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#### **Note:**

- "EB" on the packaging indicates the United Kingdom.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

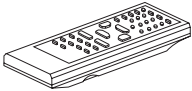
## Dear Customer

Thank you for purchasing this product.  
For optimum performance and safety, please read these instructions carefully.

## Supplied Accessories

Please check and identify the supplied accessories.  
Use numbers indicated in parentheses when asking for replacement parts.

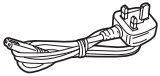
- Remote control transmitter (N2QAHB00048)..... 1 pc.



- AC mains lead..... 1 pc.

### Note:

- The included AC mains lead is for use with this unit only.  
Do not use it with other equipment.



For United Kingdom (VJA0733)



For Australia and New Zealand  
(K2CJ2DA00010)



For Continental Europe (K2CQ2CA00002)

## Precautions

- Avoid using or placing this unit near sources of heat. Do not leave it in an automobile exposed to direct sunlight for long time with the doors and windows closed as this may deform the cabinet.
- Avoid cuts, scratches, or poor connections in the AC mains lead, as they may result in possible fire or electric shock hazard. Also, excessive bending, pulling or splicing of the cord should be avoided.
- Do not unplug the AC mains lead by pulling on the cord. To do so may cause premature failure or shock hazard.
- Do not operate this unit on AC outlet in a bathroom, as a potential shock hazard may result.
- When not in use, disconnect the AC mains lead from the household AC outlet.

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

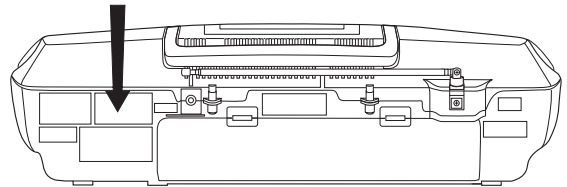
TÄMÄ LAITE ON TARKOITETTU KÄYTETTÄVÄKSI LEUDOSSA ILMASTOSSA.

DETTE APPARATET ER BEREGNET TIL BRUK UNDER MODERATE KLIMAFORHOLD.



(Back of product)

## LUOKAN 1 LASERLAITE KLASS 1 LASER APPARAT



DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅRNING. NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION, UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO!	AVATTAESSA JA SUOJALUKKUS OHITETTAESSA OLET ALTIINA NÄKYMÄTÖNTÄ LASERSÄTELYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING	OSYNLIG LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRÄKTA EJ STRÅLEN.
ADVARSEL	USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN. RQLS0218

Inside of product  
Tuotteen sisällä  
Produktets inside

This product may receive radio interference caused by mobile telephones during use. If such interference is apparent, please increase separation between the product and the mobile telephone.

### CAUTION!

**THIS PRODUCT UTILIZES A LASER.  
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.  
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.**

### WARNING:

**TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.**

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## Caution for AC Mains Lead



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### (For United Kingdom)

#### ("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5-ampere fuse is fitted in this plug. Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

### CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below.

If in any doubt please consult a qualified electrician.

### IMPORTANT


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

Blue: Neutral, Brown: Live.

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

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

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

**WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.**

**THIS PLUG IS NOT WATERPROOF — KEEP DRY.**

#### Before use

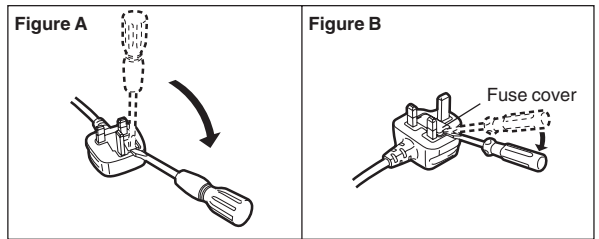
Remove the connector cover.

#### How to replace the fuse

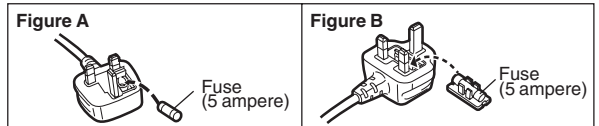
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



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## Maintenance

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### If the surfaces are dirty

To clean this unit, wipe with a soft, dry cloth.

- Never use alcohol, paint thinner or benzene to clean this unit.
- Before using chemically treated cloth, read the instructions that comes with the cloth carefully.

### For a cleaner crisper sound

Clean the heads after every 10 hours of use to assure good quality playback and recording.

Use a cleaning tape (not included).

### Cassette tape care

- Tapes exceeding 100 minutes are thin and can break or get caught in the mechanism.
- Tape slack can get caught up in the mechanism and should be taken up before the tape is played.
- Endless tapes can get caught up in the deck's moving parts if used incorrectly.

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## CD Selection

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Choose CDs with this mark: (A).

This unit can play CD-DA (digital audio) format audio CD-R and CD-RW that have

been finalized (a process that enables CD-R/CD-RW players to play audio CD-R and CD-RW) upon completion of recording. It may not be able to play some CD-R or CD-RW due to the condition of the recording.



#### Do not

- use CDs in irregular shape.
- use CDs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.
- attach scratch-proof covers or any other kind of accessory.
- write anything on the CD.
- clean CDs with liquids. (Wipe with a soft, dry cloth.)
- use CDs printed with label printers available on the market.

# Location of Controls

## Main Unit

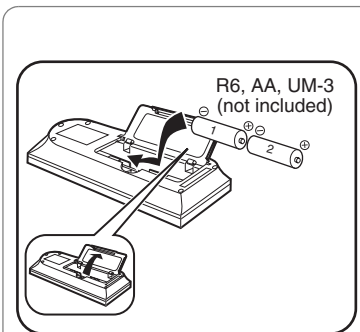
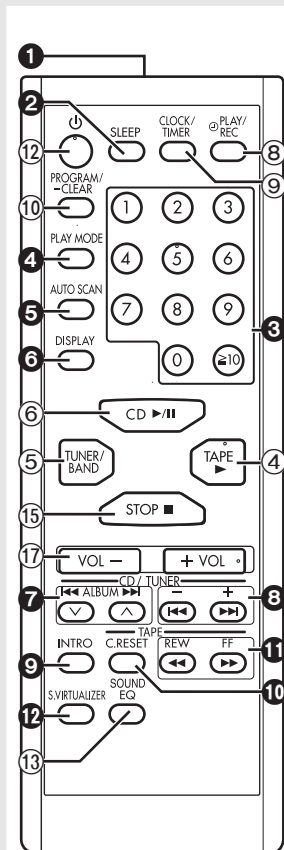
- ① Deck
- ② Deck eject button (▲ DECK) ..... (→ 10)
  - Press [▲ DECK] to open the deck.
  - (The unit comes on.)
  - Then, load a cassette and close the deck by hand.
- ③ Record/record pause button (●/||) ..... (→ 10, 11)
- ④ Cassette play button (▶ TAPE)..... (→ 10)
  - Press [▶ TAPE] to start play.
- ⑤ Band button (TUNER BAND) ..... (→ 7)
  - Press [TUNER BAND] to select “FM” or “AM”.
- ⑥ CD play/pause button (CD ▶/||)..... (→ 8, 9)
  - Press [CD ▶/||] to start play.
  - Plays to the end of the CD and stops.
  - Press [CD ▶/||] to pause halfway during play.
  - Press again to resume play.

