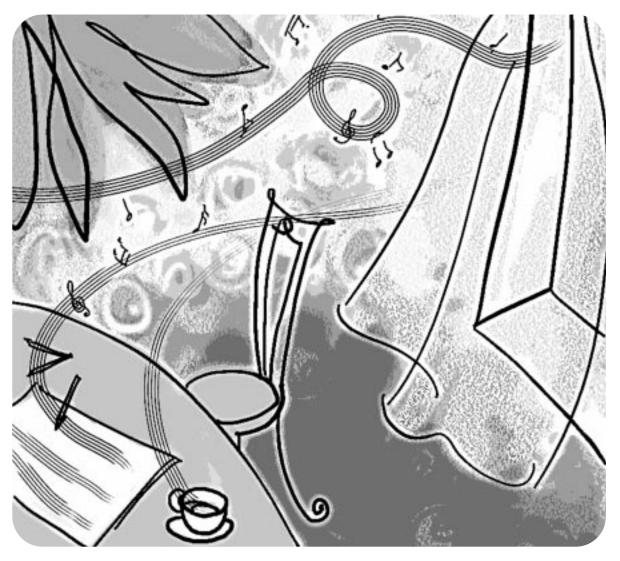
# **Panasonic**®

Portable Stereo CD System



**Operating Instructions** 

RX-ED50





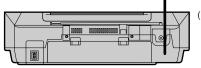
The "EB" indication shown on the packing case in-dicates United Kingdom.

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





# CLASS 1 LASER PRODUCT



(Back of product)

| -        |   |
|----------|---|
| DANGER   | INVISIBLE LASER RADIATION WHEN OPEN.<br>AVOID DIRECT EXPOSURE TO BEAM.  |
| ADVARSEL | USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE<br>ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING. |
| VARO!    | AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA<br>NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.      |
| VARNING  | OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH<br>SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.                |
| ADVARSEL | USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS<br>BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.               |
| VORSICHT | UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET.<br>NICHT DEM STRAHL AUSSETZEN.                             |

(Inside of product)
(Indersiden at apparatet)
(Tuotteen sisällä)
(Apparatens insida)

(Produktets innside)
(Im Inneren des Gerätes)

#### **CAUTION!**

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

#### WARNING:

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

#### Dear customer

Thank you for purchasing this product.

For optimum performance and safety, please read these instructions carefully.

#### Table of contents

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Technical specifications ..... Back cover

# (For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark ♠ or the BSI mark ♥ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

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

#### **CAUTION!**

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

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

If in any doubt please consult a qualified electrician.

#### **IMPORTANT**

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

Blue: Neutral, Brown: Live.

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

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

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

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

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

#### Before use

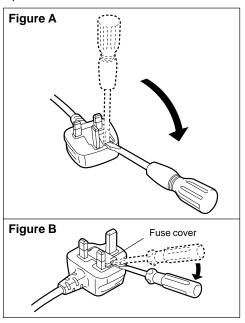
Remove the connector cover.

#### How to replace the fuse

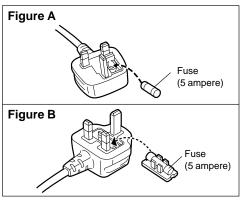
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

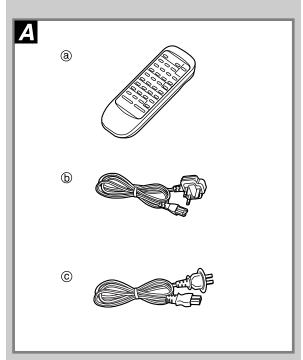
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



Replace the fuse and close or attach the fuse cover.





# Supplied accessories

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

- (For United Kingdom: RJA0038-1U)
- (c) (For Australia and New Zealand: RJA0035-A)

#### Note

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

#### **Precautions**

- 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 this unit 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 socket.

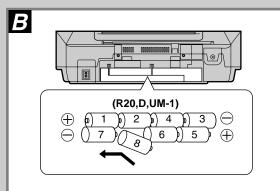
#### CAUTION!

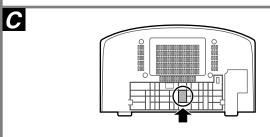
DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING.

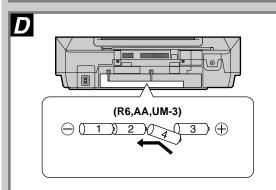
#### Use of batteries

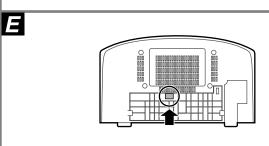
- If this unit is not used for a long period of time or is used only from an AC power source, remove all the batteries to prevent potential damage due to possible battery leakage.
- Do not use rechargeable type batteries.
- Do not mix old and new batteries or batteries of different types (e.g. manganese and alkaline).
- Remove worn out batteries promptly and dispose of them properly.
- Do not expose to heat or flame.
- Do not disassemble.
- Do not short circuit.
- If a battery leaks, remove all the batteries and dispose of them properly. Thoroughly clean the battery compartment before inserting new batteries.
- If battery fluid comes in contact with skin or clothes, flush with water immediately.
- Keep out of reach of children.
- Do not attempt to recharge alkaline or manganese batteries.
- Batteries installed incorrectly can leak and damage the unit.

# AC IN~ To household mains socket AC mains lead









#### Power sources

# A Operating the unit on AC power

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

#### Connect the AC mains lead.

The AC mains lead must be disconnected from the unit if you intend to power the unit with batteries.

# **B** Using batteries (not included)

The unit cannot be powered by batteries if the AC mains lead is connected.

The remote control cannot turn the unit on when batteries are used.

# Removing the batteries

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

#### **Battery life**

"
ights when the batteries are running down. Replace all the batteries with new ones.

# Memory back-up batteries (not included)

Insert these batteries to save the information contained in the memory, such as the clock and timer settings, if there is an interruption to the power supply.

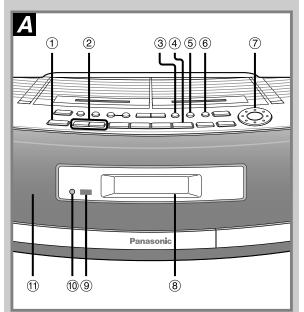
These batteries do not power the unit.

