Panasonic

Portable Stereo CD System
RX-DT75
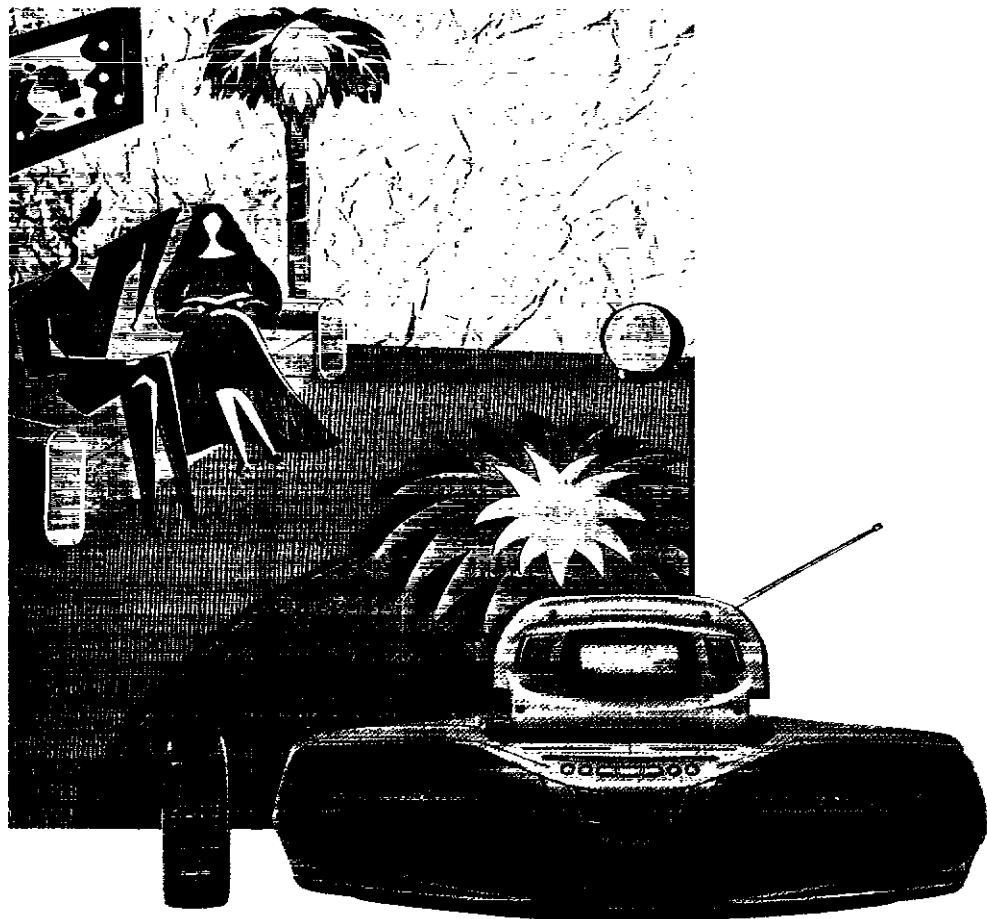
Operating Instructions

COMPACT
disc
DIGITAL AUDIO

RQT2317-B

Dear Customer

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

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

> **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.

CLASS 1 LASER PRODUCT

(Back of product)
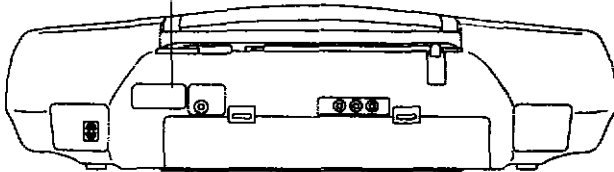
**DANGER-Invisible laser radiation when open.
AVOID DIRECT EXPOSURE TO BEAM.**

(Inside of product)

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Table of Contents

Caution for AC Mains Lead

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 UNSUIT-
ABLE FOR THE SOCKET OUTLET IN YOUR
HOME THEN THE FUSE SHOULD BE RE-
MOVED AND THE PLUG CUT OFF AND DIS-
POSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRI-
CAL SHOCK IF THE CUT OFF PLUG IS IN-
SERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown 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 the colours of the wires in the mains lead of this appliance 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 in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚.

Before use
Remove the connector cover as follows.

Connector cover
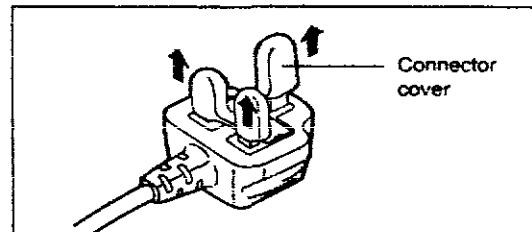
How to replace the fuse
1. Remove the fuse cover with a screwdriver.
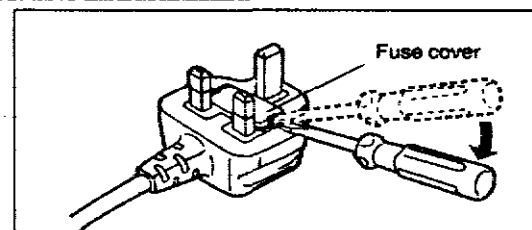
Fuse cover

2. Replace the fuse and attach the fuse cover.

Fuse
(5 ampere)

4
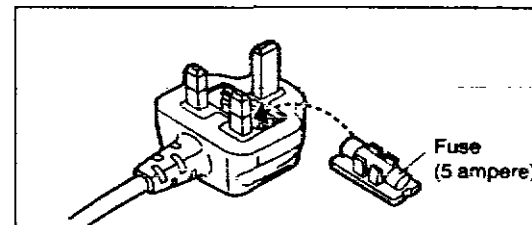
Precautions

- If the set 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.
- Avoid using or placing this unit near sources of heat. Do not leave it in an automobile exposed to direct sunlight for a 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 the set on AC power in a bathroom, as a potential shock hazard may result.
- When not in use, disconnect the AC mains lead from the household mains outlet.

Max.40°C
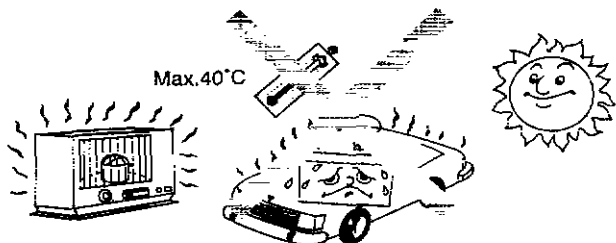
Supplied Accessories
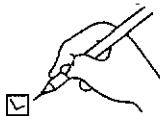
Please check and identify the supplied accessories.
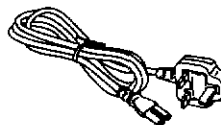
☐ AC mains lead .... 1 pc.
(VJA0733)
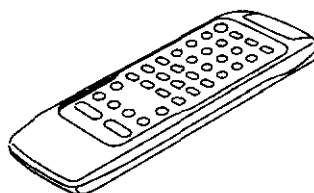
☐ Remote control transmitter .... 1 pc.
(RAK-RX135WH)

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Power Sources

To operate on AC power

Connect the included AC mains lead to the AC socket of the unit and your household outlet.

Household mains outlet
AC 230–240 V, 50 Hz

AC IN~

AC mains lead (included)
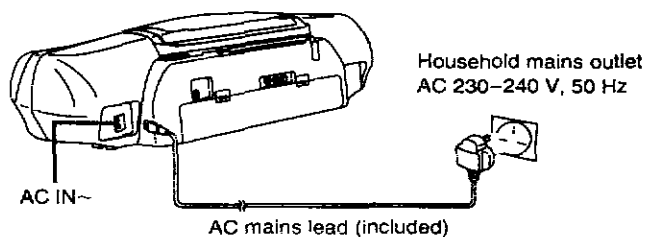
> BE SURE TO READ THE CAUTION FOR THE AC MAINS LEAD ON PAGE 4 BEFORE THE FOLLOWING CONNECTION.

To operate on battery power

Battery installation

Unplug the AC mains lead from the household mains outlet and the AC socket of the unit.
Insert ten R20/LR20 (UM-1, not included) batteries into the battery compartment, making sure that the batteries are installed in the designated numerical order and that the proper polarities are maintained.

Inner row

Outer row
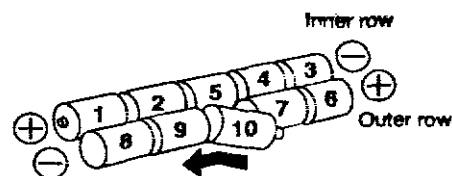
- Batteries installed with incorrect polarities may leak and damage this unit.
- Do not mix batteries (old and new) or types (manganese and alkaline, etc.).
- If the unit is not used for a long period of time or is used only from an AC power source, remove the batteries to prevent potential damage from possible battery leakage.

Battery removal

Bottom of the unit
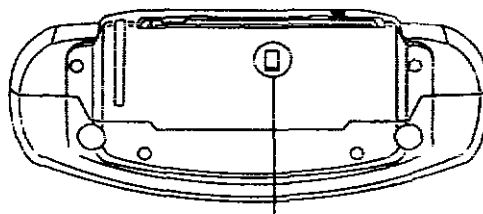
Insert your finger into the opening and push the batteries out.

Battery life

When the batteries get weak, the tape speed will slow down, the sound will become distorted and the volume will decrease.
If the POWER/BATT indicator goes out or dims, replace all the R20/LR20 batteries with new ones.

6
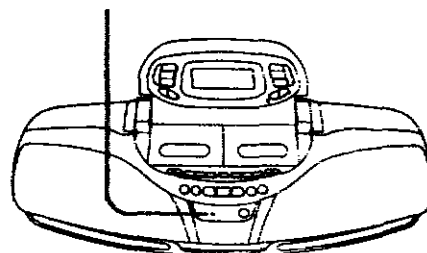
Memory back-up batteries (four R6/LR6)

In the event of a power failure, or if the AC mains lead is disconnected from the household mains outlet (during AC operation), or should the batteries fail, the memory back-up batteries will preserve the preset memory and the timer functions of this unit.

Battery installation

Insert four R6/LR6 (UM-3, not included) batteries into the battery compartment, making sure that the batteries are installed in the designated numerical order and that the proper polarities are maintained.

Inner row

Outer row
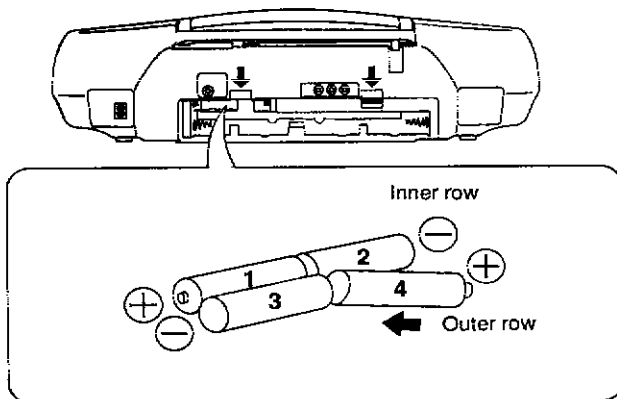
●The life of the memory back-up batteries can be prolonged by keeping the AC mains lead plugged in the household mains outlet at all times.
●When disconnecting the AC mains lead, switch off the power first by pressing POWER.
●The life of the memory back-up batteries is reduced if the AC mains lead is disconnected from a household mains outlet with the power still supplied.

### Battery removal
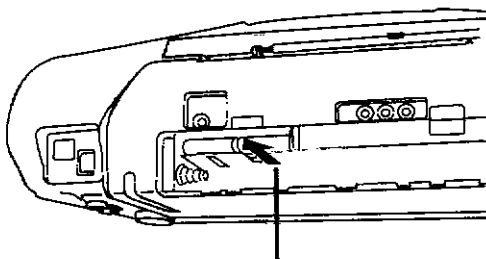
Insert your finger and pull out the batteries.

Battery life

The life of the memory back-up batteries is about one year.

Use of batteries

●Do not mix old and new batteries, or batteries of different types (manganese and alkaline, etc.).
●Always remove old, weak or worn-out batteries promptly and dispose of them properly.
●Never subject batteries to excessive heat or flame; do not attempt to disassemble them; and be sure they are not short-circuited.
●If the unit is not to be used for a long period of time, remove the batteries and store them in a cool, dark place.
●If a battery leaks, remove all batteries and dispose of them properly.
●Thoroughly clean the battery compartment before inserting new batteries.
●If the electrolyte comes into contact with skin or clothes, flush with water immediately.
●Keep batteries out of reach of children.
●Do not use rechargeable (nickel-cadmium) type batteries.
●Do not attempt to recharge alkaline or manganese batteries.

In these operating instructions, "unit off" is defined as the following mode.
"Standby" when AC power is used.
"Battery power off" when batteries are used.

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Location of Controls

Basic controls

No.	Name	Ref. page
①	Timer button (TIMER)	42
②	Preset equalizer button (PRESET EQ)	27
③	Display section	
④	Volume buttons (VOL −, VOL +)	12
⑤	Power/battery check indicator (POWER/BATT)	6
⑥	Standby indicator (STANDBY ⏻) 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.	12
⑦	Power "STDBY ⏻ (AC)/ON" switch [POWER, STDBY ⏻ (AC)/ON] Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.	12
⑧	Remote control signal sensor (SENSOR)	10
⑨	Top panel open/close button (TOP PANEL OPEN/CLOSE)	11

Tuner controls

No.	Name	Ref. page
⑩	Tuner/band button (TUNER/BAND)	13, 16
⑪	Tuning buttons (TUNING/CD −/◄◄, ►►/+)	16

CD controls

No.	Name	Ref. page
⑫	Auto CD record button (AUTO CD RECORD)	30
⑬	CD tray	19
⑭	CD tray open/close button (CD OPEN/CLOSE)	19
⑮	Play/pause button (▷/☐☐)	13, 19
⑯	CD stop/clear button (☐/CLEAR)	19
⑰	Skip/search buttons (TUNING/CD −/◄◄, ►►/+)	20

8
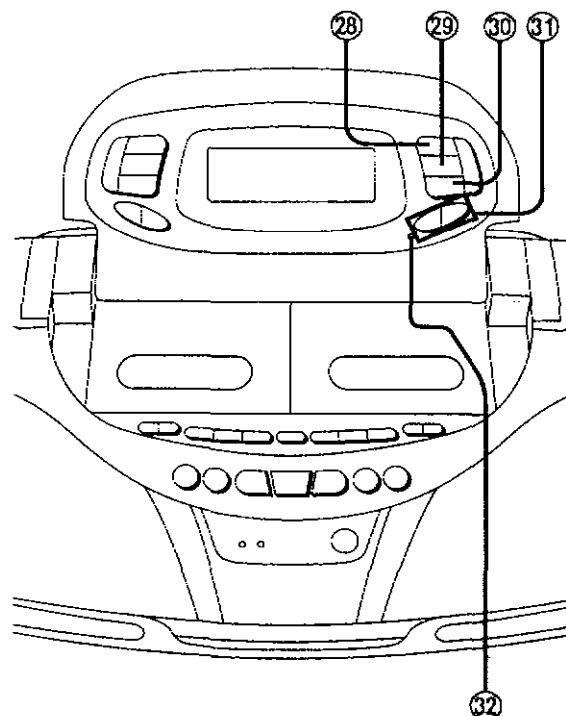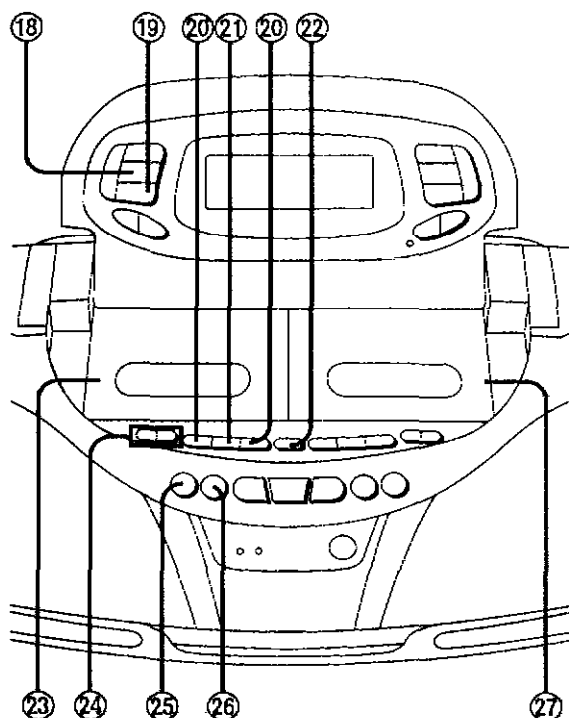
Deck controls

No.	Name	Ref. page
⑱	Tape edit button (TAPE EDIT)	*41*
⑲	Rec pause button (REC PAUSE)	*38*
⑳	Playback button (◁ REV, FWD ▷)	*13, 24*
㉑	Tape stop button (▢)	*24*
㉒	Deck 1/deck 2 select button (DECK1/2)	*24*
㉓	Deck 1 cassette lid (DECK1)	*41*
㉔	Fast-forward/rewind/tape program sensor (TPS) buttons (◁◁ TPS ▷▷)	*24, 26*
㉕	Deck 1 cassette lid open/close button (DECK1 OPEN/CLOSE)	*41*
㉖	Deck 2 cassette lid open/close button (DECK2 OPEN/CLOSE)	*24*
㉗	Deck 2 cassette lid (DECK2)	*24*

MENU controls

No.	Name	Ref. page
㉘	Main menu select button (MAIN MENU SELECT)	*14, 52*
㉙	Sub menu select button (SUB MENU SELECT)	*14, 52*
㉚	Setting button (SET)	*14, 52*
㉛	Setting menu select buttons (−/REV, FWD/+)	*14, 52*
㉜	Setting menu select indicator	*14, 52*

Concerning the Remote Control

Battery installation

Insert two R03 (UM-4, not included) batteries as shown below.

Insert the batteries in the correct polarities (⊕, ⊖).
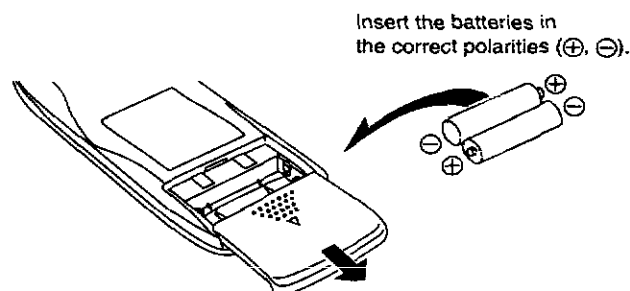
To remove the batteries, pull out the ⊕ side.
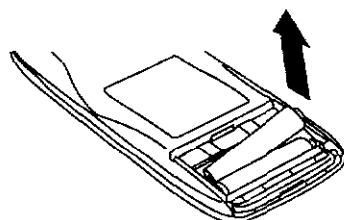
Remote control unit's operation range

Face about 7 meters in front of the sensor.

Remote control signal sensor (SENSOR)

30° | 30°

Transmission window
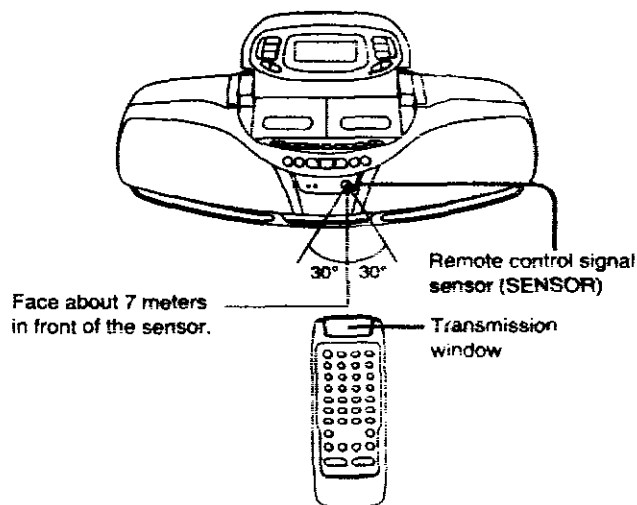
How to use the remote control unit properly

● Do not place obstacles between the remote control signal sensor and remote control unit.
● Do not expose the remote control signal sensor to direct sunlight or to the bright light of an invertor fluorescent light.
● Take care to keep the remote control signal sensor and the transmission window free from dust.

To prevent malfunctioning of the remote control unit:
● Do not disassemble or remodel the unit.
● Do not place heavy objects on top of it.
● Do not leave it where it will be exposed to direct sunlight
● Do not spill beverages or other liquids over it.

Battery life

The battery life is about one year.
Although the battery life varies depending on how often the device is used, the batteries should be replaced, on average, about once every year.
The batteries should be replaced if commands from the remote control transmitter do not operate the unit even when the transmitter is held close to the front panel.