- ⑦ CD recording mode button (CD REC MODE)..... (→ 11)
- ⑧ Play timer/record timer button (⏵ PLAY/REC) .... (→ 13)
- ⑨ Clock/timer button (CLOCK/TIMER) ..... (→ 12, 13)
- ⑩ CD program/clear, tuner preset button  
(- MEMORY - CLEAR) ..... (→ 7, 9)
- ⑪ Speaker  
Note:
  - These speakers do not have magnetic shielding.
  - Do not place them near televisions, personal computers or other devices easily influenced by magnetism.
- ⑫ Standby/on switch (⏻/⏻)..... (→ 7, 9)
- ⑬ Sound equalizer button (SOUND EQ)..... (→ 14)
- ⑭ Tuning/CD search, Rewind/fast-forward buttons (REW/-/◀◀, ▶▶/+/FF)..... (→ 7, 8, 10)

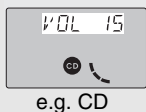
## Remote Control

- ① Transmission window  
Aim at the sensor, avoiding obstacles, at a maximum range of 7 meters directly in front of the unit.
- ② Sleep timer button (SLEEP)..... (→ 13)
- ③ Numeric buttons..... (→ 7, 8, 9)
- ④ CD/MP3 play mode/FM mode button (PLAY MODE)..... (→ 7, 8, 9, 11)
- ⑤ Auto scan button (AUTO SCAN)..... (→ 7)
- ⑥ Display select button (DISPLAY)..... (→ 10, 12)
  - Press [DISPLAY] to display the clock on the Display panel ⑩.
- ⑦ Preset channel select/album skip buttons (√/◀◀ ALBUM, ALBUM ▶▶/∧)..... (→ 7, 8)
- ⑧ Tuning/CD skip, search/MP3 track skip/clock, timer adjust buttons (-/|◀◀, ▶▶/|+)..... (→ 7, 8, 9, 12)
- ⑨ MP3 intro play button (INTRO) ..... (→ 9)
- ⑩ Tape counter reset button (C.RESET) ..... (→ 10)
  - Press [C.RESET] to reset the tape counter.
  - The counter resets to “000”.
- ⑪ Rewind/fast-forward buttons (◀◀/REW, ▶▶/FF) ..... (→ 10)
- ⑫ Sound virtualizer button (S.VIRTUALIZER)..... (→ 14)

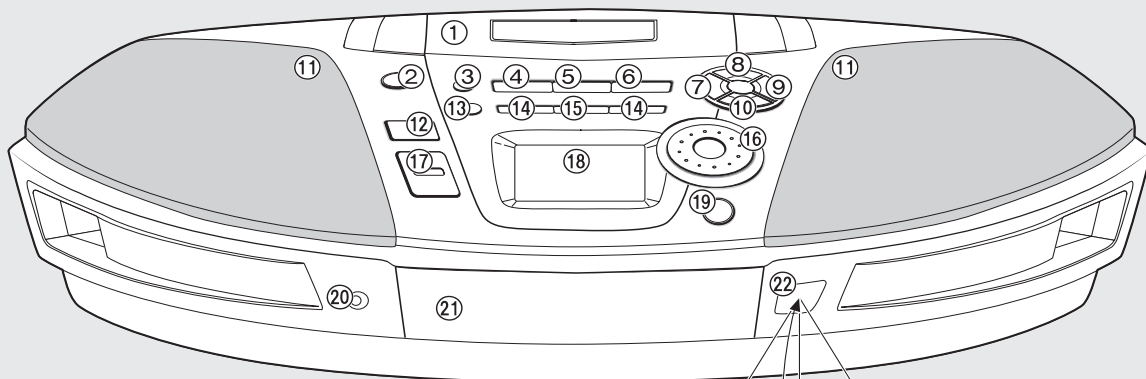
When the unit is supplied with AC Power, the button such as ④ function in the same way as the controls on the main unit. To save power, the unit cannot be turned on from the remote control when batteries are used.



- ⑮ **CD/Tape mode select/stop button**  
 (■ TAPE/CD) ..... (→ 8, 9, 10, 11)  
 • Press [■ TAPE/CD] to stop play.
- ⑯ **Time adjust, Preset channel select/CD track select dial**  
 (TIME/PRESET TUNE ← TRACK SKIP →)..... (→ 7, 8, 9, 11, 12)
- ⑰ **Volume control buttons (+, – VOLUME)..... (→ 7, 8, 10)**  
 • Press [+ , – VOLUME] to adjust to the desired volume for CD, Tuner or Cassette.

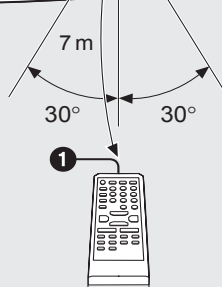


- ⑱ **Display panel**
- ⑲ **CD tray open/close button (▲ CD) ..... (→ 8, 11)**  
 • Press [▲ CD] to open the tray.  
 (The unit comes on.)  
 Load a CD and press [▲ CD] to close the tray.
- ⑳ **Standby indicator (⏻) (RX-ES29)**  
 When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.
- Standby/on indicator (⏻/I) (RX-ES23)**  
 The indicator lights green when the unit is turned on. When the AC power supply is used, it functions as an AC connection indicator. (The indicator colour changes to red when the unit is turned off.)
- ㉑ **CD tray**
- ㉒ **Remote control signal sensor (SENSOR)**



**Use**

- Keep the transmission window and the unit's sensor free from dust.
- Operation can be affected by strong light sources, such as direct sunlight, and the glass doors of cabinets.



**Batteries**

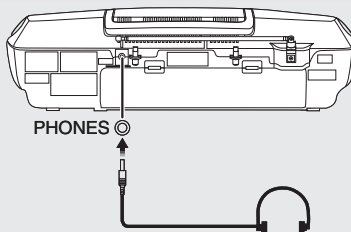
Insert so the poles (+ and –) match those in the remote control.

Remove if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

Replace if the unit does not respond to the remote control even when held close to the front panel.

**Do not**

- put heavy objects on the remote control.
- take the remote control apart.
- spill liquids onto the remote control.



**To Use Headphones (not included)**  
**Reduce volume before connection.**  
 Plug type: 3.5 mm stereo

**Note:**

- Avoid listening for prolonged periods of time to prevent hearing damage.