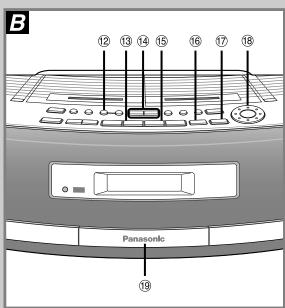
#### Replacing the batteries

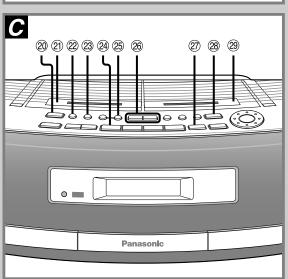
- The memory batteries last about one year.
- Connect the unit to AC power before replacing the batteries.

# Removing the batteries

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







## Location of controls

# Basic controls

| Number            | Designation                             | Reference Page                            |
|-------------------|---|---|
| Press to switch   | the unit from on t<br>andby mode, the u | to standby mode or nit is still consuming |
| 2 Volume contro   | I buttons (-,+ VOL                      | .UME) 9,12,14                             |
| ③ Preset EQ butt  | on (PRESET EQ)                          | 22  |
| ④ AUX button ( ■  | AUX )                                   | 23  |
| ⑤ Play timer/reco | ord timer button                        |   |
| ( @ PLAY/REC)     |   | 20  |
| 6 Clock/timer bu  | tton (CLOCK/TIME                        | ER)8,20                                   |
| 7 Time adjust/pro | eset tuning/CD tra                      | ck select dial                            |
| ( ◀◀/∨़ ↔ ∧/▶▶    | H TIME/PRE.TUNE/C                       | (D)                                       |
|                   |   |   |
| 8 Display panel   |   |   |
| Remote contro     | I signal sensor (S                      | ENSOR) 7                                  |
| ① Standby indica  | itor ( 也 )                              |   |
|                   | up in standby mode                      | C mains supply, this and goes out when    |

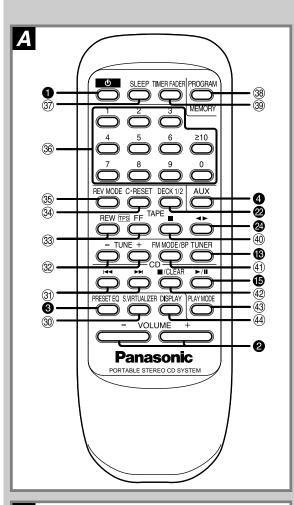
# Tuner/CD controls

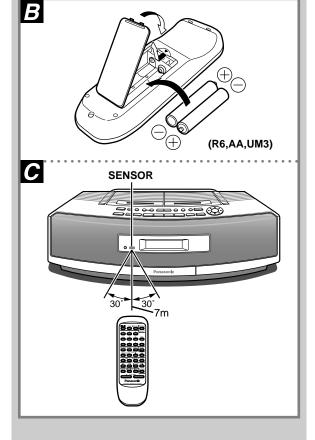
11 Speaker

| Number               | Designation        | Reference Page |
|----------------------|--------------------|----------------|
| (2) CD recording me  | ode button         |                |
| (CD REC MODE)        |                    | 18             |
| 13 Band button (B    | AND TUNET)         | 12,13          |
| 14 Tuning/CD sear    | ch buttons         |                |
| (−/◀◀, ▶▶/+ RI       | EW-TUNE/TPS-FF     | 5)             |
| (15) CD play/pause I | outton ( ►/II CD   | I) 9           |
| 16 Stop, TAPE/CD     | mode select butto  | on             |
| (■ TAPE/CD) .        |                    | 9              |
| (7) CD tray open/clo | se button          |                |
| (▲ CD OPEN/CL        | OSE)               | 9              |
| 18 Preset tuning/C   | D track select/ski | p dial         |
| ( ◀◀/∨़↔∧/▶▶         | TIME/PRE.TUNE/CI   | D)9,13         |
| 19 CD tray           |                    |                |

## C Cassette deck controls

| Nu     | mber D                    | esignation       | Reference Page |
|--------|---------------------------|------------------|----------------|
| 20     | Deck 1 eject buttor       | n (≜ DECK 1)     | 14             |
| 21)    | Deck 1                    |                  |                |
| 22     | Deck 1/2 select but       | ton (DECK 1/2)   | 15             |
| 23     | Tape edit button (T       | APE EDIT)        | 20             |
| $\sim$ | Cassette play/direc       | ,                | ► TAPE ) 14    |
| 25)    | Record/record pau         | se button        |                |
|        | (●/Ⅱ)                     |                  | 17–19          |
| 26     | Rewind/fast forwar        | d TPS buttons    |                |
|        | (-/ <b>◄◄</b> , ▶►/+ REW- | -TUNE/TPS-FF)    | 14–15          |
| 27)    | Stop, TAPE/CD mo          | de select button | 1              |
|        | (■ TAPE/CD)               |                  | 14,19          |
| 28)    | Deck 2 eject buttor       | n (▲ DECK 2)     | 17,19          |
| 29     | Deck 2                    |                  |                |
|        |                           |                  |                |





#### The remote control

## **A** Buttons

| Nun          | nber               | Designation    | Reference Page |
|--------------|--------------------|----------------|----------------|
| $\sim$       |                    | ,              | ALIZER) 22     |
| <u>3</u> 2 1 | Funing buttons (–  | TUNE+)         |                |
| $\sim$       | Rewind/fast forwa  | ,              |                |
| $\sim$       | •                  | •              | ET) 16         |
| $\sim$       | Reverse mode se    |                | .=             |
|              | REV MODE)          |                |                |
|              | Numbered button    |                |                |
| $\simeq$     | Program memory     | ` '            | 21             |
| $\sim$       | ,                  |                | 11,13          |
|              |                    |                | ) 22           |
| ~            | Гаре stop/mode s   | •              | •              |
| (41) F       | M mode BP butte    | on (FM MODE/BP | ) 12,19        |
| $\sim$       | CD stop/program    |                |                |
|              |                    |                | 10–11          |
|              | CD play mode but   |                |                |
| (44)         | Display select but | tton (DISPLAY) | 8,16           |

When the unit is supplied with AC power, buttons ① to ④, ⑥, ⑥, ② and ② function in the same way as the controls on the main unit. To save power, the unit cannot be turned on from the remote control when batteries are used.

