction manual.

**2. Power-cord protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

Never pull or stretch the cord.

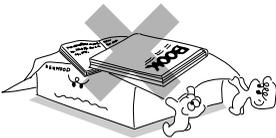


**3. CAUTION – Polarization** – This appliance may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

**4. Ventilation** – Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the appliance and to protect it from overheating, and these openings must not be blocked or covered. The appliance should be situated so that its location or position does not interfere with its proper ventilation.

To maintain good ventilation, do not put records or a tablecloth on the appliance. Place the appliance at least 10 cm away from the walls.

Do not use the appliance on a bed, sofa, rug or similar surface that may block the ventilation openings. This appliance should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

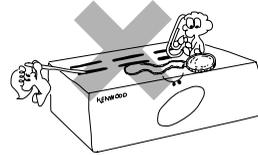


**5. Water and moisture** – The appliance shall not be exposed to dripping and splashing - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc. Do not place an object containing liquid, such as a flower vase, on the appliance.

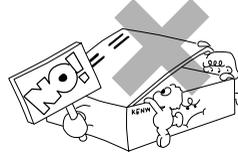
**6. Temperature** – The appliance may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).

**7. Heat** – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat. Do not place a flaming object, such as a candle or lantern, on or near the appliance.

**8. Electric shock** – Care should be taken so that objects do not fall and liquid is not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this appliance, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this appliance.



**9. Enclosure removal** – Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.



**10. Magnetic fields** – Keep the appliance away from sources of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.

**11. Cleaning** – Unplug this appliance from the wall outlet before cleaning. Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzene, etc. to clean the cabinet. Use a clean dry cloth.

**12. Accessories** – Do not place this appliance on an unstable cart, stand, tripod, bracket, or table. The appliance may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the appliance. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



**13. Lightning** – For added protection for this appliance during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the appliance due to lightning and power-line surges.

**14. Abnormal smell** – If an abnormal smell or smoke is detected, immediately turn the power OFF and unplug the appliance from the wall outlet. Contact your dealer or nearest service center.

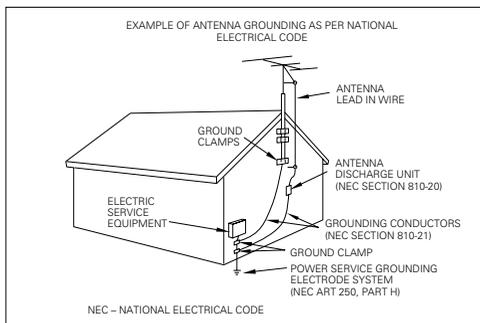


**15. Damage requiring service** – The appliance should be serviced by qualified service personnel when:

- A.** The power-supply cord or the plug has been damaged.
- B.** Objects have fallen, or liquid has been spilled into the appliance.
- C.** The appliance has been exposed to rain or water.
- D.** The appliance does not appear to operate normally by following the instruction manual. Adjust only those controls that are covered by the instruction manual as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the appliance to its normal operation.
- E.** The appliance has been dropped, or the enclosure damaged.
- F.** The appliance exhibits a marked change in performance.

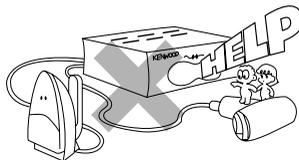
**16. Servicing** – The user should not attempt to service the appliance beyond that described in the instruction manual. All other servicing should be referred to qualified service personnel.

**17. Outdoor antenna grounding** – If an outside antenna is connected to the appliance, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Article 810 of the National Electrical Code ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.



**18. Power lines** – An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

**19. AC outlets** – Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical appliances, such as an iron or toaster, to it to prevent fire or electric shock.



**20. Overloading** – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

**21. Attachment** – Do not use attachments not recommended by the appliance manufacturer as they may cause hazards.

**22. Replacement parts** – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.

**23. Safety check** – Upon completion of any service or repairs to this appliance, ask the service technician to perform safety checks to determine that the appliance is in proper operating condition.

**Notes:**

1. Item 3 is not required except for grounded or polarized equipment.
2. Item 17 and 18 are not required except for units provided with antenna terminals.
3. Item 17 complies with UL in the U.S.A.

Make connections as shown below.

When connecting the related system components, refer also to the instruction manuals of the related components.

### CAUTION

Do not plug in the power lead until all connections are completed.

### Malfunction of microcomputer

If operation is not possible or erroneous display appears even though all connections have been made properly, reset the microcomputer by referring to "In case of difficulty". → 42

### CAUTION

Be sure to adhere followings. Or proper ventilation will be blocked causing damage or fire hazard.

- Do not place any objects impairing heat radiation onto the top of the unit.
- Leave some space around the unit (from the largest outside dimension including projection) equal to or greater than, shown below.

Top panel : 50 cm

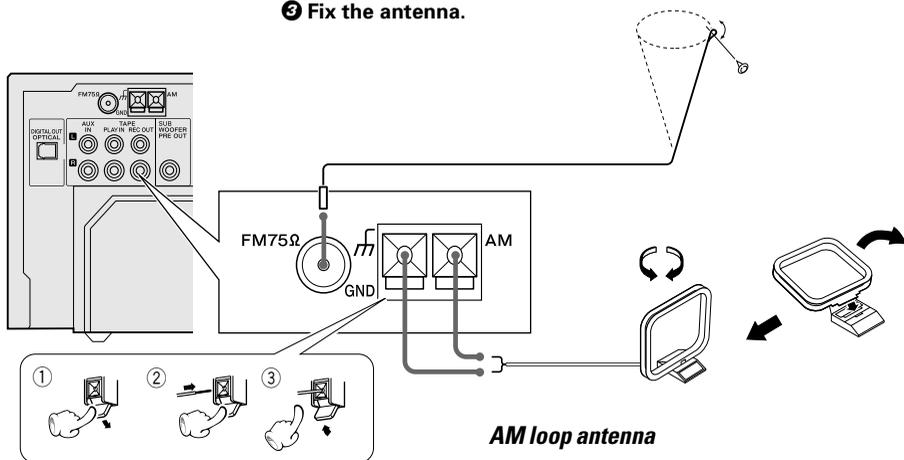
Back panel : 10 cm

## Connection of accessory antennas

### FM indoor antenna

The supplied antenna is for temporary indoor use only. For stable signal reception, we recommend to use an outdoor antenna. Remove the indoor antenna if you connect to an outdoor antenna.

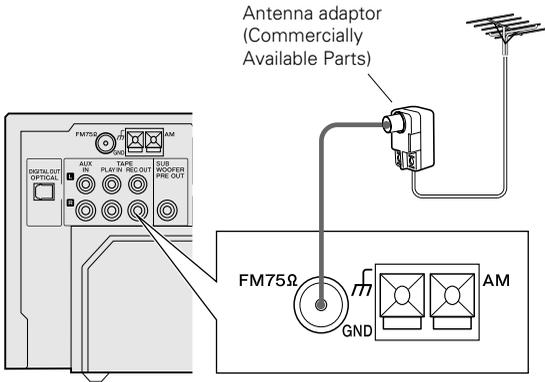
- 1 Connect the antenna to the antenna terminal.
- 2 Locate the position providing good reception condition.
- 3 Fix the antenna.



### AM loop antenna

The supplied antenna is for indoor use. Place it as far as possible from the main system, TV set, speaker cords and power cord, and set it to a direction which provides the best reception.

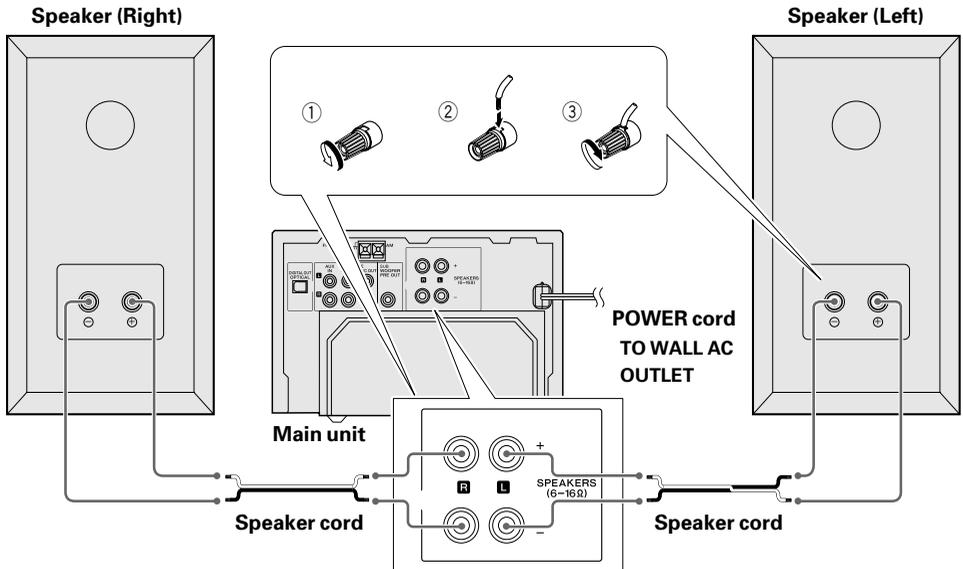
## Connection of FM outdoor antenna (sold separately)



### FM outdoor antenna

Lead the 75 Ω coaxial cable connected to the FM outdoor antenna into the room and connect it to the FM 75 Ω terminal. Please remove the indoor antenna after an outdoor antenna has been installed.