Opening the panel
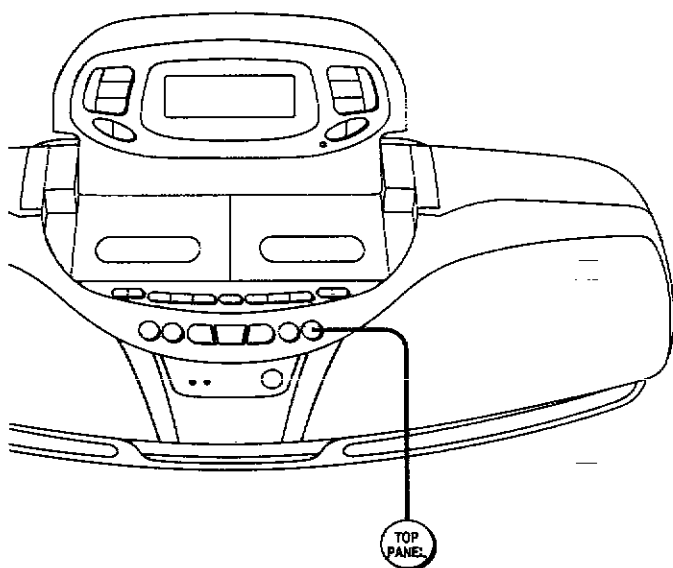
To open the panel

Press TOP PANEL OPEN/ CLOSE.
The unit is turned on.

To close the panel

Press TOP PANEL OPEN/ CLOSE.

When dry cell batteries are being used to power the unit, the panel cannot be opened or closed by pressing TOP PANEL on the remote control in the unit off mode. Turn the unit on first before using this button.

Common Operations

Basic operations
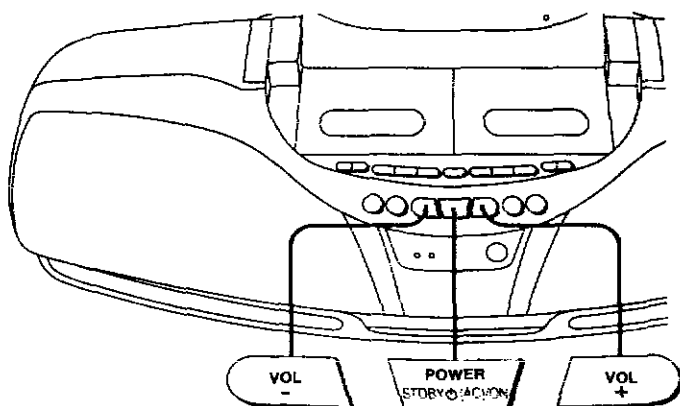
Turning the unit ON/OFF

To turn the unit ON:
Press POWER.
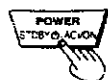
To turn the unit OFF:
Press POWER.
When using an AC power, the unit is turned to standby mode. (STANDBY ⏻ indicator lights.)

Adjusting the volume

Press VOL − or VOL + to adjust the volume to the desired level.
VOL +: Press this to increase the volume.
VOL − : Press this to reduce the volume.

The volume level can be adjusted from "−− dB" (lowest) to "0 dB" (highest).

Reference
The volume can be adjusted even when the unit is off.

To listen through headphones (not included)
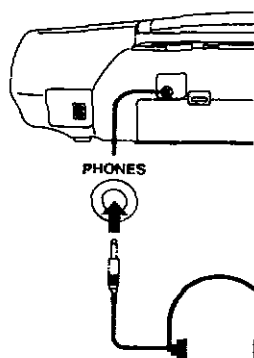
● Turn down the volume before connecting the headphones.
● Avoid listening for prolonged periods of time to prevent hearing damage.
● Plug type used: Stereo mini

PHONES
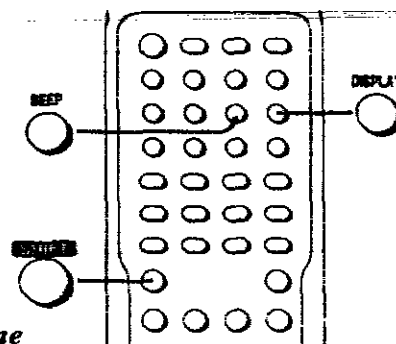
Beep tone

When one of the function buttons is pressed, one beep is heard to verify that the button has been properly operated. When one of the buttons has been pressed in error, two beeps are heard as a warning.

If you do not intend to use the beep tone function:
(Available only from the remote control)
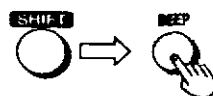
While the unit is on;
While holding SHIFT down, press BEEP.
Holding SHIFT down   The "BEEP OFF" display appears.

To use the beep tone function, repeat the same operation. (The "BEEP ON" display appears.)

Displaying the present time or linear tape counter

These operations come in handy to check the present time during play or calculate the time remaining on the tape during recording using the linear tape counter.
(Available only from the remote control)
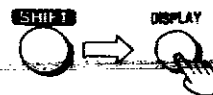
While the unit is on;
While holding SHIFT down, press DISPLAY.
Holding SHIFT down   Each time DISPLAY is pressed, the display will change.

Example: When DISPLAY is pressed during CD play;

1. The play status is indicated.

   ①
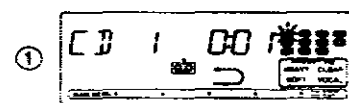
2. The present time is indicated.

   ②
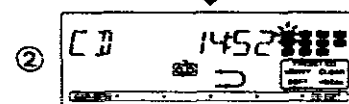
3. The linear tape counter display appears.

   ③

"−−−−" appears for the linear tape counter display when no tape has been loaded.

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Easy listening

(Only when a household mains outlet is used for the unit)
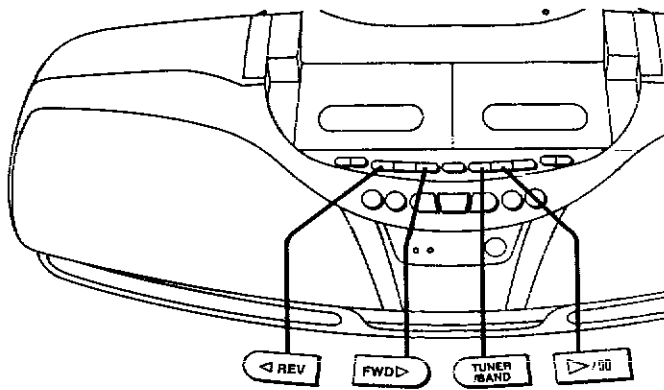
When a CD or tape is inserted, you can start play directly by pressing a single button (even in the unit off mode).

. . . .

Listening to CDs:

. . . .

Listening to tapes:

. . . .

Listening to radio broadcasts:

References

●You can play directly by pressing the same button on the remote control transmitter.
●Even when the unit is being powered by batteries, you can start play directly by pressing the single button (mentioned above) after turning the unit on.

13

Setting the Clock

Setting menu select indicator
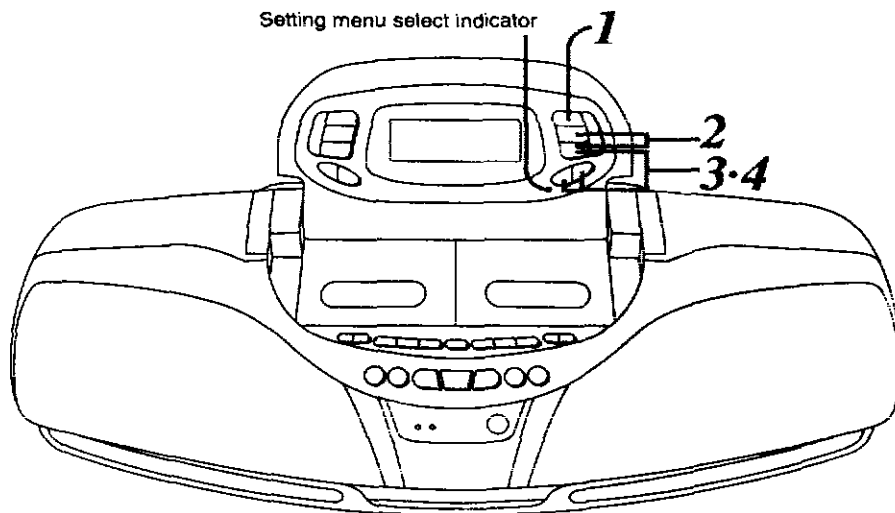
Example: Setting the clock to 16:20 in the TAPE mode;

1 Press MAIN MENU SELECT to display TIME.
┌→TAPE→TIME→SOUND ────────┐
(The display changes each time the button is pressed.)

`-- TIME -- --`

2 Press SUB MENU SELECT to display CLOCK.
┌→TIMER→SLEEP →CLOCK────────┐
(The display changes each time the button is pressed.)

`CLOCH`

Press SET.
The setting menu select indicator flashes.

3 Press −/REV or FWD/+ to display the hours (16).
┌1-2-3...15-16...23-0────────┐
(The display changes each time the button is pressed.)

`CLOCH-]600`

Press SET.

4 Press −/REV or FWD/+ to display the minutes (20).
┌01-02...19-20...59-00 ────────┐
(The display changes each time the button is pressed.)

`CLOCH 16:20-`

Press SET.
The clock now starts operating, and the display returns to its original status.

If you have made a mistake during operation:
1. Press MAIN MENU SELECT.
2. Repeat the procedure from step 1.

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Once broadcast stations have been programmed, they can easily be tuned in at the touch of a button on the unit or on the remote control. (Up to ten LW, MW or FM stations each can be programmed in the preset channels.)
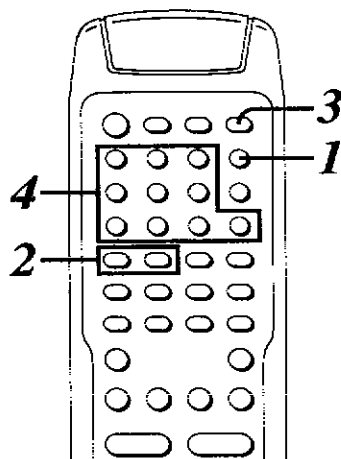
(Available only from the remote control)

Example: Programming FM 88.10 MHz in preset channel 3;

1 TUNER/BAND

Press TUNER/BAND to display FM.

┌→LW→MW→FM┐
└──────────────┘

(The display changes each time the button is pressed.)

F M 8750

2 –/I◄◄   ►►I/+

Press –/I◄◄ or ►►I/+ to tune in the broadcast station.

F M 88.10
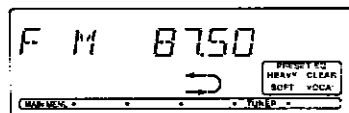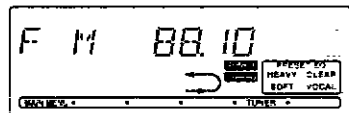
3 PROGRAM

Press PROGRAM.

Indicator flashes.

F M 88.10

4
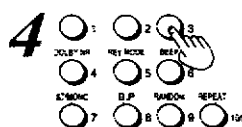
While PGM is flashing;

Press a number button (1 to 10/0) to select the preset channel.

The preset channel selected now appears on the display.

Preset channel

F M 88.10
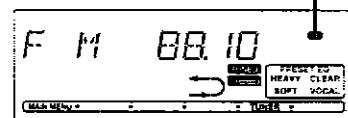
5

Repeat steps 2 to 4 to program the other stations.

Programming LW/MW stations:
1. Press TUNER/BAND in step 1 to display LW or MW.
2. Perform steps 2 to 5.

Selecting the stations automatically:
Keep pressing –/I◄◄ or ►►I/+ until the frequency display starts to change. A station with good reception is automatically selected and the selection process then stops.

To stop the selection at any time:
Press –/I◄◄ or ►►I/+ again.
The selection may stop without tuning into any station if there is interference in the vicinity. In such a case, press –/I◄◄ or ►►I/+ until a station's frequency is picked up.

Listening to Radio Broadcasts

Listening to programmed stations (Preset tuning)

Make sure you have completed the procedure for "Programming Broadcast Stations" (on page 15) first.
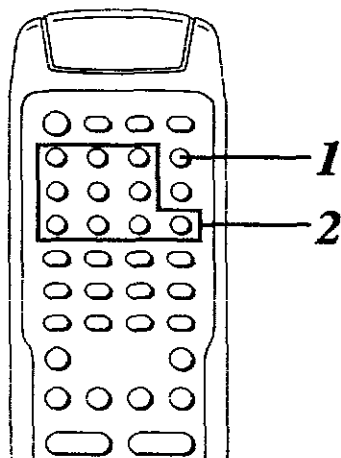
(Using the remote control)

1 TUNER/BAND

Press TUNER/BAND to display LW, MW or FM.

┌→LW→MW→FM→┐

(The display changes each time the button is pressed.)

```
F  M    87.50
                ⊃      PRESET ED
                       HEAVY CLEAR
                       SOFT  VOCAL
     MAIN MENU •   •    •  TUNER •
```

2 ○¹ ○² ○³
○⁴ ○⁵ ○⁶
○⁷ ○⁸ ○⁹ ○

Press the number button (1 to 10/0) to select the programmed station.

```
F  M    88.10    ■
                ⊃      PRESET ED
                       HEAVY CLEAR
                       SOFT  VOCAL
     MAIN MENU •   •    •  TUNER •
```
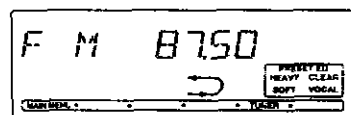
(Using the main unit)
1. Set the tuning method to PRESET. (See page 55)
   (The PGM indicator lights.)

```
F  M    87.50    ■
                ⊃      PRESET ED
                       HEAVY CLEAR
                       SOFT  VOCAL
     MAIN MENU •   •    •  TUNER •
```

2. Press TUNER/BAND to display LW, MW or FM.
3. Press −/I◁◁ or ▷▷I/+ to tune in the broadcast station.
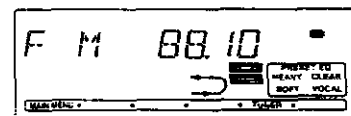
Listening to broadcast stations which have not been programmed (Manual tuning)
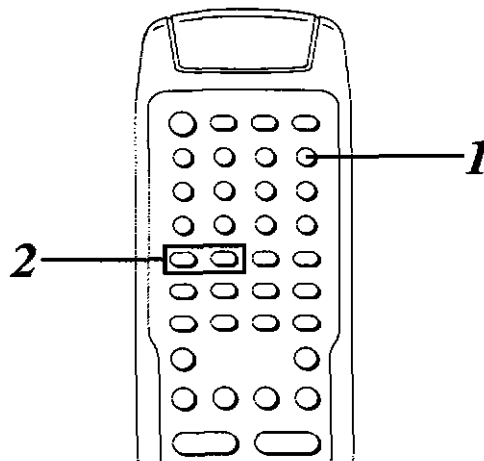
(Using the remote control)

1 TUNER/BAND **Press TUNER/BAND to display LW, MW or FM.**

┌→LW→MW→FM─┐

(The display changes each time the button is pressed.)

2 -/I◄◄ ►►I/+ **Press -/I◄◄ or ►►I/+ to tune in the broadcast station.**

►►I/+ : Press this to increase the broadcast frequency.

-/I◄◄ : Press this to reduce the broadcast frequency.

Keep the button depressed until the frequency display starts to change. A station with good reception is automatically selected and the selection process then stops. (Automatic tuning)

Lights when a station is tuned in (It may not light if the signals of the station are weak.)

Lights when an FM stereo broadcast is tuned in.
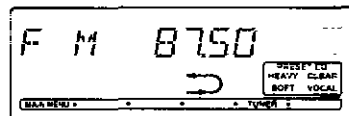
(Using the main unit)
1. Set the tuning method to MANUAL (see page 55).
   (The PGM indicator goes off.)
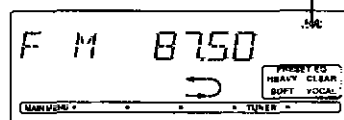
2. Press TUNER/BAND to display LW, MW or FM.
3. Press -/I◄◄ or ►►I/+ to tune in the broadcast station.

**To stop the automatic tuning at any time:**
Press -/I◄◄ or ►►I/+ again.
The selection may stop without tuning into any station if there is interference in the vicinity. In such a case, press -/I◄◄ or ►►I/+ until a station's frequency is picked up.

Frequency display steps:
The frequency display changes in the following steps:
FM: 50 kHz steps
LW, MW: 9 kHz steps

For better reception

When there is too much interference during an FM stereo broadcast

Reduce the interference by setting the sound to monaural.

(Using the remote control)
Example: While an FM stereo program is being received;
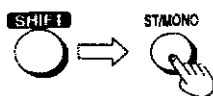
While holding SHIFT down, press ST/MONO.

Holding SHIFT down
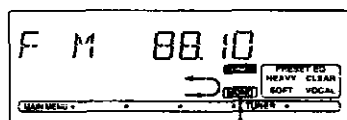
Lights.

To return to stereo reception, repeat the same procedure and turn off the [MONO] display.

Note

The STEREO display will not light in the monaural mode even when a stereo broadcast is received.

Reference

The stereo/monaural mode can also be set using the menu operation on the main unit. (See page 55.)

Adjusting the antennas for better reception

FM
Pull out the telescopic antenna and adjust its length and angle for optimum reception.
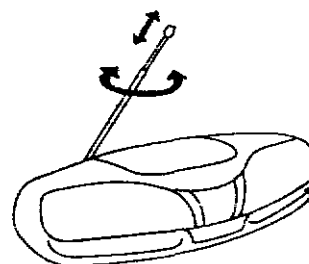
LW/MW
Turn the unit in the direction which gives the best results.

2·3   **4** ▷/⏸

---

1 □/CLEAR

Press □/CLEAR.

---

2 CD
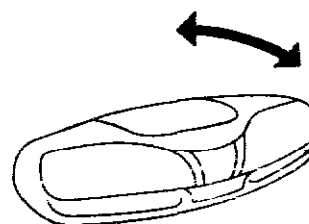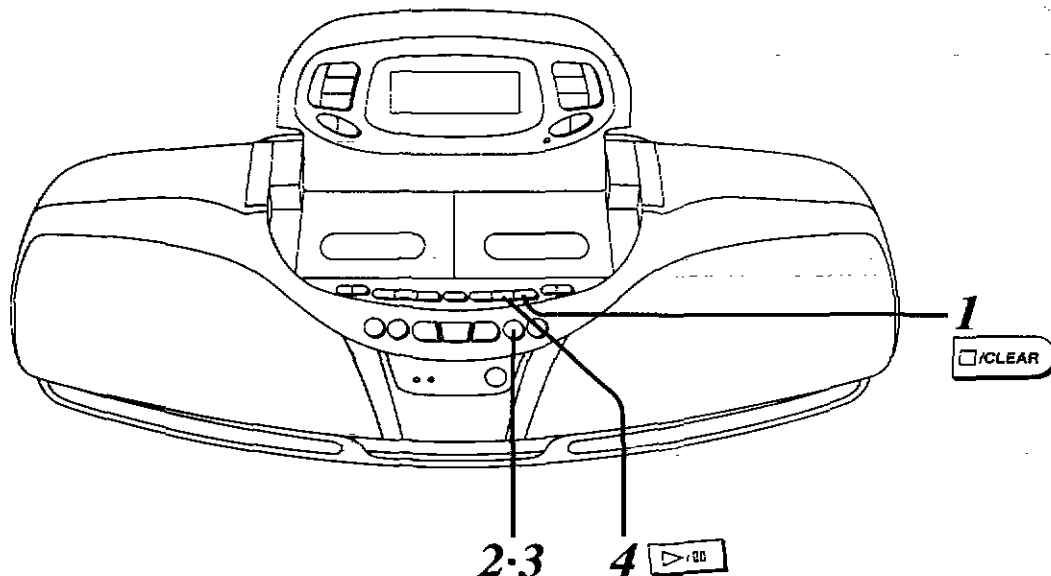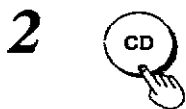
Press CD OPEN/CLOSE to open the tray and insert the CD.
Insert the CD with its label surface facing up.

---

3 CD
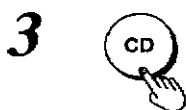
Press CD OPEN/CLOSE to close the tray.

CD 12 53:05
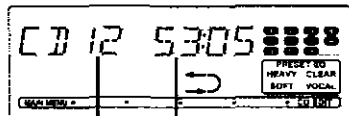
Total number of tracks
Total play time

---

4 ▷/⏸

Press ▷/⏸ to start play.
Play now starts in sequence from track 1 to the last track, after which it will stop automatically.

Flashes.

CD 1 0:0
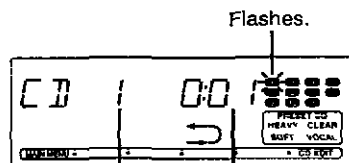
Track now playing
Elapsed play time of track playing

To stop play:
Press □/CLEAR.

To stop play temporarily:
Press ▷/⏸.

To resume play:
Press ▷/⏸ again.

If "NO DISC" or "PANASONIC" appears on the display:
A CD has not been inserted.

If "⊟" appears on the display:
This lights when a CD with 11 or more tracks has been inserted.

Note
Interference may affect radio or TV reception when CDs are played close to a radio or TV set. If this occurs, place the unit as far away from the set as possible.