# Batteries (not included)

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

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

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

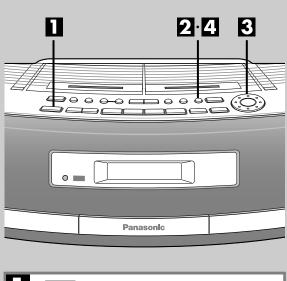
# **C** Use

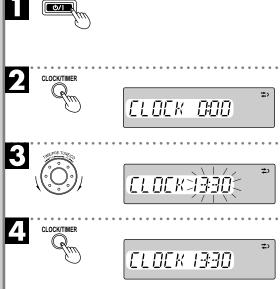
Aim at the sensor, avoiding obstacles, at a maximum range of 7 meters directly in front of the unit.

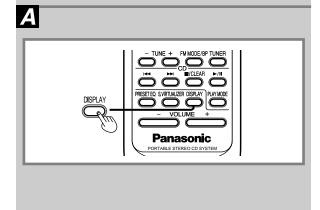
- Keep the transmission window and the unit's sensor free from dust.
- Operation can be affected by strong light sources, such as direct sunlight, and the glass doors on cabinets.

#### Do not;

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







# Setting the time

This is a twenty-four hour clock.
The example shows how to set the clock to 13:30.

- Press [ 💇 ] to turn the unit on.
- Press [CLOCK/TIMER] to select "CLOCK".

  Each time the button is pressed:

  → "CLOCK"→"ON ② PLAY"→" ② PLAY OFF"

  Original display ←"OFF ② REC" ←"ON ③ REC" ←
- Within 10 seconds

  Turn [I◀◀/▽←→ △/▶► TIME/PRE.TUNE/CD]

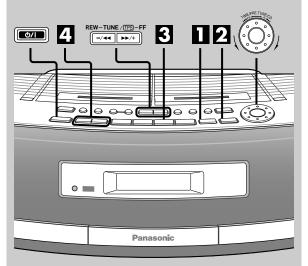
  to set the time.
- Press [CLOCK/TIMER] to start the clock. The original display is restored shortly after.

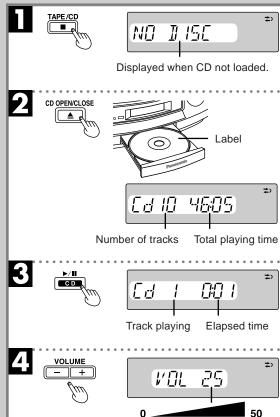
#### When batteries are used

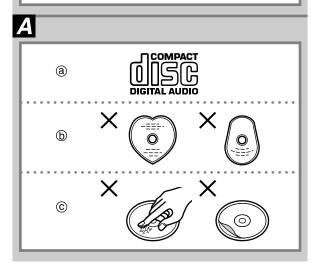
The unit cannot be turned on with the remote control.

A Displaying the clock

Remote control only Press [DISPLAY].







#### **CDs**

Preparation: (when using batteries) Press [ ].

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

  (Unit comes on when using AC power.)

  Each time the button is pressed

  TAPE ↔ CD
- Press [ ▲ CD OPEN/CLOSE] to open the tray, load a CD, and press [ ▲ CD OPEN/CLOSE] to close the tray.
- Press [ >/II CD ] to start play. Plays to the end of the CD and stops.
- Press [-,+ VOLUME] to adjust the volume.

#### To stop play

Press [ ■ TAPE/CD].

One touch play (When using AC power) When a CD is loaded, press [ >/II GD ].

The unit comes on and play starts.

#### To pause play

Press [ ►/II CD ] during play.
Press again to resume play.

#### To skip tracks

Turn [ I◀◀/∨ ↔ ^/►► TIME/PRE.TUNE/CD] clockwise (forward) or counterclockwise (backward).

#### Searching through tracks

Press and hold [ -/◀◀ REW-TUNE/፲፱§ ] (backward) or [ ▶►/+ TUNE/፲፱§-FF] (forward) during play.

#### Note

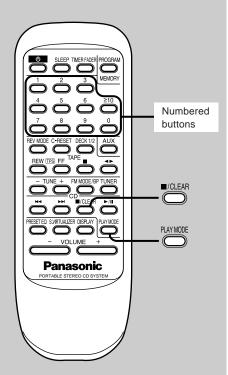
If this unit causes interference to other equipment (radios and televisions) separate it from the equipment.

# A CD selection

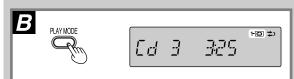
Choose discs with this mark: (a)

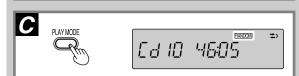
#### Do not

- use irregularly shaped discs (b).
- use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers. (©)
- attach scratch-proof covers or any other kind of accessory.
- write anything on the CD.
- clean CDs with liquids. (Wipe with a soft, dry cloth.)









#### **CDs**

#### Other modes of play

#### Preparation:

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

#### Remote control only

# A

#### Direct access play

Starts normal play from a selected track

#### Select the track with the numbered buttons.

For tracks numbered 10 and over, press [≥10] then the two digits.

# В

#### Repeat play

Plays a track or all tracks repeatedly

# Press [PLAY MODE] before or during play to select the mode.

Each time the button is pressed

→ 1-© : One track repeated
 ↓
 © : All tracks repeated

RANDOM

No display (canceled)

#### To repeat selected tracks

- ① Start program play (⇒ page 11).
- 2 Press [PLAY MODE] to select " ".

#### To cancel

Press [PLAY MODE] until " 1- $\square$ " and "  $\square$ " are cleared. The mode is also canceled if the CD tray is opened.



#### Random play

Plays the tracks once each in random order

# Press [PLAY MODE] before or during play to select " RANDOM ".

Each time the button is pressed

 $\rightarrow$  1-10  $\rightarrow$  10  $\rightarrow$  1200  $\rightarrow$  1200 No display (canceled)

#### To cancel

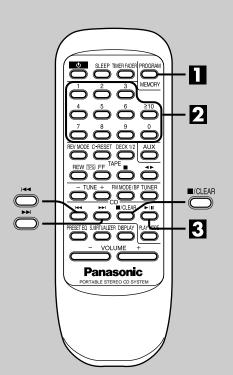
Press [PLAY MODE] to clear " PANDOM ".