## Use of Batteries

- If this unit is not used for a long period of time or is used only from an AC power source, remove all the batteries to prevent potential damage due to possible battery leakage.
- Align the poles (+ and -) correctly when inserting the batteries.
- Do not mix old and new batteries or different types of batteries.
- Do not recharge ordinary dry cell batteries.
- Do not heat or disassemble the batteries. Keep them away from flame or water.
- Do not keep together with metallic objects such as necklaces.
- Do not use rechargeable type batteries.
- Do not use batteries if the covering has peeled off.

Mishandling of batteries can damage other items, cause damage to the unit, and may cause a fire through short-circuiting or electrolyte leakage. If electrolyte leaks from the batteries, consult your dealer. Wash thoroughly with water if electrolyte comes in contact with any part of your body.

## Power Sources

**FOR THE UNITED KINGDOM ONLY.  
READ THE CAUTION FOR THE AC MAINS LEAD ON  
PAGE 3 BEFORE CONNECTION.**

### To operate the unit on AC power ①

Connect the AC mains lead.

- ①: Household AC outlet
- ②: AC mains lead (included)


### To use batteries (not included) ②

Disconnect the AC mains lead from unit to operate on battery power. The remote control cannot turn the unit on when batteries are used.

### To remove the batteries A

Open the battery cover, insert a finger into the hole in the bottom of the unit and push the batteries out.

#### Battery life

“” flashes on the display when the batteries are running down. Then, the unit turns itself off and displays “U01”. Replace all the batteries with new ones.


## Memory Batteries

Memory batteries retain memory (clock/timer/CD/radio settings) during power supply interruption.

These batteries do not power the unit.

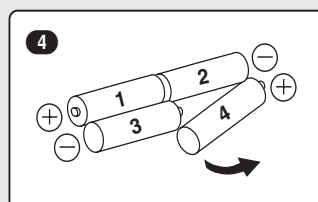
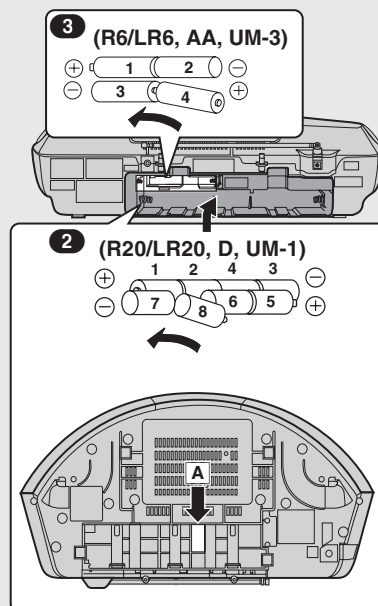
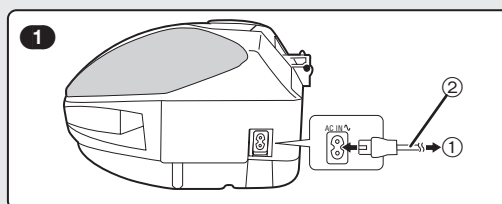
\* Memory batteries are not included.

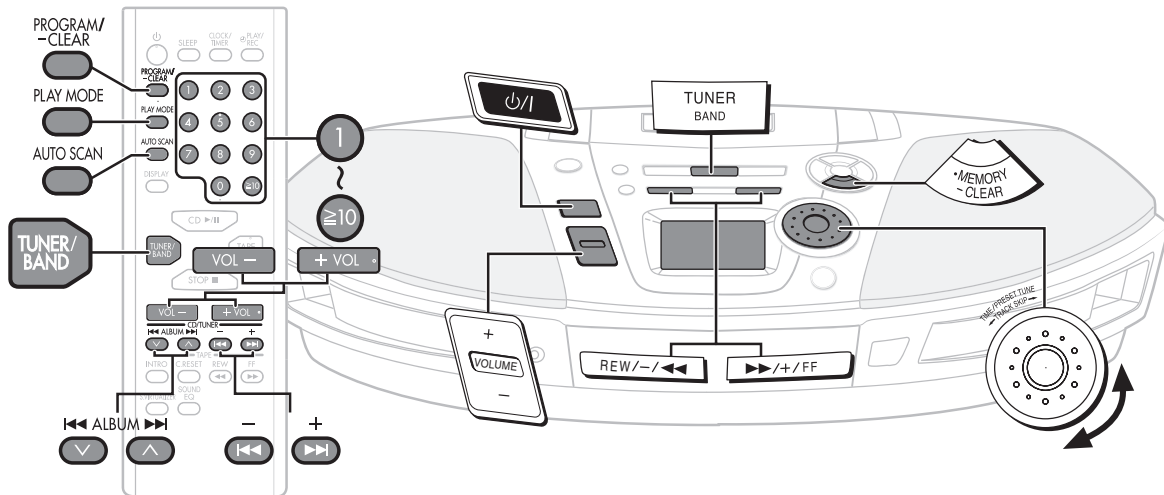
### To replace the batteries ③

- The memory batteries last for about 1 year.
- Connect the unit to AC power before replacing the batteries.
- Extend the memory battery life by always pressing  to turn the unit off before disconnecting the unit from the AC power source or replacing the power batteries.

### To remove the batteries ④

Lift the negative end of the number 4 battery to remove batteries.





## The Radio

### Preparation:

- When using batteries, press [POWER].
- Press [TUNER BAND] to select “FM” or “AM”.

### Manual tuning

- 1 Press [REW/-/◀] or [▶/+/FF] to select a station.

#### To tune automatically

Press and hold [REW/-/◀] or [▶/+/FF] until the frequency starts changing rapidly.

- Auto tuning may be interrupted when there is excessive interference.
- To cancel auto tuning, press [REW/-/◀] or [▶/+/FF] once again.

- 2 Press [+ , - VOLUME] to adjust volume.

### To use auto scan

You can search for a station by listening to all tuned-in stations for 8 seconds each.

- 1 Press [AUTO SCAN].
- 2 Press [AUTO SCAN] when you find the desired station.

Auto scan ends when it reaches the original frequency again. To stop during the process, press [AUTO SCAN].

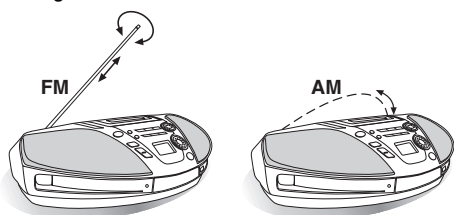
### To improve FM sound quality

Press [PLAY MODE] to display “MONO”.

Monaural sound is selected and noise reduces when reception is weak.

Press [PLAY MODE] again to cancel the mode.

- To improve reception
  - FM : Change the length and direction of the antenna.
  - AM : Change the direction of the unit.



- AM reception is briefly interrupted if [▲ DECK] is pressed.
- To improve reception when using the unit in a building or vehicle, place it near a window.

### Preset tuning

Up to 16 stations can be set in the FM and AM band.

- 1 Press [REW/-/◀] or [▶/+/FF] to tune to the required station.

- 2 Press [• MEMORY - CLEAR].

