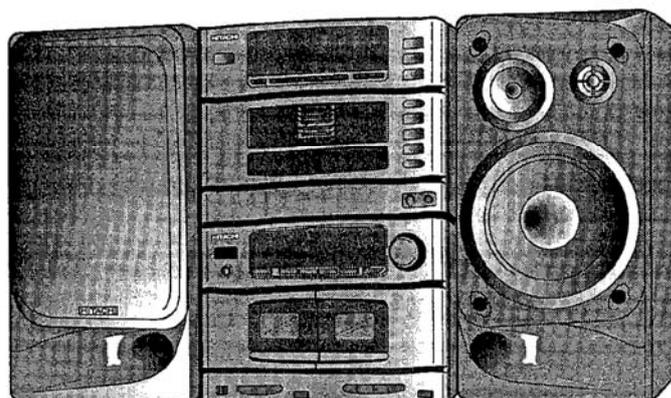# HITACHI

COMPACT HI-FI COMPONENT SYSTEM

Model **AX-C12E(BS)**
AX-C15E(BS)

INSTRUCTION MANUAL

AX-C15E

NOTICE

The OPERATE button located on the front panel is secondarily connected and does not separate the apparatus from the mains supply on the switched-off position. As to the indication of the OPERATE button, " I " shows ON and "⏻" electrical power stand-by. If the unit is to be left unattended for a long period, turn off [O] the main power switch on the Rear Panel.

Before operating, please read all these Instructions thoroughly.

SOME DO'S AND DON'TS ON THE
SAFE USE OF EQUIPMENT

(for U.K.)

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

DO read the operating instructions before you attempt to use equipment.
DO ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.
DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.
DO be careful with glass panels or doors on equipment.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way - switch off, withdraw the mains plug and consult your dealer.
DON'T remove any fixed cover as this may expose dangerous voltages.
DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure that your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.
DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving a vehicle.
DON'T listen to headphones at high volume, as such use can permanently damage your hearing.
DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishings. Overheating will cause damage and shorten the life of the equipment.
DON'T use makeshift stands and NEVER fix legs with wood screws - to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.
*DON'T* allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL
- *NEVER* let anyone especially children push anything into holes, slots or any other opening in the case - this could result in a fatal electrical shock;
- *NEVER* guess or take chances with electrical equipment of any kind. It is better to be safe than sorry!

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

THIS LABEL IS FIXED
TO THE REAR OF THE PLAYER

**CLASS 1
LASER PRODUCT**
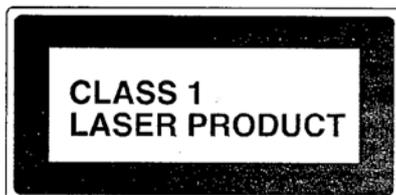
CAUTION
This product contains a low-power laser device. To ensure continued safety do not remove any covers or attempt to gain access to the inside of the products. Refer all servicing to qualified personnel.

IMPORTANT

The mains lead on this equipment may be supplied with a moulded plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA or BSI approved BS 1362 fuse must be used of the same rating. If the fuse cover is detachable never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is of the same colour as that visible on the pin face of the plug. Fuse covers are available from your dealer.

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

Should it be necessary to change the mains plugs, this must be carried out by a competent person, preferably a qualified electrician.

If there is no alternative to cutting off the mains plug, ensure that you dispose of it immediately, having first removed the fuse, to avoid a possible shock hazard by inadvertent connection to the mains supply.

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 coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

On no account connect either of these wires to the terminal marked E or by the earth symbol ⏚ or coloured green or green and yellow.

Alternatively, this equipment may be supplied with a rewireable plug already fitted, which may be removed if not suitable and an alternative fitted in accordance with the preceding instructions.

- Before switching the Operate button to ON " I ", be sure to turn down the volume. If no sound is emitted from the speakers when the volume is raised, lower the volume again, switch the Operate button to STANDBY "⏻", and check to see if the speaker cords are properly connected.

- The AX-C12E/C15E contains a muting circuit and it takes about 2- 4 seconds until this unit reaches stable operation after switching the POWER ON.

- Never open the covers or touch the inside or insert a metal object. Any of these could cause an electric shock or a fault.

- When a thunder starts, unplug the power cord and disconnect the antenna.

- The apparatus shall not be exposed to dripping or splashing.

- To clean cabinet and panels when dirty, clean off dirt on the surfaces with a dry cloth. Never use thinner, benzene or alcohol, for these will damage the surface finish.

- Protect the unit against excessive heat (e.g. direct sunlight), dust and moisture.

- Be careful not to damage the power supply cord. Be sure to hold the plug when pulling it out; do not pull the cord.

- Discs which can be played on the CD player have the following mark on them: COMPACT disc DIGITAL AUDIO

- We recommend you do not use a C-120 cassette tape to prevent from breakage or jamming.

- Do not install the set in a confined location; otherwise, heat dissipation will be poor and malfunctions may occur.

- Do not place any foreign objects in the disc compartment. It may cause damage to the mechanism.

- Do not move the sound system suddenly from a very cold room into a warm room. When a chilled CD player is moved suddenly to a warm location, condensation may form on the pickup lens, preventing proper operation. In this case, wait 1–2 hours before resuming play.

- During playback, if the CD player is subjected to a sudden shock or jolt, some noise may be produced. This is not a malfunction.

- The CD player has a wide dynamic range. As a result, if you turn your amplifier's volume up too high during soft (low volume) parts of a program, your speakers may be damaged when the dynamic range of a sudden loud passage is produced.

- Do not store discs in high-temperature, high-humidity locations. The discs may develop warps and become unable to play. Also, discs with moisture on them may be unplayable. Wipe any moisture off with a soft, dry cloth, and be sure discs are fully dry before using.

- Do not leave a disc inside the CD player when it is not used for a long period.

SAFEGUARDS
Electrical energy can perform many useful functions. This unit has been engineered and manufactured to assure your personal safety. Improper use can result in potential electrical shock or fire hazards. In order not to defeat the safeguards, observe the following instructions for its installation, use and servicing.

INSTALLATION
Avoid the use of this unit in high temperature areas (such as near heating equipment) or in direct sunlight. Do not block the unit from radiating heat.

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

Sound Controls

• **5-mode preset Graphic equalizer**

You can select the best sound setting among FLAT, HEAVY, MILD, CLEAR and VOCAL, with easy operation, matching to sound sources and your sound preference.

• **Super Wide-effect**

Lets you enjoy stereo-sound effect of a concert hall.

• **Dynamic Bass**

Enjoy the rich bass sound.

• **Spectrum Analyzer for AX-C15E**

Tuner

• **36 random preset stations**

You can preset your desired stations up to 36 stations in random way. Just press the button on the remote control and you can get the desired station.

CD Player with 7-Disc Changer (6-Disc Magazine + 1 Disc Tray)

• **CD DIRECT RECORDING function**

You can start recording from a CD by pressing one operation button. And the auto spacing function automatically inserts a 4-second unrecorded interval between songs.

• **AUTO EDIT function**

This function automatically arranges CD tracks to be recorded matching to your tape length. You do not have to worry about the playing time when recording from a CD.

• **CONTINUOUS EDIT function**

Use this function when you want to record from more than one disc onto one tape.

Double-Cassette Deck

• **AUTO REVERSE**

• **AUTO TAPE SELECTOR**

Automatically detects your tape-type and selects the best position for playback or recording.

• **DOLBY B Noise Reduction**

Speaker System

• **3-Way Speaker System (HS-AX15) for AX-C15E**
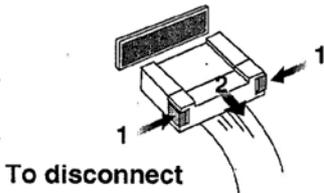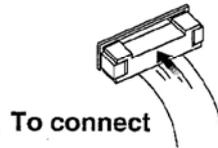• **2-way Speaker System (HS-AX12) for AX-C12E**
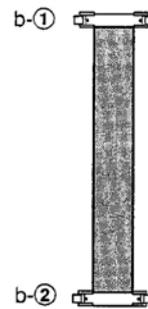
CONTENTS

Basic connections

1. Connect the cables by following the numbers indicated below.

To connect

NOTE: Insert the connector so that it is locked.
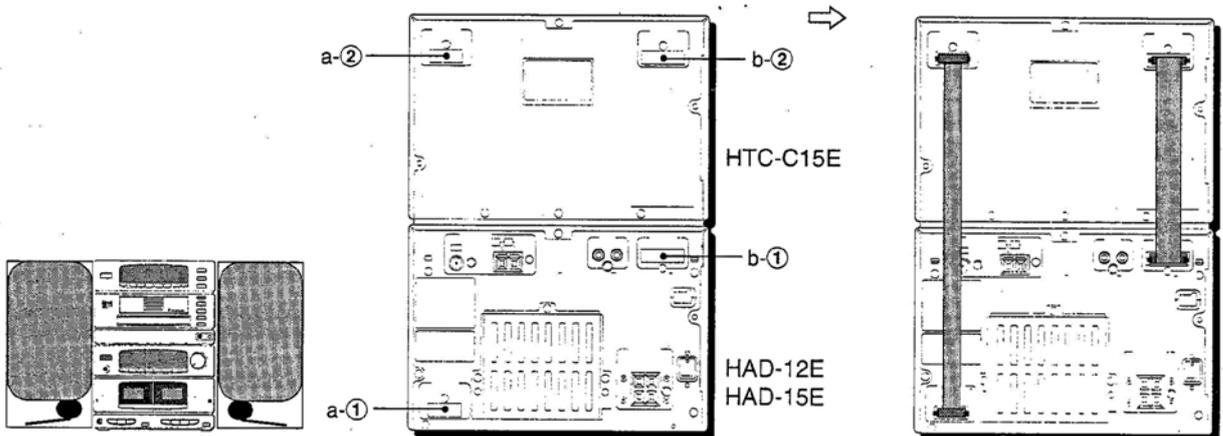
To disconnect

a-① · a-②
— SYSTEM —
CONNECTOR 2

b-① · b-②
— SYSTEM —
CONNECTOR 1

a-② · b-②

HTC-C15E

b-①

HAD-12E
HAD-15E

a-①

HAD-12E
HAD-15E
b-① · a-② · HTC-C15E · b-②

a-①

2.

③

②

FM (75 ohms)

①

DAT, etc.

3.

R L

HS-AX15

HS-AX15

1. for HS-AX15

Black   Red

R L

Red

Black

④

4.

NOTE: • Make sure that the core part of wire is locked by the terminal after each connection.
• Set the AM loop antenna away from the sound system, system connector cable and speaker wire.
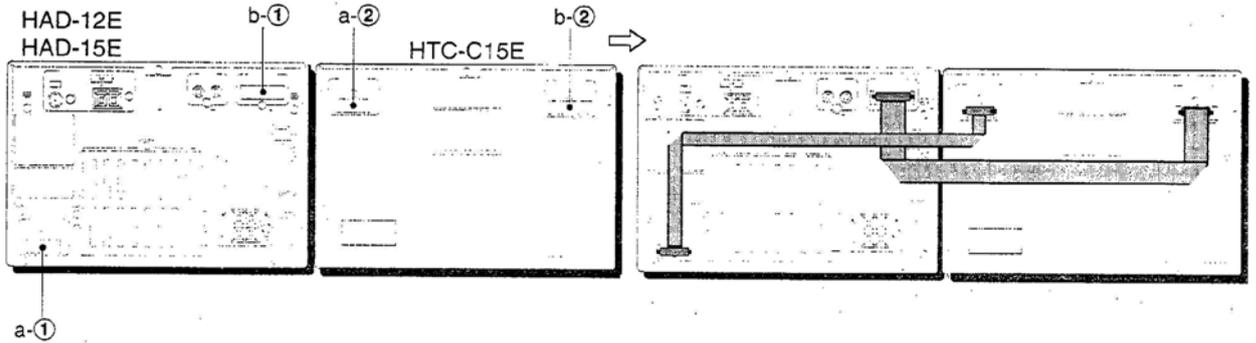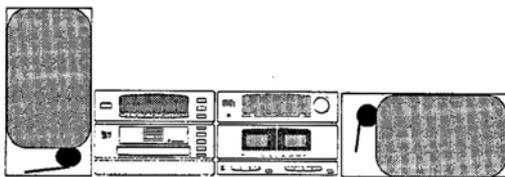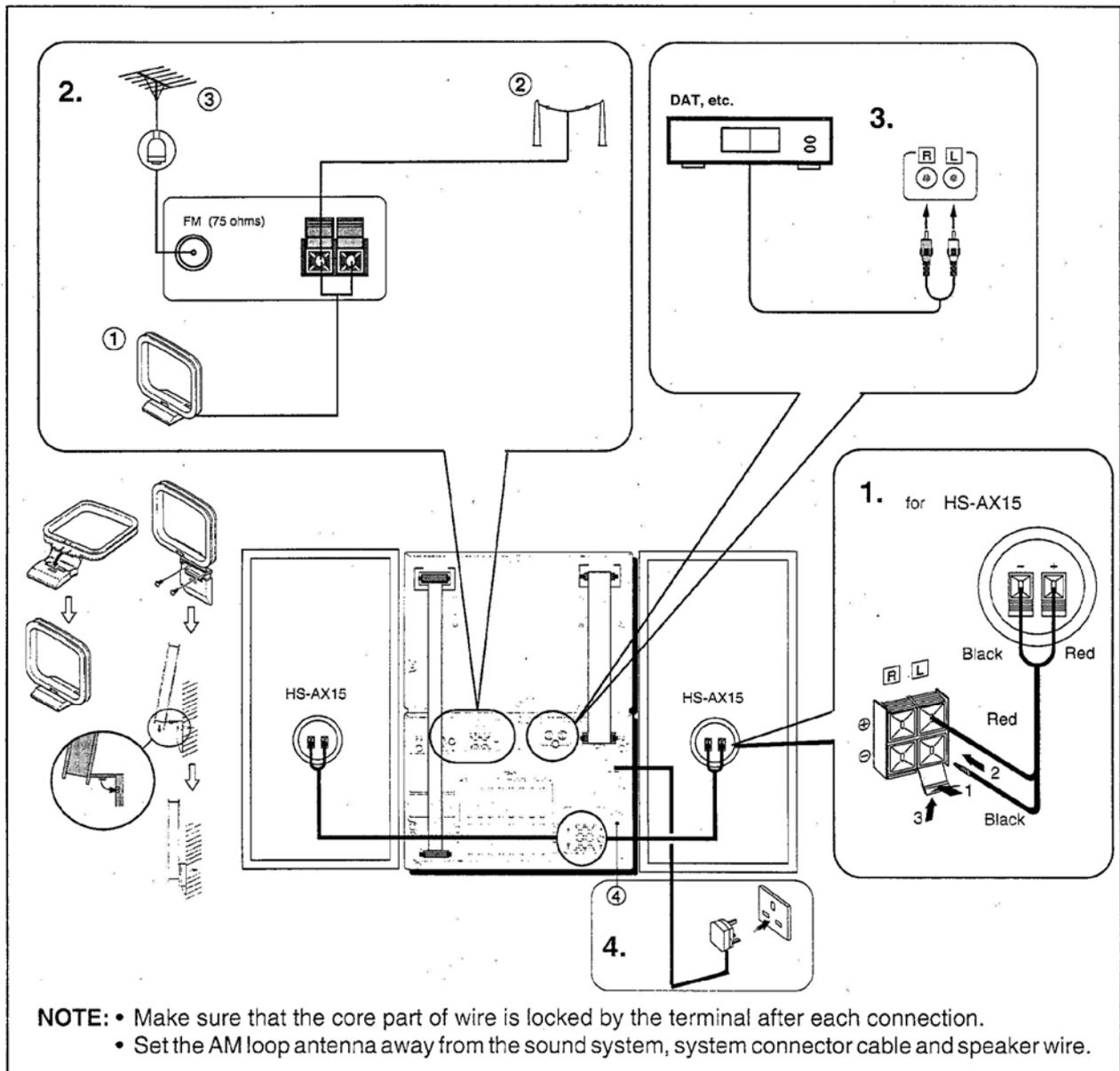
1. Speaker Connections
Be sure to connect the red wire to ⊕ and the black wire to ⊖. Also be sure to connect the right speaker to R and the left speaker to L .