References
- When ▷/⏸ is pressed after a CD has been Inserted, the tray closes automatically and play commences.
- If the unit is turned off while the CD tray is still open, the tray will close automatically and then the unit will be turned off.

Listening to CDs
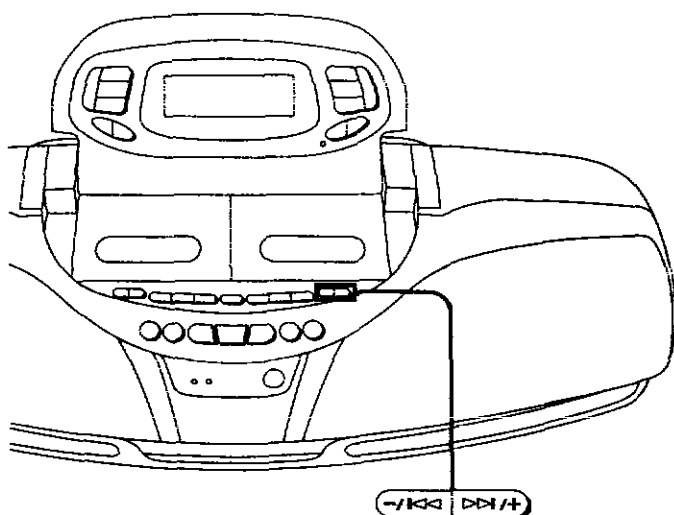
To skip tracks (Skip)

During play:

Press ▷▷▮/+ to skip ahead to the start of the next track.

Press –/▮◁◁ to skip back to the start of the current track.

By repeating this operation, you can skip tracks in the number that corresponds to the number of times you pressed the button.

Note

In random play (see page 23), you cannot skip to the beginning of the track that has been already played

Reference

In program play (see page 22), you can skip forward and backward in the programmed sequence.

To search forward or backward (Search)

During play:

Keep ▷▷▮/+ depressed to advance disc play rapidly.

Keep –/▮◁◁ depressed to review disc play rapidly.

Release the button when the desired position on the disc is reached.

Reference

During program play (see page 22) and random play (see page 23), search will only take place within the track in play.
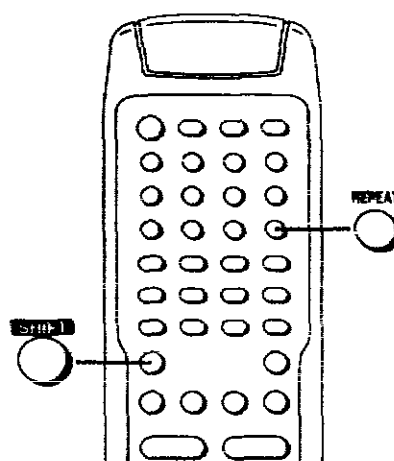
To repeat tracks (Repeat)

(Available only from the remote control)
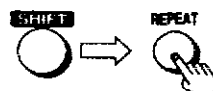
SHIFT   **REPEAT**

Holding SHIFT down

Before play or during play:
While holding SHIFT down, press REPEAT.
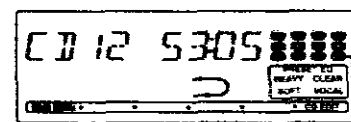
Lights.

To cancel repeat play:

Repeat the same procedure one more time to turn 🔵 indicator off.

References

- In program play (see page 22), the unit plays the programmed tracks in the programmed sequence repeatedly.
- You can enjoy the same track over and over by programming only one track.
- When program play is canceled, the repeat mode is also deleted.

Starting CD play from a desired track (Direct play)
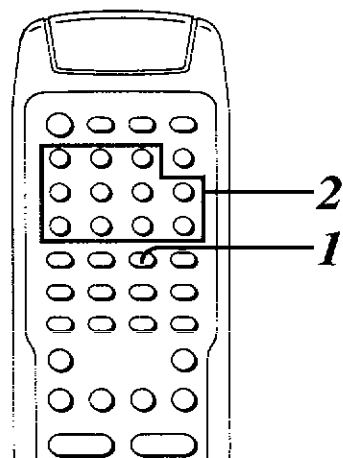
(Using the remote control)
Example: Starting disc play from track 8;

1 Press the CD ■ button to switch to CD play.

2 Press one of the number buttons (1 to 10/0, +10) to select the desired track.

> `CD 8 00 1`
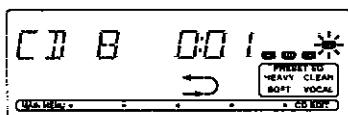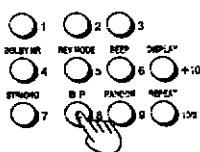
All the tracks starting from the one selected and ending with the last track are played in sequence, and play automatically stops.

To select a track with a number exceeding 10:
Example: Track 13;

$\bigcirc$+10 → $\bigcirc$3

Track 20;

$\bigcirc$+10 → $\bigcirc$+10 → $\bigcirc$10/0
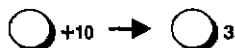
Track 35;

$\bigcirc$+10 → $\bigcirc$+10 → $\bigcirc$+10 → $\bigcirc$5
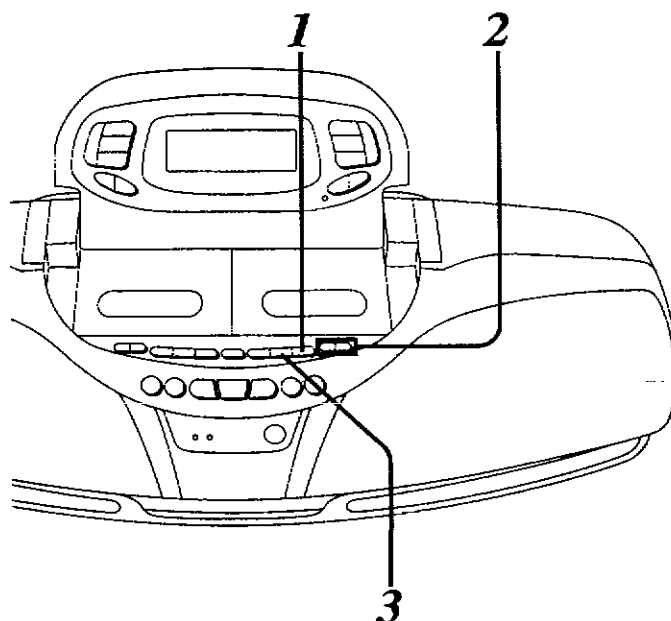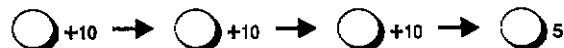
(Using the main unit)
Example: Starting disc play from track 9;

1 Press □/CLEAR to switch to CD play.

2 Press —/ |◁◁ or ▷▷| /+ to display track "9".

> `CD 9`

3 Press ▷/⊞ to start play.

> `CD 9 00 1`
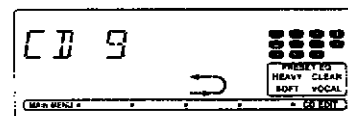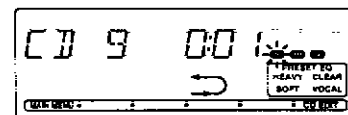
All the tracks starting from the track selected and ending with the last track are played in sequence, and play automatically stops.

21

Selecting and listening to your favorite tracks (Program play)

Up to 36 tracks can be programmed.
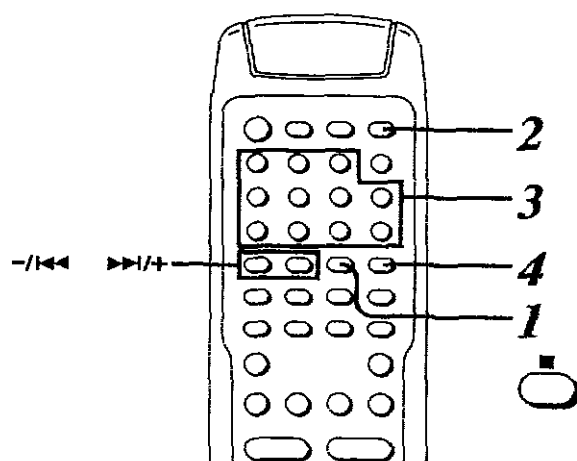
(Available only from the remote control)
Example: Selecting tracks 3, 5, then 7;

1 Press the CD ■ button.

2 PROGRAM
Press PROGRAM to turn on the [PGM] indicator.

Lights.
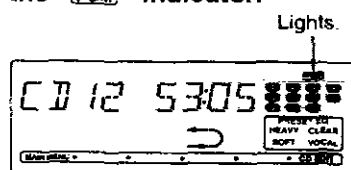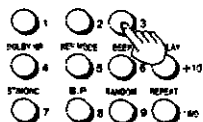
3 Press one of the number buttons (1 to 10/0, +10) to select the desired track.
Repeat step 3 (the tracks will be programmed automatically).

Play sequence
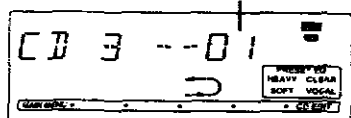
Total play time of programmed tracks

●To select a track with a number exceeding 10; see page 21.

4 ►/II
Press ►/II to start play.
The programmed tracks are played in the programmed sequence, and play stops automatically.
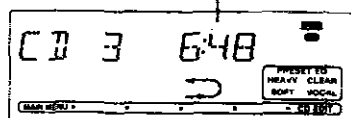
To clear program play:
In the stop mode:
Press CD ■ button to turn off the [PGM] indicator. (Press this button twice during play.)
The CLEAR display now appears and the programmed tracks are cleared.

When "FULL" appears on the display:
The number of programmed tracks has exceeded 36. No more tracks can be programmed.

When "--:--" appears on the display:
The total play time of the programmed tracks has exceeded 120 minutes. However, programming and play are still possible.

When " 🎵 " appears on the display:
A track numbered 11 or more has been programmed. (Operation remains unchanged.)

Contents of memory containing programmed tracks:
The contents of the memory will be retained even if play is stopped or if the unit is turned off before its completion.

This appears when tracks have been programmed in the memory.

```
CD-P  13:58 = ⊟
```
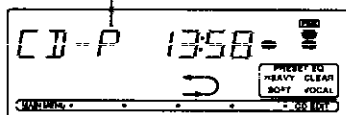
To check what has been programmed:
Press –/I◄◄ ►►I/+ when "P" is displayed.
Each time this button is pressed, the number of the track and the play sequence can be checked.

The program is erased in the following circumstances:
●When CD OPEN/CLOSE has been pressed.
●When the AC mains lead is disconnected or if batteries are removed without inserting memory back-up batteries beforehand.

Playing selections in random order (Random play)

(Available only from the remote control)

1 **Press the CD ■ button.**

2 While holding SHIFT down, press RANDOM.

Holding SHIFT down

Lights.

```
CD  2    0:0 I
```
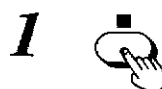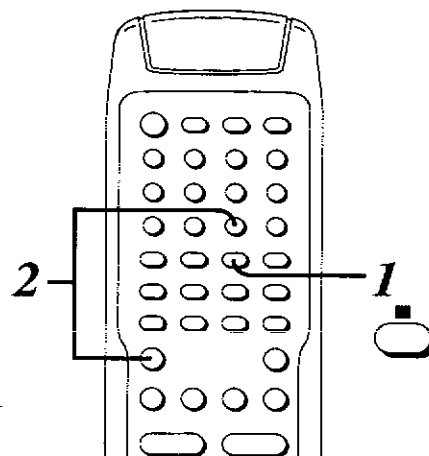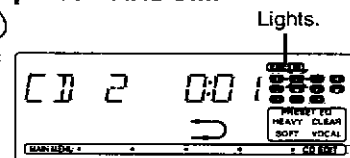
All the tracks are played at random, and play automatically stops.

To clear random play:
Press the CD ■ button to turn off the RANDOM indicator.

Note

Random play cannot be used in combination with program play to play CD tracks.

23

Listening to Tapes

Normal, chrome and metal tapes can be used. The unit automatically identifies the type of tape.
Tapes can be played in either deck 1 or deck 2.
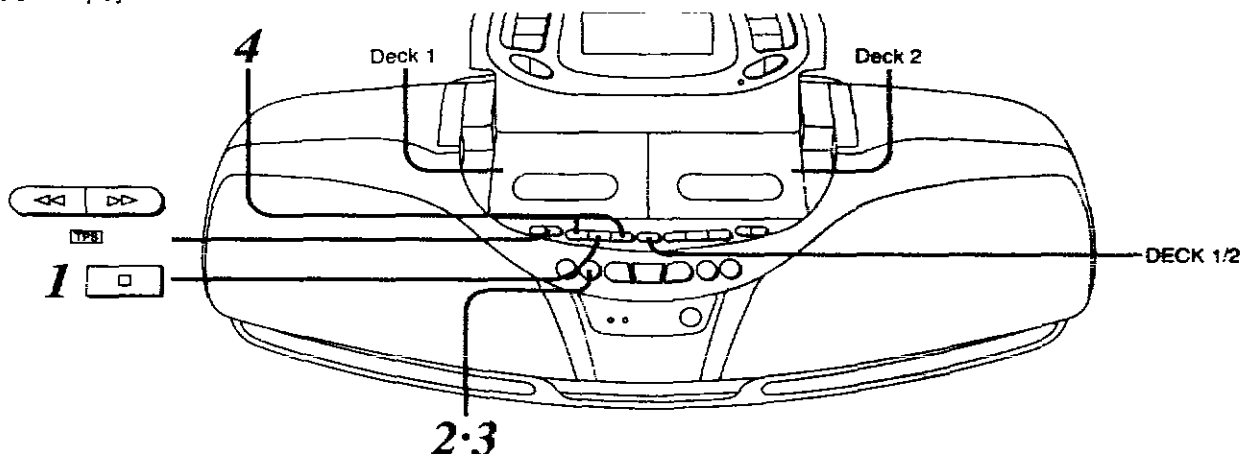
Example: Playing a tape in deck 2:

1
Press the tape □ button to switch to the tape mode.

```
TAPE ------
```
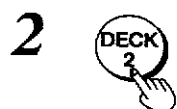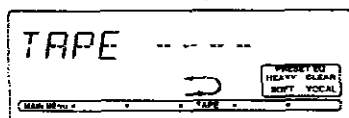
2
Press DECK2 OPEN/CLOSE to open the cassette lid, and insert the tape.

Top side
Reverse side
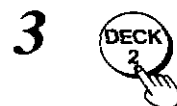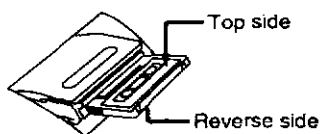
3
Press DECK2 OPEN/CLOSE to close the cassette lid.

Linear tape counter (See page 25.)

```
TAPE  00.00
```
Lights.
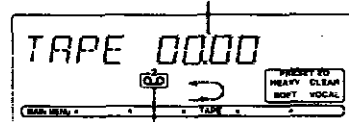
4
Press ◁ REV or FWD ▷.
Press FWD ▷ to play top side.
(Play commences after the FWD PLAY display appears.)
Press REV ◁ to play reverse side.
(Play commences after the REV PLAY display appears.)

```
TAPE  00.0 1
```
Top side playback display

To stop play:
Press the tape □ button.

When tapes have been loaded in both decks:
Press DECK1/2 to select the deck whose tape is to be played back.
(The deck corresponding to the lighted display can be operated.)

```
TAPE  00.00
```
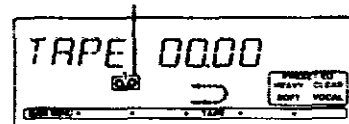
Reference

While a tape is playing in one deck, the other deck can be used to fast forward or rewind another tape. Select the deck using DECK1/2 and operate. After operation, press DECK1/2 to turn on the display of the deck which is playing the tape.

Fast forwarding and rewinding a tape
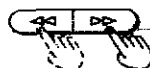
In the stop mode:
Press ◁◁ or ▷▷.
The tape is fast forwarded or rewound in the direction of the arrows (◁◁ or ▷▷).

Fast forwarding and rewinding at high speed:
When fast forwarding the tape from its beginning or rewinding a tape from its end, the tape travels at high speed (about twice as fast as normal).
The tape does not travel at high speed when the radio mode is selected.

Fast forwarding and rewinding at normal speed:
Once the tape has started to travel at high speed, press the same button again.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.

24
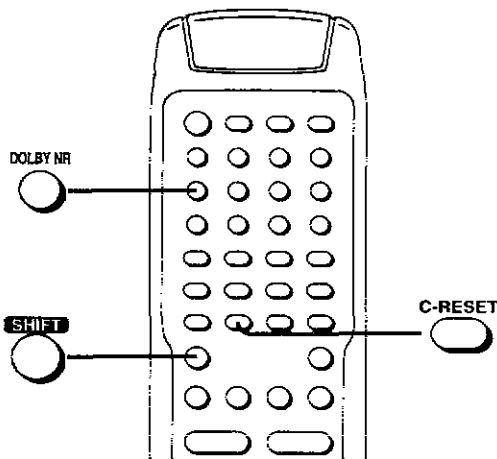
Selecting the Dolby noise reduction function

(Using the remote control)

SHIFT ⇒ DOLBY NR

Holding SHIFT down

While holding SHIFT down, press DOLBY NR.

```
TAPE  00.00
```

Lights.
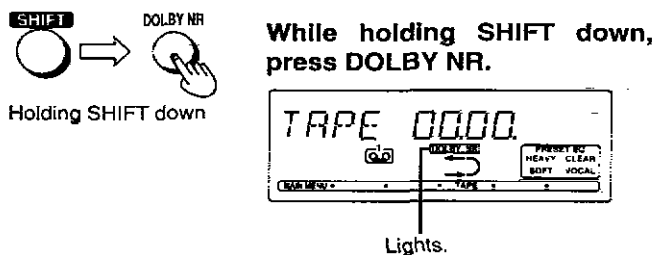
To release the Dolby NR function:
Repeat the same steps as above to turn off the **DOLBY NR** indicator.

Reference

The Dolby noise reduction can also be selected using the menu operation on the main unit. (See page 54.)

Linear tape counter

This indicates the approximate tape time which has elapsed. It is useful for calculating the remaining time of the program being played or the remaining time of the tape.

To set the linear tape counter to 00.00:
(Using the remote control)

C-RESET

Press C-RESET.

```
TAPE  00.00
```

Note

The unit's linear counter is not a clock. Depending on the length and type of the tape used, there may be a discrepancy between the actual recording or playback time and the counter indication.

Reference

The linear tape counter can also be reset to 00.00 by the unit's menu operation. (See page 54.)
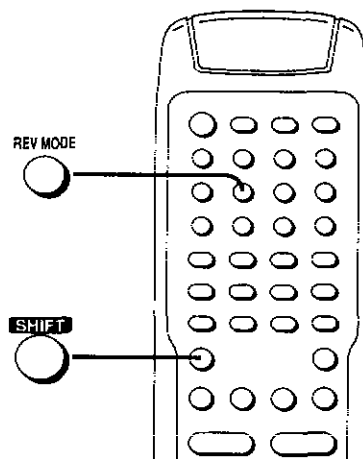
Selecting the reverse mode

(Using the remote control)

SHIFT ⇒ REV MODE

Holding SHIFT down

While holding SHIFT down, press REV MODE to select the reverse mode.

```
TAPE  00.00
```

(The display changes each time the buttons are pressed.)
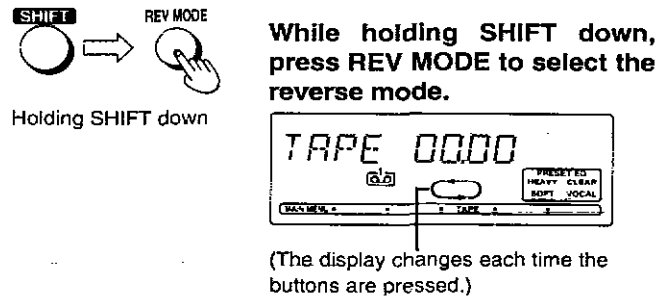
⊃ : The unit plays both sides, and then the tape automatically stops. (From top side to reverse side)

⊂⊃ : The unit plays both sides of the tape repeatedly until you press the tape ⊃ button.
When you load cassettes into both decks;
The unit plays both sides of the tape in both decks repeatedly. Playback will continue until you press the tape ☐ button.

⇄ : The unit plays one side only, and then the tape automatically stops.

Reference

The reverse mode can also be selected using the unit's menu operation. (See page 54.)

To listen continuously to two tapes in succession:
The tapes will be played continuously until the tape ⊂ button is pressed.
1. Load tapes into deck 1 and deck 2.
2. Select the reverse mode (⊂⊃).
3. Select which deck is to start tape play by pressing DECK1/2.
4. Press < REV or FWD > to start the tape play.
   FWD ▷: Press this to play the tape from its top side.
   < REV: Press this to play the tape from its reverse side.

The Dolby noise reduction function cannot be set separately for decks 1 and 2. It is recommended that you use tapes which have been recorded with the same Dolby setting (ON or OFF).