- 3 While “PGM” is flashing

Turn [TIME/PRESET TUNE ← TRACK SKIP →] to select the channel and press [• MEMORY - CLEAR] or on remote control, press the numeric buttons to select channels.

- For channels 1 to 9, press the corresponding number.
- For channels 10 to 16, press [≥10], then the two digits.

If “PGM” goes off during presetting, return to step 1.

### To select channels

Turn [TIME/PRESET TUNE ← TRACK SKIP →] to select the channel or on remote control, press the numeric buttons to select channels.

### To use preset scan

You can search for a station by listening to all preset channels for 8 seconds each.

- 1 Press and hold [√/◀◀ ALBUM] or [ALBUM ▶▶/∧] until “PS” appears on the display.

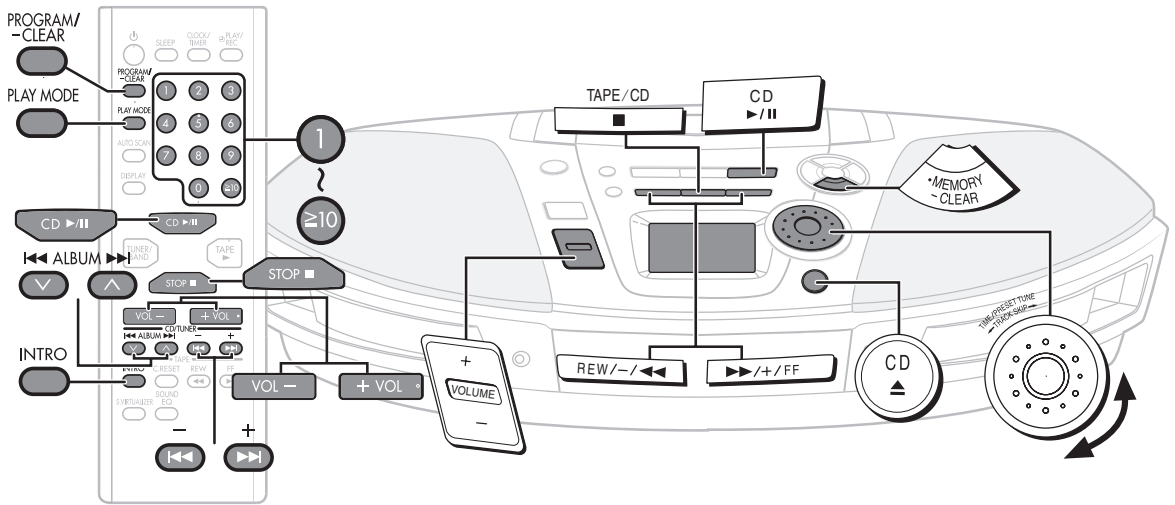
- 2 Press [√/◀◀ ALBUM] or [ALBUM ▶▶/∧] when you find the desired channel.

Preset scan ends after searching through each preset channel once. To stop during the process, press [√/◀◀ ALBUM] or [ALBUM ▶▶/∧].

### To skip the preset channel,

- 1 Select the desired station.
- 2 Press [• MEMORY - CLEAR].
- 3 While “PGM” is flashing
  - Turn [TIME/PRESET TUNE ← TRACK SKIP →] to display “\_”.
- 4 Press [• MEMORY - CLEAR].

To select the skipped channel, Press the numeric buttons.



## CDs and MP3

To play a disc **CD-DA** **MP3**

### 1 Press [▲ CD] to open the tray.

(The unit comes on.)

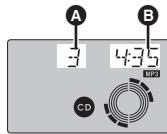
- Label must face upward (→ right).
- Load a CD and press [▲ CD] to close the tray.



### 2 Press [CD ▶/||] to start play.

Plays to the end of the CD and stops. When playing MP3, "MP3" is displayed.

- A**: Track number
- B**: Elapsed play time



e.g. MP3

### 3 Press [+ , - VOLUME] to adjust volume.

### One touch play (when using AC power)

When a CD is loaded, press [CD ▶/||].

To	Operations
stop play	Press [■ TAPE/CD].
pause play	Press [CD ▶/  ] during play.
skip tracks*	Turn [TIME/PRESET TUNE ← TRACK SKIP →] clockwise (forward) or counter-clockwise (backward). On remote control, press [-/ <<] or [▶/ +].
search through tracks <b>CD-DA</b>	Press and hold [REW/-/<<] or [▶/+/FF] during play. On remote control, press and hold [-/ <<] or [▶/ +] during play.
skip album <b>MP3</b> *	Press [REW/-/<<] or [▶/+/FF]. On remote control, press [V/ << ALBUM] or [ALBUM ▶/ /▲].

\* For skip tracks and skip album, Press [CD ▶/||] to start play if in the stop mode.

#### Note:

- Keep this unit away from radios and televisions if interference occurs.

## Advanced CD and MP3 Functions

### Preparation:

Press [■ TAPE/CD] to switch to CD mode.

### Remote control only

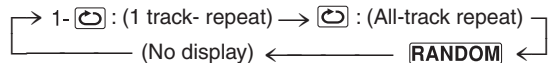
### Direct access play **CD-DA** **MP3**

- Starts play from a selected track.
- Press the numeric buttons to select and play your desired track.  
For 2-digits number: press [≥10] once, then the 2 digits.  
For 3-digits number: press [≥10] twice, then the 3 digits.

### Repeat play and Random play **CD-DA**

- Repeat : plays a track or all tracks repeatedly.
- Random : plays each track once in the random order.

Press [PLAY MODE] to select the desired mode.



- Press [CD ▶/||] to start play if in the stop mode.
- **Random can only be selected in the stop mode.**
- The play mode is also cancelled if the CD tray is opened.

To	Operations
repeat the desired track	Press [PLAY MODE] to select "1- [CD]".
repeat programmed tracks	1 Start program play. (→ 9) 2 Press [PLAY MODE] to select "[CD]".
cancel repeat play	Press [PLAY MODE] until "1- [CD]" and "[CD]" are cleared.
cancel random play	Press [PLAY MODE] to clear "[RANDOM]". If cancelled during play, play continues to the end of the CD.

### Notes: (For Random Play)

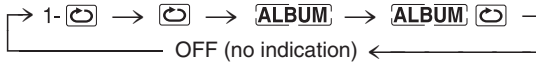
- Random play cannot be used together with program play.
- Search can be done within the current playing tracks.
- During play you cannot select tracks with the numeric buttons and skip to tracks which have already been played.



## Repeat play and Album play MP3

You can play (ALBUM) or repeat play (ALBUM, ) tracks only in the selected album.

**Press [PLAY MODE] before or during playback to select the desired mode.**



- (ALBUM): play all tracks in the selected album one time.
- (ALBUM, ): play all tracks in the selected album repeatedly.
- You can select another album with album skip.
- You cannot use random play with MP3.