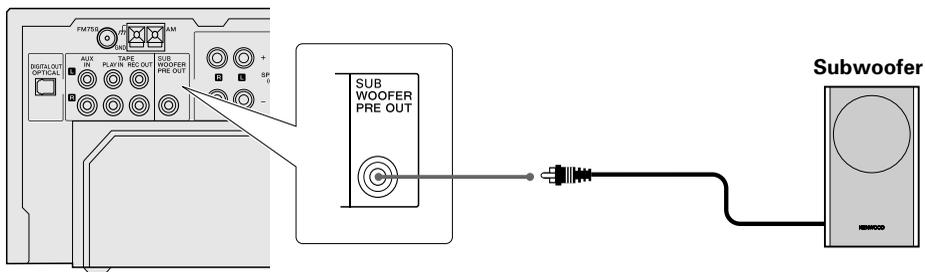
## Connection of the speaker system



- Never short-circuit the + and – speaker cords.
- If the left and right speakers are connected inversely or if the speaker cords are connected with reversed polarity, the sound becomes unnatural with ambiguous acoustic image positioning. Be sure to connect the speakers and speaker cords correctly.

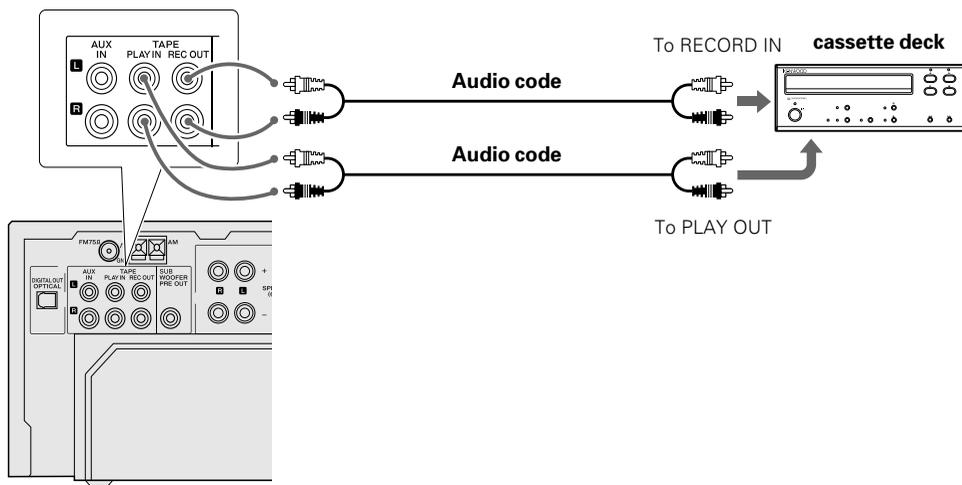
## Connection of a subwoofer (sold separately)

A subwoofer provides powerful playback of the very low range. It can be used with all types of playback.



## Connection of a cassette deck (sold separately)

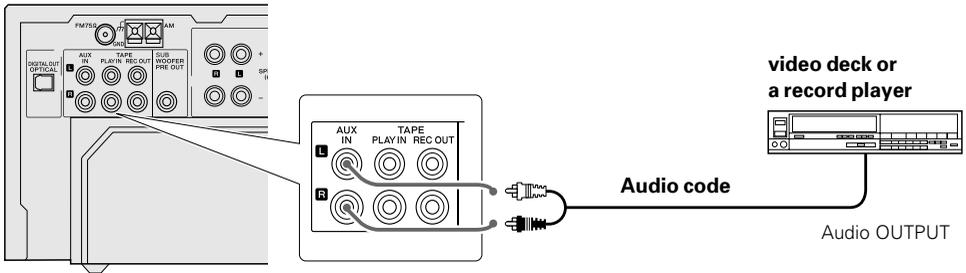
Connect a separately sold cassette deck with the accessory audio cord to the terminals TAPE PLAY IN and REC OUT at the rear of this unit. Please refer also to the operation instructions supplied with the cassette deck.



## Connection to an external source (audio equipment)

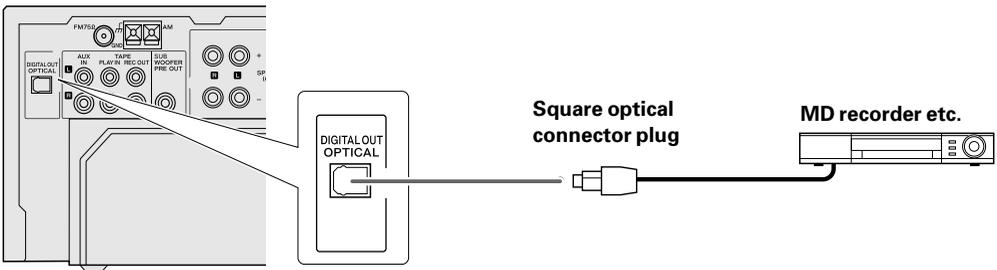
### In case of analog connection

You can use the input terminal AUX at the rear of this unit to connect a video deck or a record player (P-110) (sold separately) with built-in RIAA equalizer amplifier.

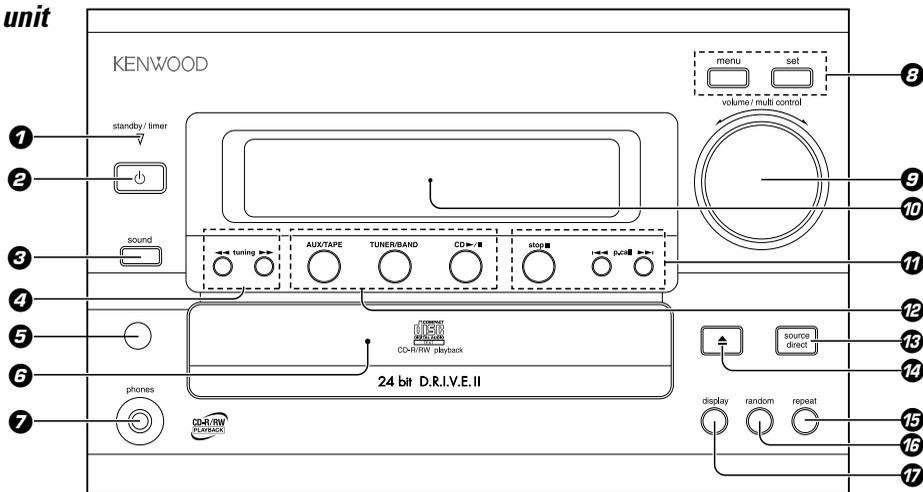


### In case of digital connection

You can use the digital output terminal OPTICAL at the rear of this unit.



## Main unit



### 1 Standby/timer indicator

Standby status (power OFF): Red  
 Timer standby status (power OFF): Green  
 Energized (power ON): Not lit

### 2 Power button

Press to set the unit to On or Standby. - 16

### 3 Sound key

Used to switch the sound. - 17

### 4 Tuning keys

**CD :** - 21

Used to fast-forward or fast-reverse the played audio.

**TUNER :** - 24

Used to select a radio station.

### 5 Remote sensor

This window receives signals from the remote control unit. - 15

### 6 CD tray

- 20

### 7 Headphone jack

Connect headphone with a stereo mini-plug (optionally available). - 16

### 8 Menu key

Used for application operations for each source. - 17

**set key** - 17

Used to confirm a function selected in the menu.

### 9 Volume/multi control knob

- 16 - 17

Used for volume adjustment and to select items in the setting menus.

### 10 Display panel

### 11 Stop key

- 20

Press to stop a disc.

When this is pressed in standby mode, the present time is displayed for 5 seconds.

### 12 Input selection keys

**CD :** skip CD tracks - 21

**TUNER :** select a preset radio station - 22

### 13 Source direct key

- 28

Selection of AUX (externally connected equipment) or tape.

**TUNER/BAND** - 22

Used to switch the broadcasting band (AM or FM) when listening to the radio.

**CD ►/||** - 20

Used to select CD for playback and for pausing.

### 14 Source direct key

- 17

Key for listening with high sound quality by eliminating additional circuits as far as possible.

### 15 Display key

- 20

To load or eject a CD.

### 16 Repeat key

- 32

Press for setting repeated playback.

### 17 Random key

- 33

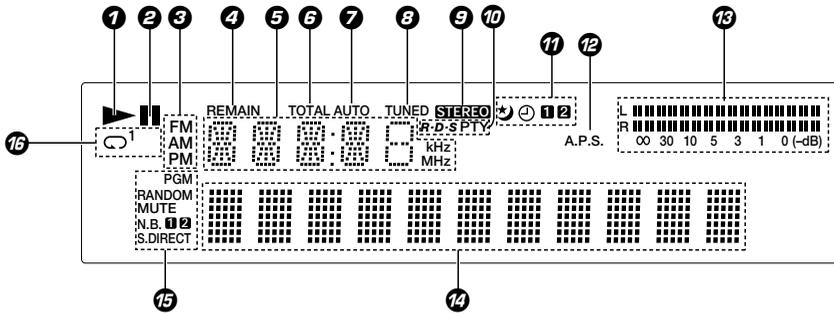
Press for setting playback of tracks in a random order.