2. Antenna Connections
①MW/LW (AM) loop antenna (attached): Be sure to connect this antenna and do not disconnect it even when you use a MW/LW outdoor antenna.
②MW/LW (AM) outdoor antenna (optional): Use this antenna when the reception is not good enough.
③FM outdoor antenna (optional): Be sure to connect this antenna.

3. AUX Connections
Use these terminals when you want to connect an extra sound unit.

4. Power Requirement
To AC 240 V, 50 Hz.
CAUTION: Plug in the set only after all the connections have been completed.

IMPORTANT: Switching on the main power switch (④)
Be sure to set the main power switch [POWER⏻/〇] to [⏻].

③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

②

⑪ ⑫ ⑬

⑭ ⑮ ⑯ ⑰ ⑱

①

⑲ ⑳

㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙

1 2

㊴ ㊳ ㊲ ㊱ ㉟ ㉞ ㉝ ㉜ ㉛ ㉚

④①

④②

OPERATE   TUNER   AUX   Q.EQ
   ⏻ I   BAND   PATTERN
④⓪   ④③

1   2   3   4
⑤   6   7   8   ④④
9   10   0/11   10+/12

►/II   ◄   ►   ■
④⑤ ⑤①   ⑤⓪ ④⑧
         DUB   ◄◄   ►►   TAPE 1/2
⑤② ⑤④   ④⑨ ⑤⑤
         CD DIR. A.EDIT PROG   RANDOM
⑤③ ⑤⑨   ⑤⑥ ⑤⑧
         REMAIN   ⟲   I◄◄   ►►I
⑥⓪   ⑤⑦
⑥①   ■   ►/II
⑥③   ⑥②
         P.MODE   VOLUME   DISC
⑥④   ⑥⑤

8
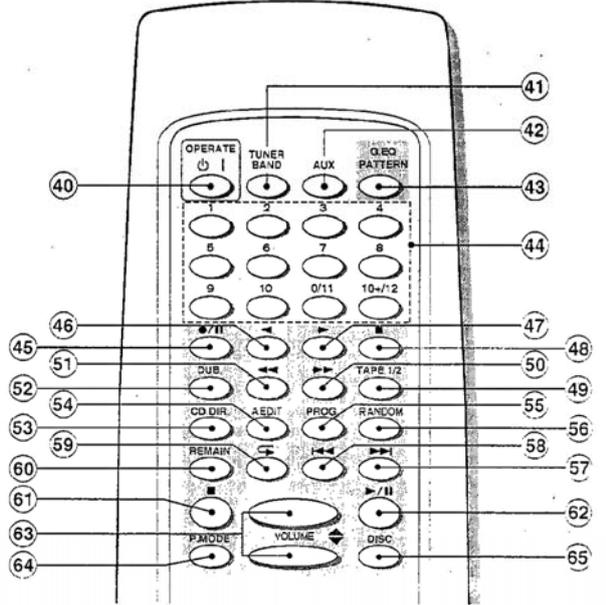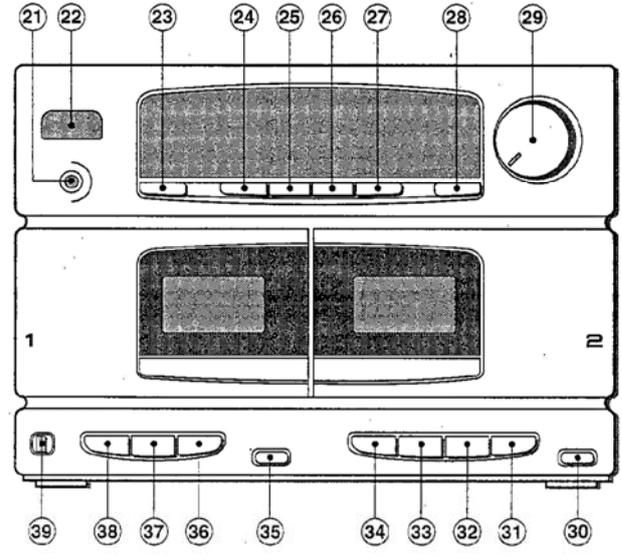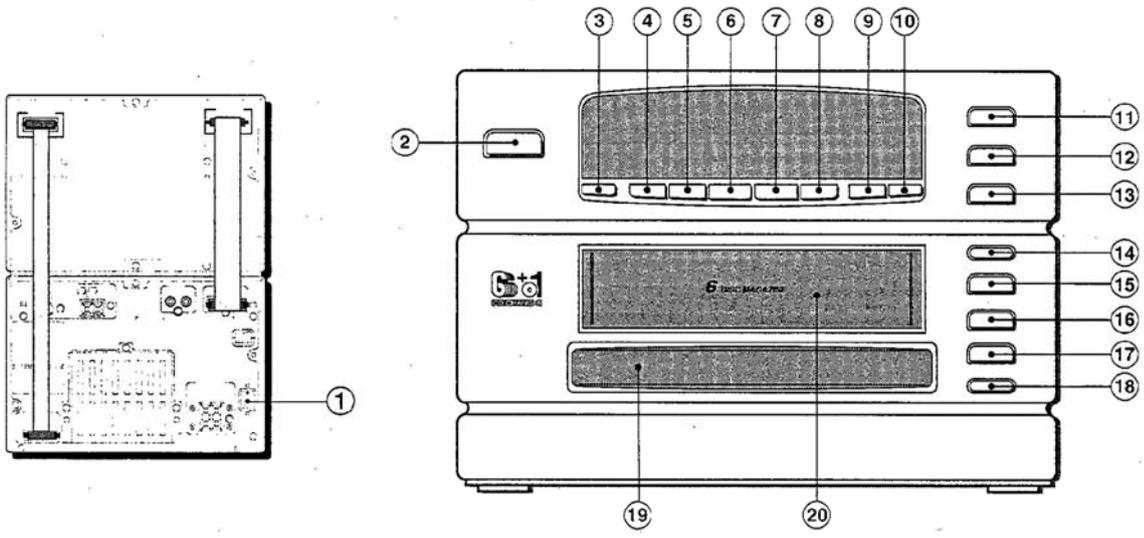
REAR PANEL
① Main Power Switch [POWER ⏻/ ○]

FRONT PANEL
② Operate Button [OPERATE ⏻/ I]
Timer
③ Timer Mode Button
④ Clock/Timer/Sleep Timer Selection Button
[CLOCK/TIMER/SLEEP]
⑤ Clock/Timer/Sleep Timer Setting (-) Button [SET -]
⑥ Clock/Timer/Sleep Timer Setting (+) Button [SET +]
Tuner
⑦ FM Mode Button [FM MODE]
⑧ Radio Station Memory Button [MEMORY]
⑨ Tuning Down Button [▼ DOWN]
⑩ Tuning Up Button [▲ UP]
⑪ Preset Station Up Button [▲ UP]
⑫ Preset Station Down Button [▼ DOWN]
⑬ Graphic Equalizer Pattern Selection Button
[G.EQ PATTERN]
CD Player
⑭ Disc Magazine Ejection Button [▲ EJECT]
⑮ Play/Pause Button [▶ PLAY/ II PAUSE]
⑯ Stop/Clear Button [■ STOP/ CLEAR]
⑰ Disc Selection Button [DISC]
⑱ CD Tray Open Close Button [▲ OPEN/CLOSE]
⑲ CD Tray
⑳ CD Magazine Slot [6 DISC MAGAZINE]
㉑ Headphones Socket [PHONES]
㉒ Remote Control Sensor [REMOTE SENSOR]
㉓ Super Wide On/Off Button
[SUPER WIDE ▬ON/▮OFF]
㉔ CD Player Selection Button [CD]
㉕ Tape Deck Selection Button [TAPE]
㉖ Tuner/Band Selection Button [TUNER (BAND)]
㉗ Auxiliary Source Selection Button [AUX]
㉘ Dynamic Bass On/Off Button
[DYNAMIC BASS ▬ON/▮OFF]
㉙ Volume Control [VOLUME]
Cassette Deck
㉚ Ejection Button [▲ EJECT]
㉛ Stop Button [■ STOP]
㉜ Forward Play Button [▶ PLAY]
㉝ Reverse Play Button [◀ PLAY]
㉞ Recording/Pause Button [●/II REC/ PAUSE]
㉟ Ejection Button [▲ EJECT]
㊱ Stop Button [■ STOP]
㊲ Forward Play Button [▶ PLAY]
㊳ Reverse Play Button [◀ PLAY]
㊴ DOLBY NR On/Off Switch

REMOTE CONTROL (RB-AXC15)
㊵ Operate Button [OPERATE ⏻/ I]
㊶ Tuner/ Band Selection Button [TUNER/ BAND]
㊷ Auxiliary Source Selection Button [AUX]
㊸ Graphic Equalizer Pattern Selection Button
[G.EQ PATTERN]
㊹ Number Buttons
Cassette Deck
㊺ Recording/Pause Button [●/II]
㊻ Reverse Play Button [◀]
㊼ Forward Play Button [▶]
㊽ Stop Button [■]
㊾ Tape 1/2 Selection Button [TAPE 1/ 2]
㊿ Fast forward/ Skip Search Button [▶▶]
51 Rewind/ Skip Search Button [◀◀]
52 Dubbing Button [DUB.]
CD Player
53 CD Direct Recording Button [CD DIR.]
54 Auto Edit Recording Button [A.EDIT]
55 Programme Button [PROG.]
56 Random Play Button [RANDOM]
57 Skip/Manual Search Button [▶▶|]
58 Skip/Manual Search Button [|◀◀]
59 Repeat Play Button [⟳]
60 Remaining Time Button [REMAIN]
61 Stop/Clear Button [■]
62 Play/ Pause Button [▶/II]
63 Volume Control [VOLUME ♦]
64 Play Mode Button [P.MODE]
65 Disc Selection Button [DISC]

1.5V x 2 (IEC R6, "AA",SUM-3)

5 ~ 7 m

30°   30°

SOUND CONTROL

1.

4.

3.

2.