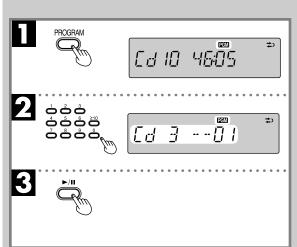
If canceled during play, play continues to the end of the disc.

The mode is also canceled if the CD tray is opened.

#### Note

- Random play does not work when " I is displayed (press | /CLEAR] first).
- Tracks cannot be selected with the numbered buttons.
- You cannot skip to tracks already played.
- · Search can be done within tracks only.





#### **CDs**

#### Program play:

Select up to 36 tracks to play in the order you choose

#### Preparation:

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

#### Remote control only

# Press [PROGRAM].

#### Enter the track number with the numbered buttons.

For tracks numbered 10 and over, press [≥10] then the two digits.

Repeat this step to program the tracks in the required order.

# Press [ ►/II ].

All the tracks are played in the selected order.

The program remains intact even if play is stopped or the unit is turned off. "Cd-P" appears when play is stopped to indicate the contents are in the memory.

#### To cancel

Press [■ /CLEAR] while stopped.

"CLEAR" is displayed, all the tracks are cleared, and program mode is canceled.

The mode is also canceled if the CD tray is opened.

#### "FULL" is displayed

If 36 tracks have been programmed.

#### "-- --: -- " is displayed

If the total play time of the program exceeds 100 minutes. You can still program and play tracks.

#### To check the contents of the program

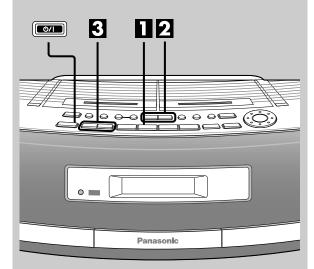
While stopped

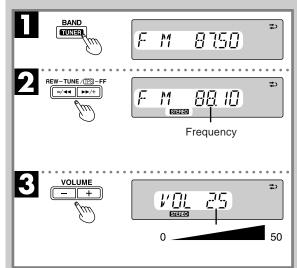
Press [ ◄◄ ] or [ ▶►I ].

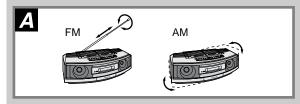
Each time one of the buttons is pressed, a track and its order in the program are displayed.

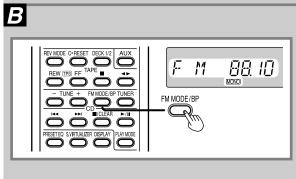
Program play does not work when "RANDOM" is displayed (press [PLAY MODE] to clear it) (⇒ page 10).

Search can be done within tracks only.









# The radio: manual tuning

Preparation: (when using batteries) Press [ o/l ].

Press [BAND TUNE] to select FM or AM.
(Unit comes on when using AC power.)

Each time the button is pressed  $AM \leftrightarrow FM$ 

Press [-/◀◀, ▶►/+ REW-TUNE/፲PS-FF] to select a station.

" STEREO " is displayed during FM stereo broadcasts.

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

#### **Auto-tuning**

Press and hold [-/◀◀, ▶►/+ REW-TUNE/\bar{\text{TPS}}-FF] until the frequency starts changing rapidly.

Stops when it finds a station. (Interference may also cause it to stop. Start auto-tuning again if this occurs.)
To stop auto-tuning

Press [-/◀◀, ▶►/+ REW-TUNE/TPS-FF].

#### A To improve reception

**FM:** Change the length and position of the antenna.

AM: Change the facing of the unit.

#### Note

- AM reception is briefly interrupted if a tape deck is operated.
- To improve reception when using the unit in a building or vehicle use it near a window.

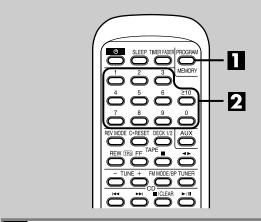
# B If noise is excessive in FM

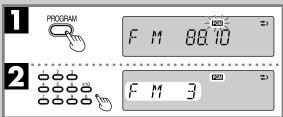
#### Remote control only

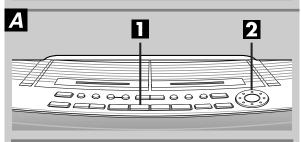
Press [FM MODE/BP] to display " MONO ".

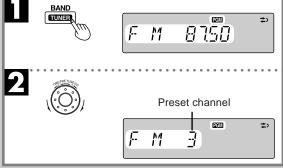
This mode improves sound quality if reception is weak for some reason but broadcasts are heard in monaural (" STEREO " goes out).

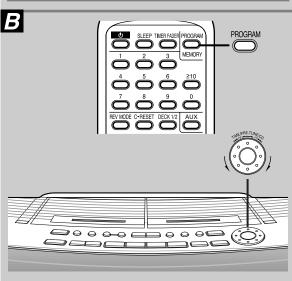
Press [FM MODE/BP] again to cancel the mode.











# The radio: preset tuning

#### Presetting radio stations

#### Remote control only

Tuning is simpler if you preset stations. You can preset 12 FM and 12 AM stations.

Preset the stations one at a time.

Preparation: Tune to the station you want to preset

- Press [PROGRAM].
- While "PGM" is flashing Press the numbered buttons to enter the station into a channel (1 to 12).
  - To enter channels 10, 11, and 12 Press ≥10, then the two digits.
  - If "PGM" stops flashing Press [PROGRAM] again.

The station occupying a channel is erased if another station is preset in that channel.

# Selecting channels

On the main unit

- Press [BAND TUNER] to select FM or AM.
- Turn [  $| \blacktriangleleft / \lor \rightarrow \land / \triangleright |$  TIME/PRE.TUNE/CD] to select the channel.

#### On the remote control

- (1) Press [TUNER] to select FM or AM.
- (2) Press the numbered buttons to select the channel (1 to 12) the station is in.

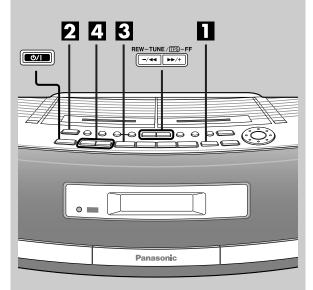
To select channels 10, 11, and 12 Press ≥10, then the two digits.