### 18 Display key

- 21

The display contents of the display are switched.

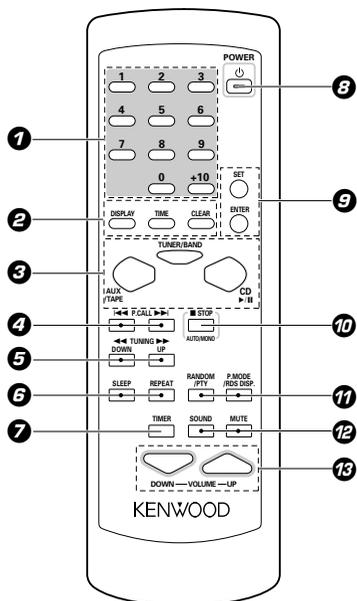
## Display



- ① Playback indication**
- ② Playback pause indication**
- ③ AM/FM (reception band) indication**  
AM/PM (morning/afternoon) indication
- ④ REMAIN (remaining time) indication**
- ⑤ Numerical display of frequency, time, track No., program No., etc.**
- ⑥ TOTAL (total recording time) indication**
- ⑦ AUTO (auto tuning) indication**
- ⑧ TUNED (radio broadcast tuned) indication**
- ⑨ STEREO (stereo broadcast reception) indication**
- ⑩ R-D-S (Radio Data System) indication, PTY (Program Type Identification) indication (For UK and Europe)**
- ⑪ ☾ (sleep timer) indication**  
⌚ 1 (timer 1) indication  
⌚ 2 (timer 2) indication
- ⑫ A.P.S. indication**  
Indication of automatic power saving status.
- ⑬ Level indication**
- ⑭ Character information display**  
Character information like the name of the received radio station (at the time of FM auto preset), CD title, etc. is displayed.
- ⑮ PGM indication**  
Indication at the time of program playback.  
**RANDOM indication**  
Indication at the time of random playback.  
**MUTE indication**  
Indication at the time of mute (no sound).  
**N.B.1/N.B.2 indication**  
Indication when the N.B. (natural bass) function is selected.  
**S.DIRECT indication**  
Indication when the source direct function is ON.
- ⑯ Repeat mode indication**  
⏮ 1 : Indication of one track repeat.  
⏮ : Indication of all repeat

## Remote control unit

The keys on the remote control unit with the same names as on the main unit have the same function as the keys on the main unit.



**7 TIMER key** — 39  
Used for execution and cancellation of the various timers.

**8 POWER key** — 16  
Press to set the unit to On or Standby.

**9 SET key** — 30  
Used for programmsetting. At the time of the standby, used for clock display.

**ENTER key** — 23  
Used for confirmation of setting.

**10 ■ STOP/AUTO/MONO key**  
**CD :** — 20  
Press to stop a disc.

**TUNER :**  
Used to switch AUTO tuning or MANUAL tuning (Monaural reception) — 24

**Standby mode :**  
When this is pressed in standby mode, the present time is displayed for 5 seconds.

**11 RANDOM/PTY key (For Europe and U.K.)**  
**CD :** — 33  
Press for setting playback of tracks in a random order.

**TUNER :** — 26  
Used at the time of PTY reception.

**RANDOM key (For U.S.A. and Canada)** — 33  
Press for setting playback of tracks in a random order.

**P.MODE/RDS DISP. key (For Europe and U.K.)**  
**CD :** — 30  
Press to program tracks in the desired sequence.

**TUNER :** — 27  
Used at the time of RDS reception.

**P.MODE key (For U.S.A. and Canada)** — 30  
Press to program tracks in the desired sequence.

**12 SOUND key** — 17  
Press to switch the sound effect.

**MUTE key** — 17  
Press to mute the audio temporarily.

**13 VOLUME keys** — 16  
Press to adjust the volume.

### Infrared ray system

**Model : RC-F0701 (For U.S.A. and Canada)**  
**: RC-F0701E (For UK and Europe)**

**1 Numeric keys** — 21 — 24  
Used to select a CD track number or recall a pre-set station of the tuner.

**2 DISPLAY key** — 21  
Used for display switching.

**TIME key** — 21  
Used for time display switching.

**CLEAR key** — 31  
Used to delete a program.

**3 Basic operation keys (input selectors, play/pause)**

**CD ►/|| key** — 20

**TUNER/BAND key** — 22

**AUX/TAPE key** — 28

**4 |◀◀ P.CALL ▶▶| keys** — 21 — 22

**5 ◀◀ TUNING ▶▶ keys** — 21 — 24

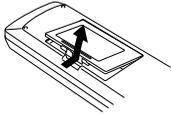
**6 SLEEP key** — 36

**REPEAT key** — 32

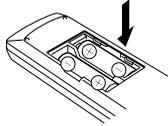
Press for setting repeated playback.

## Loading batteries

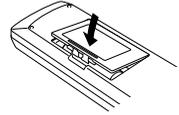
① Remove the cover.



② Insert batteries.



③ Close the cover.



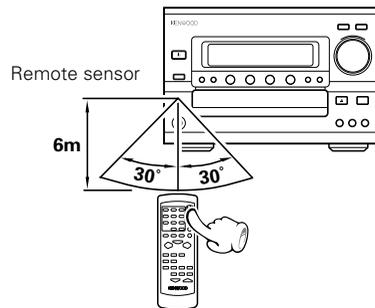
- Insert two R6 ("AA"-size) batteries following the polarity indications.

## Operation

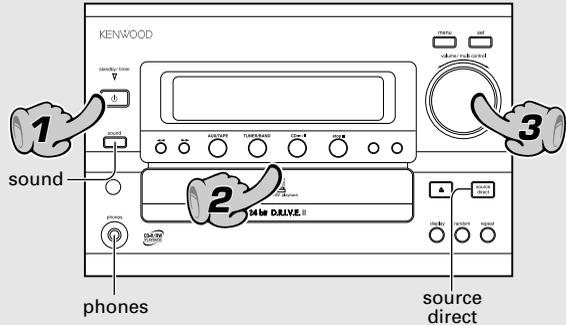
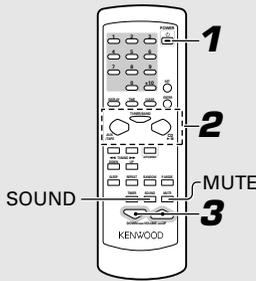
After plugging the power cord of this unit, press the **POWER** (⏻) key of the remote control unit to turn the system ON. When the system is turned ON, press the key of the function to be operated.

- When pressing more than one remote control keys successively, press the keys securely by leaving an interval of 1 second or more between keys.

## Operating range (approx.)



- The provided batteries are intended for use in operation checking, and their service life may be short.
- When the remote controllable distance becomes short, replace both of the batteries with new ones.
- If direct sunlight or the light of a high-frequency fluorescent lamp (inverter type, etc.) is incident to the remote sensor, malfunction may occur. In such a case, change the installation position to avoid malfunction.



### 1 Power ON (OFF)

When the power is ON and the key is pressed, the power becomes OFF (standby).

It takes a little time from power OFF operation until the power is switched off.

- For about five seconds after power ON, mute (no sound) status is applied for circuit protection.

#### One-touch operation function

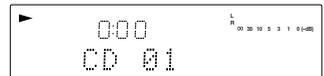
When one of the following keys is operated in power OFF (standby) condition, the power will be switched on, the source will be selected, and playback will start in case of CD.

CD▶/II key, TUNER/BAND key, AUX/TAPE key.

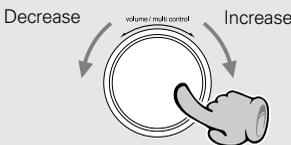
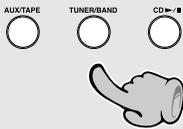


### 2. Select the source to be listened to.

- CD - 20
- TUNER - 22
- AUX/TAPE - 24

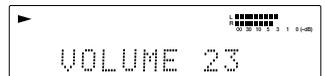


- \* The source can also be selected by pressing TUNER/BAND, CD▶/II, or AUX/TAPE on the remote control. (Playback will start automatically when CD▶/II is pressed.)

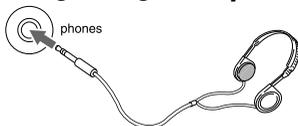


### 3. Adjust the volume.

- Rapid turning produces a large change in volume. (AI VOLUME function)
- A guide value (0 to MAX) is shown on the display.



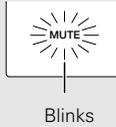
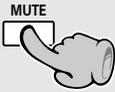
### Listening through headphone



- Insert the headphone plug into the headphone jack.
- The sound from all speakers are cut off.
- Turn the volume/multi control knob to adjust the volume.
- Lower the volume before you connect or disconnect plugs.
- Headphone with a stereo mini plug can be connected.

## Muting the sound temporarily

Remote control unit only

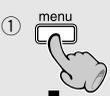


- Press again to resume the original volume.
- This is also canceled when the volume is changed.