25

Listening to Tapes

Tape program sensor (TPS)

During play, the number of programs corresponding to the number of times the TPS button was pressed will be skipped, and the desired program is located (up to 9 programs before or after the program now heard).

. . . .
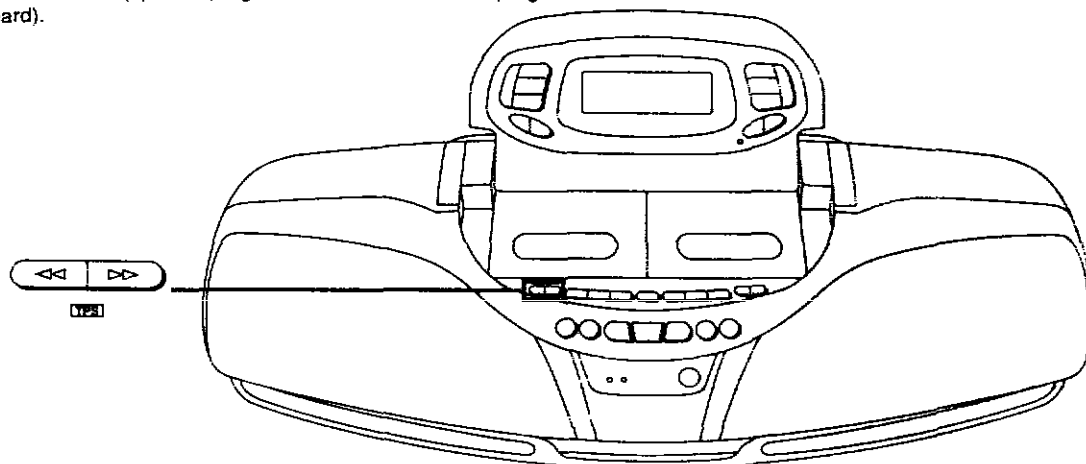
Example:

When ◁◁   When ▷▷
was pressed 3 times   was pressed 3 times

Track in play
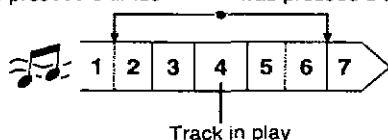
During playback of the top side (▷ indicator is lighted):

Press ▷▷ .
Skips forward by the number of tracks corresponding to the number of times the button was pressed

Number of programs skipped
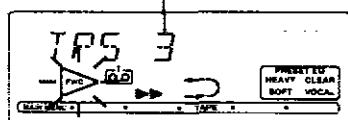
Press ◁◁ .
Skips backward by the number of tracks corresponding to the number of times the button was pressed.

Number of programs skipped
(the program which was heard is included in this number)
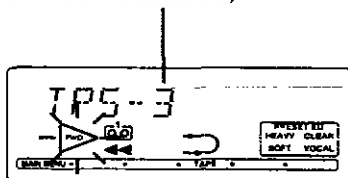
During playback of the reverse side (< indicator is lighted):
Press ◁◁ to skip forward.
Press ▷▷ to skip backward.

Note

Since the blank spaces between tracks are used for locating the beginning of each track, the TPS function may not operate in the following cases:
- When the blank spaces are 4 seconds or less
- When there are no blank spaces on the tape (such as when the recording has been made from a microphone, etc.)
- When there are parts of tracks which have been recorded at a particularly low level or which have not been recorded at all (such as with classical music)
- When 10 or fewer seconds have elapsed since the beginning of a track or when there are 10 or fewer seconds until beginning of the next track

Reference

To create unrecorded blanks on the tape to enable programs to be searched when recording CD tracks, set the auto space function first and then proceed with edit-recording. (See page 55.)

26

Selecting the equalizer effect

Four equalizer effects have been stored In the unit.
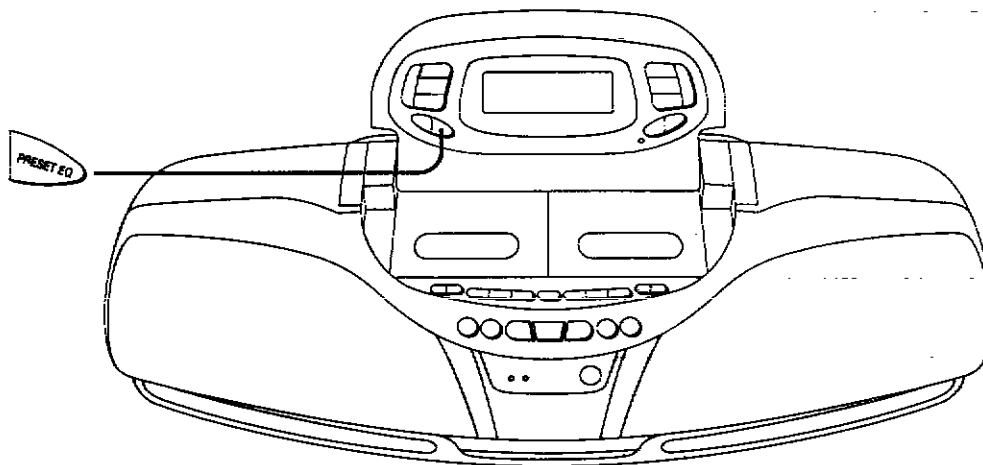
Press PRESET EQ to select the desired equalizer effect.

┌→HEAVY→CLEAR→SOFT ──────┐
└ EQ-OFF←VOCAL ←──────────┘

(The display changes each time the button is pressed.)

```
CLEAR
```
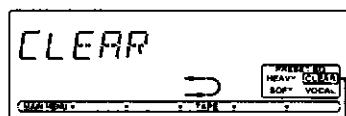
The display surrounding the selected equalizer effect lights.

When the equalizer effects are not going to be used (to listen to the original sound):

Press PRESET EQ to Indicate "EQ-OFF".

```
EQ-OFF
```
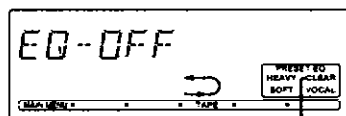
The display surrounding the equalizer effect is cleared.

■ Stored equalizer effects

HEAVY: This gives an added punch to rock music, etc.
CLEAR: This boosts the treble range of music.
SOFT: This produces a soft, background music effect.
VOCAL: This enhances vocals.

Adjusting the deep-bass

The deep-bass can be used in combination with the equalizer effects.
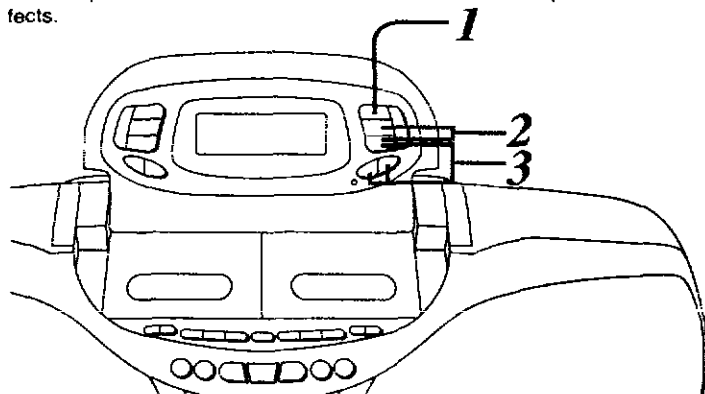
Example: In the TAPE mode;

1 Press MAIN MENU SELECT to display "SOUND".

```
- - SOUND - -
```

┌→TAPE→TIME→SOUND ──────┐

(The display changes each time the button is pressed.)

2 Press SUB MENU SELECT to display "S-XBS".

```
S - XBS
```

┌→S-XBS→TONE ──┐

(The display changes each time the button is pressed.)

Press SET.

3 Press —/REV or FWD/+ to select the desired level.
The deep-bass can be adjusted to any of 11 steps from 0 to 10.
FWD/+: Press this to increase the level.
—/REV: Press this to reduce the level.
Press SET.

Reference
The S-XBS level selected in step 3 is stored in the memory only when the equalizer effects are not going to be used (when the EQ-OFF is indicated: see page 27).

Adjusting the treble

The treble can be used in combination with the equalizer effects.
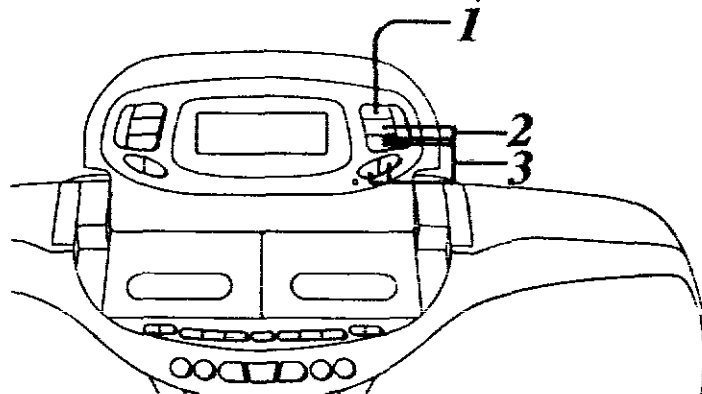
Example: In the TAPE mode;

1 Press MAIN MENU SELECT to display "SOUND".

```
- - SOUND - -
```

┌→TAPE→TIME ·SOUND ──────┐

(The display changes each time the button is pressed.)

2 Press SUB MENU SELECT to display "TONE".

```
TONE
```

┌→S-XBS→TONE ──┐

(The display changes each time the button is pressed.)

Press SET.

3 Press —/REV or FWD/+ to select the desired level.
The treble can be adjusted to any of 11 steps from —5 to 5.
FWD/+: Press this to increase the treble tone.
—/REV: Press this to reduce the treble tone.
Press SET.

Reference
The TONE level selected in step 3 is stored in the memory only when the equalizer effects are not going to be used (when the EQ-OFF is indicated; see page 27).

28

Normal, chrome and metal tapes can be used.
The unit automatically identifies the type of tape used.

Outlined below are several ways of recording CDs. Pick the one that best suits your purpose.

Easy recording (Automatic CD recording) (See page 30.)

All the tracks can be recorded in their original sequence onto a single tape.
Only part of a track may be recorded at the end of the top side. This track will be re-recorded in its entirety at the beginning of the reverse side.

Only part of track 6 is recorded.

| Top side | | Track 1 | Track 2 | Track 3 | Track 4 | Track 5 | |

| Reverse side | | Track 6 | Track 7 | Track 8 | |

Track 6 is re-recorded in its entirety.
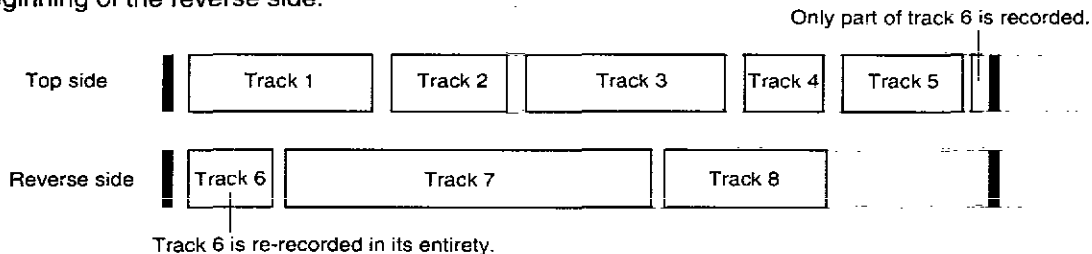
This recording method can be used to record your favorite tracks. (See page 31.)
It can also be used to record the tracks of several CDs onto a single tape. (See page 31.)

Menu Editing

From one CD

All the tracks on the CD are edited.
(AI/FIT: AI/FIT editing) (See page 32.)

None of the tracks is partially recorded at the end of the top side.
The track sequence is rearranged to fit the length of the tape and the tracks for recording.

| Top side | | Track 1 | 2 | 3 | 4 | 5 | |
| Reverse side | | 6 | 7 | 8 | |
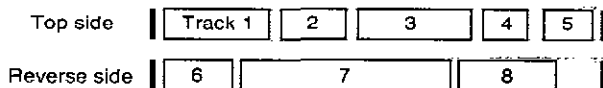
Your favorite tracks are selected and edited.
(MANUAL: Manual editing)(See page 34.)

None of the tracks is partially recorded at the end of the top side.

| Top side | | Track 2 | 3 | 6 | 5 | 1 | |
| Reverse side | | 7 | 8 | 4 | |
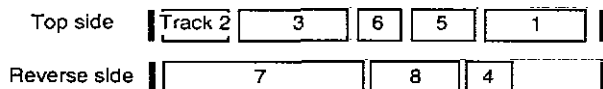
From several CDs

Several CDs are edited in succession.
(LINK: Link editing)(See page 36.)

None of the tracks is partially recorded at the end of the top side.

┌──── First CD ────┐ ┌──── 2nd CD ────┐

| Top side | | Track 1 | 2 | 3 | 5 | |
| Reverse side | | 1 | 4 | 1 | 2 | |

└──── 3rd CD ────┘ └──── 4th CD ────┘
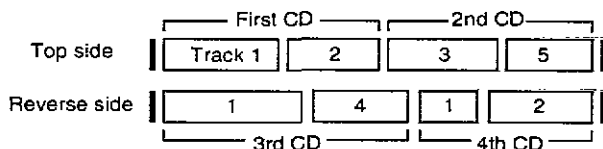
To record without using the edit functions (See page 38.)
●This method can be used to record tracks with a long play time in their original sequence.
●It can also be used to record CD tracks at the end of a tape.
●One of the tracks may be partially recorded at the end of the tape.

●The recording level is set automatically.
●Any change made to the volume or tone quality during recording
will not affect the recording.

Easy recording (Automatic CD recording)

Only Deck 2 can be used.
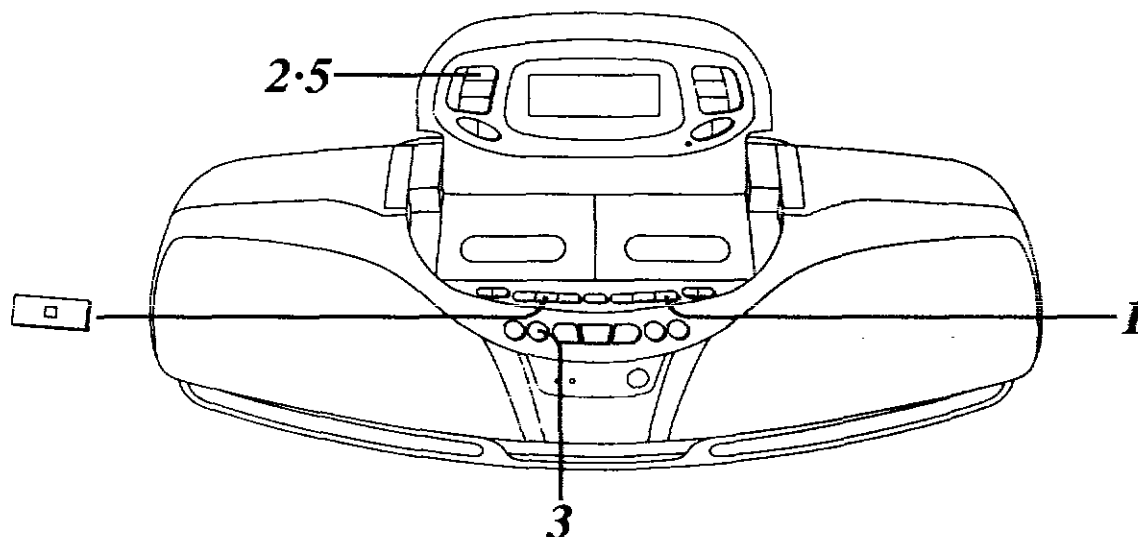
Insert a CD.

1 Press □/CLEAR.

2 Before loading the tape:
Press AUTO CD RECORD to find out how long the tape must be to accommodate the recording of all the tracks.

Length of the tape required to record all tracks
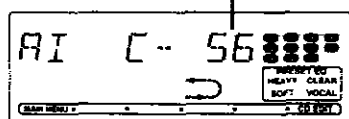
3 Press DECK2 OPEN/CLOSE and load the tape, which is longer than the length indicated in step 2.

With the side on which recording is to commence facing up.

(Example: 60-minute tape)

4 While holding down SHIFT on the remote control:
Press DOLBY NR to select the Dolby noise reduction function.
(See page 25.)

Holding SHIFT down

5 Press AUTO CD RECORD to start recording.
When this button is pressed, the tape is rewound and after a 10-second blank is recorded, recording starts.
(The recording level is set automatically.)

Tape now rewinding

10-second blank now being recorded

Recording starts

To stop recording:
Press the tape □ button.
The CD play also stops at the same time.

There is no need to take up the leader tape.
The reverse mode of the tape is automatically set to ⊃ .
If especially important material is being recorded, ensure you re-place worn out batteries beforehand, or simply plug the unit into a household mains outlet.

When "————" appears on the display:
This means that a CD with 37 or more tracks on it has been loaded.
Be sure to insert a tape which is longer than the total playing time of the CD.
(The recording of all the tracks may not be completed if tape length is insufficient.)

To record with unrecorded blanks between tracks:
These blanks come in handy when searching for programs during tape play.
Set the auto space function before starting with the operation for edit-recording. (See page 55.)

Recording your favorite tracks

After programming your favorite tracks (see steps 1 to 3 on page 22), perform steps 2 to 5 on page 30.

> Your attention is drawn to the fact that recording pre-recorded tapes or discs on other published or broadcast material may infringe copyright laws.
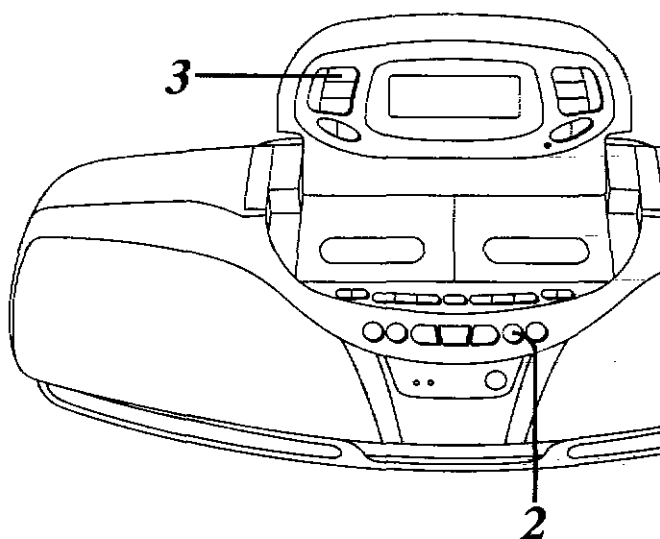
Recording tracks from several CDs onto a single tape

If there is still room on the tape after one CD has been recorded, deck 2 will be set to the recording standby mode.

1   Record one CD.

2   (CD)   Press CD OPEN/CLOSE and change the CD.
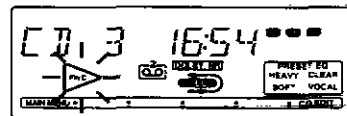
3   (AUTO CD RECORD)   Press AUTO CD RECORD.
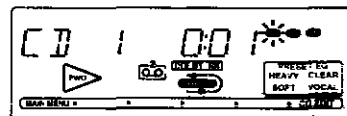
Recording now starts from the position on the tape.

When another CD is not going to be recorded in succession, press the tape □ button to release the recording standby mode.

Edit-recording all the tracks on a CD (AI/FIT editing)

A CD may have up to 36 tracks.
If the tape is long enough, the CD tracks will be recorded in their
original order. Depending on the length of the tape, the tracks may
be rearranged so that they will all be recorded.
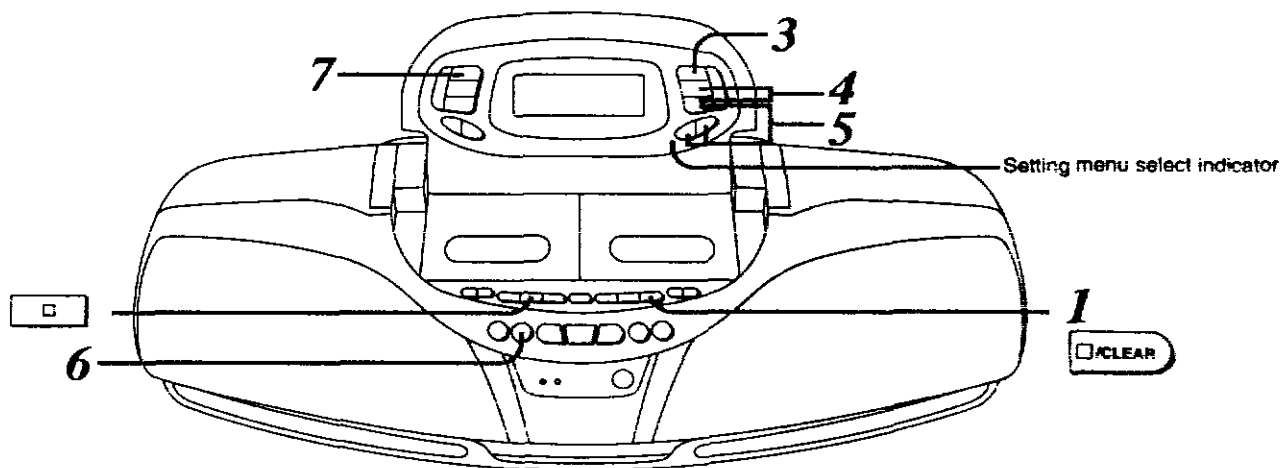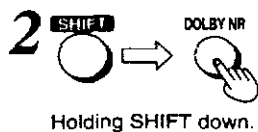
Setting menu select indicator

Insert the CD.