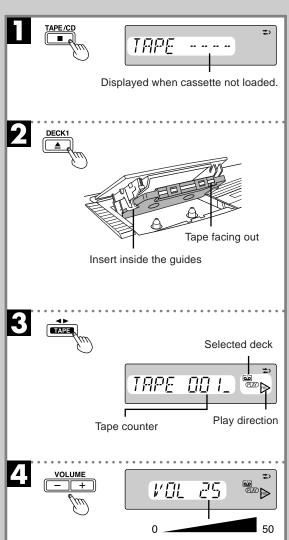
# Canceling a preset channel

e.g. If channel 3 is not needed.

- 1) Select channel 3.
- ② Press [PROGRAM].
- (3) Within 10 seconds
- is displayed.
- (4) Press [PROGRAM].
  - Now, when  $[ \bowtie \checkmark / \lor \leadsto \land / \blacktriangleright \blacktriangleright]$  TIME/PRE.TUNE/CD] is turned, channel 3 is skipped.

The channel can still be selected with the remote control.





#### Cassettes

You can play cassettes in either deck 1 or deck 2. Deck 1 is used in this example.

Preparation: (when using batteries) Press [ ].

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

(Unit comes on when using AC power.)

# Press [ \( \Delta \) DECK 1] to open the deck and load a cassette.

Play starts from the side facing up

Close deck by hand.

(Play direction automatically switches to "  $\triangleright$  " when the deck is closed.)

## ? Press [ ◀► TAPE] to start play.

> : Side facing up played

: Side facing down played

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

#### To stop play

Press [ ■ TAPE/CD].

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

When a cassette is loaded, press [ ◀► TAPE]. The unit comes on and play starts.

#### To change sides

Press [  $\blacktriangleleft \blacktriangleright$  TAPE] during play. Each time the button is pressed  $\blacktriangleright \leftrightarrow \blacktriangleleft$ 

#### Fast-forward and rewind

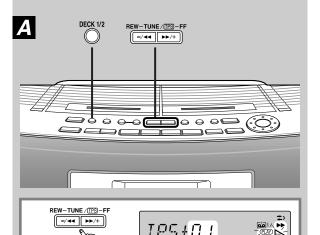
While stopped

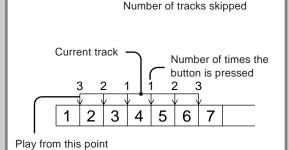
Press [ -/◄◄ REW-TUNE/TPS] (backward) or [►►/+TUNE/TPS-FF] (forward).

#### Cassette tape selection and care

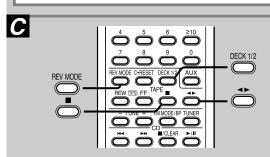
The unit can play normal, high, and metal position tapes. It identifies the type automatically.

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











#### Cassettes

# Tape Program Sensor (TPS)

TPS finds the beginning of a track and resumes play from there.

#### During play

# Press [ —/◀◀ REW-TUNE/፲PS ] (backward) or [ ▶▶/+ TUNE/፲PS—FF] (forward).

Each press increases the number of tracks skipped (up to 9).

#### Note

TPS may not operate correctly in the following situations:

- If the interval between tracks is less than 4 seconds.
- If there is noise between tracks.
- If there are silent parts within tracks.

TPS stops if you start play, rewind or fast-forward on the other deck.

# B To switch decks

#### Press [DECK 1/2].

The deck currently selected is displayed.

#### Note

- The unit automatically selects the deck when a cassette is loaded
- Operations on the current deck stop when an operation is started on the other deck.

# C Selecting reverse mode

#### Remote control only

#### Press [REV MODE].

Each time the button is pressed

→ 

∴ Plays top side to bottom side then stops

↓

(♣): Plays continuousy until [■] is pressed

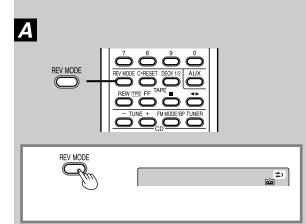
Plays one side only

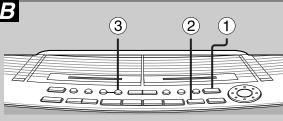
#### To play two cassettes in succession

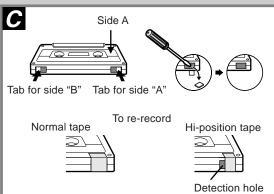
- 1 Press [REV MODE] so " ( ) is displayed.
- ② Press [ ◀► ] to start play.

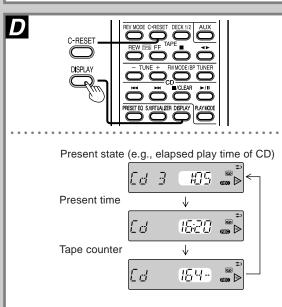
Play continues until [ ■ ] is pressed

You can also press [DECK 1/2] to select the deck to play first.









## Before recording

Use household AC power or new batteries when recording to avoid poor recordings caused by the batteries running down

Televisions can cause interference to recordings made on this unit if the two are too close to each other.

#### Selection of tapes for recording

The unit automatically identifies the type of tape.

| Normal position/TYPE I | O.K. |
|------------------------|------|
| High position/TYPE Ⅱ   | O.K. |
| Metal position/TYPE Ⅳ  | NO   |

Metal position tapes can be used, but the unit will not be able to record or erase them correctly.

#### Volume and sound quality in recording

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

# A Selecting reverse mode

#### Remote control only

#### Press [REV MODE].

- $\Rightarrow$ ) and  $\Rightarrow$ ): Both sides record (top side  $\Rightarrow$  bottom side).
- **:** One side only records.

# **E** Erasing recordings

- 1 Insert the cassette with the side to be erased facing up.
- 2 Press [ TAPE/CD] to switch to TAPE mode.
- ③ Press [ ●/ **II** ].

# C Erasure prevention

The illustration shows how to remove the tabs to prevent recording. To record on the tape again, cover as shown, being careful not to cover the high position discrimination hole.