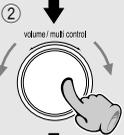
## Adjust the left/right volume balance

Main unit only

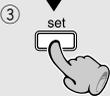
### ① Select "BALANCE" as follows.



- ① Press the "menu" key.
- ② Select "BALANCE" with the "volume/multi control" knob.



When the "volume/multi control" knob is turned, switching is done as follows.



"AUX INPUT ?"  
"TONE ?"  
"BALANCE ?"  
"TIME ADJUST ?"  
"TIMER SET ?"  
"A.P.S. SET ?"  
"DIMMER ?"

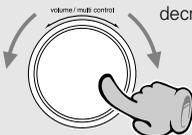
Return to the original status is made when no operation is performed within 20 seconds.

### ② Press the "set" key.

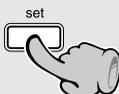
### ② Adjust the left/right volume balance with the "volume/multi" control knob.

The right volume decreases.

The left volume decreases.



### ③ Press the "set" key.

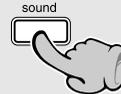


## Listening to the original sound of the source (source direct)

The sound from CD or another source can be heard as faithful as possible to the original sound by not passing it through the sound adjustment circuits of this unit.

Main unit only

### ① Press the "sound" key repeatedly to select "S.DIRECT".



Each press switches the modes as follows.

"N.B.1"  
"N.B.2"  
\* "TONE 1"  
\* "TONE 2"  
\* "TONE 3"  
"SOURCE DIRECT"  
"SOUND MODE OFF"

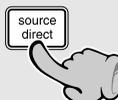


\* "TONE 1(2,3)" is not displayed when "BASS" and "TREBLE" both are set to "0".

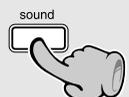
- When source direct is selected, N.B1, N.B2, and TONE1, TONE2, TONE3 are cancelled.
- To return to normal mode, press the "sound" key repeatedly to select "SOUND MODE OFF".

## Direct selection of the source direct function

Main unit only



- To return to normal mode, press the "sound" key repeatedly to select "SOUND MODE OFF".



## Adjusting the tone

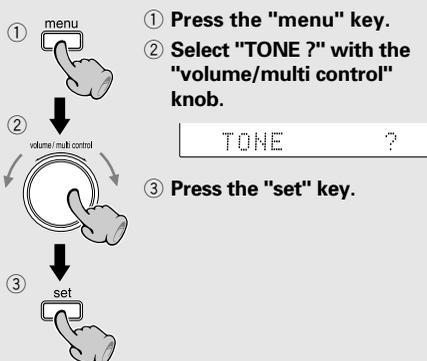
### TONE CONTROL

The low range (BASS) and the high range (TREBLE) each can be set to a desired level.  
Three types of tone control can be set in advance.

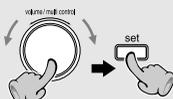
#### TONE CONTROL setting

Main unit only

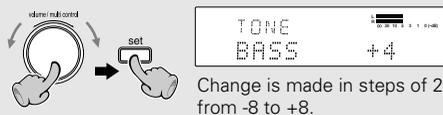
- ❶ Select "TONE ?" as follows.



- ❷ Select "TONE 1 ?" (or 2, 3) with the "volume/multi control" knob and press the "set" key.



- ❸ Adjust the level for the low range (BASS) with the volume/multi control knob and press the "set" key.



- ❹ Adjust the level for the high range (TREBLE) with the volume/multi control knob and press the "set" key.



- When the setting has been completed, return to the original display is made after display of "COMPLETE".

#### Listening with use of TONE CONTROL

Select and set the desired tone control setting set in advance.

Main unit only

- ❶ Press the "sound" key repeatedly to select "TONE 1", "TONE 2" or "TONE 3".

Each press switches the modes as follows.



\* "TONE 1(2,3)" is not displayed when "BASS" and "TREBLE" both are set to "0".

- To return to normal mode, press the "sound" key repeatedly to select "SOUND MODE OFF".

#### N.B. circuit (natural bass)

NB1 : The low range will be emphasized.

NB2 : The low range will be emphasized still further.

Main unit only

- ❶ Press the "sound" key repeatedly to select "N.B.1" or "N.B.2".

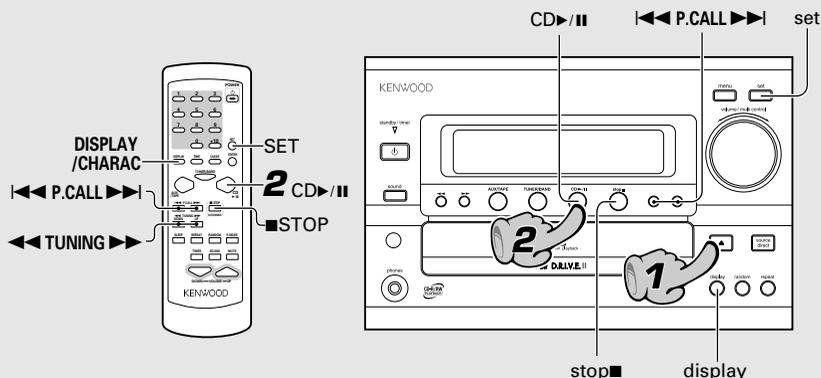
Each press switches the modes as follows.



\* "TONE 1(2,3)" is not displayed when "BASS" and "TREBLE" both are set to "0".

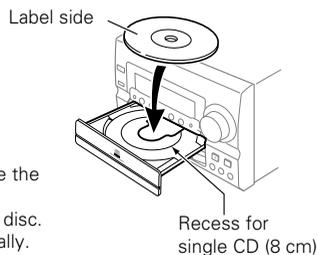
- To return to normal mode, press the "sound" key repeatedly to select "SOUND MODE OFF".





## 1. Load a disc.

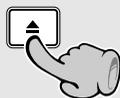
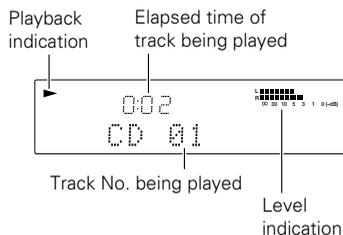
- 1 Open the CD tray.
- 2 Place a disc.
- 3 Close the CD tray.



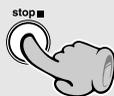
- Always press the ▲ key to close the CD tray.
- Do not touch the played side of disc.
- Be sure to place a disc horizontally. Placing it with an inclination will result in malfunction.

## 2. Start playback.

- After a few seconds, play starts from track No.1.



## To stop playback



## To pause playback



- Each press pauses and plays the CD alternately.

## To fast forward and backward

Main unit

Remote control

- Press and hold one of the keys during playback. Normal playback resumes at the point where the key is released.

## Skipping tracks

Main unit

Remote control

- The track in the direction of the key pressed is skipped, and the selected track will be played from the beginning.
- When the  $\lll$  key is pressed once during playback, the track being played will be played from the beginning.
- To skip further to a track located before the current track, press the  $\lll$  key quickly.

## Playback from desired track

Remote control unit only

Select the desired track No.

1	2	3
4	5	6
7	8	9
0	+10	

Press the numeric keys as shown below....

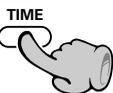
To select track No. 23  
: +10, +10, 3

To select track No. 30  
: +10, +10, +10, 0

## In regard to display of the CD time

Each time the "TIME/SPACE" key is pressed during CD playback, the time display on the display is switched.

Remote control unit only



- ① Elapsed time of the track  
: 1:23
- ② Remaining time of the track  
: REMAIN display 2:37
- ③ Total elapsed time of the disc  
: TOTAL display 23:50
- ④ Total remaining time of the disc  
:REMAIN TOTAL display 36:50

- Only ① and ② are displayed during random playback and single track repeat.
- At the time of program playback, ④ becomes the display of the total time for the programmed tracks.

## In regard to title display

When a disc conforming to CD TEXT is played and the display key is pressed during CD playback (or during stop), the character information recorded on the CD can be displayed on the display. Each time the display key is pressed, switching is done between the following items.

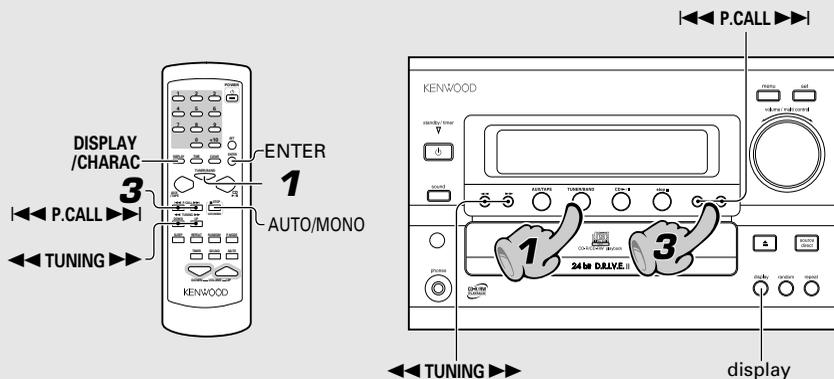
Main unit

Remote control

Disc title \*1

→ Track No. → Track title \*1

- \*1 The disc title is displayed during stop. The track title is scrolled during playback.