1.
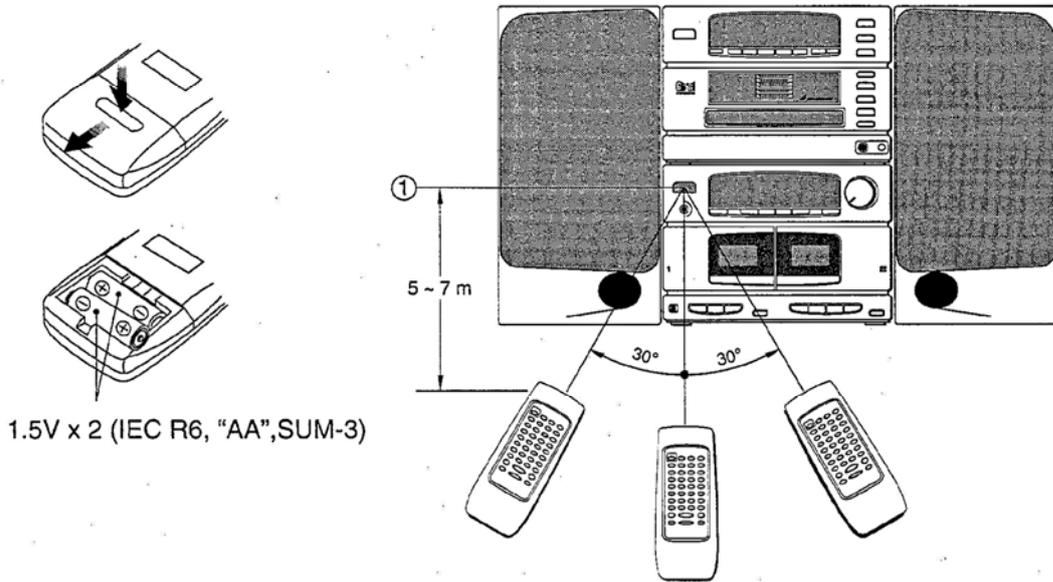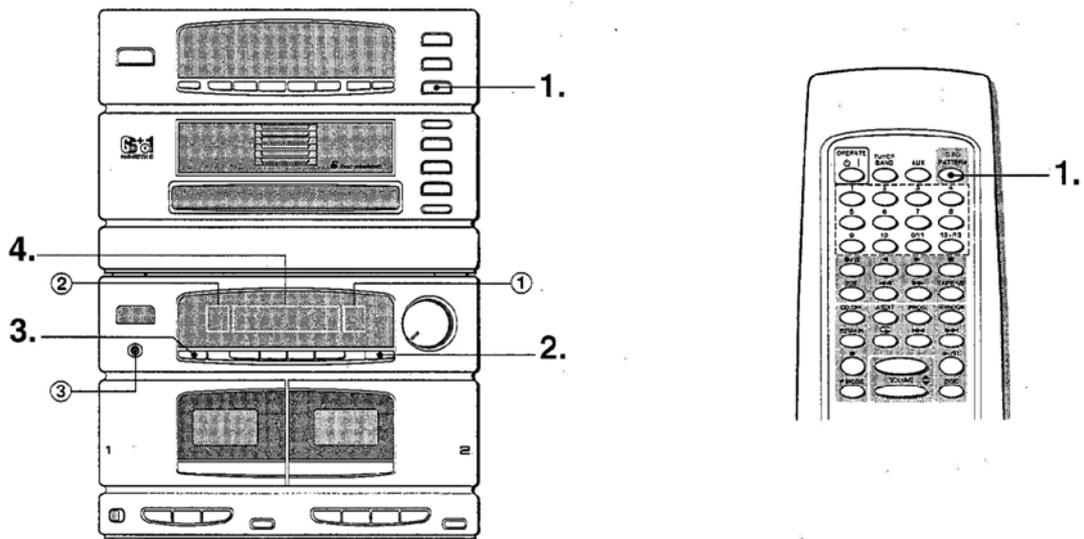
1. Point the remote control at the remote sensor (①) when operating.
2. The remote control may not be effective in the strong daylight.
3. Never get the remote control wet.
4. Replace the batteries when the performance of the remote control becomes unstable.

NOTES: • Do not use new and old batteries or different kinds batteries together.
• During radio listening (MW/LW), if you operate the remote control extremely close to the sound system, some noise may be produced.

GRAPHIC EQUALIZER PATTERN CONTROL

You can select the best sound setting among FLAT, HEAVY, MILD, CLEAR and VOCAL, with easy operation, matching to sound sources and your sound preference.

1. Press [G.EQ PATTERN] on the remote control or on the front panel.
When you select the Graphic equalizer pattern other than FLAT, "G.EQ" indicator appears in the display to tell you the Graphic equalizer pattern is on.

DYNAMIC BASS effect

2. Set [DYNAMIC BASS] to ON to get the rich bass sound, then the DYNAMIC BASS indicator (①) lights up. To turn it off, press [DYNAMIC BASS] again.

SUPER WIDE effect

3. Set [SUPER WIDE] to ON to get the stereo sound effect of a concert hall, then the SUPER WIDE indicator (②) lights up. To turn it off, press [SUPER WIDE] again.

SPECTRUM ANALYZER (for AX-C15E)

4. Sound factors of your sound source are displayed with 6 bands.
NOTE: The spectrum analyzer is not affected by any sound controls such as the graphic equalizer and Dynamic bass control.

Listening with Headphones

Insert your headphones plug into the headphones socket (③) to enjoy private listening.

11

1.

2.
3.
4.
5.
6.

1.

①

STAND
BY   OFF   -:--

2.

TIMER   CLOCK/   ┌─ SET ─┐
MODE   TIMER/   -   +
        SLEEP

CLOCK
STAND OFF   -:--
BY

3.

TIMER   CLOCK/   ┌─ SET ─┐
MODE   TIMER/   -   +
        SLEEP

CLOCK
STAND OFF   -0:00
BY

4.

TIMER   CLOCK/   ┌─ SET ─┐
MODE   TIMER/   -   +
        SLEEP

CLOCK
STAND OFF   18:00
BY

5.

TIMER   CLOCK/   ┌─ SET ─┐
MODE   TIMER/   -   +
        SLEEP

CLOCK
STAND OFF   18:25
BY

6.

TIMER   CLOCK/   ┌─ SET ─┐
MODE   TIMER/   -   +
        SLEEP

CLOCK
STAND OFF   18:25
BY
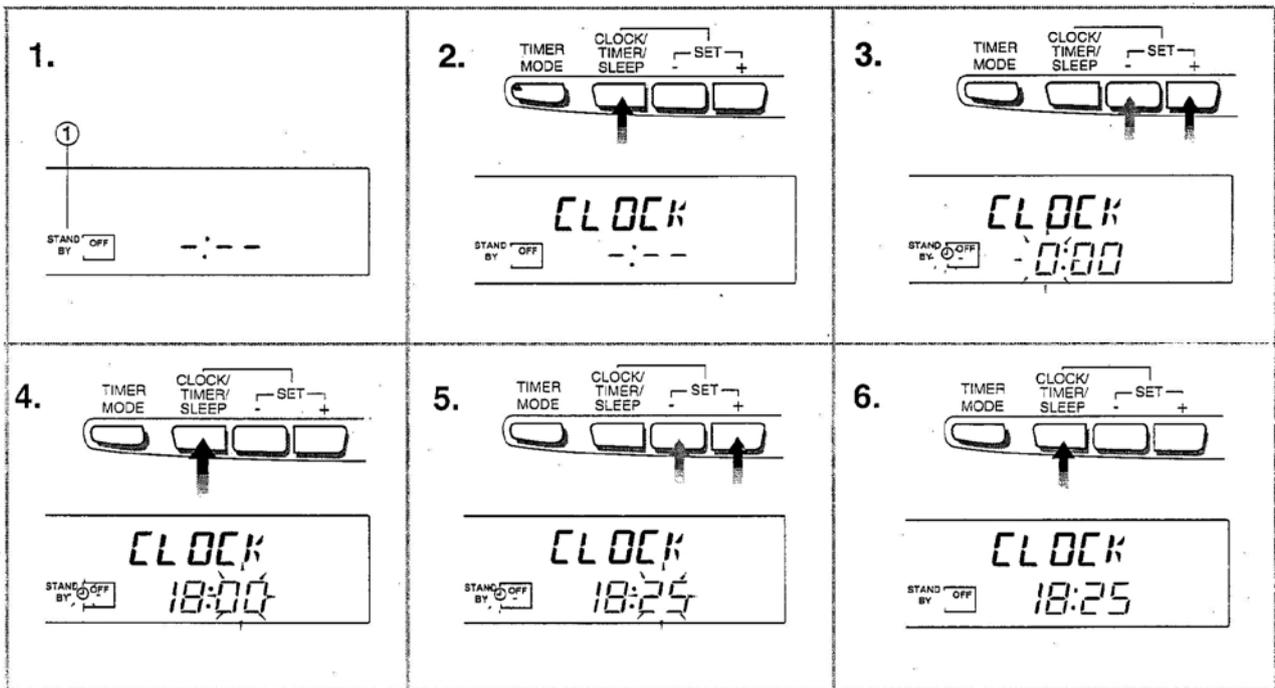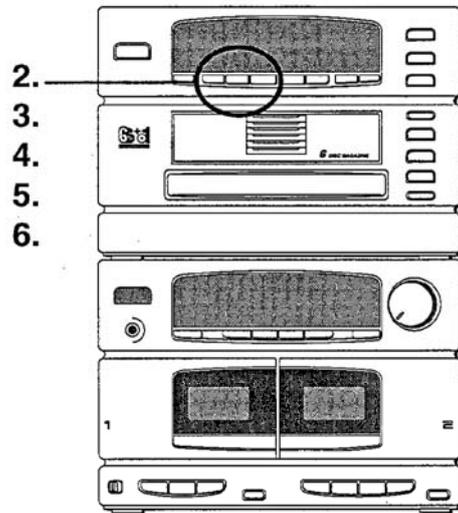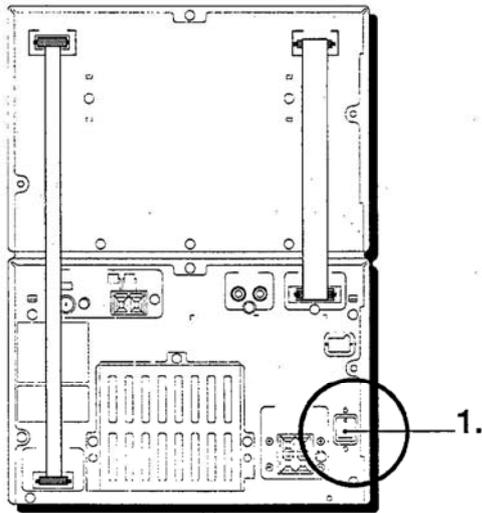
(Example of setting it at 18:25)

Switching on the main power switch
1. Set the main power switch [POWER ⏻/ ○] to [⏻], and the power standby indicator (①) and "-: -- " will appear in the display.

To set the clock setting mode
2. Press [CLOCK/TIMER/SLEEP] so that "CLOCK" appears in the display. It will be displayed for 5 seconds. If it disappears, press the same button again.

To set the current hour
3. With "CLOCK" in the display, press either [SET +] or [SET –] repeatedly or continuously to set the current hour.
4. Then press [CLOCK/TIMER/SLEEP].

To set the current minutes
5. Press either [SET +] or [SET –] repeatedly or continuously to set the current minutes.
6. Then press [CLOCK/TIMER/SLEEP] by a time signal.
   NOTE: Clock setting mode will be cancelled unless you press [CLOCK/TIMER/SLEEP] within 60 seconds. In that case, repeat the operation steps 2.~ 6.

To call the clock in the display
7. Press [CLOCK/TIMER/SLEEP], and the current time will appears for 5 seconds.

To reset the clock
Follow the operation steps 2.~ 6. of the SETTING THE CLOCK.
TIP: The clock is displayed when the set is in power stand-by status.

13

1.

OPERATE   OPERATE

2. (9.)

TUNER BAND   TUNER (BAND)

⟲FM   OFF 98.00 MHz

⟲MW   OFF 819 KHz

⟲LW   OFF 168 KHz

3.

FM MODE

FM 98.00 MHz (LOCKED AUTO STEREO) ⟸ ⟹ FM 98.00 MHz (LOCKED)

4.

TUNING ▼ DOWN ▲ UP

⟲FM OFF 98.00 MHz   LOCKED AUTO

①

5.

TUNING ▼ DOWN ▲ UP

6.

FM MODE MEMORY   TUNING ▼ DOWN ▲ UP

⟲FM OFF 98.00 MHz   LOCKED AUTO

7. (10.)

STATION ▲ UP

▼ DOWN

8.