1 Press □/CLEAR.

2 While holding SHIFT down on the remote control:
Press DOLBY NR to select the Dolby noise reduction setting.
Holding SHIFT down. (See page 25.)

3 Press MAIN MENU SELECT to display "CD EDIT".
┌→CD EDIT→TIME ────┐
└─TAPE←SOUND←────┘
(The display changes each time the button is pressed.)

-CD EDIT-

4 **Press SUB MENU SELECT to display "AI/FIT".**
┌→AI/FIT→MANUAL ──┐
└─ A-SPACE ←──────┘
(The display changes each time the button is pressed.)

AI/FIT

Press SET.
Setting menu select indicator flashes.

Length of tape required to record all the tracks in their original order

AI C- 59

5

Press —/REV or FWD/+ to display the length of the tape to be used.

...46–47...59–60...120–01–02...

(The display changes each time the button is pressed.)

"60" is set here because a length of more than 59 minutes is required.
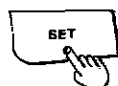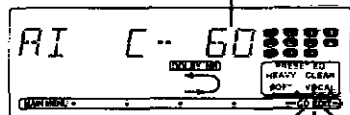
Press SET.

When a shorter tape length than that displayed in step 4 is set, the tracks are rearranged in the editing.

(Depending on the length of the tape, it may not be possible to record all the tracks.)

Time remaining on side A of the tape
| Time remaining on side B of the tape
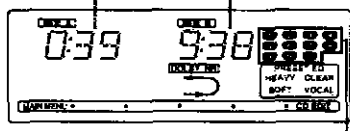
Tracks which can be recorded on both sides of the tape.

6

Press DECK2 OPEN/CLOSE and load the tape.

7

Press AUTO CD RECORD to start recording.

When this button is pressed, the tape is rewound and after a 10-second blank is recorded, recording starts.

(The recording level is set automatically.)

Tape now rewinding

10-second blank now being recorded

Recording starts
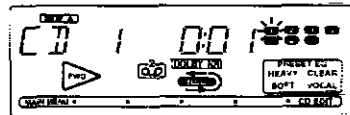
To stop recording:
Press the tape ☐ button.
The CD play also stops at the same time.

To release the edit-record setting:
In the stop mode:
Press ☐/CLEAR.
The "CLEAR" display now appears.

To record with unrecorded blanks between tracks:
These blanks come in handy when searching for programs during tape play.
Set the auto space function before starting with the operation for edit-recording. (See page 55.)

To check the tracks which have been assigned to both sides:
Upon completion of step 5, the display changes as follows each time SET is pressed.
1. Number of tracks which can be recorded on side A (top side) and remaining time
2. Number of tracks which can be recorded on side B (reverse side) and remaining time
3. Remaining time on both sides

Recording another CD in succession:
If there is still room on the tape upon completion of the recording, the deck is set to the recording standby mode. You can record another CD in succession using the LINK edit. (See page 36.)

Note

It is not possible to edit all the tracks if the CD has 37 or more tracks. If such a CD is used, "MANUAL" appears after ERROR is displayed in step 4.
To record all the tracks, use a tape which is sufficiently long and proceed with steps 3 to 5 on page 30.

Reference

●The reverse mode of the tape is automatically set to (⊃).
●There is no need to take up the leader tape.

If "OVER" appears:
You can still start recording but since the tape is not long enough to accommodate all the tracks on this CD, some tracks will not be recorded.

Amount of time lacking on side B (reverse side)
OVER display |
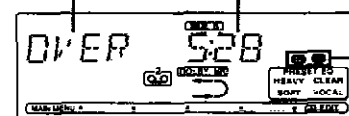
Tracks which cannot be recorded

Selecting and edit-recording your favorite tracks (Manual editing)

Up to 36 tracks can be programmed.
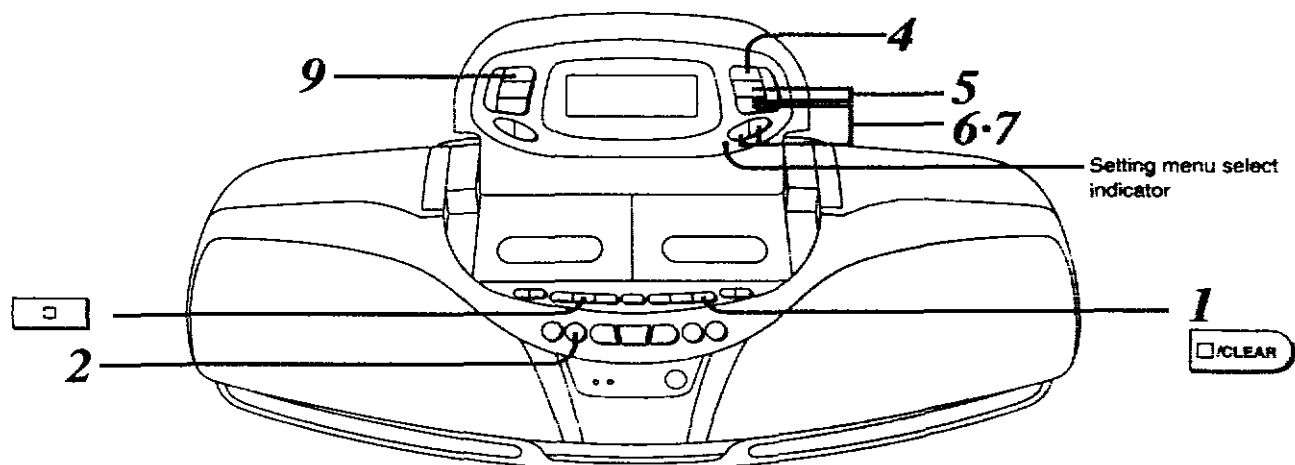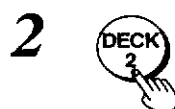
Setting menu select indicator

Insert the CD.

1 Press □/CLEAR.

2 Press DECK2 OPEN/CLOSE and load the tape.

3 Hold SHIFT down → DOLBY NR
While holding SHIFT down on the remote control:
Press DOLBY NR to select the Dolby noise reduction setting.
(See page 25.)

4 Press MAIN MENU SELECT to display "CD EDIT".
┌→ CD EDIT→TIME──┐
└ TAPE←SOUND←──┘
(The display changes each time the button is pressed.)

-CI EDIT-
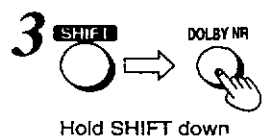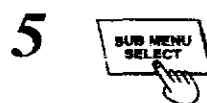
5 Press SUB MENU SELECT to display "MANUAL."
┌→ AI/FIT→MANUAL ─┐
└ A-SPACE ←──────┘
(The display changes each time the button is pressed.)

MANUAL

Press SET.
Setting menu select indicator flashes.

6 Press −/REV or FWD/+ to display the length of the loaded tape.
┌─…46…89-90…120-01-02─┐
(The display changes each time the button is pressed.)

M   C-- 90

Press SET.

4500 4500
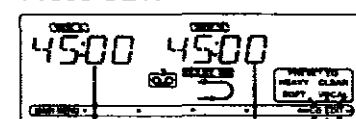
Recording time on one side of tape

7

Press −/REV or FWD/+ to display your favorite track.

┌...M1−M2...M7−M8...M15... ┐

(The display changes each time the button is pressed.)

```
M   B   5:02
```
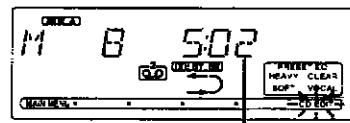
Play time of designated track

Press SET.

```
39:58   45:00
```
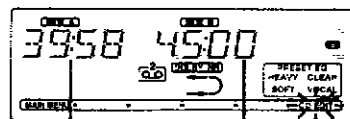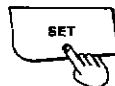
Time remaining on tape side A

Time remaining on tape side B

8

Repeat step 7.

(The tracks are programmed automatically.)

9

Press AUTO CD RECORD to start recording.

When this button is pressed, the tape is rewound and after a 10-second blank is recorded, recording starts.

Tape now rewinding
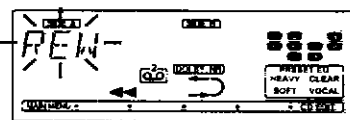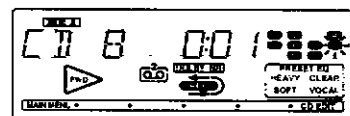
```
REW
```

10-second blank now being recorded

```
PRE-REC
```

Recording starts

```
CD  B   0:01
```

To stop recording:

Press the tape ☐ button.
The CD play also stops at the same time.

To release the edit-record setting:

In the stop mode:
Press ☐/CLEAR.
The "CLEAR" display now appears.

To check the tracks which have been assigned to both sides:

(Complete step 8, press MAIN MENU SELECT and complete the menu operation before proceeding with the steps below.)
The display changes as follows each time SET is pressed.
1. Number of tracks which can be recorded on side A (top side) and remaining time
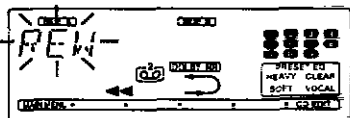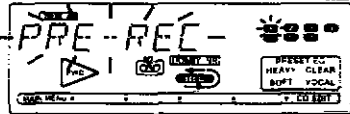2. Number of tracks which can be recorded on side B (reverse side) and remaining time
3. Remaining time on both sides

To record with unrecorded blanks between tracks:

These blanks come in handy when searching for programs during tape play.
Set the auto space function before starting with the operation for edit-recording. (See page 55.)

Recording another CD in succession:

If there is still room on the tape upon completion of the recording, the deck is set to the recording standby mode. You can record another CD in succession using LINK edit. (See page 36.)

References

● The reverse mode of the tape is automatically set to (⊃).
● There is no need to take up the leader tape.

If "OVER" appears:
Since the tape is not long enough to accommodate all the tracks you have chosen, the last track selected will not be programmed.

Edit-recording several CDs in succession (Link editing)

This can be done with the deck in the recording standby mode after the first CD has been edit-recorded.
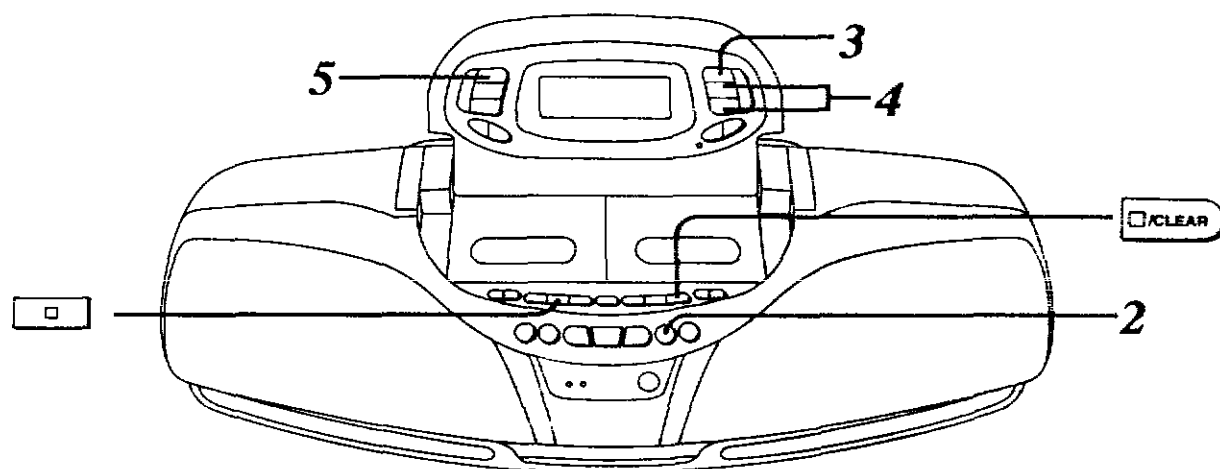
Recording all the tracks on a second CD (AI/FIT)

1

Edit-record the first CD.
● Edit-recording all the tracks on the CD: AI/FIT (See page 32.)
● Selecting and edit-recording your favorite tracks: MANUAL (See page 34.)

2

Press CD OPEN/CLOSE and replace the first CD with the second CD.
Number of tracks and play time of new CD
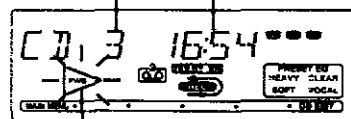
Recording standby status

3

Press MAIN MENU SELECT to display "CD LINK".
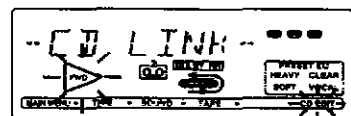
4

Press SUB MENU SELECT to display "AI/FIT".
┌► AI/FIT→MANUAL ─┐
└ A-SPACE◄────────┘
(The display changes each time the button is pressed.)

Press SET.

5

Press AUTO CD RECORD to start the recording.
Recording starts from the position concerned on the tape.

To record a third or further CD, repeat steps 2 to 5.

To clear the link edit setting:

1. Press □/CLEAR to clear the edit-record setting.
   The "CLEAR" display appears.

2. Press the tape ☐ button to clear the recording standby status.

Reference

The reverse mode of the tape is automatically set to (☴).

If "OVER" appears:
Since the tape is not long enough to accommodate all the tracks, some tracks will not be recorded. Release the link edit mode when not even one track can be recorded.

Setting menu select
Indicator

□/CLEAR
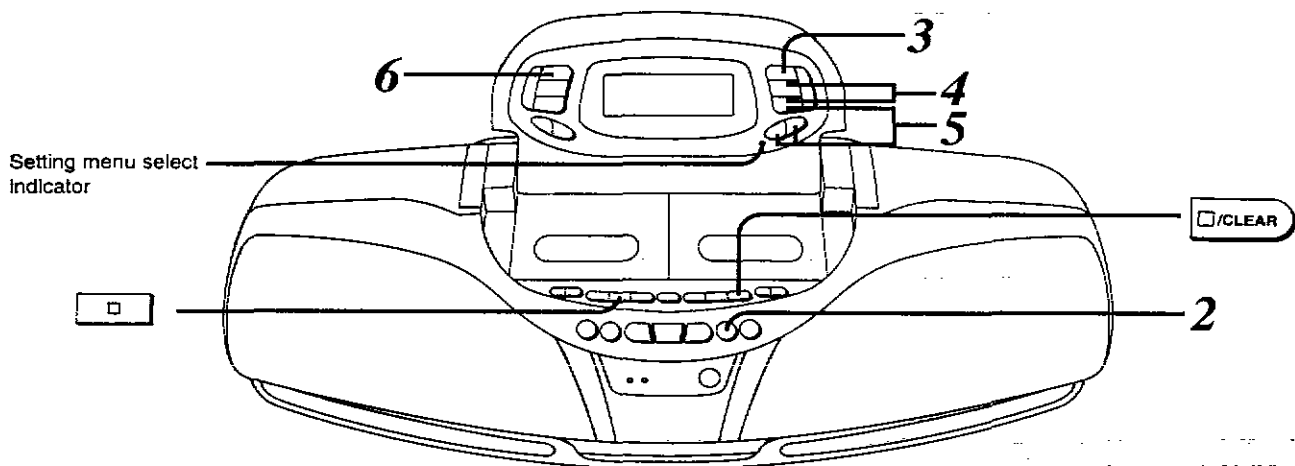
Recording your favorite tracks in a programmed sequence (MANUAL)

1 **Edit-record the first CD.**
●Edit-recording all the tracks on the CD: AI/FIT (See page 32.)
●Selecting and edit-recording your favorite tracks: MANUAL (See page 34.)

2 **Press CD OPEN/CLOSE and replace the CD.**

3 **Press MAIN MENU SELECT to display "CD LINK".**

4 **Press SUB MENU SELECT to display "MANUAL".**
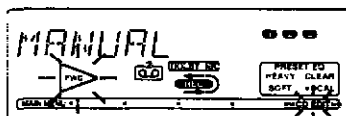
Press SET.
Setting menu select indicator flashes.

5 **Press —/REV or FWD/+ to display your favorite track.**
Press SET.
Repeat step 5 to complete the programming.
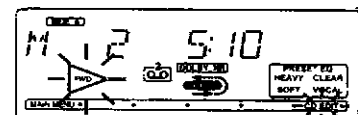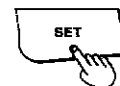
6 **Press AUTO CD RECORD to start recording.**
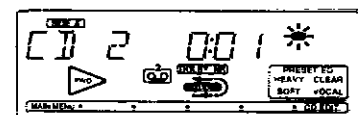
To record a third or further CD, repeat steps 2 to 6.

To clear the link edit setting:
1. Press □/CLEAR to clear the edit-record setting.
The "CLEAR" display appears.
2. Press the tape □ button to clear the recording standby status.

If "OVER" appears:
Since the tape is not long enough to accommodate all the tracks you have chosen, the last track selected will not be programmed.

37

Recording without the edit function

The recording level is set automatically.
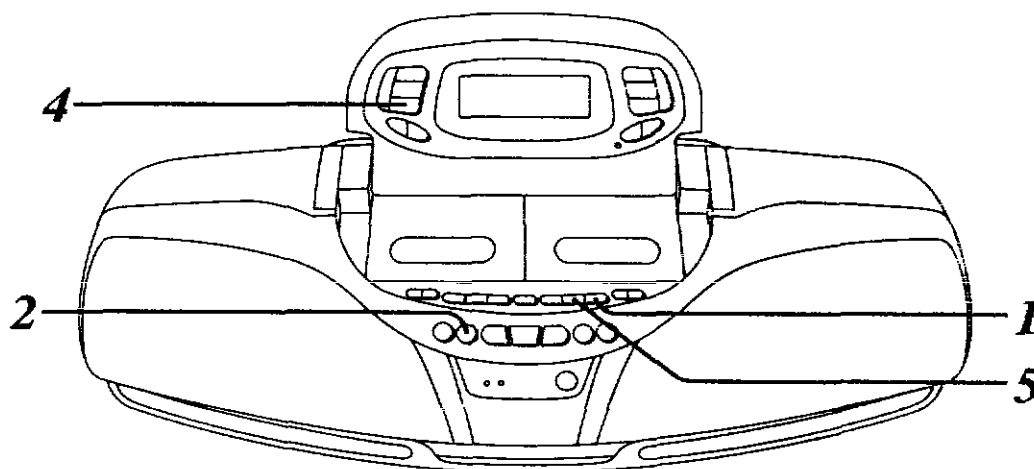
Insert the CD.

1 Press □/CLEAR.

2 Press DECK2 OPEN/CLOSE and load the tape.
(Take up the leader tape before proceeding.)

3 DOLBY NR
Holding SHIFT down

While holding SHIFT down on the remote control:
Press DOLBY NR to select the Dolby noise reduction setting.
(See page 25.)

REV MODE
Holding SHIFT down

While holding SHIFT down on the remote control:
Press REV MODE to select the reverse mode.
(See page 25.)

‡ : Sound is recorded on only one side of the tape, and then the tape stops automatically.

‡⊃ : Sound is recorded on the top side and then the reverse side, and the tape stops automatically.

⊂‡⊃ : Sound is recorded on the top side and then the reverse side, and the tape stops automatically.

4 REC PAUSE
Press REC PAUSE to establish the recording standby status.

Flashes.   Lights.
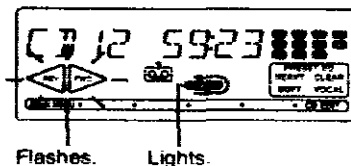
5 ▷/₀₀
Press ▷/₀₀ .
Recording starts

To take up the leader tape:
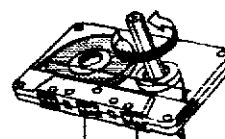
Magnetic part of tape
(sound can be recorded)

Leader tape
(nothing can be recorded)

To record your favorite tracks:
First program your favorite tracks (by following steps 1 to 3 on page 22) and then proceed with steps 2 to 5 above.