### 1. Select the tuner input.

Each press of the **TUNER/band** key switches the band as follows.

- ↔ FM
- ↔ AM

### 2. Preset a radio station in memory.

**Collective presetting of stations** - [23]

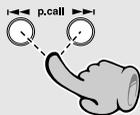
Follow the procedure in "**Collective presetting of stations**" to preset automatically the tunable radio stations in your area.

- Once the stations are stored by auto presetting, you are not required to repeat this procedure the next time you listen to radio. However when you shift to another location whereby the broadcast station frequencies are different, you will have to re-execute the presetting of stations.

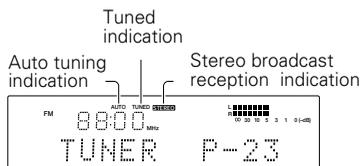
**One-by-one presetting (Manual preset)** - [24]

A station can also be tuned even when it is not preset. For details, read "**Tuning to a non-preset radio station (Auto tuning, Manual tuning)**".

### 3. Tuning (Preset Call)



- If radio stations have already been stored with auto presetting or manual presetting, select a station using the **◀▶▶** key. Each press of the same key switches the preset stations in sequence.



**When ▶▶▶ is pressed :** 1→2→3 ... 38→39→40→1...

**When ◀◀◀ is pressed :** 40 → 39 → 38 ..... 3 → 2 → 1 → 40.....

- When a key is held depressed, preset stations will be skipped at an interval of about 0.5 second.
- To select a preset station from the remote, use the **◀◀◀ P.CALL ▶▶▶** key or numeric keys.

## Collective presetting of stations

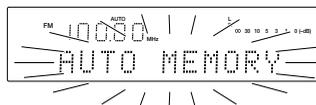
AUTO PRESET ..... For U.S.A. and Canada  
 AUTO MEMORY ..... For U.K. and Europe

Remote control unit only

① Select the tuner input.



② Press the "ENTER" key for more than 2 seconds



- A maximum of 40 stations of the band presently being received will be preset.
- When there are many stations and the intended station has not been preset, please also use "One-by-one presetting (Manual preset)".

Basic

## Channel space setting

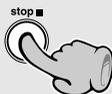
The space between radio channels has been set to the one that prevails in the area to which the system is shipped. However, if the current channel space setting does not match the setting in the area where the system is to be used, for instance when you move from area 1 or area 2 shown in the following table or vice versa, proper reception of AM/FM broadcasts cannot be expected. In this case, change the channel space setting in accordance with your area by referring to the following table.

Main unit only

① Select the tuner input.



② Press the "stop ■" key for more than 2 seconds.



Each press the "stop ■" key for more than 2 seconds switches the modes as follows.

- ① FM 50 k
- ② FM 100 k

- At FM 50 kHz, the corresponding AM frequency is 9 kHz.  
 At FM 100 kHz, the corresponding AM frequency is 10 kHz.

	Area	CHANNEL Space Frequency
①	USA, Canada and South American countries	FM: 100 kHz AM: 10 kHz
②	Other countries	FM: 50 kHz AM: 9 kHz

## Tuning to a non-preset radio station (Auto tuning, Manual tuning)

Select the tuning mode according to the radio wave receiving condition.

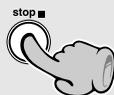
When the receiving condition is good:  
**AUTO mode**

When it is poor due to weak radio waves:  
**MANUAL mode**

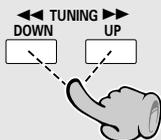
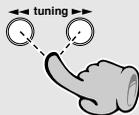
- ① Press the " ■ STOP (AUTO/MONO)" key during TUNER input.

Main unit

Remote control



- ② Tune a station.



Each press alternates the mode.

- ① "AUTO" : Stereo reception  
 ② "MANUAL" : Monaural reception

- In **MANUAL mode**, FM stations are received in monaural.

In **AUTO mode** :

The next preset station can be received automatically every time the TUNING (◀◀ or ▶▶) key is pressed.

In **MANUAL mode** :

Press the TUNING (◀◀ or ▶▶) key repeatedly until the desired station is received. The desired station can also be received by holding the TUNING (◀◀ or ▶▶) key depressed until its frequency is displayed.

## One-by-one presetting (Manual preset)

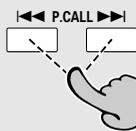
Remote control unit only

- ① Perform the procedure in "Tuning to a non-preset radio station (Auto tuning, Manual tuning)" to receive the station to be preset.

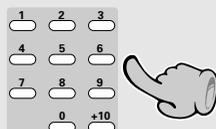
- ② Press the ENTER key during reception.



- ③ Select one of the preset numbers from 1 to 40.



or



- 4 Press the ENTER key again.

(Repeat steps ①, ②, ③ and 4 to preset other stations)

- A maximum of 40 stations of the band presently being received will be preset.

- If several stations are preset under the same number, the previous memory is replaced with the latest memory contents.

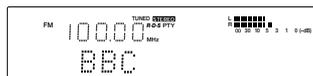
RDS is a system which transmits useful information (digital data) for FM broadcasts together with the broadcast signal. Tuners and receivers designed for RDS reception can extract the information from the broadcast signal for use with various functions such as automatic display of the station name.

***This unit is equipped with the following functions utilizing RDS data :***

**PTY (Program Type Identification) Search :**

→  26

The tuner automatically searches for a station which is currently broadcasting a specified program type (genre).



**PS (Program Service Name) Display :**

When an RDS broadcast is received, the station name is automatically displayed.

- Some functions may not be provided or be given different names depending on countries or areas.

## ***Before using RDS***

**For reception of RDS stations, the auto memory function must be used to preset the stations. During the auto memory function, the presetting sequence priority will be given to the RDS stations.**

## Searching for a desired program type (PTY search)

By specifying the type of program (genre) you want to listen to, the tuner automatically searches for a station which is currently broadcasting a program of the specified type.

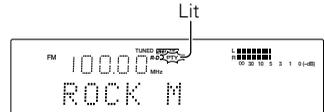
However, if a station is not preset by auto memory, "NO DATA" will light instead of the program (genre) type and PTY search is not available.

Set the reception band to FM. Preset RDS stations with the auto memory function. → 24

### 1. Select the PTY search mode.

Remote control unit only

RANDOM  
/PTY

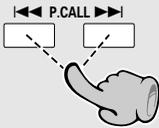


When an RDS broadcast is received, the program type is shown on the display. If no PTY data is available, or if the station is not an RDS station, "NONE" is displayed.

### 2. Select the desired program type.

Use program type table on the right for your convenience.

Selection with the ◀◀ or ▶▶ key.



Select while "PTY" is lit.

The desired program type can be selected with the ◀◀ or ▶▶ key from 29 types. Press the key and release it when the desired type is displayed.

Program type table

◀◀, ▶▶ keys	Program Type Name	Display
DOWN ↑ UP ▼	Pop Music	POP M
	Rock Music	ROCK M
	Easy Listening Music	EASY M
	Light Classical	LIGHT M
	Serious Classical	CLASSICS
	Other Music	OTHER M
	News	NEWS
	Current Affairs	AFFAIRS
	Information	INFO
	Sport	SPORT
	Education	EDUCATE
	Drama	DRAMA
	Culture	CULTURE
	Science	SCIENCE
	Varied	VARIED
	Weather	WEATHER
	Finance	FINANCE
	Children's programs	CHILDREN
	Social Affairs	SOCIAL
	Religion	RELIGION
	Phone In	PHONE IN
	Travel	TRAVEL
	Leisure	LEISURE
	Jazz Music	JAZZ
	Country Music	COUNTRY
	National Music	NATION M
	Oldies Music	OLDIES
	Folk Music	FOLK M
	Documentary	DOCUMENT

### 3. Start the search.

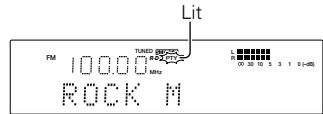


- No sound is heard while "PTY" is blinking.
- If a program of the desired type cannot be found, "NO PROG" is displayed, then after several seconds the display returns to the original display.
- If a program of the desired type is found, that program is received and the program type name display changes to the station name display.

### To change to a different program type :

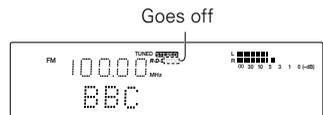
Repeat steps 1., 2., 3.

When searching for a Rock Music broadcast  
Display while the tuner is searching.



Program type name display.

When a station is received.

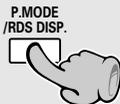


Station name display.