FM MODE MEMORY   TUNING ▼ DOWN ▲ UP

14
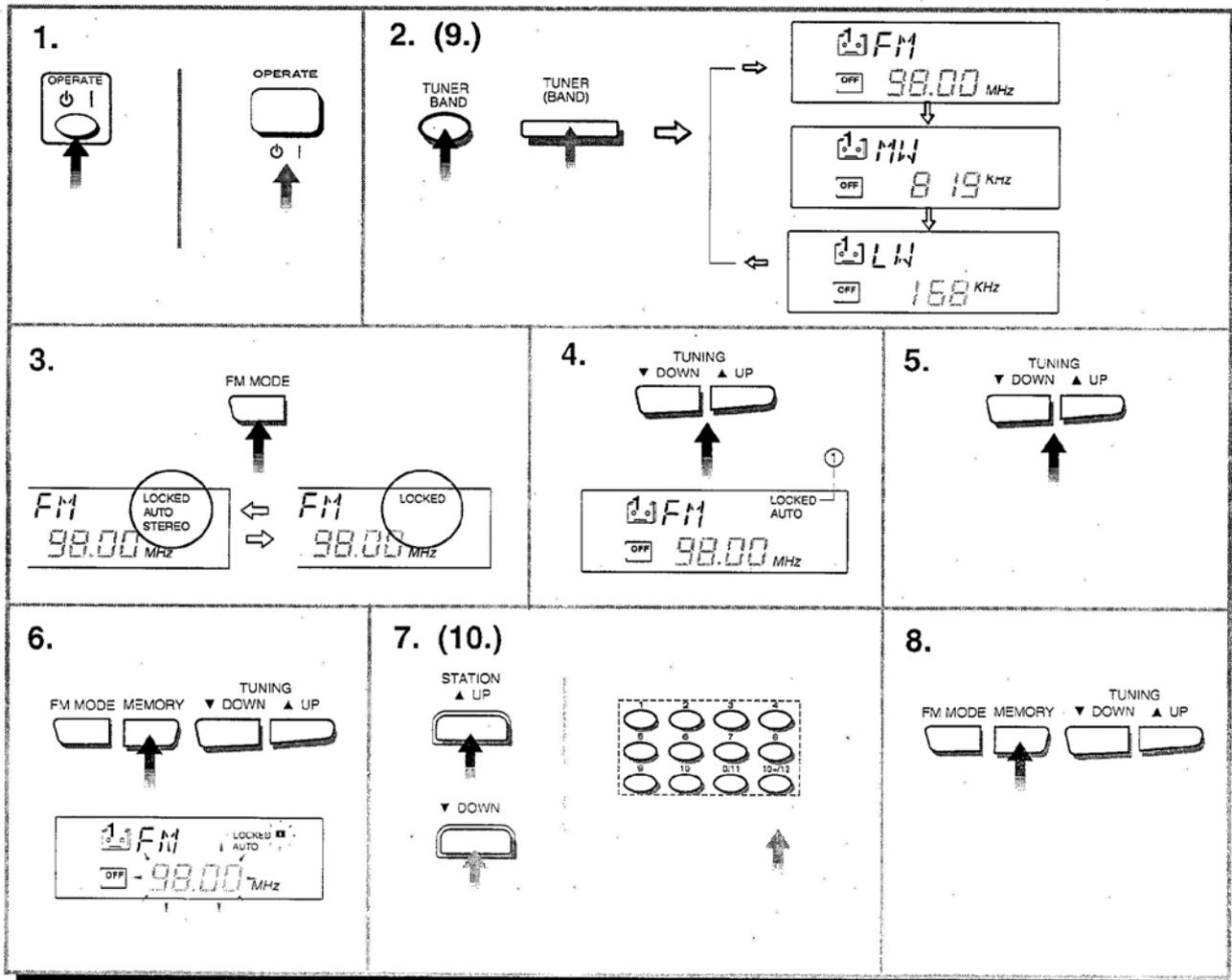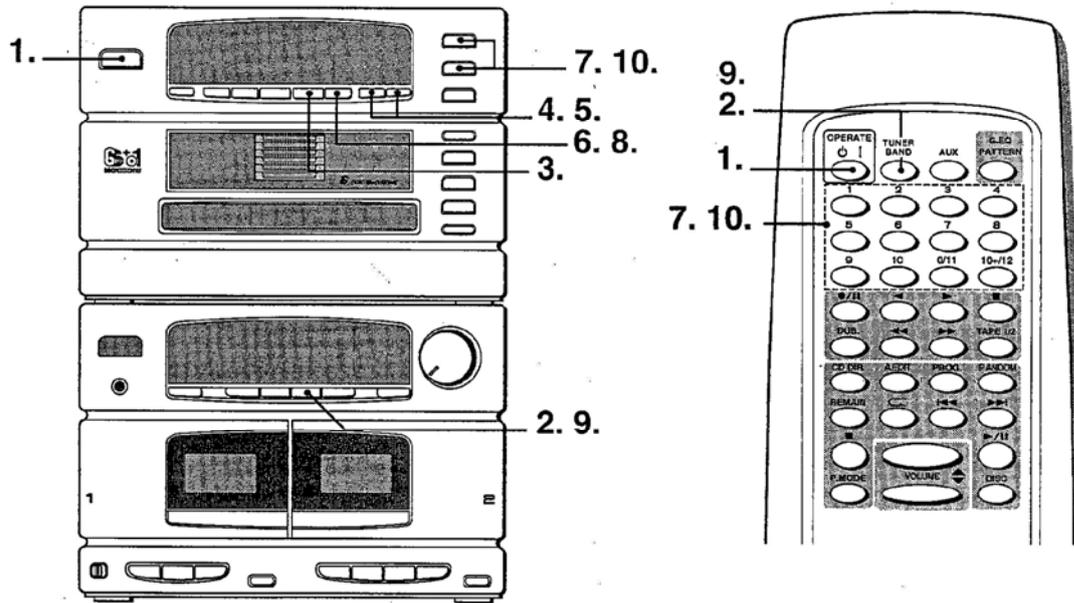
Basic Operation (Example of listening to FM)

Turning the set on
1. Press [OPERATE ⏻/ l] on the remote control or on the front panel.

Setting the desired band
2. Repeatedly press [TUNER/BAND] on the remote control or [TUNER/(BAND)] on the front panel to get the desired band in the display.

About the FM MODE (FM band only)
3. You can select either Auto mode ("AUTO" is appeared in the display) or Mono mode ("AUTO" disappeared in the display) as tuning mode by pressing [FM MODE] on the front panel. When, with "AUTO" in the display, a stereo broadcast is received "STEREO" appears in the display.
   With the Mono mode, the auto search function is not available. To know the tuning frequency steps, see the Table of Tuning Frequency Steps.

Table of Tuning frequency Steps			
BAND	FM	MW	LW
STEP	0.05 MHz	9 kHz	1 kHz

   NOTES: • Set the tuning mode to Mono if a stereo signal is too weak or a noise is audible during FM stereo listening. Normally set it to Auto mode.
   • During radio listening, a noise could be audible when you open or close the CD tray.

To tune to a radio station
4. With FM band, press [TUNING ▲UP] or [TUNING ▼ DOWN] on the front panel. Then the tuner starts to search a station. When a broadcast is found, "LOCKED"(①) appears in the display and the search halts. Repeat the same operation until you can get the desired station.
   With MW/LW band, continuously press [TUNING ▲UP] or [TUNING ▼ DOWN] on the front panel, Frequency in the display changes continuously. When tuned, "LOCKED"(①) appears in the display.

PRESETTING RADIO STATIONS INTO THE MEMORY
   You can preset 12 stations each for FM, MW and LW.
5. Tune to your desired station by pressing [TUNING ▲UP] or [TUNING ▼ DOWN].

To preset the station
6. Press [MEMORY] on the front panel, and the frequency indicator and the preset station number blinks for 5 seconds.
7. In that period, press [STATION ▲UP] or [STATION ▼ DOWN] on the front panel, or press the desired number button ([1] ~ [10+/12]) on the remote control to select the desired preset number.
8. Press [MEMORY] again to set the station to the preset number.
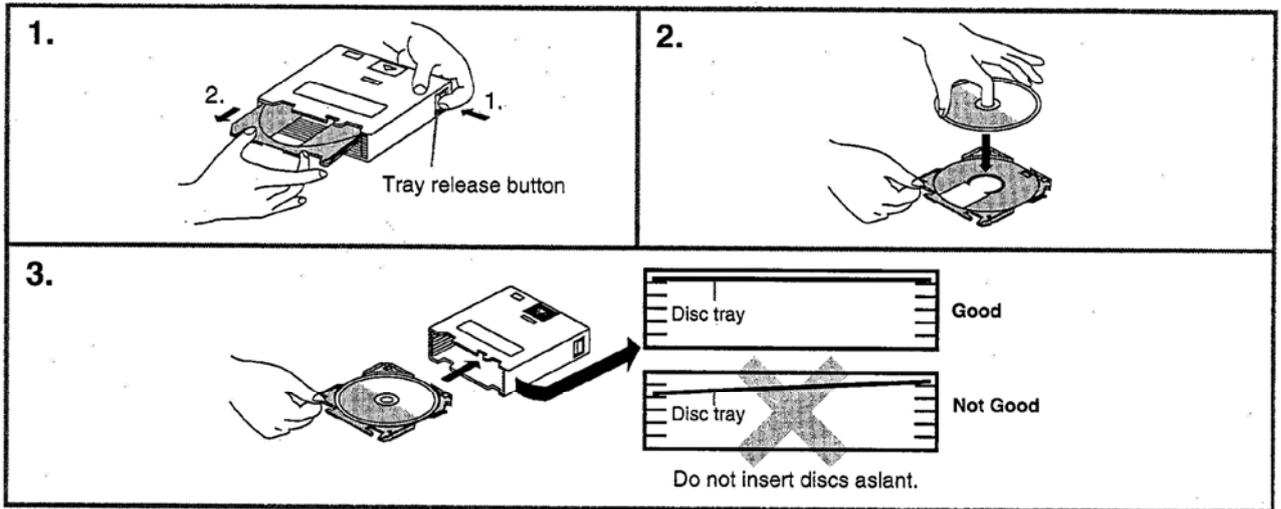   Repeat the same procedure for further stations.
   NOTE: Tuning mode (either Auto or Mono mode) is also preset.
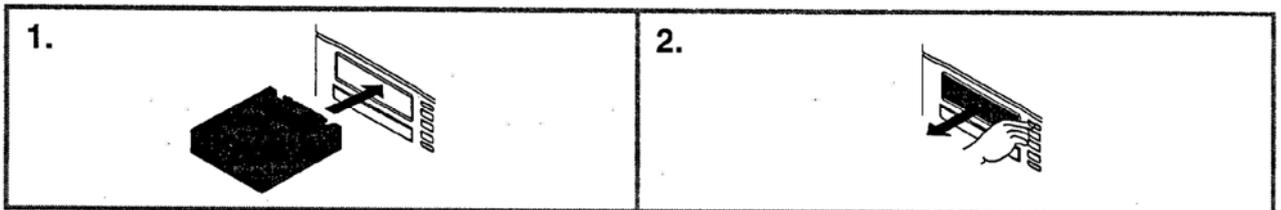
Listening to a preset station
9. Select the desired band by pressing [TUNER/BAND] on the remote control or [TUNER/(BAND)] on the front panel.
10. Press the desired number button on the remote control, or press [STATION ▲UP] or [STATION ▼ DOWN] on the front panel to select the desired station.

Inserting Discs into the Magazine

1.

Tray release button

2.

3.

Disc tray — Good

Disc tray — Not Good

Do not insert discs aslant.

Loading the Magazine

1.

2.

Loading a Disc in the Disc Tray

1.

2.

3.

Caution: Be sure to place the disc in the centre of the CD tray. An improper placement of the disc may cause scratch marks and malfunction.

Not Good

Disc title label

IMPORTANT: Be sure to stick the disc title label to the position shown in the above illustration. It may cause malfunction if it is sticked to any other position.
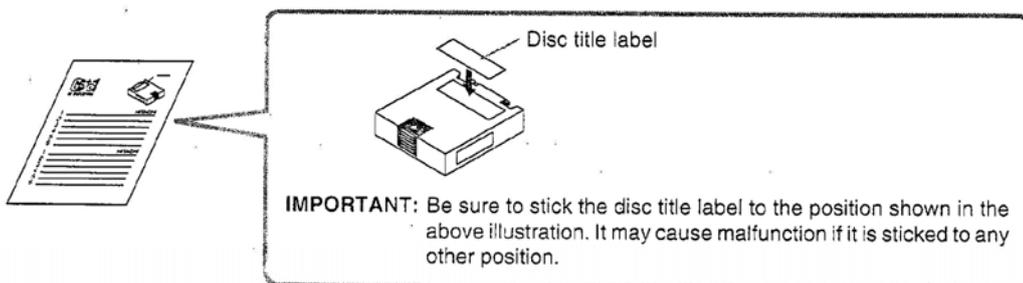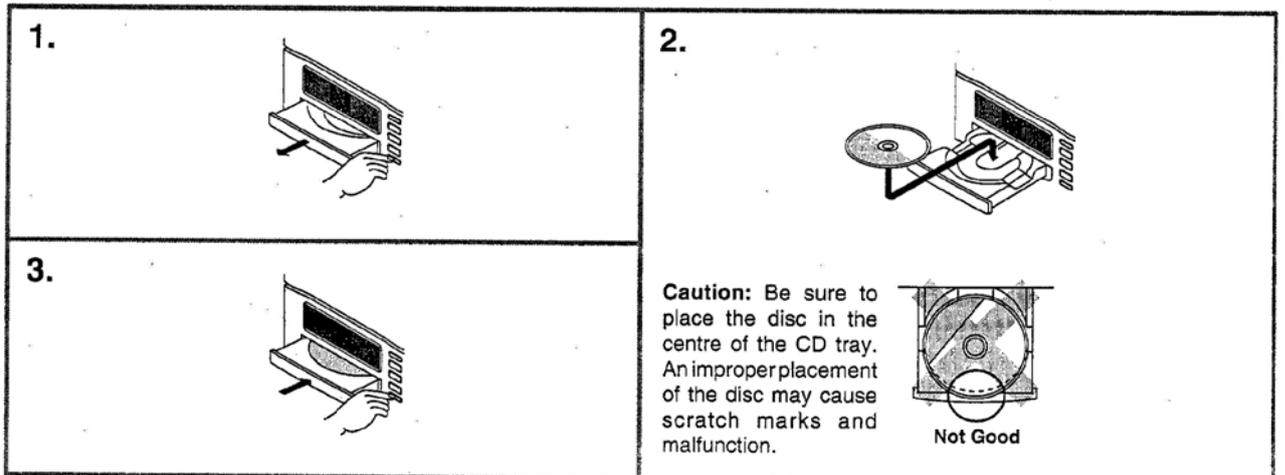
1. Pull the disc tray out of the magazine while pressing the tray release button.
2. Place a disc, with its label facing up, in the tray.
   NOTE: Hold the disc by the edge and do not touch its surface, especially its unlabelled side which has the recorded data.
3. To insert the disc tray into the magazine, slide it along the two guide grooves on the same level until the tray is locked. You can insert up to 6 discs into the magazine.
CAUTION: • Insert all the trays into the magazine even if not all the trays are loaded with discs.
        • Do not bend the tray.
        • Do not force the tray into the magazine.
        • Do not cover the openings in the trays. They are passages of the laser signal.
        • Do not insert discs directly into magazine without using the tray.
        • Inserting the tray aslant may cause such a malfunction as you cannot eject the magazine from the player.