# To display the tape counter while recording

## Remote control only

#### Press [DISPLAY].

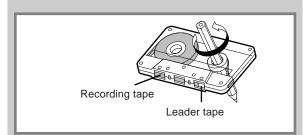
Each time the button is pressed in CD, Radio, or AUX mode

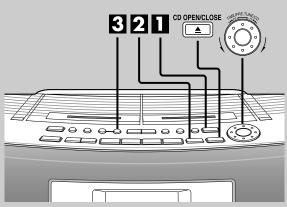
#### To reset the tape counter

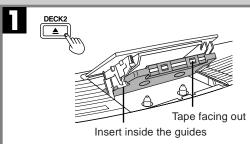
Press [C-RESET].

The counter resets to "000".

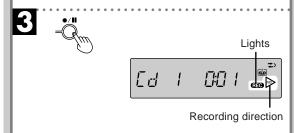
Your attention is drawn to the fact that recording prerecorded tapes or discs or other published or broadcast material may infringe copyright laws.













## Recording CDs (Deck 2 only)

#### Preparation:

- Insert a CD (⇒ page 9).
- To record from the beginning of the tape
   Wind on the leader tape.
- Select the reverse mode.

# Press [ ▲ DECK 2] to open the deck and load a cassette.

Recording starts from the side facing up Close deck by hand.

(Play direction automatically switches to "  $\mathop{\triangleright}$  " when the deck is closed.)

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

Each time the button is pressed TAPE  $\leftrightarrow$  CD

# Press [ ●/II ] to start recording.

CD play and recording start at the same time.

The cassette stops when the CD finishes.

> : Recording top side

: Recording bottom side

Deck 1 cannot be operated during recording.

#### To stop recording

Press [ ■ TAPE/CD].

#### A To pause recording

Press [ ●/II ].

Press again to resume recording.

# To continue recording from another CD on the same tape

- ① Press [ ▲ CD OPEN/CLOSE] and insert the other CD.
- ② Press [ ●/II ].

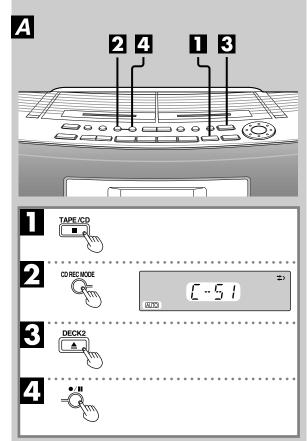
Recording begins from where it stopped.

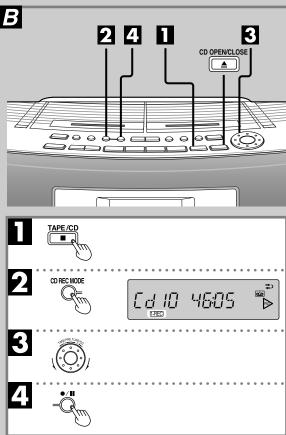
#### To record selected tracks

- ① Do step ■, then program the tracks (⇒ Program play steps to ② on page 11).
- ② Press [ ●/II ].

#### To skip unwanted tracks

- ① Press [ ●/ II ] to pause recording. (The CD also pauses.)
- ② Turn [ I◄◄/V → → ∧/▶►I TIME/PRE.TUNE/CD] so the next track you want to record is displayed.
- ③ Press [ ●/II ] to resume recording.





## **Automatic CD recording**

You can record the whole CD (AUTO) or a selected track(1-REC). If a track is interrupted at the end of the side facing up, it is recorded again on the side facing down.

## **A** AUTO

Recording begins from the side facing up and the reverse mode is set to " \( \bigcirc\)".

Preparation: Insert a CD (→ page 9)

- Press [ TAPE/CD] to switch to CD mode.
- Press [CD REC MODE] so "AUTO" is displayed.

Each time the button is pressed → AUTO → 1-REC → OFF —

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

Press [ ▲ DECK 2] to open the deck and load a cassette.

Close deck by hand.

Press [ •/ II ] to start recording.
The unit rewinds the tape, records 10 seconds of silence, and then starts recording.

To stop recording

Press [■ TAPE/CD]. The CD also stops.

To record selected tracks

- (1) Program tracks (→ steps 1 and 2 on page 11).
- ② Do steps 2 to 4.

#### Note

You cannot use AUTO with repeat or random play (→ page 10).

# B 1-REC

#### Preparation:

Insert a CD (→ page 9) and a cassette. Wind the tape to where you want to start recording.

- Press [■ TAPE/CD] to switch to CD mode.
- Press [CD REC MODE] so "1-REC" is displayed.
- Turn [ ► / V → A / ► I TIME/PRE.TUNE/CD] to select the track you want to record.
- Press [ •/ II ] to start recording.
  CD play and recording start at the same time.

To stop recording

Press [ ■ TAPE/CD]. The CD also stops.

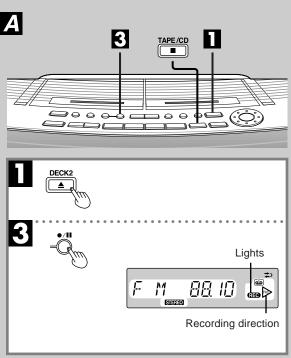
To continue recording from another CD

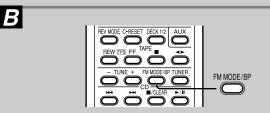
- 1 Press [ ▲ CD OPEN/CLOSE] and insert the other CD.
- ② Do steps 3 and 4.

To record a track while it is being played

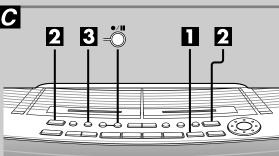
- 1 Press [CD REC MODE] so "1-REC" is displayed.
- (2) Press [ ●/II ].

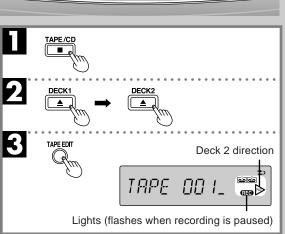
Recording starts from the beginning of the track and stops when the track finishes.











# A Recording the radio

#### Preparation:

- Wind on the leader tape.
- To record from part way through the tape
   Wind the tape on to where you want to start recording.
- Select the reverse mode.
- Press [ ▲ DECK 2] to open the deck and load a cassette.
- Tune to the station (⇒ pages 12 and 13).
- 3 Press [ ●/II ] to start recording.