## MP3 Intro play

Intro functions allow you to start playing the 1st track of all album for 10 seconds each in the stop mode.

**Press [INTRO] to start intro play.**

Intro function is cancelled after playing the 1st track of last album in the disc. To stop during the process, press [INTRO] or TAPE/CD.

This unit can play MP3, a method of compressing audio without affecting audio quality.

### ■ When creating MP3 files to play on this unit

Disc format: ISO9660 level 1 and level 2 (except for extended formats)

Title names and album names are not displayable on this unit.

### ■ Limitation on MP3

- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- This unit cannot play files recorded using packet write.
- If a CD-ROM format CD contains MP3 and files other than MP3, only the MP3 files will be playable.
- Depending on how you create MP3 files, they may not play in the order you numbered them or may not play at all.

**MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.**

## Program play CD-DA MP3

You can program up to 24 tracks.

### On the main unit

**Preparation:**

Press TAPE/CD to switch to CD stop mode.

**1 Turn [TIME/PRESET TUNE ← TRACK SKIP →] to select the track.**

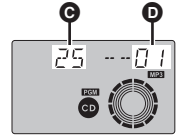
**2 Press [•MEMORY-CLEAR].**

**C:** Programmed track

**D:** Play sequence

**3 Repeat step 1 and 2 to program other tracks.**

**4 Press [CD ►/||] to start play.**



e.g. MP3

### On the remote control

**Preparation:**

Press STOP to switch to CD stop mode.

**1 Press [PROGRAM/-CLEAR].**

“PGM” appears on the display.

**2 Press the numeric button(s) to select the desired track.**

For 2-digits number: press [ $\geq 10$ ] once, then the 2 digits.

For 3-digits number: press [ $\geq 10$ ] twice, then the 3 digits.

Repeat this step to program other tracks.

**3 Press [CD ►/||] to start play.**

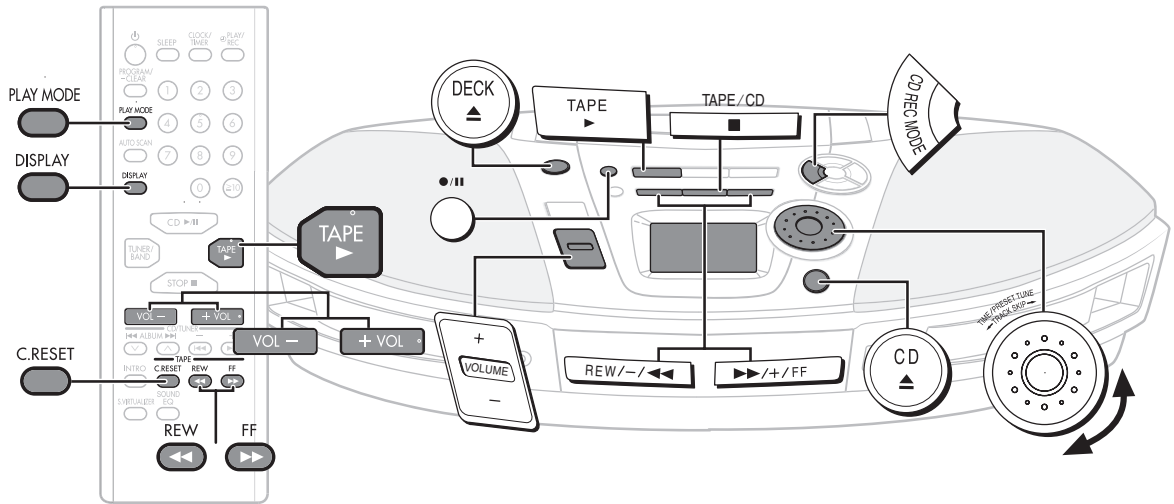
The program remains intact even if play is stopped or the unit is turned off. “Cd-P” for CD-DA or “P” for MP3 appears when play is stopped to indicate the contents are in the memory.

To	Operations
cancel*	Press and hold [ <b>•MEMORY-CLEAR</b> ] in the CD stop mode until “CLEAR” is displayed. On remote control, press and hold [ <b>PROGRAM/-CLEAR</b> ].
check the program contents (while “Cd-P” for <span style="border: 1px solid black; padding: 0 2px;">CD-DA</span> or “P” for <span style="border: 1px solid black; padding: 0 2px;">MP3</span> is displayed)	Turn [ <b>TIME/PRESET TUNE ← TRACK SKIP →</b> ]. On remote control, press [ <b>-/ ◀◀</b> ] or [ <b>▶▶/ +</b> ].

\* The mode is also cancelled if the CD tray is opened.

### Notes:

- “FULL” is displayed  
If 24 tracks have already been programmed.
- “- -: - -” is displayed CD-DA  
You can still program and play tracks if the total elapsed play time of the program exceeds 200 minutes.



## Cassette Tape Play

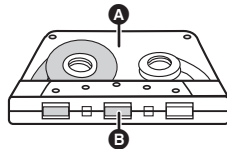
### 1 Press [▲ DECK] to open the deck.

(The unit comes on.)

Load a cassette and close the deck by hand.

**A**: Side to be played back facing up.

**B**: Insert the cassette with the exposed tape facing you.



### 2 Press [▶ TAPE] to start play.

### 3 Press [+ , - VOLUME] to adjust volume.

To	Operations
stop play	Press [■ TAPE/CD].
start one touch play*	Press [▶ TAPE] when a cassette is loaded.
fast-forward	Press [▶▶ /+ /FF]. On remote control, press [▶▶ /FF].
rewind	Press [REW /- /◀◀]. On remote control, press [◀◀ /REW].

\* when using AC power.

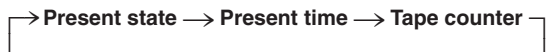
### Volume and sound quality in recording

- Recording level is set automatically.
- Recordings are unaffected by changes to sound quality.

### To display the tape counter while recording

Press [DISPLAY].

Each time you press the button in the CD or radio mode:



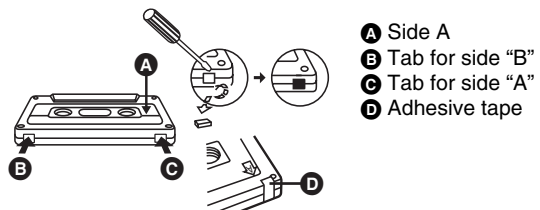
### To reset the tape counter

Press [C.RESET].

The counter resets to "000".

### Erasure prevention

The illustration shows how to remove the tabs to prevent recording. To record on the tape again, cover as shown.



## Cassette Tape Recording

### Before Recording

Your attention is drawn to the fact that recording pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

### Notes:

- Use household AC power or new batteries when recording to avoid poor recordings caused by the batteries running down.
- Televisions can cause interference to recordings made on this unit if they are too close to each other.

### Selection of tapes

Use normal position tapes.

High position and metal position tapes can be played, but the unit will not be able to record or erase correctly.