To insert the magazine
1. Insert the magazine into the magazine slot until it is locked.

To eject the magazine
2. Press [▲ EJECT].

To open the disc tray
1. Press [▲ OPEN/CLOSE].
To load a disc
2. Place a disc, with its label facing up, in the tray.
NOTE: Hold the disc by edge and do not touch its surface, especially its unlabelled side which has recording data.
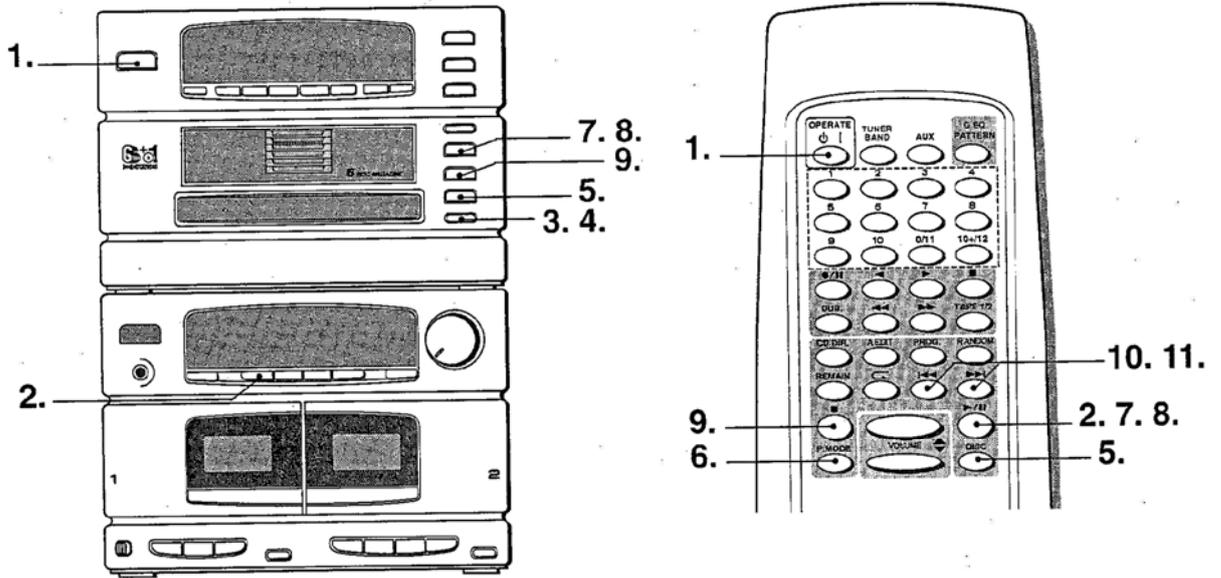**CAUTION:** Do not scratch the disc when placing or removing it.
To close the disc tray
3. Press [▲ OPEN/CLOSE].
CAUTION: • Do not leave the disc tray open unless you change a disc. The player would stop after having played one song in the magazine if the disc tray left open.
        • Beware that your fingers are not caught in the tray when closing it.
        • Do not force open or close the disc tray. It may cause a malfunction.
        • Make sure to press [▲ EJECT] first and then press [▲ OPEN/CLOSE] if you want to change discs both in the magazine and in the disc tray simultaneously, with the magazine disc in play mode or standby to play.
        • Beware! The disc tray will close automatically if you press [▲ EJECT] after pressing [▲ OPEN/CLOSE] with the magazine disc in play mode or standby to play.

1.

OPERATE / OPERATE

2.

CD / ►/II

CD 0
0.00

3.

≜ OPEN/CLOSE

4.

≜ OPEN/CLOSE

CD 0
OFF 0.00

5.

DISC / DISC / DISC ALL
6 5 4 3 2 1 T

6.

P.MODE

DISC ALL ⇒ DISC 1
6 5 4 3 2 1 T   6 5 4 3 2 1 T

7.

►/II / ►PLAY/ II PAUSE

CD 1
OFF 0.01

8.

►/II / ►PLAY/ II PAUSE

PAUSE
CD 1
OFF 0.31

9.

■ / ■ STOP/CLEAR

① ② ③

1 CD 21
OFF 73.15⌐

10.

I◄◄ ►►I

1 2 3 4
5 6 7 8
9 10 0/11 10+/12

►/II

11.

I◄◄ ►►I

Basic Operation

Turning the set on
1. Press [OPERATE⏻/ I] on the remote control or on the front panel.

Selecting the CD function
2. Press [CD] on the front panel.
   NOTE: You can select the CD function by pressing [▶/ II] on the remote control. In that case, the CD player starts play immediately.

Loading a disc
3. Open the disc tray by pressing [▲OPEN/CLOSE] on the front panel.
   Place a disc, with its labelled side up, in the disc tray.
   NOTES: • Hold the disc by the edge and do not touch its surface (especially its unlabelled side which has the recording data).
   • Do not place more than 1 disc at one time.
   • This set can play a 8 cm (3 inch) disc without any adaptor. Remove an adaptor if it is attached to your disc.
   • Do not interrupt open-close movement of the CD tray.
4. Close the disc tray by pressing [▲ OPEN/CLOSE] on the front panel.

Selecting the disc tray
5. Repeatedly press [DISC] on the remote control or on the front panel so that "τ⊂⊃" blinks in the display.

Setting the play mode

   About the play mode
   To play one disc: Select " [DISC] " in the display by pressing [P.MODE] on the remote control.
   To play all the discs: Select " [DISC/ALL] " in the display by pressing [P.MODE] on the remote control. All the discs in the Disc Tray and Disc Magazine will be played continuously.
6. Press [P.MODE] on the remote control to get " [DISC] " in the display.

To start play from the first track to the last
7. Press [▶/ II] on the remote control or [▶PLAY/ II PAUSE] on the front panel.

To halt play temporarily
8. Press [▶/ II] on the remote control or [▶PLAY/ II PAUSE] on the front panel.

To stop play
9. Press [■] on the remote control or [■STOP/CLEAR] on the front panel. Then the total number of tracks (①) and the total playing time (②) of the disc are indicated in the display. The music table (③) also indicates each track number.
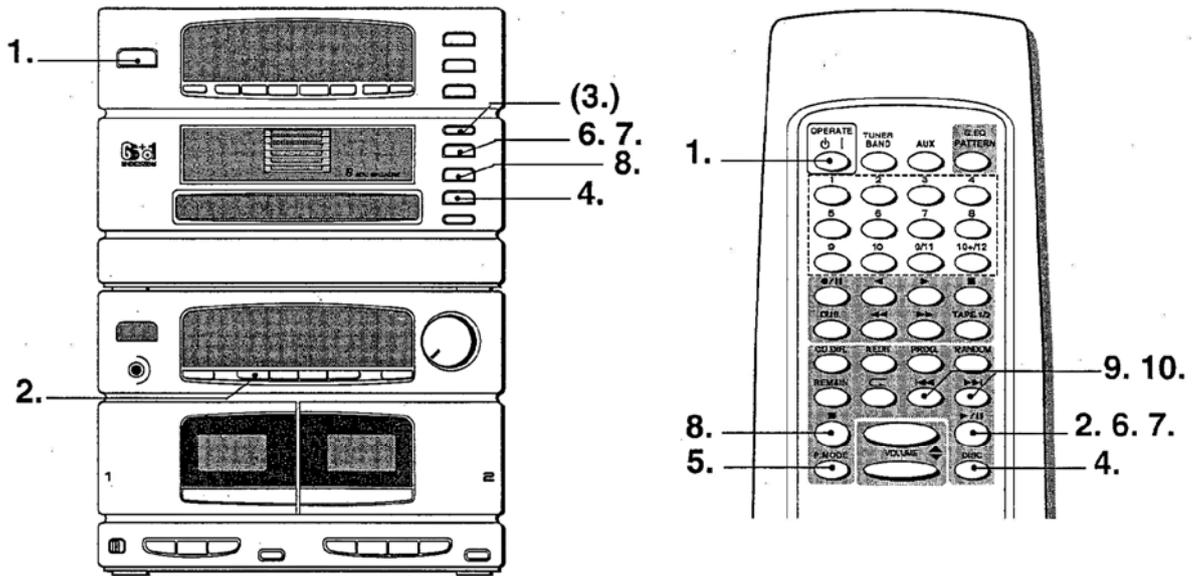
To play from the desired track to the last track of disc
10. Press the particular track number on the remote control. Or select the desired track by repeatedly pressing [I◀◀] / [▶▶I] on the remote control, and then press [▶/ II].

To get a particular part of a track
11. Press and hold [I◀◀] / [▶▶I] on the remote control during play, and the player will start search. The player will start play when you release the button.

Basic Operation

Turning the set on
1. Press [OPERATEᵟ/ I] on the remote control, or press [OPERATE ᵟ/ I] on the front panel.
Selecting the CD function
2. Press [CD] on the front panel.
   NOTE: You can select the CD function by pressing [▶/ II] on the remote control. In that case, the CD player starts play immediately.
Loading the Disc Magazine
3. Insert the Disc Magazine into the Magazine slot until it is locked.
   NOTES: • To eject the Disc Magazine, press [≜EJECT] on the front panel.
   • Do not insert 8 cm discs in the Disc Magazine.
Selecting the desired disc to play
4. Repeatedly press [DISC] on the remote control or on the front panel so that the desired disc number blinks in the display.
Setting the play mode
About the play mode
To play one disc: Select " [DISC] " in the display by pressing [P.MODE] on the remote control. The CD player plays the disc you selected.
To play all the discs: Select "[DISC]" in the display by pressing [P.MODE] on the remote control. The CD player plays from the disc you selected to the disc number 6 continuously.
5. Press [P.MODE] on the remote control to get your desired play mode in the display.
To start play from the first track to the last
6. Press [▶/ II] on the remote control or [▶PLAY/ II PAUSE] on the front panel.
To halt play temporarily
7. Press [▶/ II] on the remote control or [▶PLAY/ II PAUSE] on the front panel.
To stop play
8. Press [■] on the remote control or [■STOP/CLEAR] on the front panel. Then the total number of tracks (①) and the total playing time (②) of the disc are indicated in the display. The music table (③) also indicates each track number.
To play from the desired track to the last track of disc
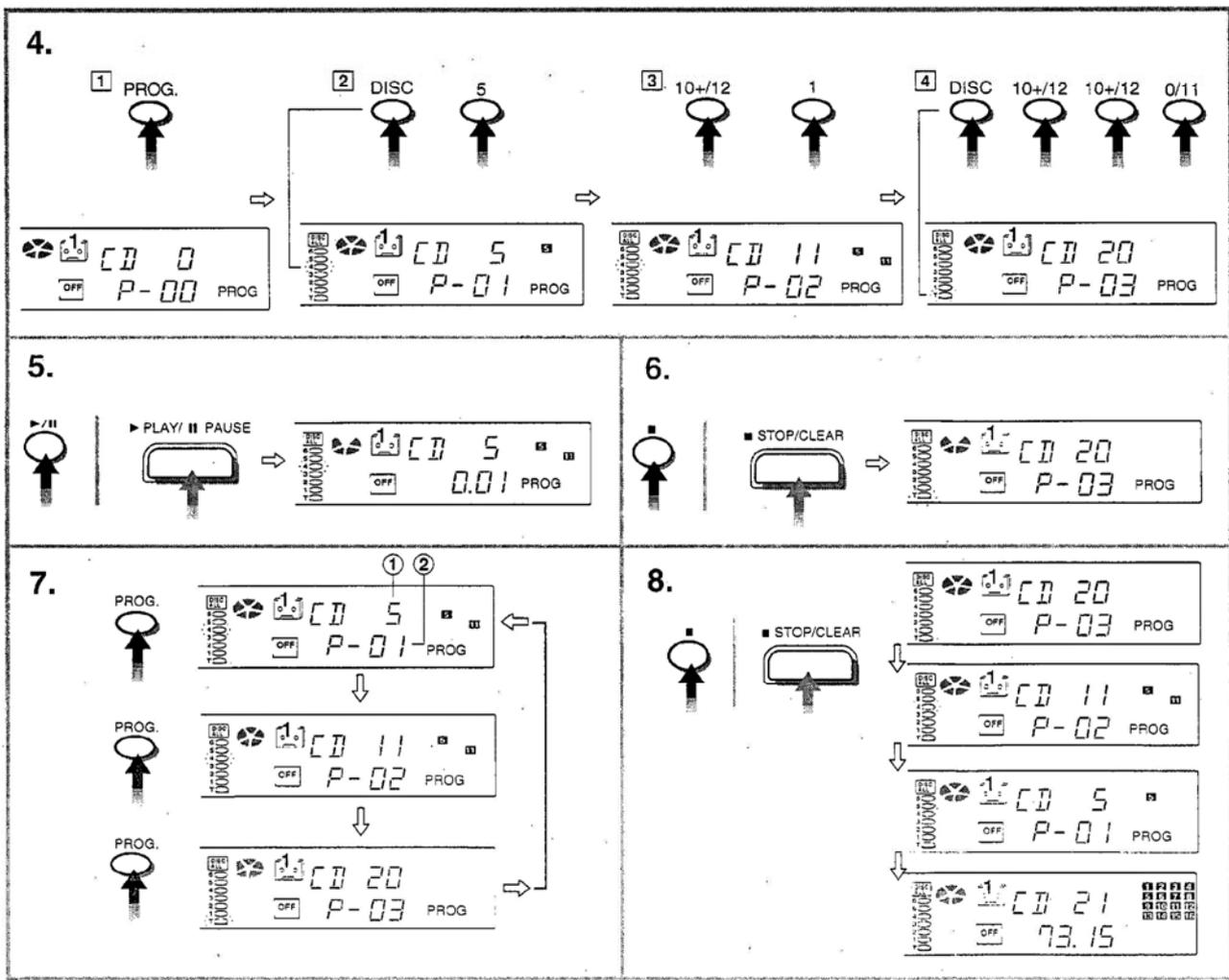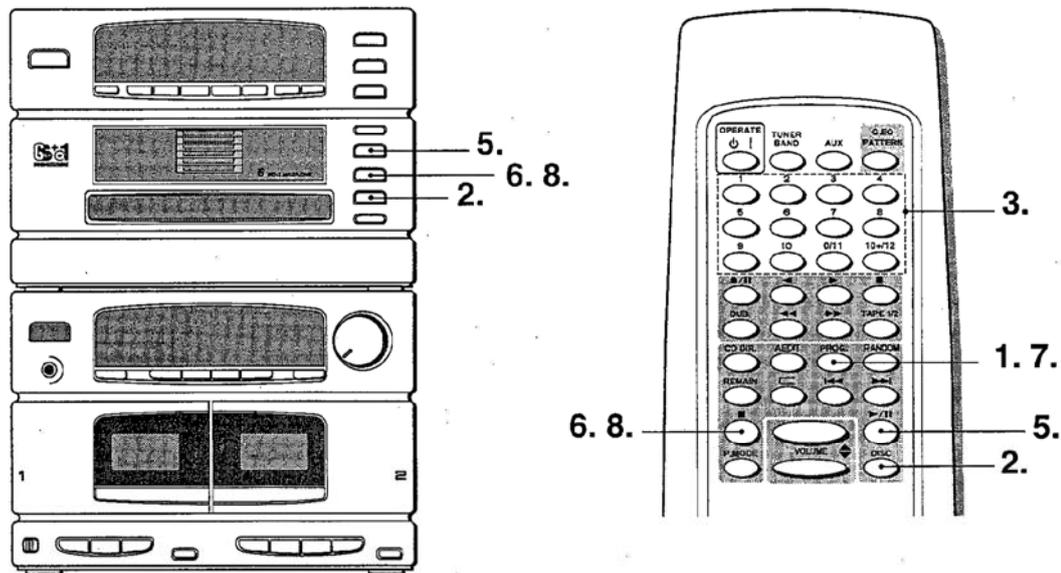9. Press the particular track number on the remote control. Or select the desired track by repeatedly pressing [I◀◀] / [▶▶I] on the remote control, and then press [▶/ II].
To get a particular part of a track
10. Press and hold [I◀◀] / [▶▶I] on the remote control during play, and the player will start search. The player will start play when you release the button.