REC PAUSE

☐/CLEAR

▷/☐☐
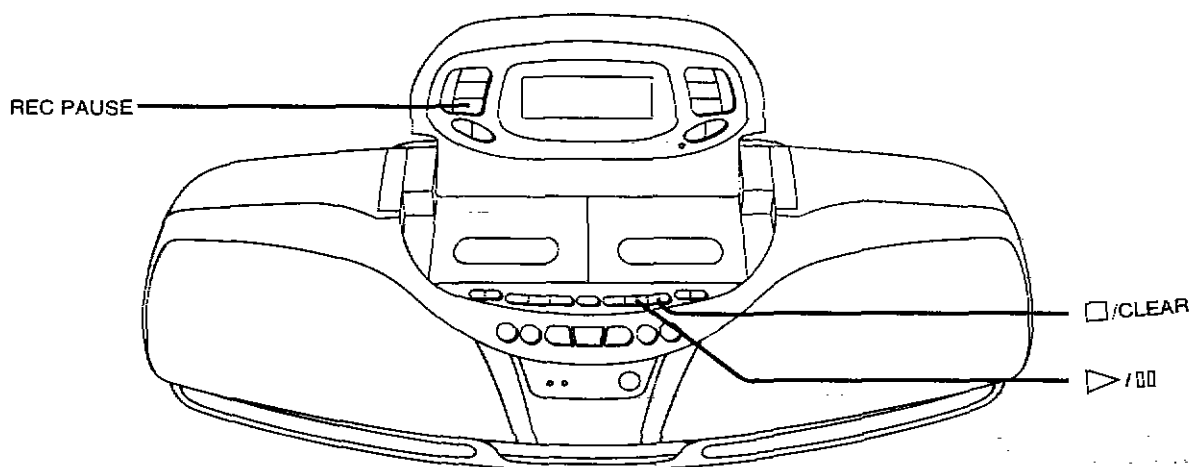
Recording tracks with a long play time in their original sequence

Recording starts on the reverse side where the last track which was recorded in part was cut off at the end of the top side.

Take up the leader tape before proceeding.

| Top side | | Track 1 | Track 2 | Track 3 | |

| Reverse side | | Track 3 | Track 4 | |

Advance the tape to the position where the recording on the top side was cut off, then start recording again.
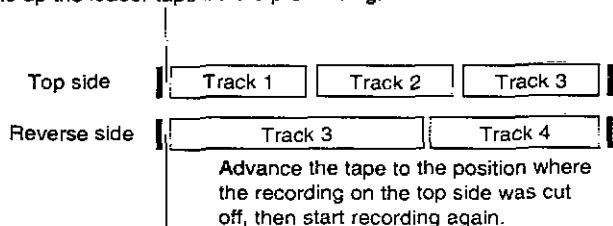
Take up the leader tape before proceeding.

■ **Recording on the top side**
1. **Load the tape and insert the CD.**
   (Take up the leader tape before proceeding.)
2. **Set the reverse mode of the tape to ⇆ and select the Dolby noise reduction setting.**
   (See page 25.)
3. **Press ☐/CLEAR and then press REC PAUSE.**
4. **Press ▷/☐** .
   Recording starts.
   CD play will continue even after recording on the top side has been completed and the tape has stopped.

■ **Recording on the reverse side**
1. **Play back the top side of the tape and check where the recording was cut off.**
2. **Play the CD and press ▷/☐ when the point where the recording was cut off is reached.**
3. **Turn over the tape so that its reverse side faces up.**
   (Take up the leader tape before proceeding.)
4. **Press REC PAUSE and then ▷/☐** .
   This resumes the recording.

Recording CD tracks onto the remainder of a recorded tape

Already recorded portion

| Top side | | | |

| Reverse side | | | Track1 | Track 2 | |

Recorded portion   Additional recording
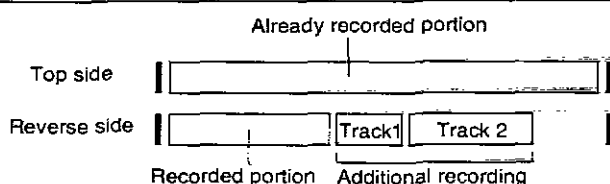
1. **Load the tape with the side to be recorded facing up.**
2. **Find the start of the section where sound is to be recorded.**
   (See page 26.)
3. **Insert the CD and press ☐/CLEAR.**
4. **Select the Dolby noise reduction setting and reverse mode.**
   (See page 25.)
5. **Press REC PAUSE.**
6. **Press ▷/☐** .
   Recording starts.

To erase sound previously recorded on a tape:
●Recording new sound onto a pre-recorded tape automatically erases what was previously recorded.
●To erase all the sound on a tape (without recording fresh sound):
  1. Load the pre-recorded tape into deck 2.
  2. Press ⇆/CLEAR.
  3. Set the Dolby noise reduction to OFF. (See page 25.)
  4. Select the reverse mode. (See page 25.)
  5. Press REC PAUSE.
  6. Press ◁ REV or FWD ▷.
     FWD ▷: For erasing sound from the top side.
     ◁ REV: For erasing sound from the reverse side.

39

Recording Radio Broadcasts

Normal, chrome and metal tapes can be used.
Radio broadcasts can be recorded in deck 2 only.
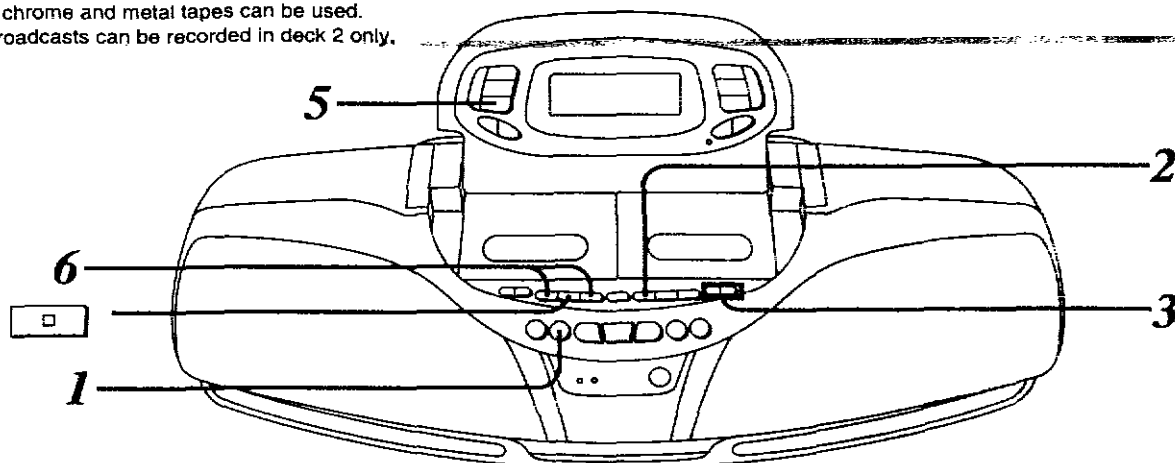
Take up the leader tape before proceeding.

1 Press **DECK2 OPEN/CLOSE** and load the tape.

2 Press **TUNER/BAND** to select the band.

→LW→MW→FM→

(The display changes each time the button is pressed.)

3 Press **TUNING** to select the radio station.
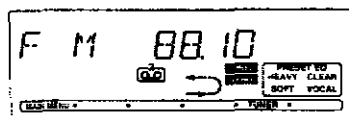
4 While holding SHIFT down on the remote control:

Holding SHIFT down

Press DOLBY NR to select the Dolby noise reduction setting.
(See page 25.)

While holding SHIFT down on the remote control:

Holding SHIFT down

Press REV MODE to select the reverse mode.
(See page 25.)

⊏ : Sound is recorded on only one side of the tape, and then the tape stops automatically.

⊏⊃ : Sound is recorded on the top side and then the reverse side, and the tape stops automatically.

⊂⊃ : Sound is recorded on the top side and then the reverse side, and the tape stops automatically.

5 Press **REC PAUSE** to establish the recording standby status.
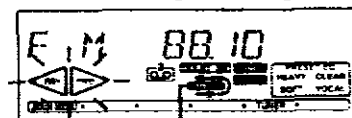
Flashes.   Lights.

6 Press ◁ **REV** or **FWD** ▷.

FWD ▷: Recording starts from the top side.

◁ REW: Recording starts from the reverse side.
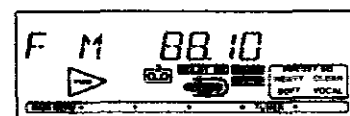
To stop recording:
Press the tape ☐ button.

To temporarily stop recording:
Press REC PAUSE.

To resume recording:
Press ◁ REV or FWD ▷.

When a lot of noise (a high-pitched tone) is heard while a LW/MW program is being recorded:
(Available only from the remote control)
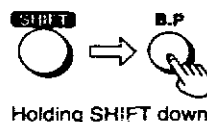
Holding SHIFT down

While holding SHIFT down:
Press B.P and select the position "BP1", "BP2" or "BP3", at which the noise level is less.

Reference

Any change made to the volume or tone quality during recording will not affect the recording.

40

Recording Tape to Tape

Normal, chrome and metal tapes can be used.

REC PAUSE
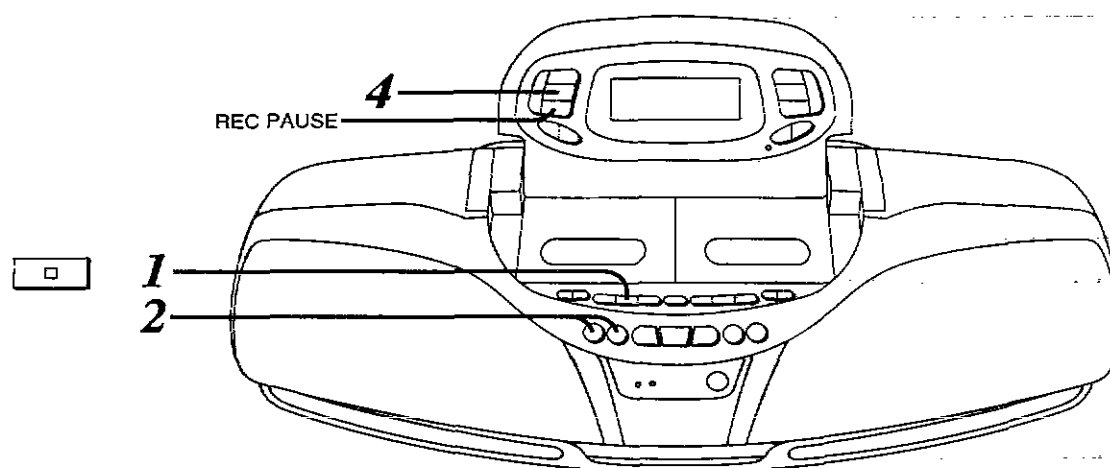
Take up the leader tape on both tapes before proceeding.

1 Press the tape ☐ button to switch to the tape mode.
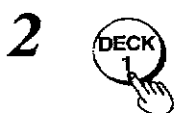
2 Press DECK1 OPEN/CLOSE and;
Load the playback tape with the side to start playback facing up.

Press DECK2 OPEN/CLOSE and;
Load the recording tape with the side to start recording facing up.
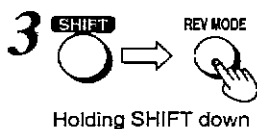
3 REV MODE While holding SHIFT down on the remote control:
Press REV MODE to select the reverse mode.
Holding SHIFT down (See page 25.)

⊐ : Sound is recorded on only one side of the tape, and then the tape stops automatically.

⊐ : Sound is recorded on the top side and then the reverse side, and the tape stops automatically.

⊂⊐ : Sound is recorded on the top side and then the reverse side, and the tape stops automatically.

4 TAPE EDIT Press TAPE EDIT to start the recording.
To record at the normal speed:
Press the button once (recording starts after the "NORMAL" display appears).

To record at high speed (approx. 1.7 times normal speed):
Press the button twice in succession (recording starts after the "HIGH" display appears).
Press the button for the second time while "NORMAL" is on the display.

To stop recording:
Press the tape ☐ button.

To temporarily stop recording:
Press REC PAUSE.

To resume recording:
Press TAPE EDIT.

To record another tape in succession:
If there is still room on the recording tape after the recording has been completed, deck 2 will remain in the recording standby mode and another tape can be recorded in succession.
1. Replace the playback tape in deck 1.
2. Press TAPE EDIT to start recording.

Note

If the unit is brought near a TV set during recording, noise may be recorded due to the effects of the signals from the TV set. Maintain a distance of at least 1.5 meters between the unit and a TV set.

References

●You can set different types of tapes on the decks for editing and playback.
●Recording is not affected by changes made to the volume or tone quality during the recording.
●The playback tape is recorded with its original settings (recording level, Dolby NR) unchanged.

41

Using the Wake-up Timer

Make sure that you set the clock first. (See page 14.)
The wake-up timer enables you to wake up at the designated time to the sound of a favorite piece of music delivered at the desired volume level.

Setting menu select indicator
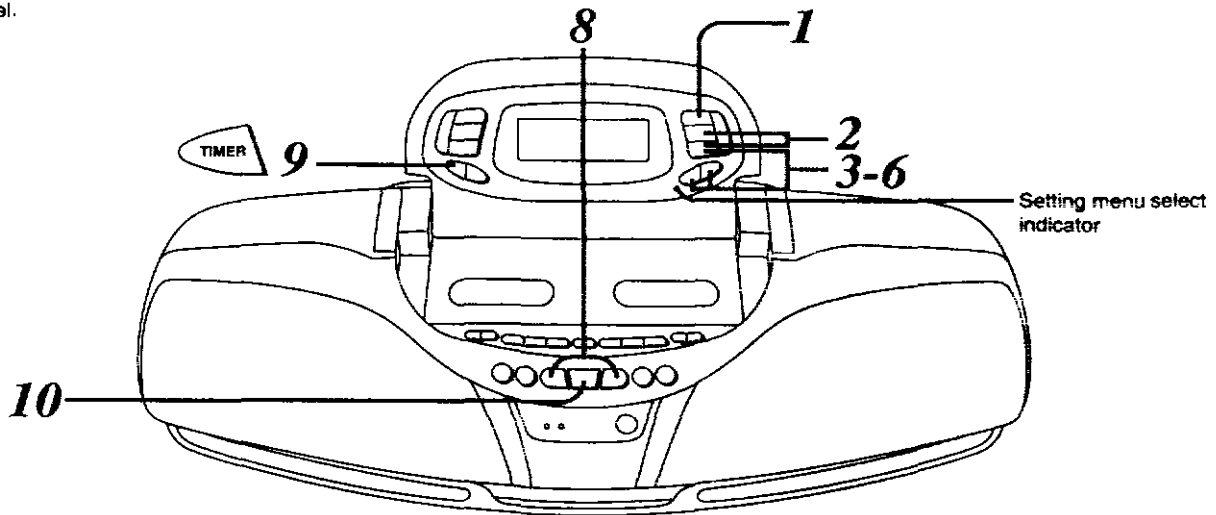
Example: Programming in the TAPE mode to play a CD from 7:00 to 8:30;

1 **Press MAIN MENU SELECT to display "TIME".**

→TAPE→TIME→SOUND

(The display changes each time the button is pressed.)
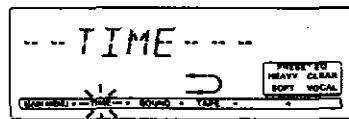
`- - TIME - - - -`

2 **Press SUB MENU SELECT to display "TIMER".**

→TIMER→SLEEP→CLOCK

(The display changes each time the button is pressed.)

`TIMER`
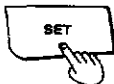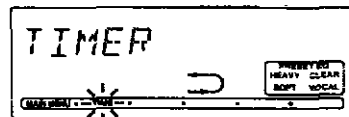
Press SET.
Setting menu select indicator flashes.

3 **Setting the play start (ON) time**

Press −/REV or FWD/+ to display "7" for the hour.

0−1−2...6−7−8...23

(The display changes each time the button is pressed.)

`- 7:00   0:00`

Press SET.

4 **Press −/REV or FWD/+ to display "00" for the minutes.**

00−01...03...29−30...59

(The display changes each time the button is pressed.)

`7:00-  0:00`
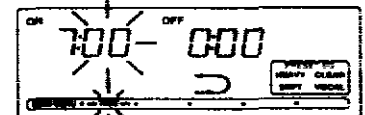
Press SET.

5 **Setting the play end (OFF) time**

Press −/REV or FWD/+ to display "8" for the hour.

0−1−2...6−7−8...23
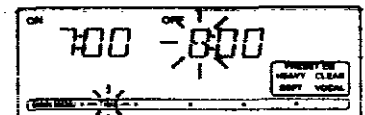
(The display changes each time the button is pressed.)

`7:00  -8:00`

Press SET.

42

6 **Press —/REV or FWD/+ to display "30" for the minutes.**

— 00–01...03...29–30...59 —

(The display changes each time the button is pressed.)

```
ON      OFF
 7:00    8:30-
                    PRESET EQ
                    HEAVY  CLEAR
                    SOFT  VOCAL
```
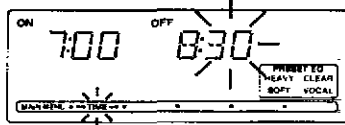
Press SET.

7 **Select the sound source to be played.**

Listening to radio programs
(Follow steps 1 and 2 on pages 16 and 17.)
Listening to CDs
(Follow steps 1 to 3 on page 19.)
Listening to tapes
(Follow steps 1 to 3 on page 24.)
●When you insert cassettes in both deck 1 and deck 2, deck 1 has priority.
●It is possible to program tracks on a disc (see steps 1 to 3 on page 22) and have them played at the time set by the timer. If the CD is ejected, or loaded after the programming, the timer play will start from the first track.

8 **Press VOL to set the volume to be heard during play.**

The volume level during timer operation is now set.

9 **Press TIMER.**

Timer play display lights.
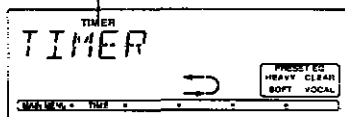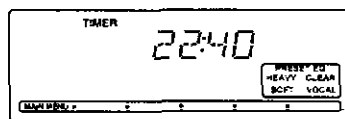
```
  TIMER
 TIMER              PRESET EQ
                    HEAVY  CLEAR
                    SOFT  VOCAL
```

10 **Press POWER to turn the unit off.**

```
  TIMER
  22:40             PRESET EQ
                    HEAVY  CLEAR
                    SOFT  VOCAL
```

This flashes at the programmed time.

```
  -TIMER-
 CD  1    00         PRESET EQ
                     HEAVY  CLEAR
                     SOFT  VOCAL
                     CD
```
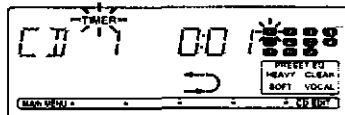
To release the timer function:
(only when the unit is ON)

Press TIMER and clear the timer play display.

The TIMER OFF display now appears. The timer does not operate but the time setting is stored in the memory.

To check what has been programmed:
(only when the unit is OFF)
Press TIMER.
The display changes automatically as follows:
1. Programmed time to start and time to end
2. Programmed source
3. Volume level during operation

To enjoy play after programming (after step 9):
1. Start playing the desired sound source.
2. After play, turn the unit off before timer play starts.
Even if you change the volume level or sound source, whatever was programmed is restored at the wake-up time.

Using the timer at the same time every day:
First check that TIMER appears on the display and then turn the unit off. Perform steps 7 to 10 to change the source and volume for the timer function.

To stop the timer in mid-operation:
Turn the unit off.

Note
The timer will not operate if the unit is on.

Using the Unattended Recording Timer

Make sure that you set the clock first. (See page 14.)
The unattended recording timer makes it possible to record radio program of your choice at the designated time.

Setting menu select indicator
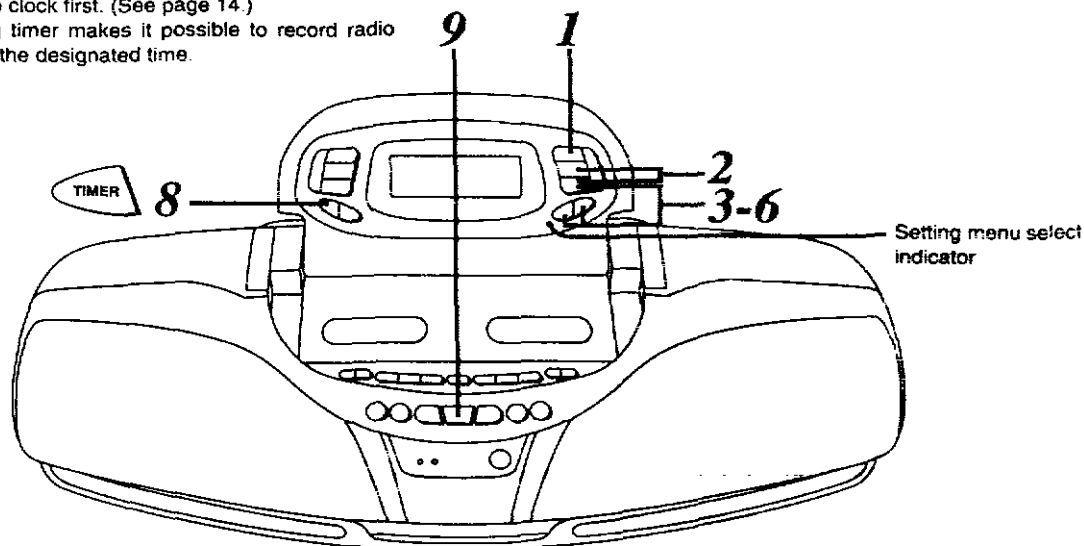
Example: Programming in the TAPE mode to record a program from 13:00 to 14:30;

1 **Press MAIN MENU SELECT to display "TIME".**

→TAPE→TIME→SOUND

(The display changes each time the button is pressed.)
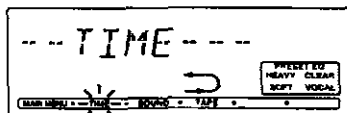
2 **Press SUB MENU SELECT to display "TIMER".**

→TIMER→SLEEP→CLOCK

(The display changes each time the button is pressed.)
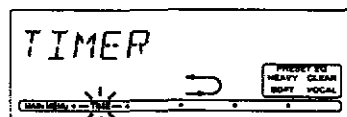
Press SET.
Setting menu select indicator flashes.