#### To stop recording

Press [ ■ TAPE/CD].

#### To pause recording

Press [ ●/II ].

Press again to resume recording.

# Reducing noise when recording AM (Beat Proof function)

#### Remote control only

Press [FM MODE/BP] while recording.

Each time the button is pressed

bP1 ↔ bP2

Choose the setting with the least noise.

# C Recording tape-to-tape

#### Preparation:

- Prepare the cassettes
   Wind on the leader tape.
- Select the reverse mode.
- Press [ TAPE/CD] to switch to TAPE mode.
- Press [ ▲ DECK 1] and insert the playback cassette.

Press [ ▲ DECK 2] and insert the recording cassette.

The tapes can be different types.

Press [TAPE EDIT] to start recording.

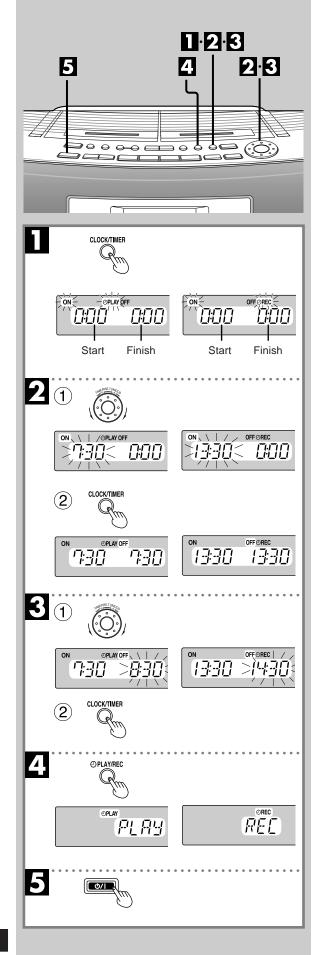
#### To stop recording

Press [ ■ TAPE/CD].

#### To pause recording

Press [ ●/II ]. Both decks pause.

Press [TAPE EDIT] to resume recording.



## Using the timer

The timer has two functions. It can be set to come on at a certain time to wake you up, or it can be set to record the radio. Be aware that weak batteries can cause the timers to malfunction. Use household AC power for best operation.

#### Preparations:

- Turn the unit on and set the clock (⇒ page 8).
- For the play timer, prepare the music source you want to listen to; tape, CD or radio, and set the volume.
- For the record timer, insert the tape in deck 2, select the reverse mode (→ page 16), tune to the radio station (→ pages 12 and 13) and set the volume.

#### Setting the start and finish times

# Press [CLOCK/TIMER] to select the timer function.

Each time the button is pressed:

"CLOCK" → "ON ② PLAY" → " ② PLAY OFF"

Previous display ← "OFF ③ REC" ← "ON ② REC" ←

These indicators flash on the display for about 10 seconds.

Proceed to step 2 before the indicators stop flashing. ON ① PLAY: to set the play timer

ON @ REC: to set the record timer

- ① Dial [ I◄◄/∨↔ ∧/►► TIME/PRE.TUNE/CD] to set the start time.
  - 2 Press [CLOCK/TIMER].
- 3 ① Dial [  $| \blacktriangleleft / \lor \rightarrow \land / \triangleright \triangleright |$  TIME/PRE.TUNE/CD] to set the finish time.
  - 2 Press [CLOCK/TIMER].

The start and finish times are now set.

#### Turning the timers on

## Press [ @ PLAY/REC].

Each time the button is pressed:

 $\rightarrow$   $\bigcirc$  **PLAY**  $\rightarrow$   $\bigcirc$  **REC**  $\rightarrow$  off (no display) -

@ PLAY: to turn the play timer on

@ REC: to turn the record timer on

(The indicator doesn't appear if the start and finish times haven't been set.)

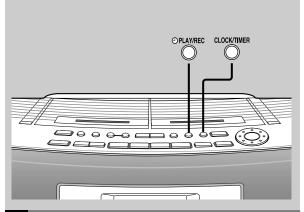
"E" appears if the clock hasn't been set.

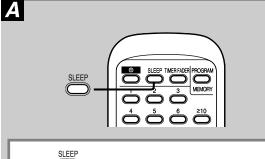
# 5 Press [ ■७/I■ ] to turn the unit off.

The unit must be off for the timers to operate.

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

(Continued on next page)







#### Using the timer

#### To cancel the timer

Press [ @ PLAY/REC] to clear the timer indicator from the

The timers come on at the same time everyday until they are canceled.

#### Checking the settings

Press [CLOCK/TIMER] when the unit is off. The settings are shown in the following order. Start time, Finish time → Source → Volume → Clock

#### To change the settings

#### To change the times

Do steps 1, 2, 3, and 5.

#### To change the source

Turn the unit on, choose the source and press [ @ PLAY/REC] to turn the timer on (⇒ step 4).

#### You can enjoy other sources after you have set the timer.

The timer will come on under the same conditions the unit was in when [ @ PLAY/REC] is pressed to turn the timer on (⇒ step 4). Before turning the power off, check tape direction if you played cassettes.



## The sleep timer

#### Remote control only

Set the unit to stop and turn off after a certain time.

While listening to a CD, a cassette, or the radio.

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

Each time the button is pressed

 $\rightarrow$  SLEEP 30  $\rightarrow$  SLEEP 60  $\rightarrow$  SLEEP 90 SLEEP OFF ← SLEEP 120 ←

#### To cancel

Press [SLEEP] to select "SLEEP OFF".

#### To check the remaining time

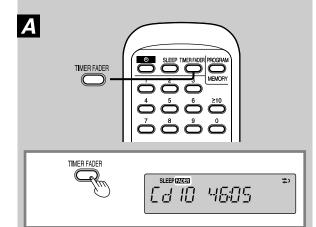
Press [SLEEP] once.

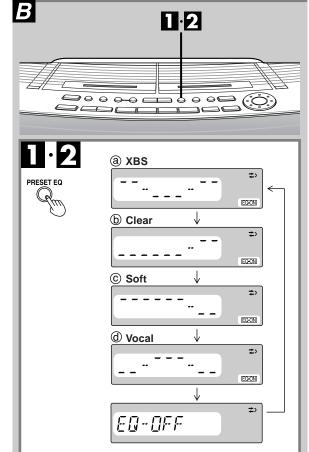
The remaining time is shown for about 5 seconds.