4.

| 1 PROG. | 2 DISC 5 | 3 10+/12 1 | 4 DISC 10+/12 10+/12 0/11 |

CD 0
P-00 PROG ⇒ CD 5 P-01 PROG ⇒ CD 11 P-02 PROG ⇒ CD 20 P-03 PROG

5.

►/II ► PLAY/ II PAUSE ⇒ CD 5 0.01 PROG

6.

■ STOP/CLEAR ⇒ CD 20 P-03 PROG

7.

① ②

PROG. CD 5 P-01 PROG

PROG. CD 11 P-02 PROG

PROG. CD 20 P-03 PROG

8.

■ STOP/CLEAR

CD 20 P-03 PROG

CD 11 P-02 PROG

CD 5 P-01 PROG

CD 21 73.15

Programmed Play: You can select and programme up to 16 tracks from 7 discs freely and play them in your desired order.

To programme the desired tracks from the desired disc
1. With the CD player in stop mode, press [PROG.] on the remote control, and "PROG" will appear in the display.
2. Repeatedly press [DISC] on the remote control or on the front panel to select your desired disc.
3. Press the desired track number on the remote control.
4. **Example of programming the track number 5 and 11 from the disc number 4 and the track number 20 from the Disc Tray:** [1] Press [PROG.], [2] repeatedly press [DISC] ⇒ press [5], [3] press [10+/12] ⇒ [1], [4] Repeatedly press [DISC] ⇒ press [10+/12] ⇒ [10+/12] ⇒ [0/11].
   NOTE: To cancel programme mode, press [■] on the remote control or [■ STOP/CLEAR] on the front panel.

To start play
5. Press [▶/ II] on the remote control or [▶ PLAY/ II PAUSE] on the front panel.

To stop play
6. Press [■] on the remote control or [■ STOP/CLEAR] on the front panel once.
   NOTE: Programme steps will be cleared if you press [■] or [■ STOP/CLEAR] more than one time.
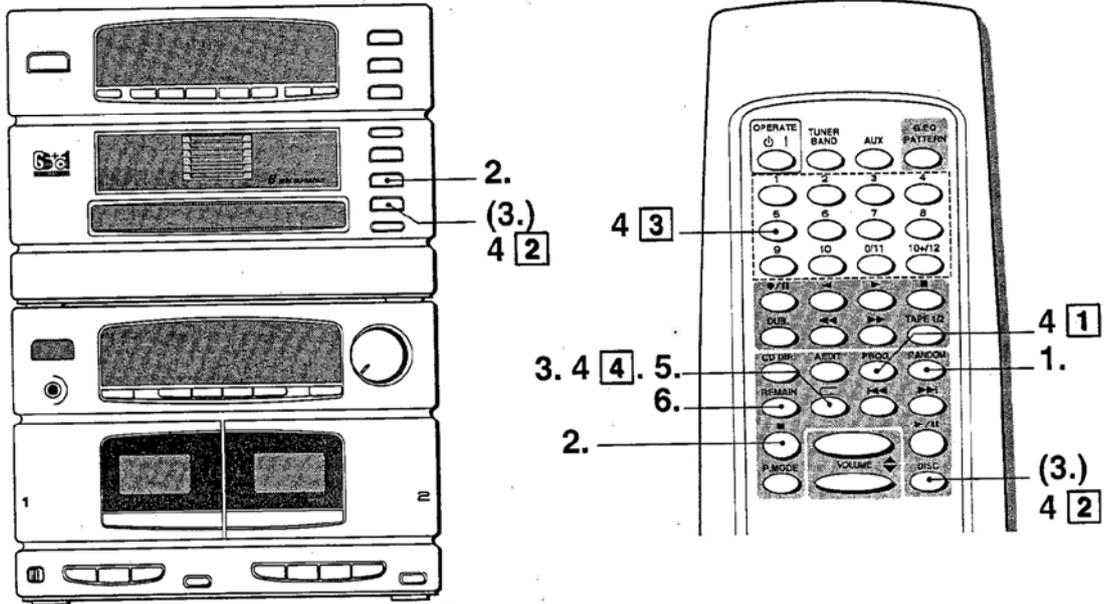
To review the programme
7. Press [PROG.] repeatedly. Each time you press [PROG.], the track number (①) and its programme step (②) are indicated in the display.

To clear the programme
8. Repeatedly or continuously press [■] on the remote control or [■ STOP/CLEAR] on the front panel.

1.

RANDOM

2.

STOP/CLEAR

3.

DISC   DISC

4.

[1] PROG. ⇒ [2] DISC | DISC ⇒ [3] 5 ⇒ [4]

5.

6.

Playing time of the track

REMAIN

Remaining time of the disc

Listening to a CD in Random Order

Random Play: You can make the player select tracks to play in random order.

About 2-Way Random Play Mode:

Random play with one disc: Set the play mode to " 🔲 " by pressing [P.MODE] on the remote control.

Random play with all the disc: Set the play mode to "🔲" by pressing [P.MODE] on the remote control . The CD Player starts random play with one disc after another starting from the disc you selected to the disc number 6.

To start random play

1. With the set in CD mode, press [RANDOM] on the remote control. Then "RANDOM" appears in the display.

To cancel random play

2. Press [■] on the remote control or [■STOP/CLEAR] on the front panel. "RANDOM" disappears in the display.

  NOTE: When you want to halt random play without cancelling the play, press [▶/ II] on the remote control or [▶ PLAY/ II PAUSE] on the front panel.

  TIPS: • Pressing [▶▶I] makes the random play take a step forward.

  • Pressing [RANDOM] renews the random play.

Listening Repeatedly

About Repeat Play Mode:

Repeat play with one disc: Set the play mode to " 🔲 " by pressing [P.MODE] on the remote control. The CD player repeats all the tracks of the disc you selected.

Repeat play with all the discs: Set the play mode to " 🔲 " by pressing [P.MODE] on the remote control. The CD player repeats all the tracks of all the discs.

To repeat all the tracks in a CD

3. During CD play or in stop mode, Press [⟳] on the remote control, and "⊂" will appear in the display.

To repeat particular tracks of particular CDs

4. First programme the desired tracks on the desired disc. For example, when you want to repeat the track 5 on the disc 3, 1 press [PROG.] and 2 repeatedly press [DISC] to select the disc 3, and 3 press [5] on the remote control. Then 4 press [⟳].

To cancel the repeat play

5. Press [⟳] on the remote control so that "⊂" will disappear in the display.

  NOTE: Repeat play is also cancelled by pressing [■] or [■STOP/CLEAR].
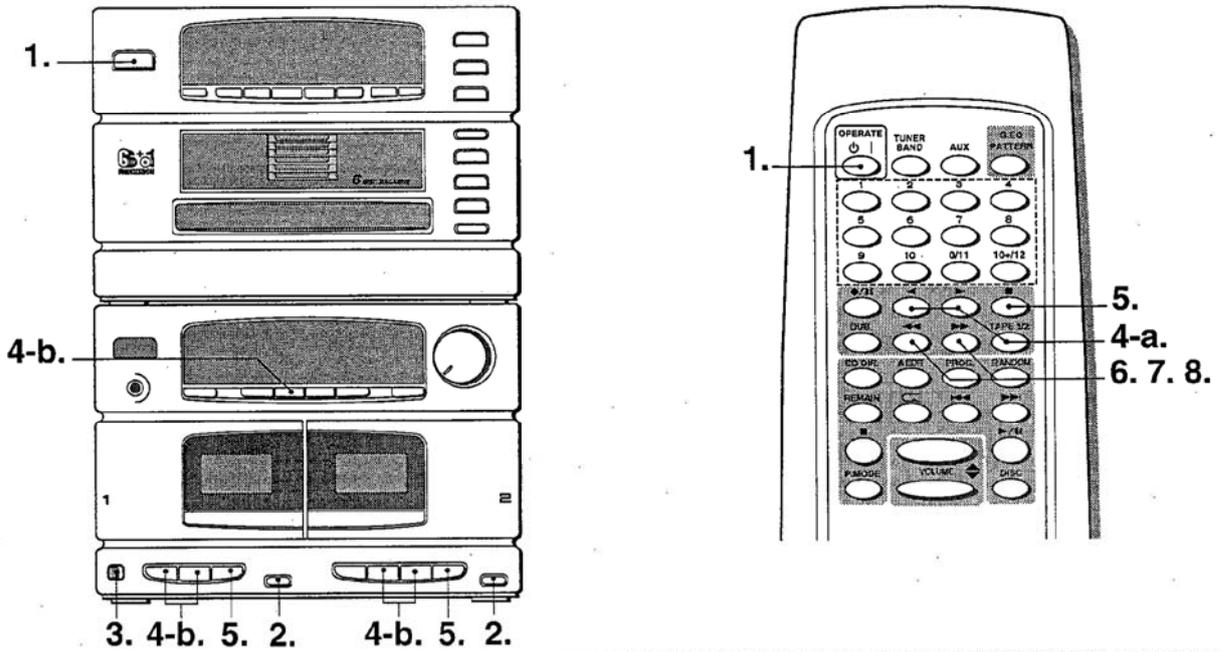
Remaining Time Function

6. When you press [REMAIN] on the remote control, the remaining time of the disc is indicated with the indicator "REMAIN". To get the playing time, press the same button again.

  NOTES: • Remaining Time function is not available during Programmed Play and Random Play.

1.

4-b.

3. 4-b. 5. 2.   4-b. 5. 2.

1.

OPERATE

OPERATE

5.
4-a.
6. 7. 8.

1.

OPERATE

OPERATE

2.   The tape side played in reverse play.

EJECT

The tape side played in forward play.

3.

DOLBY NR
OFF   ON

4-a.

TAPE 1/2

TAPE

4-b.

TAPE

PLAY

TAPE
-2-

TAPE
-2-

5.

STOP

6.   With the cassette deck in stop mode.

PLAY

7. 8.   During play

PLAY

26

Basic Operation

Turning the set on
1. Press [OPERATE ⏻/I] on the remote control or on the front panel.

Loading a tape
2. Press [⏏ EJECT] on the front panel to open the cassette holder. Insert a cassette tape and close the cassette holder.
   TIP: The Auto Tape-type Selector automatically detects your tape-type (Normal or CrO_2) and selects the best position for playback and recording.