### Using the RDS display function

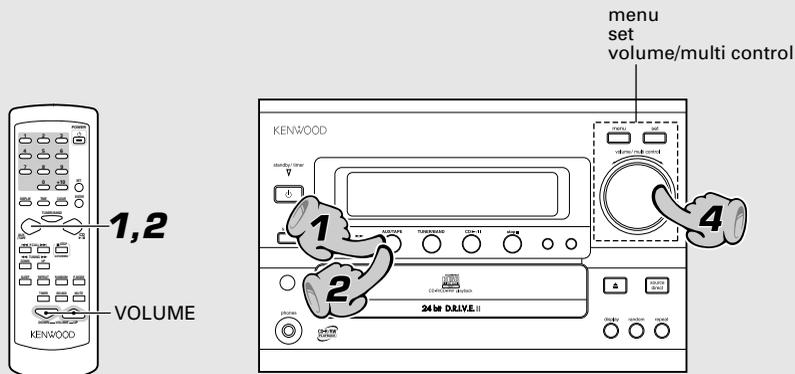
Remote control unit only

Press the P.MODE/RDS DISP. key



Each press alternates the mode.

- ① PS display
- ② Preset number display



## 1. Press the AUX/TAPE key.

When the AUX/TAPE key is pressed, the unit switches to external input or tape.

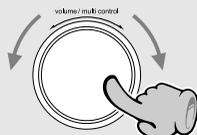


## 2. Select external input or tape.

When the AUX/TAPE key is pressed for at least two seconds, the input is switched as follows.

- ① AUX : Playback of the equipment connected to the AUX terminal at the rear.
- ② TAPE : Playback of the equipment connected to the TAPE terminal at the rear.

## 3. Start playback of the external source.

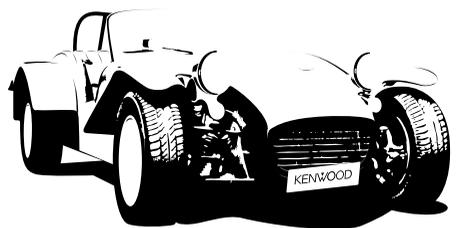


## 4. Adjust the volume.

### Adjustment of the input level at the time of AUX selection

When the output level of the source equipment connected to the AUX terminal does not match the input level of this unit (when the volume is too high or too low), it can be adjusted.

- ① Select "AUX INPUT ?" as follows.
  - ① Press the "menu" key.
  - ② Select "AUX INPUT ?" with the volume/ multi control knob.
  - ③ Press the "set" key.
- ② Adjust the input level with the volume/ multi control knob.  
The input level can be adjusted from -5 to +2.
- ③ Press the "set" key to confirm the input level.



## Listening to the desired sequence (program playback)

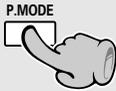
It is possible to listen to selected tracks from a disc in the desired order. (Max. 32 tracks)

Set the source CD in advance to stop status.

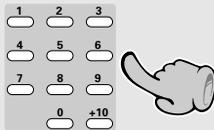


Remote control unit only

① Press the "P.MODE" key



② Press the numeric keys or the <<>, >>> key to select the track.



③ Press the "SET" key to confirm the selected track.

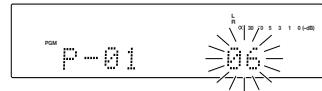
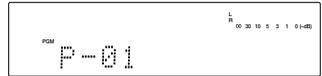
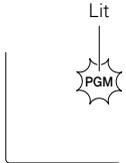


④ Repeat the steps ② to ③ to continue programming.

⑤ Press the CD >>|| key to start program playback.

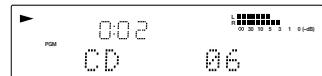


● "PGM" will light and PGM mode will be reached.



● Return to the original status is made when no operation is performed within 20 seconds.

● When no operation is performed for some time after confirmation, program stop status will be reached. To continue programming, follow the procedure for "To add a track to an existing program".



● Up to 32 tracks can be programmed. When "PGM FULL" is displayed, no more tracks can be programmed.

● If you made a mistake, press the CLEAR key and enter the track No. again.

● When a track No. is entered, the track will be added to the end of the existing program.

● Tracks will be played in the order they were programmed (following the program numbers).

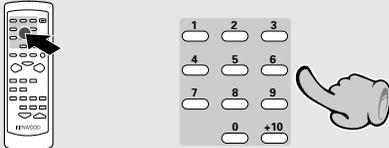
● When the "REPEAT" key is pressed during PGM mode playback or stop, the PGM mode playback can be repeated.

## To add a track to an existing program

Remote control unit only

Press in stop mode

- 1 Select the track number to be added with the numeric keys.



- 2 Press the "SET" key.

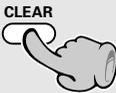


- Up to 32 tracks can be programmed. When "PGM FULL" is displayed, no more tracks can be programmed.
- If you made a mistake, press the CLEAR key and enter the track No. again.
- When a track No. is entered, the track will be added to the end of the existing program.

## To clear a programmed track

Remote control unit only

Press in stop mode

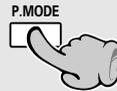


- Each time the key is pressed, the last track in the program is cleared.

## To clear the entire program

Remote control unit only

Press in stop mode



## Changing to the next track during playback of a track

Main unit

Remote control



- When the ►► key is pressed during playback, play will skip to the next track in the program.
- When the ◀◀ key is pressed once during playback, the track being played will be played from the beginning.

## Confirmation of the contents of the programmed tracks

Press the ◀◀, ►► keys after completion of programming.

Press in stop mode

Main unit

Remote control



- Each time a key is pressed, the programmed tracks will be displayed sequentially.

## Repeated playback

You can repeatedly listen to a favorite track or disc.

**1 track repeat** ..... The selected track will be repeated.

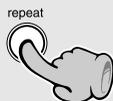
**All repeat** ..... The entire disc will be repeated.

Set the source CD in advance to stop status.

→ 20

Press the "REPEAT" key ("repeat" key) during playback or stop.

Main unit



Remote control



Each press switches the repeat mode.

- ① Off : ..... Repeat deactivated
- ② "🔄1" : .. One track repeat
- ③ "🔄" : ..... All repeat

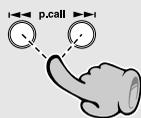
Repeat mode indication



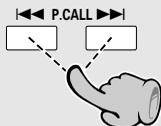
- To cancel repeat mode, press the "REPEAT" key ("repeat" key) repeatedly to make the repeat indication disappear.

## Changing to the next track during playback of a track

Main unit



Remote control



- When the ►► key is pressed during playback, play will skip to the next track.
- When the ◀◀ key is pressed once during playback, the track being played will be played from the beginning.

## Repeat playback of programmed tracks

① Perform programming. → 30

② Press the "REPEAT" key.



Each press switches the repeat mode.

- ① Program repeat ON.
- ② Program repeat OFF.

## Listening in random order (random mode)

The tracks can be played back in random order.

Set the source CD in advance to stop status.

→ 20

Press the "random" key ("RANDOM key) during playback or stop.

Main unit

Remote control

random

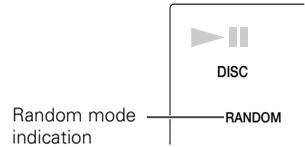


RANDOM



Each press switches the mode.

- ① "RANDOM" off ..... Normal playback
- ② "RANDOM" lid ..... Random playback



- To cancel random mode, press the "random" key ("RANDOM key) to make the RANDOM indication disappear.

## Changing to the next track during playback of a track

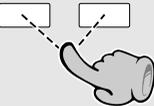
Main unit

Remote control

p.call



P.CALL



- When the ►► key is pressed during playback, the next track will be selected at random and will be played.
- When the ◀◀ key is pressed once during playback, the track being played will be played from the beginning.

## Repeated random playback

- ① Perform the operation for random playback.
- ② Press the "REPEAT" key.

REPEAT



Each press switches the repeat mode.

- ① Random repeat ON.
- ② Random repeat OFF.

## Setting auto power save (A.P.S.)

When the auto power save function is set to ON, the power is switched off (standby) automatically when about 30 minutes without any operation have passed after the end of CD playback.

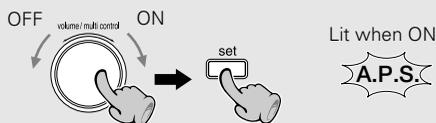
### ① Select "A.P.S, SET ?" as follows.

- ① Press the "menu" key.
  - ② Select "A.P.S, SET ?" with the "volume/multi control" knob.
- When the "volume/multi control" knob is turned, switching is done as follows.
- "AUX INPUT ?"
  - "TONE ?"
  - "BALANCE ?"
  - "TIME ADJUST ?"
  - "TIMER SET ?"
  - "A.P.S. SET ?"
  - "DIMMER ?"

Return to the original status is made when no operation is performed within 20 seconds.

### ③ Press the "set" key.

### ② Turn the "volume/multi control" knob to select ON or OFF and press the "set" key.



Auto power save operates when there is no operation for about 30 minutes after the following events.

#### When the input is CD

➡ During stop

#### When the input is tuner, tape, or external input

➡ When the volume/multi control level is the minimum level or mute.

## Adjusting the brightness of the display part (DIMMER)

When the display is felt to be too bright or too dim at night etc., the brightness can be adjusted.

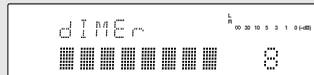
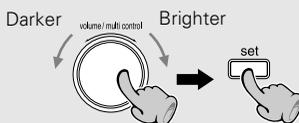
### ① Select "DIMMER ?" as follows.