3 | Setting the recording start (ON) time |

Press −/REV or FWD/+ to display "13" for the hour.

0−1−2...12−13−14...23

(The display changes each time the button is pressed.)

Press SET.

4 **Press −/REV or FWD/+ to display "00" for the minutes.**

00−01...03...59

(The display changes each time the button is pressed.)
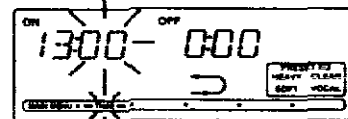
Press SET.

5 | Setting the recording end (OFF) time |

Press −/REV or FWD/+ to display "14" for the hour.

0−1−2...12−13−14...23
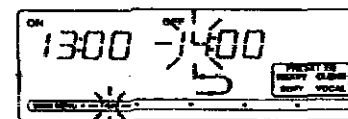
(The display changes each time the button is pressed.)

Press SET.

44

6 **Press —/REV or FWD/+ to display "30" for the minutes.**

00–01...03...29–30...59

(The display changes each time the button is pressed.)

Press SET.

. . . .
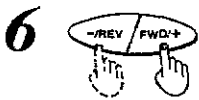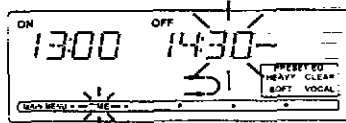
7 **Prepare to record the program.**

1. Load the tape in deck 2 with the side to start recording facing up.
2. Select the broadcasting station. (See pages 16 and 17.)
3. Select the Dolby noise reduction setting and reverse mode. (See page 25.)

Turn down the volume if you do not wish to hear the sound during the recording. (This will not affect the recording level.)

. . . .
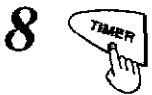
8 **Press TIMER, and press it again while "TIMER" is displayed.**

Timer recording display lights.
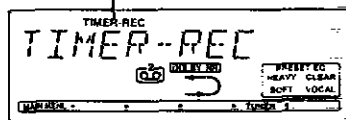
9 **Press POWER to turn the unit off.**

This flashes at the programmed time.
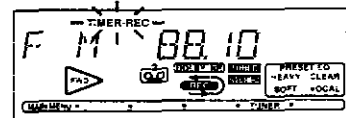
To release the timer function:
(only when the unit is ON)

Press TIMER and clear the timer recording display.

The TIMER OFF display now appears. The timer does not operate but the time setting is stored in the memory.

To check what has been programmed:
(only when the unit is OFF)

Press TIMER. The display changes automatically as follows:

1. Programmed time to start and time to end
2. Programmed source
3. Volume level during operation

To enjoy play after programming (after step 8):

1. Start playing the desired sound source.
2. After play, turn the unit off.

Even if you change the volume level or sound source, whatever was programmed is restored at the time set for unattended recording.

Using the timer at the same time every day:

First check that TIMER-REC appears on the display and then turn the unit off. Perform steps 7 to 9 to change the source and volume for the timer function.

Note

The timer will not operate if the unit is on.

Using the Sleep Timer

The turning off time can be set up to 120 minutes ahead of the present time.
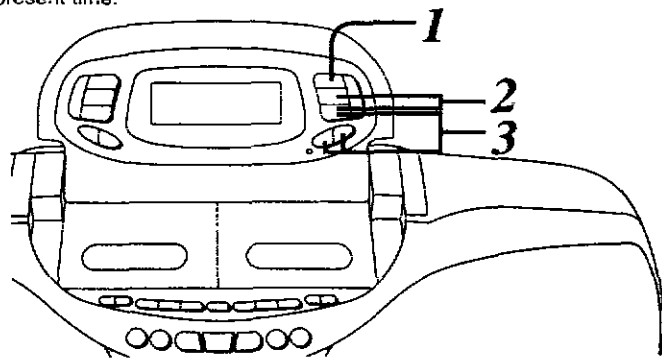
SLEEP	**While the desired sound source is playing:** **Press SLEEP on the remote control to operate the sleep timer function.** The original display is restored after "SLEEP" has appeared, and the unit is turned off after the time set has elapsed.

SLEEP indicator
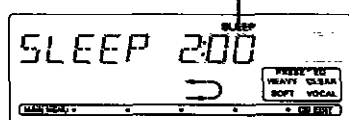
SLEEP	**To release the timer function:** Press SLEEP while "SLEEP" is displayed. The time setting will remain stored in the memory.

To change the sleep timer's time setting

1	MAIN MENU SELECT	**Press MAIN MENU SELECT to display "TIME".**
2	SUB MENU SELECT	**Press SUB MENU SELECT to display "SLEEP".**
	SET	**Press SET.**
3	−/REV FWD/+	**Press −/REV or FWD/+ to display the desired time.**
	SET	**Press SET.**
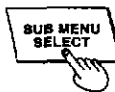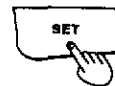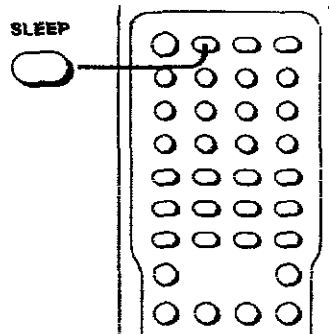
To check the time remaining during operation:
Press SLEEP.

To change the time remaining during operation:
1. Press SLEEP.
2. Press −/REV or FWD/+ while the time remaining is indicated (about 5 seconds) to change the time.
   The changed time is not stored in the memory. When you use the sleep timer function the next time, the original time prior to the change remains programmed.

Reference

Once a particular time is set, it will remain stored in the memory until it is changed.

To use the sleep timer in conjunction with the timer playback operation:
For example, falling asleep while listening to an FM program and waking up the next morning listening to a CD:
1. Set the timer for playback to listen to the CD (steps 1 to 9 on pages 42 and 43).
2. Listen to the radio.
3. Press SLEEP.

Note

You cannot make a different CD program setting for the playback timer and sleep timer.

Reference

Even if the volume is changed for the sleep timer, the sound will be heard while the timer play is operating at the volume which was adjusted when setting the timer play.

To use the sleep timer in conjunction with the timer recording operation:
For example, falling asleep while listening to a CD and subsequently recording a late-night program:
1. Set the timer for recording (steps 1 to 8 on pages 44 and 45).
2. Play the CD.
3. Press SLEEP.
   (Set the sleep timer so that the unit is turned off before the start of the timer recording.)

Having Fun with a Microphone

Karaoke
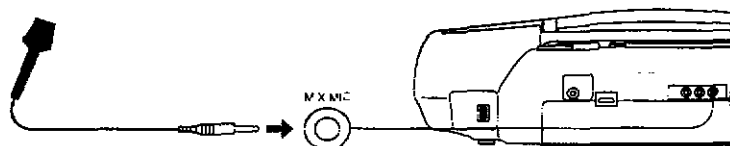
1. **Lower the volume and connect the microphone. (Plug type: mini)**
2. **Start playing a CD or tape or turn on the radio.**
3. **Start Karaoke singing into the microphone and adjust the volume.**

Recording your own voice from the microphone
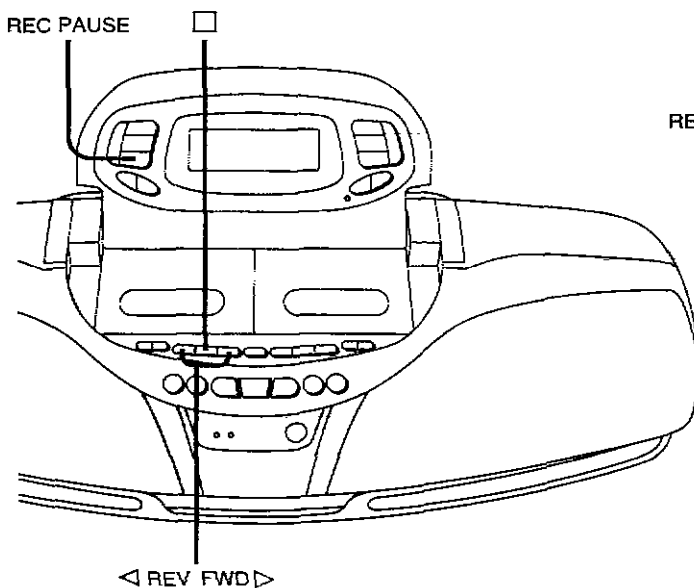
REC PAUSE ☐

◁ REV FWD ▷

1. **Connect the microphone, and load the tape in deck 2.**
2. **Select the Dolby noise reduction setting and reverse mode. (See page 25.)**
3. **Press the tape ☐ button.**
4. **Press REC PAUSE.**
5. **Press ◁ REV or FWD ▷.**
   Recording start.

Recording karaoke sound

TAPE EDIT ☐

REC PAUSE   ▷/☐☐   ☐/CLEAR
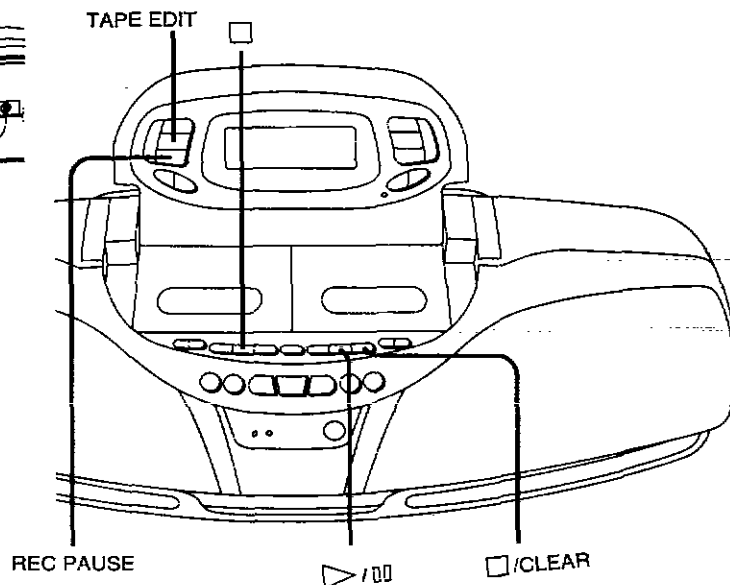
■ **Recording karaoke sound with accompaniment from a tape**
1. **Connect the microphone, and load the karaoke tape in deck 1 and the recording tape in deck 2.**
2. **Select the reverse mode. (See page 25.)**
3. **Press the tape ☐ button.**
4. **Press TAPE EDIT once.**
   Play and recording start.

■ **Recording karaoke sound with accompaniment from a CD**
1. **Connect the microphone, and load the tape in deck 2.**
2. **Select the Dolby noise reduction setting and reverse mode. (See page 25.)**
3. **Press ☐/CLEAR.**
4. **Press REC PAUSE.**
5. **Press ▷/☐☐ .**
   Play and recording start.

Notes

●Plug the microphone off the microphone jack when not in use.
●If you hear strange noises (squealing or howling) during mixing, move the microphone farther away from the speakers or turn down the volume.
●When you are enjoying KARAOKE with CDs, your voice can be heard only when the CD is in play, not when the CD is in stop or pause mode.

Using the External Units

Listening to CDs on a stereo system

■ Connections

CD OUT

To CD OUT (CD output) terminal

Stereo connection cable (not included)

L (left)   R (right)

To CD or AUX (auxiliary input) terminals
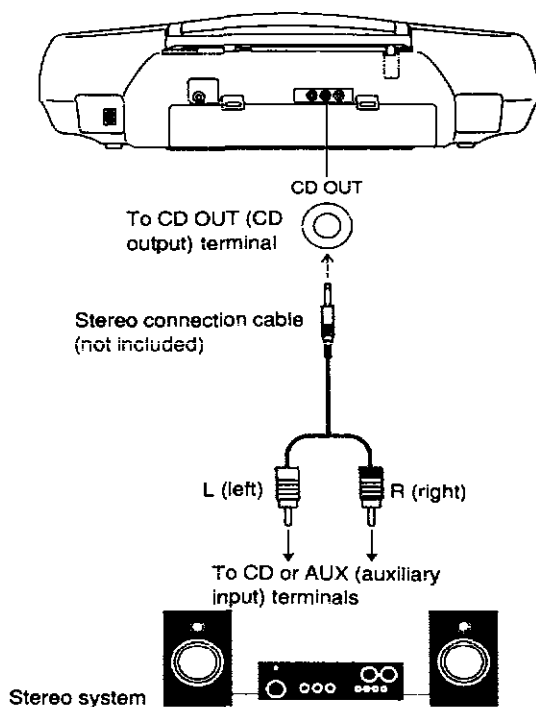
Stereo system

■ CD play
1. Press □/CLEAR and then press ▷/▯▯ .
2. Adjust the volume and tone quality on your stereo system.

Listening to records on this unit

Only a record player with built-in phono equalizer may be connected to this unit.

■ Connections

Record player

AUX IN   AUX IN terminal

Pin cord adaptor (not included)

Stereo connection cable (not included)
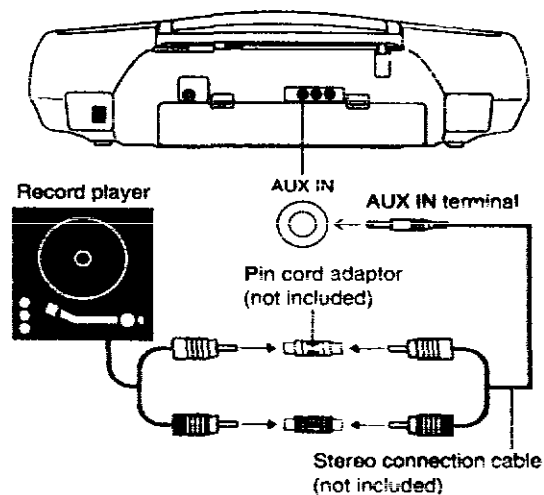
■ Record play
1. Press AUX on the remote control.
2. Start operating your record player.

Concerning CDs

Only compact discs having this mark can be used with this unit.

COMPACT disc DIGITAL AUDIO

To remove a disc from its case

Press the center holder and lift the disc holding by the edges.
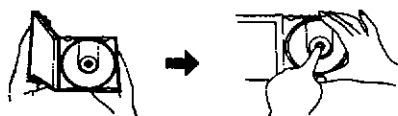
To hold the disc

Hold the disc by the edges so the surface is not soiled with fingerprints.
Fingerprints, dirt and scratches can cause skipping and distortion.

(Correct)   (Incorrect)

To store a disc in its case

Insert the disc with label facing upwards and press downward at the center.

Label
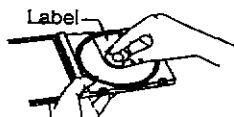
If the surface is soiled

Wipe gently with a soft, damp (water only) cloth.

(Correct)   (Incorrect)

If the disc is brought from a cold to a warm environment, moisture may form on the disc

Wipe this moisture off with a soft, dry, lint-free cloth before using the disc.

Improper disc storage:
You can damage discs if you store them in the following places;
● Areas exposed to direct sunlight
● Humid or dusty areas
● Areas directly exposed to a heat outlet or heating appliance

Handling precautions:
● Do not write on the label side with a ball-point pen or other writing utensils.
● Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
● Do not soil with fingerprints.

Concerning Cassette Tapes

Selection of cassette tapes

Cassette tape exceeding 90 minutes:
These tapes are handy for their long playback and recording time but be careful about repeatedly stopping, starting, rewinding and fast forwarding these tapes In short intervals as they are thin, tend to stretch and may become entangled in the machine.

Do not use the Fe-Cr tapes (TYPE III) in this system:
If you use this tape, it is impossible to obtain the required flat frequency response.

If the tape loosens, take up the slack

Tape slack may cause the tape to break.

To prevent erasure of recorded sounds

Remove the erase-prevention tabs with a screwdriver or a similar object.

Side A

Tab for side A

Tab for side B
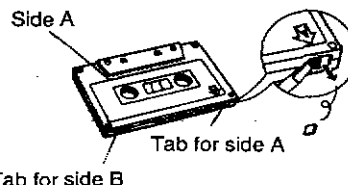
To re-record on a protected cassette, cover the slot with adhesive tape.

Adhesive tape
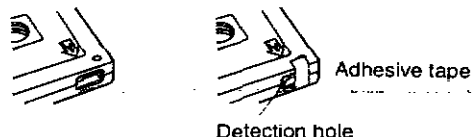
Detection hole

Do not cover the detection holes on chrome and metal tapes.

Improper tape storage:
You can damage tapes if you store them in the following places;
● In high temperature [35°C (95°F) or higher] or high humidity (80% or higher) areas
● In a strong magnetic field (near a speaker, on top of a TV, etc.)
   This can erase a recording.
● Areas exposed to direct sunlight

Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.
If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your dealer for instructions.

Problem	Probable cause(s)	Suggested remedy
Common problems		
No operation (when batteries are used as the power source).	Is the AC mains lead still connected to the unit while batteries are being used?	Disconnect the AC mains lead.
	Are the batteries flat?	Replace them with new ones. Alternatively, use a household mains outlet as the power source.
	Have the batteries been installed with their (+) and (−) polarities aligned properly?	Align the (+) and (−) polarities properly.
When "ERROR" appears:	Have you made a mistake in operation?	Read the operating instructions and try again.
Original display is restored during menu operation.	Did you leave too much time between operations?	Proceed with operation again from the start.

While listening to CDs		
Play does not start. No display of track numbers, etc...	Has the CD been installed upside down?	Install the CD with the label side facing upward.
	Has condensation formed on the unit's CD section?	Turn the unit on and leave it on for about an hour before further operation.
Certain parts of a CD are not played properly.	Is the CD soiled?	Wipe with a soft cloth.
	Is the CD scratched?	Replace with a new CD.
CD tray does not close even when CD OPEN/ CLOSE is pressed.	Has the CD been placed properly on the tray?	Put the CD on the tray properly.

While listening to tapes		
No recording.	Has the tape's accidental erasure prevention tab been broken off?	Cover the tab hole with adhesive tape.
High level of noise. Poor sound quality.	Are the heads soiled?	Clean them.
	Have the heads been magnetized?	Demagnetize them using a demagnetizer available from an audio store.
	Is the wrong Dolby noise reduction setting being used?	Change to the setting used for the recording.
High speed fast forwarding/ rewinding is not possible.	Has the unit been switched to the radio mode?	Switch the unit's mode to CD or tape.

While listening to radio broadcasts		
High level of noise; stations cannot be tuned in well.	Has the antenna been adjusted ineffectively?	Try changing the antenna's direction.
Noise heard during LW/MW reception.	Are you using the remote controller near the unit?	Use the remote controller at a distance from the unit.
	Are you operating the unit and a TV at the same time?	Place the unit at a distance from the TV. Alternatively, turn off the TV's power.

While using the timer		
No timer operation at the programmed time.	Has the programmed timer indicator (TIMER, TIMER-REC or SLEEP) been activated?	Operate again so that the display lights up.
	Is the unit on (when timers for playback or recording is used)?	Turn the unit off upon completion of the settings.

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While using the remote control transmitter

No operation.	Are the batteries flat?	Replace them with new ones.
	Have the batteries been installed with their (+) and (−) polarities aligned properly?	Align the (+) and (−) polarities properly.
	Is the remote control transmitter pointed toward the unit's receiving sensor?	Check whether anything is obstructing the path between the two sensors. Point the remote control properly at the unit's sensor, and operate.
	Is the unit's sensor exposed to direct sunlight, fluorescent light or another strong source of light?	Shield the sensor from strong sources of light.

About condensation

Condensation is water accumulation on the inside of the windows in a warm room on a cold day. Condensation can also form inside this unit in a similar manner in the following cases:

● Immediately after a heater has been turned on.
● In a steamy or very humid room.
● When the unit is suddenly moved from a cold environment to a warm one.

Maintenance

Maintenance of external surfaces

To clean this unit, use a soft, dry cloth.
If the surfaces are extremely dirty, use a soft cloth dipped in a soap-and water solution or a weak detergent solution.

Wring the cloth well before wiping the unit.
Wipe once again with a soft, dry cloth.
Never use alcohol, paint thinner, benzine, or chemically treated cloths to clean this unit. Such chemicals may damage the finish of your unit.