Setting the Dolby Noise Reduction selector
3. Set [DOLBY NR] to ON or OFF matching to the tape; if the tape has been recorded with the Dolby NR, Set [DOLBY NR] to ON.

To start play
4-a. **For the remote control operation:** Press [TAPE 1/2] to select a cassette deck to play. Each time you press [TAPE 1/2], " 🗐"(TAPE-1-) or " 🗐"(TAPE-2-) appears by turns in the display. Then press [▶] for forward play or [◀] for reverse play.
   NOTES: • The cassette decks are equipped with the tape detector. Each time you insert a tape and close the cassette holder, the TAPE 1/2 selector automatically switches to the deck into which you inserted the tape.
   • The cassette deck does not start play in the case of no tape inserted in the cassette deck you operate.

4-b. **For the front panel operation:** Press [TAPE] to select TAPE mode. Then press [PLAY ▶] for forward play or [◀ PLAY] for reverse play on the desired cassette deck to play.
   NOTE: The TAPE -1-/-2- indicator and "🗐/🗐" do not switch when you operate from the front panel.

To stop play
5. Press [■] on the remote control or [■STOP] on the front panel.
   NOTE: The tape deck automatically stops after having played 16 times both side A and B.

To rapidly advance or rewind the tape
6. With the cassette deck in stop mode, press [▶▶] or [◀◀] on the remote control.
   NOTE: If you press [▶▶] or [◀◀] during play it functions as Skip Search.

To get the beginning of the song (Skip Search)
7. Press [◀◀] during forward play (press [▶▶] during reverse play), and the cassette deck will start search with "▶" ("◀" in reverse play) blinking at faster rate. When the beginning of the song is found, the cassette deck starts play.

To get the beginning of the next song (Skip Search)
8. Press [▶▶] during forward play (press [◀◀] during reverse play), and the cassette deck will start search with "▶" ("◀" in reverse play) blinking at faster rate. When the beginning of the next song is found, the cassette deck starts play.
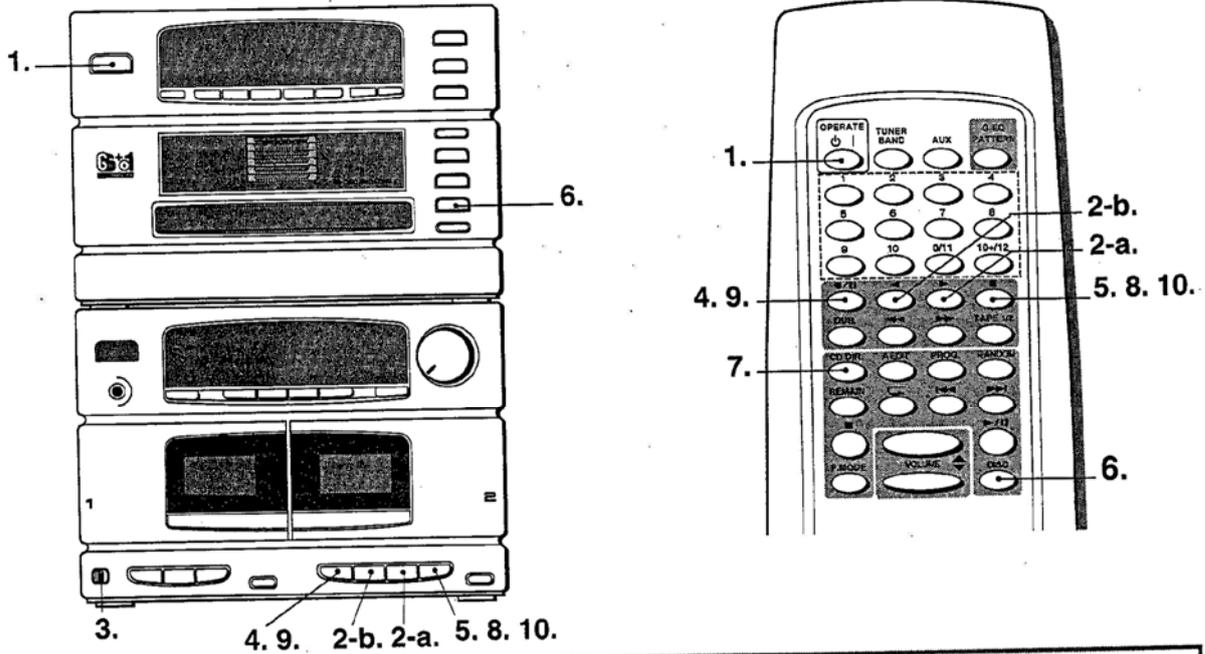   NOTES: The skip search function works by detecting an unrecorded interval for more than 4 seconds between songs. It may not function properly in the following cases:
   • The unrecorded interval is less than 4 seconds.
   • The songs have quiet or no sound parts.
   • The recorded tape has a conversation.
   • The unrecorded interval has a hum noise.
   • The recording level of a tape is too low.
   • When you operate this function while a TV is on. In this case, turn off the TV or move the unit away from the TV.

1.

OPERATE

2-a.

The side you want to record onto

2-b.

Side A

3.
DOLBY NR
OFF ON

4.
●/Ⅱ ⇒ ●/Ⅱ
REC/PAUSE PLAY STOP
REC/PAUSE PLAY STOP

5.
■
REC/PAUSE PLAY STOP

6.
DISC
DISC ALL

7.
CD DIR.
CD 1
0.01 CD DIRECT

8.
REC/PAUSE PLAY STOP

9.
TAPE
-2-
●/Ⅱ ⇒ ●/Ⅱ
REC/PAUSE PLAY STOP
REC/PAUSE PLAY STOP

10.
■
REC/PAUSE PLAY STOP

28

NOTE: Before starting recording
The Cassette Deck is equipped with Auto Reverse function, so that the tape running direction is changed automatically during recording. Notice the followings before starting recording.
• When you start recording in forward direction (▶), the cassette deck automatically records both sides of a tape. If you have an important data on either side of the tape, take off the safety tab of that side to prevent from erasing the data.
• When you start recording in reverse direction (◀) the cassette deck records only one side of a tape.
• Set the TAPE 1 in stop mode when recording form sound sources other than the TAPE, or else the TAPE 2 will record the sound from the TAPE 1.

Basic Operation
Turning the set on
1. Press [OPERATE ⏻/ I] on the remote control or on the front panel.
Loading a tape in TAPE 2
2-a. **For recording onto both sides of a tape:** Press [▶] on the remote control or [▶PLAY] on the front panel to select forward play. Then insert a cassette tape so that the Side A faces toward you.
2-b. **For recording onto one side of a tape:** Press [◀] on the remote control or [◀PLAY] on the front panel to select reverse play. Then insert a cassette tape so that the side you want to record onto faces toward the set.
TIP: The Auto Tape Selector automatically detects your tape-type (Normal or CrO2) and selects the best position for playback and recording.
Setting the Dolby Noise Reduction selector
3. Set [DOLBY NR] to ON or OFF matching to your preference.
Prepare the sound source for recording (TUNER, CD or AUX)
See p14 for TUNER, p18 ~ 21 for CD and p36 for AUX.
To start recording
4. Press [●/ II] on the remote control or [●/ II REC/PAUSE] on the front panel to stand by recording. Then the recording indicator "●" blinks. Press the same button again to start recording.
NOTES: • To halt the recording temporarily, press [●/ II]. Press the same button again to resume recording. To cancel the recording, press the tape stop button [■].
• The recording level is automatically set and the volume control is not effective.
To stop recording
5. Press the tape stop button [■] on the remote control or [■STOP] on the front panel.

Recording from a CD (CD Direct Recording)
Selecting the source disc
6. Press [DISC] on the remote control or on the front panel to select the CD tray or the desired disc in the Disc magazine.
7. With the CD player and both cassette decks in stop mode, press [CD DIR.] on the remote control. Then the CD player and the cassette deck will start synchronously.
NOTES: • At the end of each CD track, 4-second unrecorded interval is inserted onto the tape.
• During CD direct recording, the pause function is not available.
**To stop the CD direct recording**
8. With the TAPE 2 selection indicator "⌂" in the display, press the tape stop button [■] on the remote control or [■STOP] on the front panel.
NOTE: When you press the CD stop button (■) on the remote control or [■ STOP/CLEAR] on the front panel during the CD direct recording, the CD player stops immediately and the tape deck becomes recording stand-by status after having inserted 4-second unrecorded interval. To cancel the recording stand-by status, press the tape stop button [■].

How to erase a tape
9. With the set in TAPE mode, press twice [●/ II] on the remote control or [●/ II REC/PAUSE] on the front panel to start erasing.
10. To stop erasing, press [■] on the remote control or [■STOP] on the front panel.
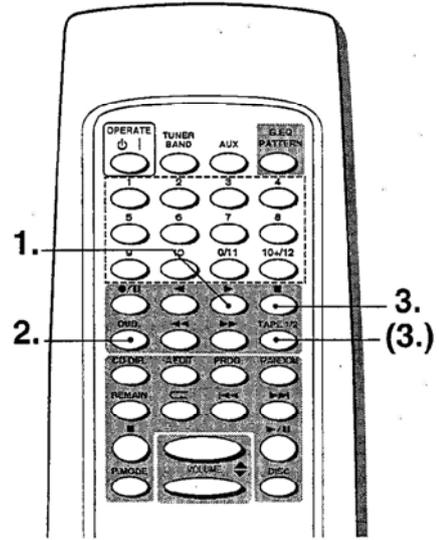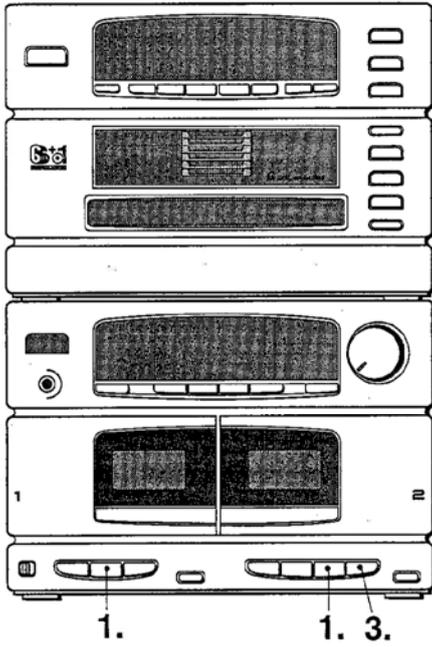
1.

Source tape   Blank tape

2.

DUB.

3.

TAPE 1/2 ⇒ 2 TAPE OFF -2- ⇒ ■

STOP

Loading tapes

1. Select the forward play (▶) both for TAPE 1 and TAPE 2. Then load a source tape in TAPE 1 and a blank tape in TAPE 2.

To start dubbing

2. Press [DUB.] on the remote control.

To stop dubbing

3. With the tape 1/2 selector in TAPE 2 position, press the tape stop button [■] on the remote control or the TAPE 2 stop button [■STOP] on the front panel.

NOTE about stop mode during dubbing:

- When pressing the stop button [■] with the Tape 1/2 selector in TAPE 2 position, both TAPE 1 and TAPE 2 stop dubbing.
- When pressing the stop button [■] with the Tape 1/2 selector in TAPE 1 position, TAPE 1 stops immediately. But TAPE 2 stops, after inserting a 4-second unrecorded interval and the REC/PAUSE ●/ II indicator on the Cassette Deck panel blinks slowly in this period. Then TAPE 2 will be in the recording standby mode with the indicator blinking rapidly.
- When TAPE 2 stops automatically at the end of the tape, TAPE 1 also stops immediately.

NOTE about the DOLBY Noise Reduction system when dubbing:

- The DOLBY NR switch is effective only to the playback sound through the monitor (speakers or headphones) while dubbing. If the source tape in TAPE 1 has been recorded with DOLBY NR On (or Off), then the tape in TAPE 2 will be duplicated with DOLBY NR ON (or OFF). When you want to listen to the playback sound while dubbing, set the switch to ON or OFF, matching to the source tape loaded in the TAPE 1.

NOTE about dubbing:

- Due to the auto reverse function of the tape decks, the deck duplicate both sides of a tape automatically. If there is an important recorded data on another side of a tape, we recommend to take off the record-preventive tab of that side to prevent from erasing the data.
- We recommend to use a blank tape with the same length as a source tape for safe dubbing.

> This equipment should not be used for duplicating copyright tapes-a breach of copyright. Copyright subsists in most pre-recorded tapes.

1. DISC

2-a.

| A. EDIT | A. EDIT | A. EDIT | A. EDIT | A. EDIT |

CD 12 43.41 ⇒ CD C-46 ⇒ CD C-60 ⇒ CD C-90 ⇒ CD C- - -

2-b.

CD C- - - PROG A.EDIT ⇒ [10+/12] x5 ⇒ CD C-5- - PROG A.EDIT ⇒ [4] ⇒ CD C-54 PROG A.EDIT

3.

CD 12 43.41 ⇒ CD A FILE PROG A.EDIT ⇒ CD A 1.25 PROG A.EDIT ⇒ CD b FILE PROG A.EDIT ⇒ CD b 14.12 PROG A.EDIT ⇒

⇒ CD 12 P-12 PROG A.EDIT

4. CD DIR.

CD 1 0.01 CD DIRECT PROG A.EDIT

5-a.

CD 12 P-12 CD DIRECT PROG A.EDIT - CONT ⇒ Replace the disc ⇒ ►/II ► PLAY/II PAUSE

5-b.

CD no FILE CD D.RECT A.EDIT - CONT

6.