#### To change the time.

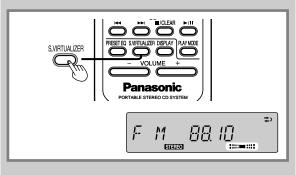
Press [SLEEP] to select the new time.

The sleep timer can be used in combination with the play and record timers. Make sure the unit is off before the play or record timer's set start time.





C



# The timer fader

#### Remote control only

Volume fades in gradually when a timer turns the unit on and fades out gradually when the sleep timer turns the unit off.

#### Press [TIMER FADER].

Press again to cancel.

#### Note

All timers are affected by this function whenever " on the display. Recordings made with the record timer are unaffected.

# **B** Sound quality

You can choose one of four types of sound quality.

- @ XBS: Adds punch to rock
- **(b)** Clear: Clarifies higher sounds
- © Soft: Use this setting for background music
- d Vocal: Adds gloss to vocals

# Press [PRESET EQ].

The current setting is displayed.

# Within 2 seconds Press [PRESET EQ] to select a setting.

Each time the button is pressed  $\Rightarrow$  @XBS  $\Rightarrow$  @Clear  $\Rightarrow$  @Soft  $\Rightarrow$  @Vocal  $\Rightarrow$  EQ OFF (canceled)

#### Note

Recordings are unaffected by changes to sound quality.

# Creating a three dimensional sound field with S.Virtualizer

#### Remote control only

Use when playing stereo sources.

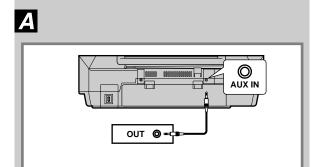
#### Press [S.VIRTUALIZER].

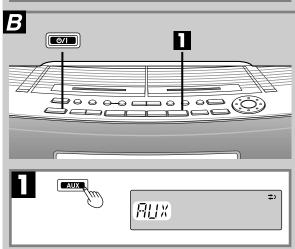
Press again to cancel.

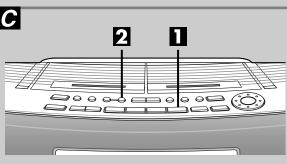
#### Note

Recordings are unaffected by this feature.

The actual effect depends on the source played.

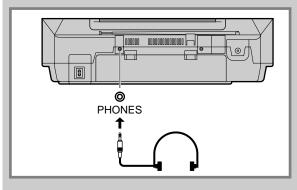








D



# Using auxiliary equipment

You can play or record sound from other equipment through this unit's AUX IN terminal.

Plug type: 3.5 mm stereo

# **B** Playback

- Press [ AUX ] to switch to AUX mode.
- 2 Start playback on the equipment.
- **C** Recording
- Do steps and ② as described above.
- **?** Press [ ●/**II** ].

#### Note

When this unit and the other equipment are connected to each other, do not set input on both unit's to "AUX". This can cause feedback noise to occur.

# Using headphones (not included)

Reduce volume before connection.

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

Plug type: 3.5 mm stereo

#### Maintenance

#### If the surfaces are dirty

#### To clean this unit, wipe with 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.

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

#### For a cleaner crisper sound

Clean the heads regularly to assure good quality playback and recording. Use a cleaning tape (not included).

## **Troubleshooting**

Before requesting service, make the below checks. If you can't fix the system as described below, or if something not listed here occurs, refer to the enclosed directory to locate an Authorized Service Center convenient to you or contact your dealer. Reference pages are shown as black circled numbers 5.

#### Common problems

| "UO1" is displayed  Replace the batteries or use household AC power.   Batteries haven't been inserted. Insert batteries or use household |  |
|---|--|
| "UO2" is displayed  Batteries haven't been inserted. Insert batteries or use household  |  |
| power. ("UO2" appears only if you have inserted memory batteri  |  |

#### CD

| CD won't play or CD display is incorrect | Clean the CD 9   |
|--|--|
|  | Wait for about an hour for condensation to clear and try again.  Make sure the label is facing up.   Replace the CD if it is scratched, warped, or irregularly shaped. |

#### Cassette deck

| Recording not possible | Have the cassette's tabs been removed? Cover the holes with tape. |
|------------------------|---|
| Poor sound quality     | Clean the heads. 28   |

#### Radio

| A lot of noise or difficult to tune | Interference may be caused by other equipment. Turn the other equipment  |
|-------------------------------------|--|
|                                     | off or separate this unit from them.                                     |
|                                     | Interference may occur if a remote control from other equipment is used. |

#### Remote control

| The remote control doesn't work.            | Check the batteries are inserted correctly.                               |
|---|---|
|   | Replace the batteries if they are worn.                                   |
| The unit can't be turned on from the remote | Use the power button on the main unit if you are using batteries to power |
| control.                                    | the unit. <b>5 7</b>  |

# Technical specifications

Radio

Frequency range

FΜ 87.50-108.00 MHz (50 kHz steps) AM 522-1629 kHz (9 kHz steps)

CD player Sampling frequency 44.1 kHz Decoding 16 bit linear

Beam source Semiconductor laser (wavelength 780 nm) No. of channels 2 channel, stereo Wow and flutter Below measurable limit D/A converter MASH (1 bit DAC)

Tape recorder

Track system 4 track, 2 channel, stereo Monitor system Variable sound monitor AC bias Recording system

**Erasing system** AC erase

Frequency range

Normal position 30 Hz-16 kHz **High position** 30 Hz-17 kHz

General **Speakers** 

**Full Range** 

 $8 \text{ cm } 6.0 \Omega X2$ 

Jacks Output PHONES: 3.5 mm stereo (16-64  $\Omega$ ) Input AUX IN: 3.5 mm stereo

Power requirement

AC 230-240 V, 50 Hz

Power consumption: 30 W 12 V (Eight R20, D, UM-1 batteries) **Battery** 

Memory back-up for computer/clock

6V (Four R6, AA, UM-3 batteries)

Dimensions (WXHXD)  $490 \times 142 \times 291 \text{ mm}$ About 5 kg Weight

without batteries

#### Note

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