- ① Press the "menu" key.
  - ② Select "DIMMER ?" with the "volume/multi control" knob.
- When the "volume/multi control" knob is turned, switching is done as follows.
- "AUX INPUT ?"
  - "TONE ?"
  - "BALANCE ?"
  - "TIME ADJUST ?"
  - "TIMER SET ?"
  - "A.P.S. SET ?"
  - "DIMMER ?"

Return to the original status is made when no operation is performed within 20 seconds.

### ③ Press the "set" key.

### ② Turn the "volume/multi control" knob to select the desired brightness and press the "set" key.



When the brightness has been increased



When the brightness has been decreased

- Adjustment is not possible when the power is off.

As the clock is not only used to show the time of the day but also used in timer operations, be sure to set the clock in advance.

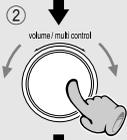
If you have made a mistake during the setting, start again from step 1.

Main unit only

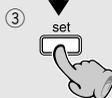
1 Select "TIME ADJUST ?" as follows.



1 Press the "menu" key.



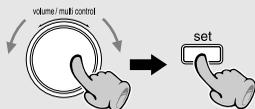
2 Select "TIME ADJUST ?" with the "volume/multi control" knob.



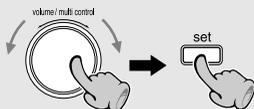
- "AUX INPUT ?"
- "TONE ?"
- "BALANCE ?"
- "TIME ADJUST ?"
- "TIMER SET ?"
- "A.P.S. SET ?"
- "DIMMER ?"

Return to the original status is made when no operation is performed within 20 seconds.

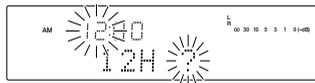
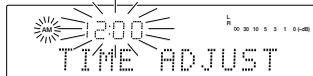
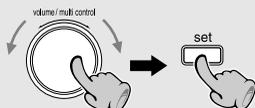
2 Turn the "volume/multi control" knob to select "12H ?" (12-hour display) or "24H ?" (24-hour display) and press the "set" key.



3 Turn the "volume/multi control" knob to adjust the "hour" setting. When "hour" has set, press the "set" key.



4 Turn the "volume/multi control" knob to adjust the "minute" setting. When "minute" has set, press the "set" key.



● When the "set" key in step 4 is pressed with a time signal, accurate setting can be made.

## Sleep timer (SLEEP)

The unit is turned OFF automatically after the specified period has elapsed.

### Timer playback (PROG. 1, PROG. 2) →

Playback of the selected input source of the CD, TUNER or AUX input starts at the specified time.

### AI timer playback (PROG. 1, PROG. 2) →

When timer playback starts, the volume level increases gradually until the set volume level is reached.

Adjust the clock before setting the timer → 

## Sleep timer (SLEEP)

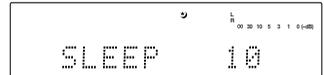
Set the number of minutes after which the unit is to be turned OFF.

Remote control unit only

Press the "SLEEP" key during CD playback, tuner reception, etc.



- The unit is turned OFF automatically after the set time has elapsed.



- Each press increases the timer period by 10 minutes. The sleep timer can be set up to 90 minutes.

→10 → 20 → 30 ..... 70 → 80 → 90 → Cancel

### To cancel

Turn the unit OFF or press the SLEEP key until the sleep timer is canceled.

The system has been set up so that the display is dimmed automatically while the sleep timer is activated.

Application

 When the power fails or the plug of the power cable is disconnected from the receptacle during power off (standby) after timer setting, the standby/timer indicator will flash green. In this case, repeat the time setting.

## Setting the timer program (PROG. TIMER)

In each of PROG.1 and PROG.2, the timer data including the operating period and played contents can be program and set to be activated or deactivated.

- Two timer settings can be reserved independently in two programs PROG.1 and PROG.2.
- Please make reservations with an interval of at least one minute, so that the operation times of PROG.1 and PROG.2 do not overlap.

Adjust the clock before setting the timer - [35](#)

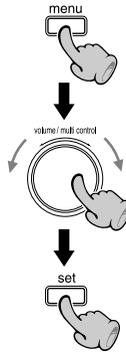
### 1. Make preparations for the play.

To listen to CD	To listen to radio	Playing the auxiliary input source
Insert a disc. (Program playback is not possible.) - <a href="#">20</a>	The station should be preset prior. - <a href="#">22</a>	Make timer setting of the component connected to the AUX/TAPE input jacks. - <a href="#">28</a>

### 2. Set the timer setting program number.

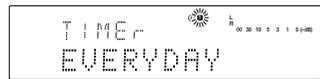
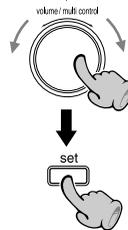
Main unit only

- 1 Press the "menu" key.
- 2 Turn the "volume/multi control" knob and select "TIMER SET?".  
  
Press the "set" key to confirm.
- 3 Turn the "volume/multi control" knob and select "PROG.1 SET (or 2)".  
  
Press the "set" key to confirm.



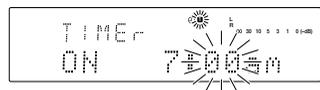
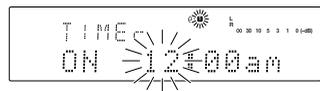
### 3. Select EVERYDAY or ONETIME execution of the programed timer.

- 1 Turn the "volume/multi control" knob and select "EVERYDAY" or "ONE TIME".  
  
Press the "set" key to confirm.



### 4. Set the ON time.

- 1 Turn the "volume/multi control" knob to adjust the "hour" setting.  
  
When "hour" has set, press the "set" key.
- 2 Turn the "volume/multi control" knob to adjust the "minute" setting.  
  
When "minute" has set, press the "set" key.



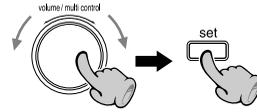
## 5. Set the OFF time.

- 1 Turn the "volume/multi control" knob to adjust the "hour" setting.

When "hour" has set, press the "set" key.

- 2 Turn the "volume/multi control" knob to adjust the "minute" setting.

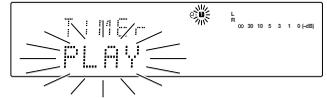
When "minute" has set, press the "set" key.



## 6. Select "PLAY" or "AI PLAY".

- 1 Turn the "volume/multi control" knob and select "PLAY" or "AI PLAY".

Press the "set" key to confirm.



- 1 "PLAY" : (Timer play)
- 2 "AI PLAY" : (Timer play with gradually increasing volume)

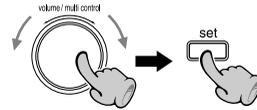
## 7. Make the desired reservation

- 1 Turn the "volume/multi control" knob to select the volume at the time of timer ON.

Press the "set" key to confirm.

- 2 Turn the "volume/multi control" knob to select the source to be play,

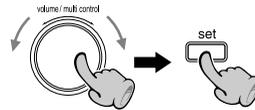
Press the "set" key to confirm.



- 1 "TUNER" : (Broadcasts)
- 2 "CD"
- 3 "AUX" : (External input / video, etc.)
- 4 "TAPE"

- 3 When TUNER has been selected, turn the "volume/multi control" knob to select the preset number and press the "set" key to confirm.

- 4 Press the "set" key to confirm the source.



Timer setting will be completed and "COMPLETE" will be displayed.



### 8. Put the unit in standby mode.



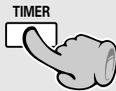
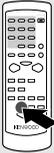
When the timer setting has been completed, confirm that the power is off (standby).

- The standby/timer indicator lights green.
- The SLEEP timer cannot be used when the timer function is being used for playback.
- When the time has not been set, the timer function cannot be used.
- The timer function will not operate when the same time is set for the ON time and the OFF time.

### Setting the PROG. timer again to the same contents

Press the TIMER key on the remote control and light "⏻ 0", "⏻ 0 0", or "⏻ 0 0 0".

Remote control unit only

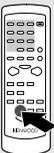


- The PROG. contents set last will be executed.
- Make the preparations for CD.

### When timer operation is not desired

While the power is on, press the TIMER key on the remote control to extinguish "⏻".

Remote control unit only



- The PROG. contents will be kept as long as no resetting is done.



When the power fails or the plug of the power cable is disconnected from the receptacle during power off (standby) after timer setting, the standby/timer indicator will flash green. In this case, repeat the time setting.

## Maintenance

### Maintenance of the unit

When the front panel or case becomes dirty, wipe with a soft, dry cloth. Do not use thinner, benzene, alcohol, etc. for these agents may cause discoloration.

### In regard to contact cleaner

Do not use contact cleaners because it could cause a malfunction. Be specially careful not to use contact cleaners containing oil, for they may deform the plastic component.

## Reference

### Caution on condensation

Condensation (of dew) may occur inside the unit when there is a great difference in temperature between this unit and the outside.

This unit may not function properly if condensation occurs. In this case, leave the unit for a few hours and restart the operation after the condensation has dried up.

Be specially cautious against condensation in a following circumstances:

When this unit is carried from one place to another across a large difference in temperature, when the humidity in the room where this unit is installed increases, etc.