### To erase recordings

- 1 Press [▲ DECK] to open the deck and insert the cassette with the side to be erased facing up.
- 2 Press [■ TAPE/CD] to switch to TAPE mode.
- 3 Press [●/||].

## Recording CDs

### Normal recording

#### Preparation:

Wind on the leader tape.

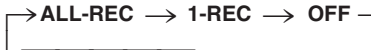
- 1 Press [▲ DECK] to open the deck.
- 2 Press [■ TAPE/CD] to switch to CD mode.
- 3 Press [●/||] to start recording.  
CD play and recording start at the same time.  
The cassette stops when the CD finishes.

To	Operations
stop recording	Press [■ TAPE/CD].
pause recording	Press [●/  ].
continue recording from another CD on the same cassette	<ol style="list-style-type: none"> <li>1 Press [▲ CD] and replace the CD.</li> <li>2 Press [●/  ]. Press again to resume recording.</li> </ol>
record selected tracks	<ol style="list-style-type: none"> <li>1 Do step 1 and 2, then program the tracks. (→ 9)</li> <li>2 Press [●/  ].</li> </ol>
skip unwanted tracks	<ol style="list-style-type: none"> <li>1 Press [●/  ] to pause recording. (The CD also pauses.)</li> <li>2 Turn [TIME/PRESET TUNE ← TRACK SKIP →] so the next track you want to record is displayed.</li> <li>3 Press [●/  ] to resume recording.</li> </ol>

### ALL-REC [CD-DA]

Records the whole CD or selected tracks. When the tape finishes before CD, recording and CD pauses for you to resume recording on the opposite side.

- 1 Press [■ TAPE/CD] to switch to CD mode.
- 2 Press [CD REC MODE] to display "ALL-REC". Each time you press the button:



The display shows the tape length needed. "C ----" indicates the tape needed exceeds 100 minutes. You can still record, but some tracks may not be recorded if the tape is not long enough.

- 3 Press [▲ DECK] to open the deck and load a cassette with the side for recording facing up.
- 4 Press [●/||] to start recording. The unit rewinds the tape, records 10 seconds of silence, and then starts recording.

To stop recording, press [■ TAPE/CD]. The CD also stops.

**If a track is interrupted at the end of the side facing up, Recording and CD pauses.**

To	Operations
record the track again on the opposite side	<ol style="list-style-type: none"> <li>1 Press [▲ DECK], flip the cassette, and insert it.</li> <li>2 Press [●/  ]*.</li> </ol>

\* The unit records 10 seconds of silence, and resumes recording from the beginning of the cut-off track.

#### Note:

- Random play and repeat play cannot be used with "ALL-REC".

### 1-REC [CD-DA] [MP3]

Records a selected track from the CD and stops.

#### Preparation:

Wind on the tape to where you want to start recording.

- 1 Press [■ TAPE/CD] to switch to CD mode.
- 2 Press [CD REC MODE] to display "1-REC".
- 3 Turn [TIME/PRESET TUNE ← TRACK SKIP →] to select the track you want to record.
- 4 Press [●/||] to start recording. CD play and recording start at the same time.

To	Operations
stop recording	Press [■ TAPE/CD]. (The CD also stops.)
continue recording from another CD	<ol style="list-style-type: none"> <li>1 Press [▲ CD] and replace the CD.</li> <li>2 Do steps 3 and 4.</li> </ol>
record a track in play	<ol style="list-style-type: none"> <li>1 Press [CD REC MODE] to display "1-REC".</li> <li>2 Press [●/  ].</li> </ol> <p>Recording starts from the beginning of the track and stops when the track finishes.</p>

#### Note:

- Recording and CD will stop when the tape reaches its end, even if the track has not finished.

## Recording the Radio

#### Preparation:

To record from the beginning of the tape; Wind on the leader tape.

To record from part or half way through the tape; Wind on the tape to where you want to start recording.

- 1 Load a cassette with the side for recording facing up.
- 2 Tune to the station.
- 3 Press [●/||] to start recording.

To	Operations
stop recording	Press [■ TAPE/CD].
pause recording	Press [●/  ]. Press again to resume recording.

#### To reduce noise when recording AM (Beat Proof function)

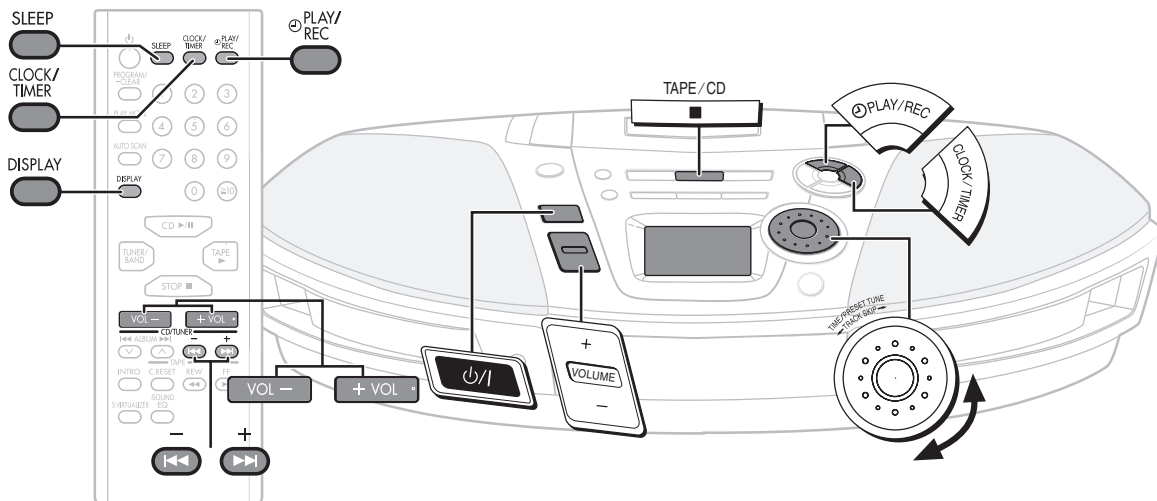
##### Remote control only

- 1 Press [PLAY MODE] while recording.

Each time you press the button:

bP1 ↔ bP2

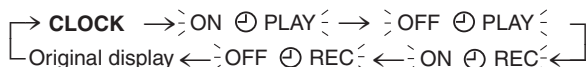
Choose the setting with the least noise.



## Setting the Clock

This is a 24-hour clock.

- 1** Press **[POWER]** to turn the unit on.
- 2** Press **[CLOCK/TIMER]** to select "CLOCK".  
Each time you press the button:



- 3** Within 10 seconds  
Turn **[TIME/PRESET TUNE ← TRACK SKIP →]** to set the time or on remote control, press **[←/|/▶]** or **[▶/|/▶]**.
- 4** Press **[CLOCK/TIMER]** to start the clock.  
The original display is restored shortly after.

### Note:

- The clock may lose or gain some time over a period.  
Readjust if necessary.