Tape head care

To assure sound quality for recording and playback, be sure to clean the tape heads after approximately every 10 hours of use.
1. Press DECK 1 or DECK2 OPEN/CLOSE to open the cassette lid.
2. Clean the tape heads, pinch rollers and the capstan shafts with a cotton swab (or a soft, lint-free cloth) slightly moistened with isopropyl alcohol.
   Do not use any solution other than alcohol for head cleaning.

Cotton swab
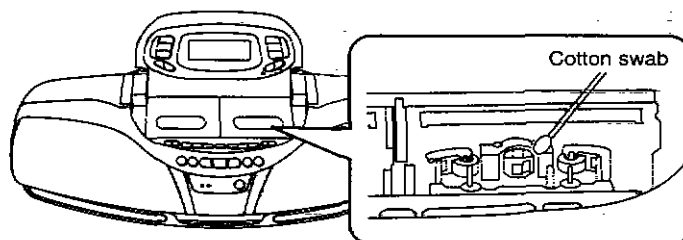
Menu Operations

Just 5 buttons enable you to activate a wide variety of functions.

Operation key point

Before menu operation		Main menu

To display the main
menus, press:

```
TRPE  -- -- --    ----
               PRESS EQ
               HEAVY  CLEAR
            SOFT  VOCAL
```

Main menu which has been set

```
-- --SOUND-- --
               HEAVY EQ
               HEAVY  CLEAR
            SOFT  VOCAL
```
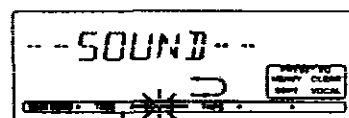
Main menus which can be selected

● You can proceed to operate from the sub menu if your
choice of main menu is already displayed.

Menu operation areas

MAIN MENU SELECT ———— For selecting the main menu

SUB MENU SELECT ———— For selecting the sub menu

SET ———— For setting the menu selected

REV FWD ———— For selecting the setting menu

○ ———— This flashes when the setting menu is
selected.
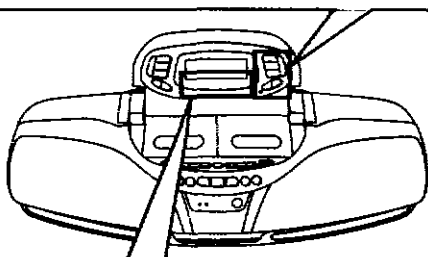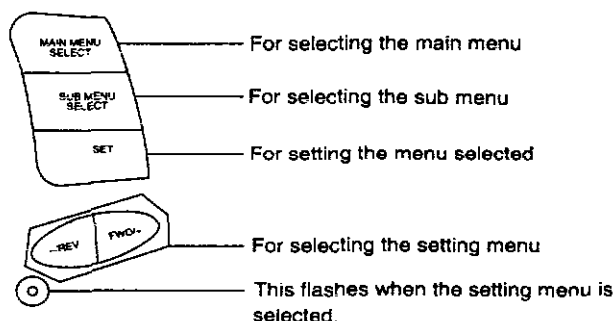
The sub menus contained in each of the main menus are shown
here. This is handy when selecting the menu required for operation.

MAIN MENU ◄	TIME	●	SOUND	▼	TAPE	●	TUNER	●	CD EDIT
SUB MENU	TIMER SLEEP CLOCK		S-XBS TONE		C-RESET REV MODE DOLBY NR		TUNE MODE ST*M*N*O		AM/FM MANUAL A-SPACE

MENU CONTROL SYSTEM

Reference

When you have made a mistake in operation:
Press MAIN MENU SELECT and start again from the beginning.

Note

Leaving too much time between operations may cause a menu
operation to be completed automatically.
If this happens, start again from the beginning.

🕐		**TIME** (clock)
🎵		**SOUND** (tone quality)
📼		**TAPE** (tape)
📡		**TUNER** (radio) Before using the TUNER menu: Press TUNER/BAND.
🎯		**CD EDIT** (CD edit-recording) Before using the CD EDIT menu: Press CD □/CLEAR. **CD LINK** (link editing) ("CD LINK" appears when link editing is set after edit-recording.)

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Sub menu	**Setting menu**

To display the sub menus, press: SUB MENU SELECT

⬇

To set the sub menus, press: SET

`S-XBS`
PRESET EQ
HEAVY CLEAR
SOFT VOCAL

To display the setting menus, press: -/REV FWD/+

⬇

To set the setting menus, press: SET

`S-XBS -2-`
PRESET EQ
HEAVY CLEAR
SOFT VOCAL

┌─ TIMER (for setting the timer times) ───── ├─ SLEEP (for setting the sleep timer activation time) └─ CLOCK (for setting the clock) ───────	──── Start time setting→End time setting ──── Play time setting ──── Present time setting

┌─ S-XBS (for adjusting the deep-bass) ──── └─ TONE (for adjusting the treble) ────────	──── Level setting (0 to 10) ──── Level setting (−5 to 5)

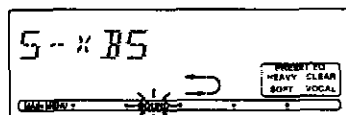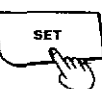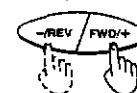|	

┌─ C-RESET (for resetting the counter to "00.00")
 	
 ├─ REV MODE (for selecting the reverse mode)
 	
 └─ DOLBY NR (for selecting the Dolby noise
            reduction setting)
	┌─ ⇥⊃ (Tape plays from top side to reverse side and
	       then stops automatically)
	 ├─ ⊂⇥⊃ (Tape plays repeatedly until stop button is
	        pressed)
	 └─ ⇥ (Only one side of tape is played, and then tape
	      stops automatically)
	 ── DOLBY-ON (Dolby noise reduction ON)
	 └─ DOLBY-OFF (Dolby noise reduction OFF)

┌─ TUNE MODE (for selecting the tuning method)
 	
 └─ ST/MONO (for selecting stereo or monaural
            reception; FM stations only)
	┌─ PRESET (when listening to programmed stations)
	 └─ MANUAL (when listening to stations which have not
	           been programmed)
	 ┌─ FM STEREO (FM stereo reception)
	 └─ FM MONO (FM monaural reception)

┌─ AI/FIT (for recording all tracks) ────
 ├─ MANUAL (recording favorite tracks) ────
 └─ A-SPACE (for creating unrecorded blanks
            between programs)
 ┌─ AI/FIT (for recording all tracks)
 ├─ MANUAL (recording favorite tracks)
 └─ A-SPACE (for creating unrecorded blanks
            between programs)
	──── Tape length setting
	 ──── Tape length setting→Recording track setting
	 ┌─ SPACE-ON (unrecorded blank function set)
	 └─ SPACE-OFF (unrecorded blank function not set)
	 ──── Recording track setting
	 ┌─ SPACE-ON (unrecorded blank function set)
	 └─ SPACE-OFF (unrecorded blank function not set)

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Examples of menu operations

Deck section

MAIN MENU SELECT

SUB MENU SELECT

SET

-/REV . FWD/+
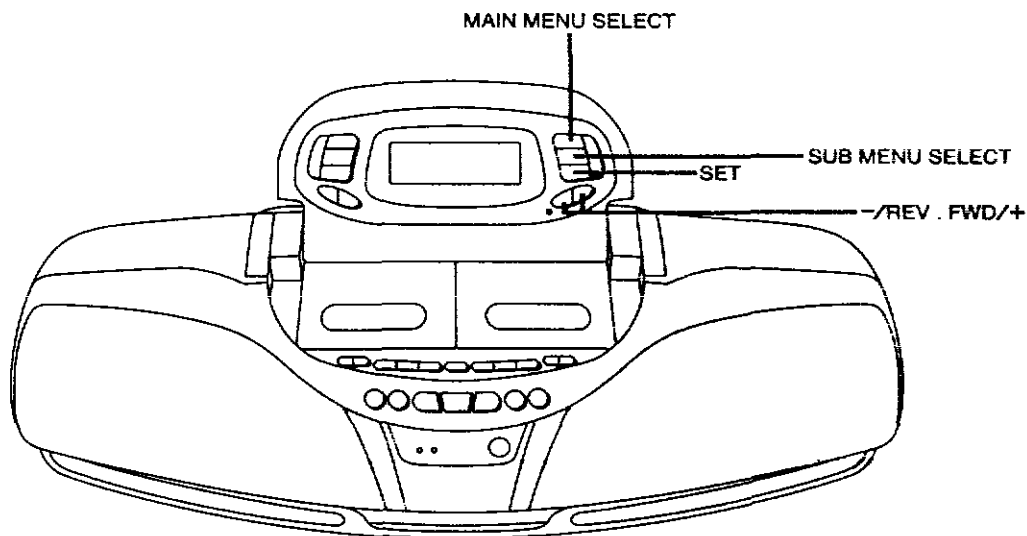
■ **Selecting the Dolby noise reduction setting (See page 25.)**

1. Press MAIN MENU SELECT to display "TAPE".
2. Press SUB MENU SELECT to display "DOLBY NR".
   Press SET.
3. Press -/REV or FWD/+ to select DOLBY-ON or DOLBY-OFF.
   Press SET.

DOLBY-ON: The Dolby noise reduction function is set.
DOLBY-OFF: The Dolby noise reduction function is released.

■ **Selecting the reverse mode (See page 25.)**

1. Press MAIN MENU SELECT to display "TAPE".
2. Press SUB MENU SELECT to display "REV MODE".
   Press SET.
3. Press -/REV or FWD/+ to display the desired mode.
   Press SET.

⊐⊃ : The tape plays from the top side to the reverse side and it then stops automatically.

⊂⊐⊃ : The tape plays repeatedly until the stop button is pressed. (When tapes have been loaded in both decks, both tapes are played continuously.)

⊐ : Only one side of the tape is played, and then the tape stops automatically.

■ **Resetting the linear tape counter to "00.00" (See page 25.)**

1. Press MAIN MENU SELECT to display "TAPE".
2. Press SUB MENU SELECT to display "C-RESET".
   Press SET.

Radio/CD sections

MAIN MENU SELECT

SUB MENU SELECT

SET

-/REV . FWD/+

■ To listen to FM stereo broadcasts in the monaural mode (See page 18.)

Noise levels are reduced by setting the sound to monaural.
1. Press MAIN MENU SELECT to display "TUNER".
2. Press SUB MENU SELECT to display "ST/MONO".
   Press SET.
3. Press −/REV or FWD/+ to display "FM MONO".
   Press SET.

To return to stereo reception, repeat the same steps and select "FM STEREO" in step 3.

■ Selecting the tuning method (See pages 16 and 17.)

There are two methods: preset and manual.
1. Press MAIN MENU SELECT to display "TUNER".
2. Press SUB MENU SELECT to display "TUNE MODE".
   Press SET.
3. Press −/REV or FWD/+ to select "PRESET" or "MANUAL".
   Press SET.

PRESET: For listening to a programmed station
MANUAL: For listening to a station which has not been programmed

■ Recording CD tracks with unrecorded blanks between the programs (Auto space function)

Unrecorded blanks lasting 4 or more seconds are required between programs in order for the tape program search function to operate properly.
When the auto space function is set, unrecorded blanks lasting about 4 seconds are automatically created between programs.
Set the function before proceeding with the automatic CD recording (see page 30) or menu edit-recording (see pages 32 to 37) operation.
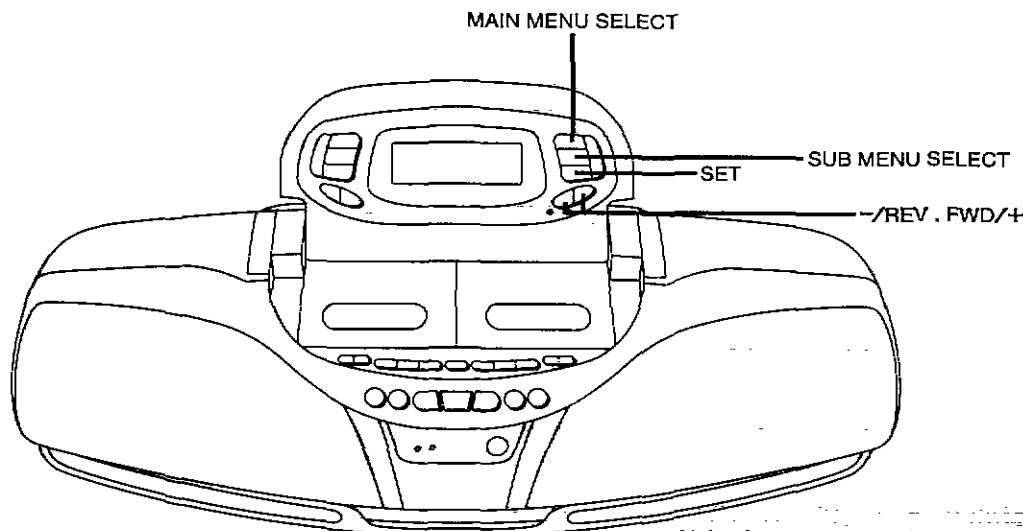1. Press MAIN MENU SELECT to display "CD EDIT".
2. Press SUB MENU SELECT to display "A-SPACE".
   Press SET.
3. Press −/REV or FWD/+ to display "SPACE-ON".

Lights.
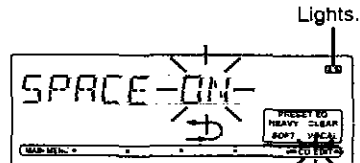
SPACE-ON

Press SET.

To release the function:
Repeat the same procedure and select "SPACE-OFF" in step 3.

Note

The auto space function does not work when recording without the edit function. (See page 38.)

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Quick Reference Guide to Remote Control Operations

To use the functions indicated by the blue letters, press the button indicated while holding SHIFT down.
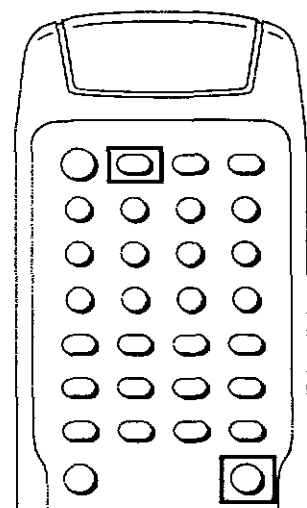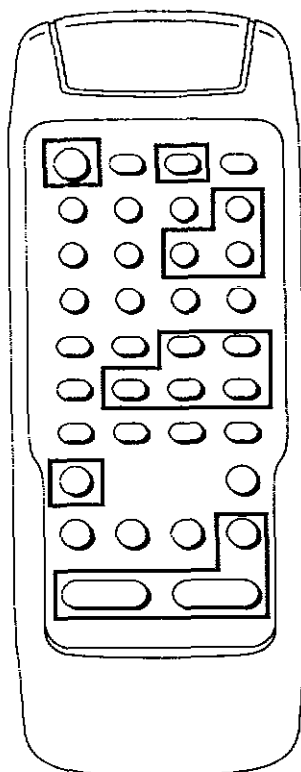
Common operations

Turning the unit ON/OFF (when a household mains outlet is used)	Turning off only when the unit is powered by dry batteries. $\bigcirc$
Selecting the input sound source	(Radio) (CD) (Tape) (AUX) $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$
Adjusting the volume	$-$ VOLUME $+$ $\bigcirc$ $\bigcirc$
Selecting the display (See page 12.)	Holding SHIFT down $\bigcirc \Rightarrow \bigcirc$
Opening/closing the top panel (See page 11.)	TOP PANEL $\bigcirc$
Easy listening (See page 13.)	(Radio) (CD) (Tape) $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$
Setting the beep tone (See page 12.)	Holding SHIFT down $\bigcirc \Rightarrow \bigcirc$

Sound quality adjustment/timer operations

Selecting the equalizer effects (See page 27.)	Each time the button is pressed ┌→HEAVY→CLEAR→SOFT─┐ └EQ-OFF←VOCAL←───┘ $\bigcirc$
Setting/releasing the sleep timer (See page 46.)	SLEEP $\bigcirc$

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To use the functions indicated by the blue letters, press the button indicated while holding SHIFT down.

CD/Tuner operations

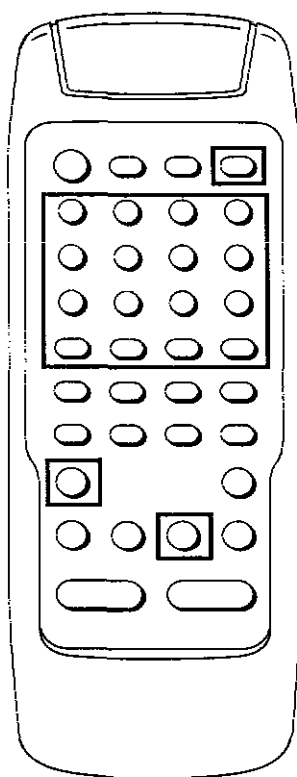|	
Opening/closing the tray (See page 19.)	CD ◯
Starting play (See page 19.)	►/Ⅱ ◯
Temporarily stopping play (See page 19.)	►/Ⅱ ◯
Stopping play (See page 19.)	■ ◯
To skip tracks (See page 20.)	–/Ⅰ◄◄ ►►Ⅰ/+ ◯ ◯
To search forward or backward (See page 20.)	–/Ⅰ◄◄ ►►Ⅰ/+ ◯ ◯
Listening from a particular track (See page 21.)	■ ◯ ⇒ ◯◯◯ ◯◯◯◯ ◯◯◯◯
Selecting and listening to favorite tracks (See page 22.)	PROGRAM ◯ ⇒ ◯◯◯◯ ◯◯◯◯ ◯◯◯◯ ⇒ ►/Ⅱ ◯
Listening to a track repeatedly (See page 20.)	Holding SHIFT down SHIFT ◯ ⇒ REPEAT ◯
Listening to tracks at random (See page 23.)	Holding SHIFT down SHIFT ◯ ⇒ RANDOM ◯
Listening to a programmed radio station (See page 16.)	TUNER/BAND ◯ ⇒ ◯◯◯ ◯◯◯ ◯◯◯◯
Listening to a radio station which has not been programmed (See page 17.)	TUNER/BAND ◯ ⇒ –/Ⅰ◄◄ ►►Ⅰ/+ ◯ ◯
Selecting reception in stereo or monaural (See page 18.)	Holding SHIFT down SHIFT ◯ ⇒ ST/MONO ◯
Reducing noise during the recording of LW/MW broadcasts (See page 40.)	Holding SHIFT down SHIFT ◯ ⇒ B.P ◯

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To use the functions indicated by the blue letters, press the button indicated while holding SHIFT down.

Deck operations

Opening/closing the cassette lid (See page 24.)	1 DECK 2 ◯ ◯
Starting play (See page 24.)	◀REV ◯ FWD▶ ◯
Selecting deck 1/2 (See page 24.)	DECK1/2 ◯
Fast forwarding and rewinding (See page 24.)	In stop mode ◀◀ SIZE ▶▶ ◯ ◯
Program search (See page 26.)	In playback mode ◀◀ SIZE ▶▶ ◯ ◯
Stopping play (See page 24.)	■ ◯
Recording (See page 38.)	●■ ◀REV FWD▶ ◯ → ◯ ◯
Selecting the Dolby noise reduction setting (See page 25.)	Holding SHIFT down SHIFT DOLBY NR ◯ ⟹ ◯
Selecting the reverse mode (See page 25.)	Holding SHIFT down SHIFT REV MODE ◯ ⟹ ◯
Resetting the linear tape counter to 00.00 (See page 25.)	C-RESET ◯

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■ Radio

Frequency Range

FM	87.5–108.0 MHz
LW	144–288 kHz
MW	522–1611 kHz

■ Disc Player

Sampling Frequency	44.1 kHz
Decoding	16-bit linear
Beam Source	Semiconductor laser
	(wavelength 780 nm)
No. of Channels	2 channel, stereo
Frequency Response	20 Hz–20 kHz
Wow and Flutter	Less than possible measurement data
D/A converter	MASH (1 bit DAC)

■ Tape Recorder

Track System	4 track, 2 channel, stereo
Recording System	AC bias
Erasing System	AC erase
Monitor System	Variable sound monitor
Frequency Range	
Normal	30–16000 Hz
CrO₂	30–17000 Hz
Metal	30–18000 Hz

■ General

Power Requirement

AC	230–240 V, 50 Hz
	Power consumption; 57 W
Battery	15 V (Ten R20/LR20, UM-1 batteries)
Memory Back-up	
for Computer/Clock	6 V (Four R6/LR6, UM-3 batteries)

Speakers

2 Woofer	8 cm
2 Midrange	8 cm
2 Tweeter	1.4 cm

Jacks

Input	MIX MIC; 2.5 mV (4.7 kΩ)
	AUX IN; 200 mV (47 kΩ)
Output	HEADPHONES; 32Ω
	CD OUT; 1.0 V (CD 0 dB)

Dimensions (Top panel closed)	
(W×H×D)	680×192×284 mm
Weight	7.9 kg without batteries

Note:
Specifications are subject to change without notice.
Weight and dimensions are approximate.

MASH is a trademark of NTT.

This apparatus was produced to BS 800.

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