### Memory backup function

#### Stored contents which are cleared immediately when power plug is unplugged from power outlet :

Clock display  
N.B. function

### Note related to transportation and movement

Before transporting or moving this unit, carry out the following operations.

- ❶ Remove the CD from the unit.
- ❷ Press the CD ►/II key.

CD NO DISC

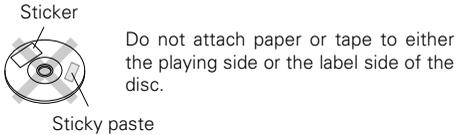
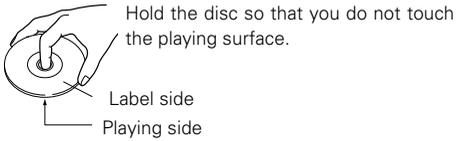
- ❸ Wait for some time and verify that the display appears as above.
- ❹ Wait a few seconds and turn the unit OFF.

#### Stored contents which will back-up after power plug is unplugged from power outlet:

State of power (on or standby), A, P, S, Last input selection, AUX level, Volume control value, Balance control, Receiving band, Frequency, Preset station, Program Timer, TONE

## Disc handling precautions

### Handling



### Cleaning



If there are fingerprint marks or foreign matter found on the disc, lightly wipe the disc with a soft cotton cloth (or similar) from the center of the disc outwards in a radial manner.

### Storage

When a disc is not to be played for a long period of time, remove it from the player and store it in its case.

## Never play a cracked or warped disc

During playback, the disc rotates at high speed in the player. Therefore, to avoid danger, never use a cracked or deformed disc or a disc repaired with tape or adhesive agent. Please do not use discs which are not round because they may cause malfunction.

## Discs which can be played with this unit

CD (12 cm, 8 cm), CD-R, CD-RW, and the audio part of CDV, CD-G, CD-EG and CD-EXTRA. Use discs that comply with the IEC standard, for example a disc carrying the  marking on the label surface.

## Disc accessories

The disc accessories (stabilizer, protection sheet, protection ring, etc.) which are marketed for improving the sound quality or protecting discs as well as the disc cleaner should not be used with this system because they may cause malfunction.

**What seems to be a malfunction is not always so. Before calling for service, check the following table according to the symptom of your trouble.**

### Operation to reset

The microcomputer may fall into malfunction (impossibility to operate, erroneous display, etc.) when the power cord is unplugged while unit is ON or due to an external factor. In this case, execute the following procedure to reset the microcomputer and return it to normal condition.

- Please note that resetting the microcomputer clears the contents stored in and it returns to condition when it left the factory.

**Unplug the power cord from the power outlet, then while holding the set key on the main unit depressed, plug the power cord again.**

### Amplifier section/Speakers

Symptom	Cause	Remedy
<b>Sound is not produced.</b>	<ul style="list-style-type: none"> <li>● The speaker cords are disconnected.</li> <li>● The volume control of this set is not adjusted properly.</li> <li>● The <b>MUTE</b> switch of remote control unit is switched ON.</li> <li>● The headphone plug is inserted into the jack.</li> </ul>	<ul style="list-style-type: none"> <li>● Connect properly referring to "System connection".  8</li> <li>● Set the sound volume to an appropriate</li> <li>● Switch <b>MUTE</b> OFF.  17</li> <li>● Unplug the headphone plug.  16</li> </ul>
<b>The "standby/timer" indicator blinks in red and no sound is output.</b>	<ul style="list-style-type: none"> <li>● The speaker cord is short-circuited.</li> </ul>	<ul style="list-style-type: none"> <li>● Turn power off and re-connect the speaker cord.  9</li> </ul>
<b>The "standby/timer" indicator blinks in green.</b>	<ul style="list-style-type: none"> <li>● There was a power failure.</li> <li>● The power cord was unplugged from the outlet.</li> </ul>	<ul style="list-style-type: none"> <li>● Adjust the present time again.  35</li> <li>● Adjust the present time again.  35</li> </ul>
<b>No sound from the headphones.</b>	<ul style="list-style-type: none"> <li>● The headphone plug is inserted incompletely.</li> </ul>	<ul style="list-style-type: none"> <li>● Insert correctly.  16</li> </ul>
<b>Sound is not produced from the left or right speakers.</b>	<ul style="list-style-type: none"> <li>● The speaker cords are disconnected.</li> <li>● Left/right volume balance is not adjusted properly.</li> </ul>	<ul style="list-style-type: none"> <li>● Connect properly referring to "System connection".  8</li> <li>● Adjust the left/right volume balance.  17</li> </ul>
<b>Power is suddenly interrupted.</b>	<ul style="list-style-type: none"> <li>● The A.P.S. function is activated</li> </ul>	<ul style="list-style-type: none"> <li>● Cancel the A.P.S. function.  34</li> </ul>
<b>The clock display blinks without changing the figures.</b>	<ul style="list-style-type: none"> <li>● The power plug was unplugged from the outlet while the power switch was ON, or there was a power failure.</li> </ul>	<ul style="list-style-type: none"> <li>● Adjust the present time referring to "Clock adjustment".  35</li> </ul>
<b>Timer operation is not possible.</b>	<ul style="list-style-type: none"> <li>● The present time has not been adjusted or there was a power failure.</li> <li>● The timer ON time and OFF time have not been set.</li> <li>● The same setting is used for the timer ON time and the timer OFF time.</li> <li>● The timer execution was not set up.</li> </ul>	<ul style="list-style-type: none"> <li>● Adjust the present time referring to "Clock adjustment".  35</li> <li>● Set the timer ON time and OFF time.  37</li> <li>● Set the timer OFF time later than the timer ON time.  37</li> <li>● Refer to "Setting the timer program (PROG. TIMER)" and select "ON" for "PROG. 1" or "PROG. 2".  37</li> </ul>

**Tuner section**

Symptom	Cause	Remedy
Radio stations cannot be received.	<ul style="list-style-type: none"> <li>● The antennas have not been connected.</li> <li>● A proper broadcasting band has not been selected.</li> <li>● The frequency of the station to be received is not tuned.</li> <li>● The space between radio channels is not suitable for the area where you live.</li> </ul>	<ul style="list-style-type: none"> <li>● Connect antennas. → </li> <li>● Select a band. → </li> <li>● Tune to the frequency of the desired station. → </li> <li>● Refer to "Channel space setting" and reset the channel space. → </li> </ul>
Noise interferes.	<ul style="list-style-type: none"> <li>● Car ignition noise.</li> <li>● Influence of an electric appliance.</li> <li>● A TV set is installed near the system.</li> </ul>	<ul style="list-style-type: none"> <li>● Install the outdoor antenna in an apart position from the road. → </li> <li>● Switch the suspected electric appliance OFF.</li> <li>● Install the TV or the system at an increased distance between them.</li> </ul>
A station has been preset but it cannot be received by pressing the P.CALL key.	<ul style="list-style-type: none"> <li>● The frequency of the preset station is not tunable.</li> <li>● The preset memory has been cleared because the power cord has been unplugged for a long period.</li> </ul>	<ul style="list-style-type: none"> <li>● Preset stations with tunable frequencies. → </li> <li>● Preset stations again. → </li> </ul>

**CD player**

Symptom	Cause	Remedy
A CD is placed in the player but it cannot be played.	<ul style="list-style-type: none"> <li>● The disc is placed upside down.</li> <li>● The disc position is displaced.</li> <li>● The disc is extremely dirty.</li> <li>● The disc is scratched.</li> <li>● Dew is condensed on the optics lens.</li> </ul>	<ul style="list-style-type: none"> <li>● Place the disc properly, with the label side facing upward. → </li> <li>● Place the disc properly. → </li> <li>● Clean the disc referring to "Disc handling precautions". → </li> <li>● Try another disc.</li> <li>● Refer to "Caution on condensation" and remove the condensation by evaporation. → </li> </ul>
Sound is not produced.	<ul style="list-style-type: none"> <li>● The disc has not been placed.</li> <li>● The player is not put to the play mode.</li> <li>● The disc is extremely dirty.</li> <li>● The disc is scratched.</li> </ul>	<ul style="list-style-type: none"> <li>● Place a disc in the CD player. → </li> <li>● Press the CD ►/II key. → </li> <li>● Clean the disc referring to "Disc handling precautions". → </li> <li>● Try another disc.</li> </ul>
Sound skips.	<ul style="list-style-type: none"> <li>● The disc is dirty.</li> <li>● The disc is scratched.</li> <li>● The player is subject to vibration.</li> </ul>	<ul style="list-style-type: none"> <li>● Clean the disc referring to "Disc handling precautions". → </li> <li>● Try another disc.</li> <li>● Install the unit in a place not subject to vibrations.</li> </ul>

**Remote control unit**

Symptom	Cause	Remedy
Remote control operation is not possible.	<ul style="list-style-type: none"> <li>● Batteries are exhausted.</li> <li>● The remote control is too far away from the system, the controlling angle is deviated or there is an obstacle in between.</li> <li>● There is no CD set in the component to be played.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace with new batteries. → </li> <li>● Operate the unit inside the remote control-able range. → </li> <li>● Set a CD in the component to be played. → </li> </ul>

**For the U.S.A.**

**Note to CATV system installer**

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