### To display the clock

#### Remote control only

Press **[DISPLAY]**.

## The Play and Record Timer

You can set the timer to come on at a certain time to wake you up (play timer) or to record a radio station (record timer).

### Preparations:

Turn the unit on and set the clock.

**For play timer**, prepare the music source (tape/CD/radio) for listening, and set the volume.

**For record timer**, check the cassette's erasure prevention tab (**→ 10**) and load the cassette with the side for recording facing up. Tune to the radio station (**→ 7**), and set the volume.

### To set the start and finish times

- 1** Press **[CLOCK/TIMER]** to select the desired timer function.  
**ON** **[PLAY]**: to set the play timer  
**ON** **[REC]**: to set the record timer  
Proceed to step **2** before these indicators stop flashing (about 10 seconds).
- 2** Turn **[TIME/PRESET TUNE ← TRACK SKIP →]** to set the start time and then press **[CLOCK/TIMER]**.
- 3** Turn **[TIME/PRESET TUNE ← TRACK SKIP →]** to set the finish time and then press **[CLOCK/TIMER]**.  
The start and finish times are now set.

## To turn the timer on

### 4 Press [⏪] PLAY/REC] to display the timer indicator.

Each time you press the button:



⏪ **PLAY**: to turn the play timer on

⏪ **REC**: to turn the record timer on

(The indicator does not appear if the start and finish times have not been set.)

“E” appears if the clock has not been set.

### 5 Press [⏻] to turn the unit off.

**The unit must be off for timer to operate.**

The record timer comes on about 30 seconds earlier than the set time.

To	Operations
cancel the timer	Press [⏪] <b>PLAY/REC</b> . (→ <b>A</b> )
check the settings*	Press [ <b>CLOCK/TIMER</b> ]. (→ <b>B</b> )
<b>A</b> : When the unit is on to clear the timer indicators from the display. (The timer comes on at the set time everyday if the timer is on.)	
<b>B</b> : The settings are shown in the following order: Start time → Finish time → Music source → Volume → Original display	

\* While the unit is in standby mode and connected to the household mains socket.

### To change the settings (when unit is on)

To	Operations
change the times	Do steps <b>1</b> , <b>2</b> , <b>3</b> and <b>5</b> .
change the source or volume	<b>1</b> Press [⏪] <b>PLAY/REC</b> to clear the timer indicator.
	<b>2</b> Make changes to the source or volume.
	<b>3</b> Do steps <b>4</b> and <b>5</b> .

**You can enjoy your desired source after you have set the timer.**

Turn the unit off before the timer's start time.

#### Note:

- The play and record timers cannot be used together.

## The Sleep Timer

### Remote control only

You can set the unit to turn off after certain time. (e.g. when you want to fall asleep while listening to music.)

### Press [SLEEP] to select the time (minutes).

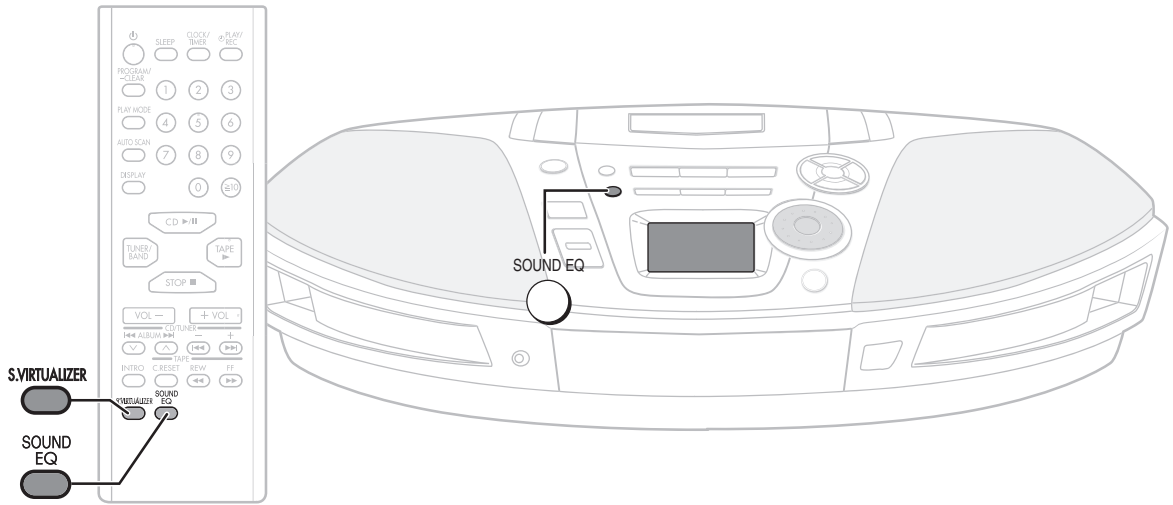
Each time you press the button:



To	Operations
cancel	Press [ <b>SLEEP</b> ] to select “ <b>SLEEP OFF</b> ”.
check the remaining time	Press [ <b>SLEEP</b> ] once. The remaining time is shown for about 5 seconds.
change the setting	Press [ <b>SLEEP</b> ] to select the new time.

#### Notes:

- You can use sleep timer in combination with play and record timer.
- Make sure the unit is off before the play and record timer's start time.
- Sleep-off time shall have higher priority than timer-off time.



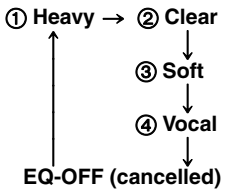
## Sound Quality

You can choose one of four types of sound quality.

- ① **Heavy:** Adds punch to rock
- ② **Clear:** Clarifies higher sounds
- ③ **Soft:** For background music
- ④ **Vocal:** Adds gloss to vocals

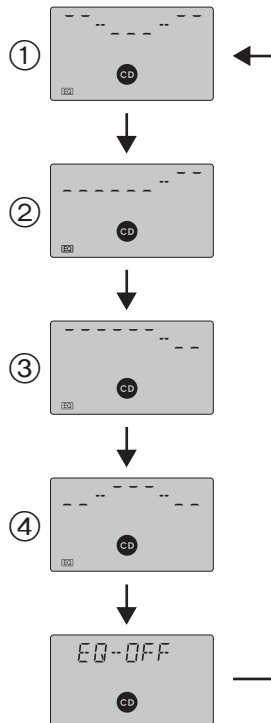
Press [**SOUND EQ**] to select a setting.

Each time you press the button:



**Note:**

- Changes to sound quality do not affect recordings.



## 3-D Sound with the Sound Virtualizer

**Remote control only**

You can create a three-dimensional sound field when listening to stereo sound.

Press [**S.VIRTUALIZER**].

Press again to cancel.



**Notes:**

- This feature does not affect recordings.
- The actual effect depends on the source played.

## Troubleshooting

Before requesting for service, make the following checks. If you cannot fix the unit as described below, or if something not listed here occurs, refer to the enclosed directory to locate an Authorized Service Center convenient to you or contact your dealer. Reference pages are shown as an example (→ 3).

### Common problems

“E” is displayed.	Indicates incorrect operation. Read the instructions.
“U01” is displayed.	Replace the batteries or use household AC power. (→ 6)
“U02” is displayed.	Power batteries have not been inserted. Insert them or use household AC power. (→ 6)

### CD

CD will not play or CD display is incorrect.	Place the CD with label facing up. (→ 8) Wait for 1 hour for condensation to dry and try again.
Certain sections are not played properly.	Clean the CD. (→ 3) Replace the CD if it is scratched, warped, or nonstandard.

### Cassette deck

Recording is not possible.	If the cassette’s tabs have removed, cover the holes with adhesive tape. (→ 10)
Poor sound quality.	Clean the heads. (→ 3)

### Radio

A lot of noise or tuning difficulty.	Interference may be caused by other equipment or the use of its remote control. Turn the other equipment off or keep this unit away from them.
--------------------------------------	---

### Remote Control

The remote control does not work.	Check to ensure the batteries are inserted correctly. (→ 4) Replace the batteries if they are worn. (→ 4)
The unit cannot be turned on from the remote control.	Turn the unit on from the main unit if you are using batteries to power the unit. (→ 4, 6)

## Technical Specifications

### Radio

Frequency range	
FM	87.50—108.00 MHz (50 kHz steps)
AM	522—1629 kHz (9 kHz steps)

### CD player

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source	Semiconductor laser (wavelength 780 nm)
Bølgelengde	780 nm
Laserstyrke	Ingen farlig stråling sendes ut
No. of channels	2-channel, stereo
Wow and flutter	Below measurable limit
D/A converter	MASH (1 bit DAC)

### Tape recorder

Track system	Stereo
Monitor system	Variable sound monitor
Recording system	AC bias
Erasing system	Multi Pole magnet
Frequency range	
Normal position	50—14000 Hz

### General

Speakers	(RX-ES29) 8 cm 5.4 Ω × 2 (RX-ES23) 8 cm 2.7 Ω × 2
----------	--

### Jacks

Output	PHONES: 3.5 mm stereo (16—32 Ω)
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### Power requirement

AC	230—240 V, 50 Hz Power consumption: (RX-ES29) 30 W (RX-ES23) 23 W
----	---

Battery	12 V [Eight R20/LR20 (D, UM-1) batteries] ● Do not use rechargeable type batteries.
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### Memory back-up for computer/clock

	6 V [Four R6/LR6 (AA, UM-3) batteries] ● Do not use rechargeable type batteries.
--	---

Dimensions	529 mm (W) × 144 mm (H) × 276 mm (D)
Mass	(RX-ES29) 4.4 kg without batteries (RX-ES23) 3.9 kg without batteries

Power consumption in standby mode	(RX-ES29) 2.7 W (RX-ES23) 2.3 W
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### Notes:

- Specifications are subject to change without notice.
- Mass and dimensions are approximate.

### CAUTION!

- DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.
- DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
- DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
- DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY FRIENDLY MANNER.

The socket outlet shall be installed near the equipment and easily accessible or the mains plug or an appliance coupler shall remain readily operable.

### NORSK

#### ADVARSEL!

- APPARATET MÅ IKKE Plasseres i en bokhylle, et innebygget kabinett eller et annet lukket sted hvor ventilasjonsforholdene er utilstrekkelige. Sørg for at gardiner eller lignende ikke forverrer ventilasjonsforholdene, så risiko for elektrisk sjokk eller brann forårsaket av overheting unngås.
- APPARATETS ventilasjonsåpninger må ikke dekkes til med aviser, bordduker, gardiner og lignende.
- Plasser ikke åpen ild, slik som levende lys, oppå apparatet.
- Brukte batterier må kasseres uten fare for miljøet.

#### ADVARSEL!

DETTE PRODUKTET ANVENDER EN LASER. BETJENING AV KONTROLLER, JUSTERINGER ELLER ANDRE INNGREP ENN DE SOM ER BESKREVET I DENNE BRUKSANVISNING, KAN FØRE TIL FARLIG BESTRÅLING. DEKSLER MÅ IKKE ÅPNES, OG FORSØK ALDRI Å REPARERE APPARATET PÅ EGENHÅND. ALT SERVICE OG REPARASJONSARBEID MÅ UTFØRES AV KVALIFISERT PERSONELL.

#### ADVARSEL:

FOR Å REDUSERE FAREN FOR BRANN, ELEKTRISK STØT ELLER SKADER PÅ PRODUKTET, MÅ DETTE APPARATET IKKE UTSETTES FOR REGN, FUKTIGHET, VANNDRÅPER ELLER VANNSPRUT. DET MÅ HELLER IKKE Plasseres gjenstander fylt med vann, slik som blomstervaser, oppå apparatet.

Utstyret bør plasseres i nærheten av AC-stikkontakten, og støpslet må være lett tilgjengelig hvis det skulle oppstå problemer.

### SUOMI

#### VAROITUS!

- ÄLÄ ASENNATA TAI LAITTA TÄTÄ LAITETTA KABINETTITYYPPISEEN KIRJAKAAPPIIN TAI MUUHUN SULJETTUUN TILAAN, JOTTA TUULETUS ONNISTUISI. VARMISTA, ETTÄ VERHO TAI MIKÄÄN MUU MATERIAALI EI HUONONNA TUULETUSTA, JOTTA VÄLTETTÄISIIN YLIKUUMENEMISESTA JOHTUVA SÄHKÖISKU- TAI TULIPALOVAARA.
- ÄLÄ PEITÄ LAITTEEN TUULETUSAUUKKOJA SANOMALEHDellä, PÖYTÄLIINALLA, VERHOLLA TAI MUULLA VASTAVALLA ESINEELLÄ.
- ÄLÄ ASETA PALAVAA KYNTTILÄÄ TAI MUUTA AVOTULEN LÄHDETTÄ LAITTEEN PÄÄLLE.
- HÄVITÄ PARISTOT LUONTOA VAHINGOITTAMATTOMALLA TAVALLA.

#### VAROITUS!

LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTA AALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

#### VAROITUS:

TULIPALO-, SÄHKÖISKUVAARAN TAI TUOTETTA KOHTAAVAN MUUN VAHINGON VÄHENTÄMISEKSI EI LAITETTA SAA ALTISTAA SATEELLE, KOSTEUDELLE, VESIPISAROILLE TAI ROISKEELLE, EIKÄ NESTETTÄ SISÄLTÄVIÄ ESINEITÄ, KUTEN ESIMERKIKSI MALJAKOITA, SAA ASETTAA LAITTEEN PÄÄLLE.

Laite tulee asettaa lähelle verkkopistorasiaa ja pistokkeen täytyy olla sellaisessa asennossa, että siihen on helppo tarttua ongelman sattuessa.