REC.PAUSE PLAY STOP

his function automatically arranges CD tracks to be recorded matching to your tape length. And the auto spacing
:nction inserts a 4-second unrecorded interval between songs. You do not have to worry about the playing time
hen recording from CDs.

ɔading a tape in TAPE 2
NOTE: Set the tape running direction to "►".
electing the source disc
1. Repeatedly press [DISC] on the remote control or on the front panel to select the desired disc in the CD
   tray or Disc Magazine.
electing the playing time of your tape
2-a. With the set in CD stop mode, repeatedly press [A. EDIT] on the remote control to get the playing time of
   your tape in the display. For example, if you use a 60-minute tape, select C-60.
2-b. When using a tape other than C-46, C-60 or C-90 (for example C-54), get "C---" in the display first and enter
   its playing time "54" by pressing the number buttons of the remote control.
3. Then the set will show you the track numbers to be recorded and a remainder time of the tape (①) as
   "A FILE" (for the side A of the tape), then "b FILE" (for the side B of the tape). Lastly, the unit will indicate
   the last track number (②) and the total number of tracks to be recorded (③).
   NOTE: To cancel the Auto Edit recording, press the CD stop button [■] on the remote control or [■ STOP/
   CLEAR] on the front panel.
ɔ start recording
4. Press [CD DIR.] on the remote control . Then the tape deck will start recording after automatically rewinding
   the tape to its beginning and/or skipping its leader tape.
   NOTE: The tape deck will erase the tape remainder of side A before starting to record "b FILE" onto the side
   B of the tape.
ontinuous Edit recording
ɔu can record from more than one disc onto one tape.
5-a. When the last track of the disc has been recorded in the Auto Edit recording, both the CD player and tape
   deck stop and the Continuous Edit indicator "CONT" (④) appears in the display.
   Replace the disc with another one. Then the unit arranges tracks to be recorded onto the remainder of the
   tape. Then press [►/ II] on the remote control or [►PLAY/ II PAUSE] on the front panel to start Continuous
   Edit recording.
   NOTE: Pressing [●/ II] or [●/ II REC/PAUSE] cannot start Continuous Recording.
5-b. When the tape remainder is not enough for recording any track of the disc, "no FILE" appears in the display.
   In this case, try a different disc, or press the cassette deck stop button [■] on the remote control or [■STOP]
   on the front panel to cancel the Continuous Edit recording.
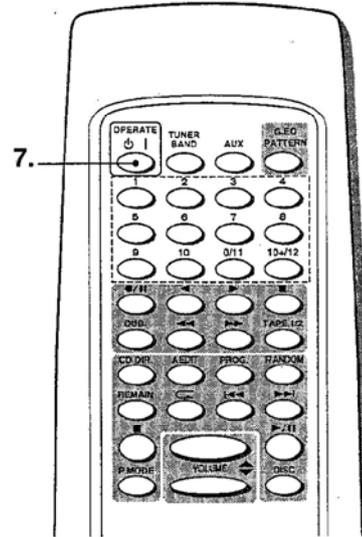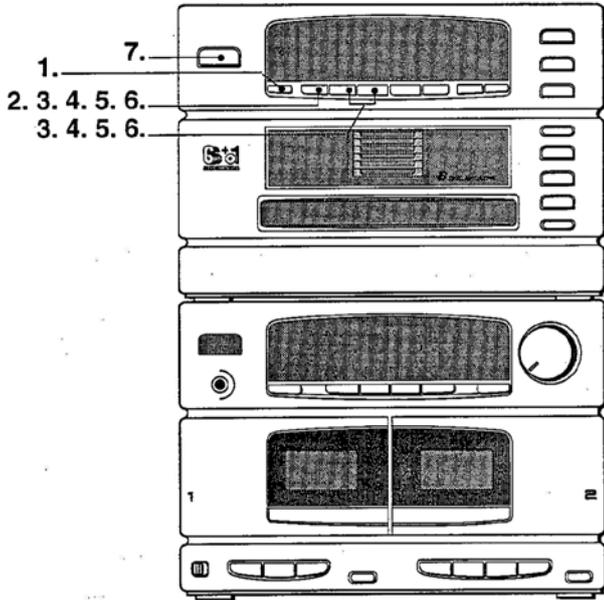### ɔ stop Auto Edit recording
6. Press the cassette deck stop button [■] on the remote control or [■STOP] on the front panel.
   NOTE: When you press the CD player stop button [■] on the remote control or [■ STOP/CLEAR] on the front
   panel, the Auto Edit recording is cancelled, but the tape deck becomes recording stand-by status after
   having inserted 4-second unrecorded interval. Press the cassette deck stop button [■] on the remote
   control or [■STOP] on the front panel if you want to cancel the recording stand-by status.
ɔTES ABOUT AUTO EDIT RECORDING:
* If a disc has more than 16 tracks, the Auto Edit recording function accepts only from the first track to 16th
  track.

1.

TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +

STAND BY OFF 14:12 ⇒ STAND BY PLAY 14:12

2.

TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +

x 2

TIMER ⇒ T-ON
STAND BY PLAY   STAND BY PLAY 0:00

3.

TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +   TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +

T-ON
STAND BY PLAY 7:00 ⇒ T-ON
STAND BY PLAY 7:00

4.

TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +   TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +

T-ON
STAND BY PLAY 7:30 ⇒ T-OFF
STAND BY PLAY 7:30

5.

TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +   TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +

T-OFF
STAND BY PLAY 8:30 ⇒ T-OFF
STAND BY PLAY 8:30

6.

TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +   TIMER MODE | CLOCK/ TIMER/ SLEEP | ─ SET ─ − +

T-OFF
STAND BY PLAY 8:40 ⇒ STAND BY PLAY 14:12

The programmable timer turns on and off your desired sound source at your desired time. It also can start recording from a radio broadcast at your desired time.

NOTE: Set the clock first referring to SETTING THE CLOCK (on page 12). The timer does not function unless the clock is set.

TIMER-PLAY
Selecting the desired sound source (CD, TAPE or TUNER)
For TUNER-play: Remove the disc from the CD player and cassette tapes from the cassette decks.
For TAPE 2-play: Remove the disc from the CD player and the cassette tape from the TAPE 1.
For TAPE 1-play: Remove the disc from the CD player.
For CD-play: Insert a disc in the CD player.
Selecting the Timer-Play mode
1. Press [TIMER MODE] on the front panel so that " [PLAY] " appears in the display.
2. Press [CLOCK/TIMER/SLEEP] twice on the front panel. Then "TIMER" and "T-ON" appears for 2 seconds in the display.
Setting the time to turn on
3. In that period, press [SET+] or [SET-] repeatedly or continuously on the front panel to get the desired hour. Then press [CLOCK/TIMER/SLEEP].
4. Press [SET+] or [SET-] repeatedly or continuously on the front panel to get the desired minutes. Then press [CLOCK/TIMER/SLEEP].
Setting the time to turn off
5. Press [SET+] or [SET-] repeatedly or continuously on the front panel to get the desired hour. Then press [CLOCK/TIMER/SLEEP].
6. Press [SET+] or [SET-] repeatedly or continuously on the front panel to get the desired minutes. Then press [CLOCK/TIMER/SLEEP].
7. Turn off the set to stand by the timer-play.
NOTES: • Set the volume control to the desired level.
• The tape deck always starts in the Forward Play under timer-play.
• Once you have set the timer, it functions everyday at the same time. Set the timer off when the timer function is not necessary.

TIMER-RECORDING
NOTES: • Tune to the desired radio station.
• Recording always starts in the Forward direction under timer-recording.
IMPORTANT: Once you have set the timer-recording, it functions everyday at the same time. Set the timer off when the timer-recording is not necessary.
8. Press [TIMER MODE] on the front panel so that " [REC] " appears in the display.
9. Follow the same operation steps 2.- 7.
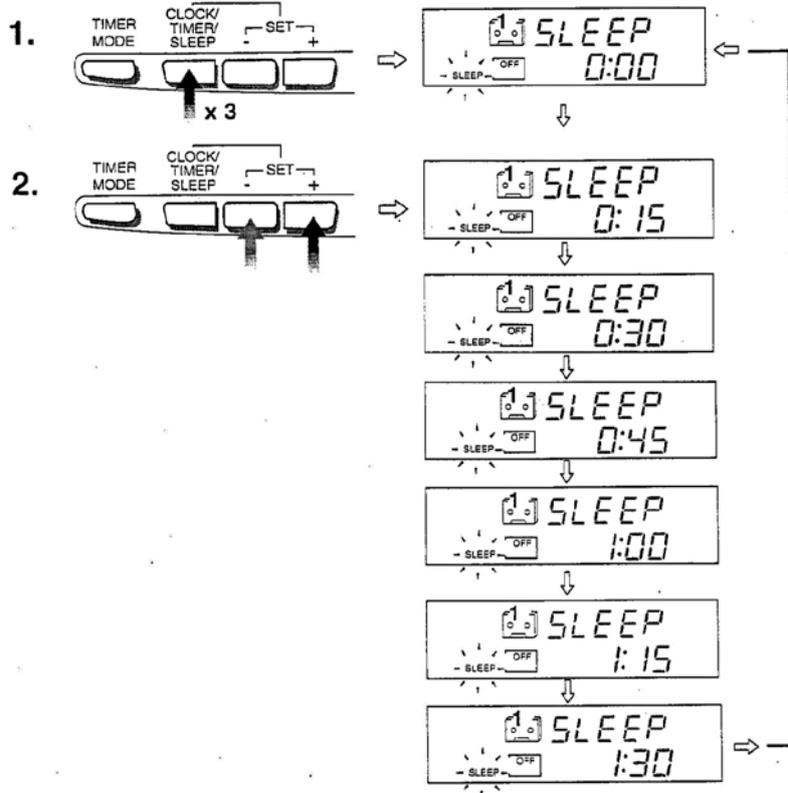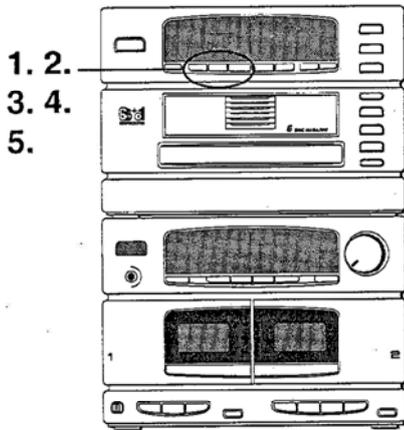
To review the timer settings
10. Press [CLOCK/TIMER/SLEEP] twice on the front panel. Then the ON-time and OFF-time appear respectively for 2 seconds in the display.
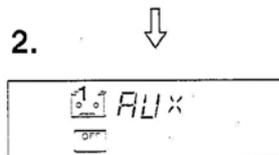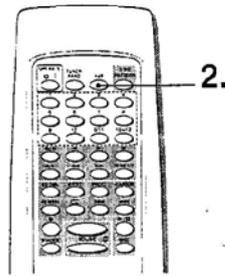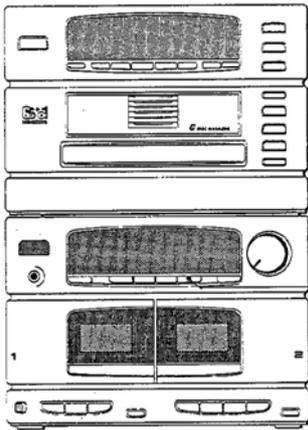### To cancel the Timer mode
11. Repeatedly press [TIMER MODE] so that " [OFF] " appears in the display.
NOTES: • The timer-play/-recording can activate only when the set is in power standby.
• When you enter the same settings of time both for turning on and off, the timer function is also cancelled.

1. 2.
3. 4.
5.

1.

TIMER MODE	CLOCK/ TIMER/ SLEEP	┌─ SET ─┐
	▲ x 3	− +

⇒

SLEEP
0:00

⇓

2.

TIMER MODE	CLOCK/ TIMER/ SLEEP	┌─ SET ─┐
		▲ ▲

⇒

SLEEP
0:15

⇓

SLEEP
0:30

⇓

SLEEP
0:45

⇓

SLEEP
1:00

⇓

SLEEP
1:15

⇓

SLEEP
1:30

⇒

2.

2.

2.

⇓

2.

AUX

You can turn off the set automatically.

1. With the sound system in power on status, press [CLOCK/TIMER/SLEEP] three times to get "SLEEP" in the display. Then the sleep timer indicator "SLEEP" blinks in the display.
2. Press repeatedly [SET+] or [SET-] until you get the desired time to turn off the sound system.
3. To review the remaining time, press [CLOCK/TIMER/SLEEP] three times.
4. To reset the sleep timer, repeat the operation steps 1~2.
5. To cancel the sleep timer, reset the sleep timer to "0:00" by following the operation steps 1~2. Then the indicator will disappear in 5 seconds.

NOTE: The sleep timer is not available during timer-play/timer-recording.

LISTENING TO AN EXTERNAL SOUND UNIT

1. Connect the output terminals of the external sound unit to the AUX IN terminal (See p 7).
2. Press [AUX] on the front panel or remote control and then operate the external sound unit.

	Symptom	Check Points (Cause)
Power Problems	No AC power.	• Is the power cord connected properly? • Check whether the main power switch on the rear panel is set to "⏻". If not so, set it to "⏻".
Tape Deck	Cassette cannot be inserted. No recording. Deteriorated sound or irregular tape speed.	• Make sure that the cassette tape is inserted properly in the cassette holder. • Are the accidental-erasure prevention tabs punched out? If so, cover the holes with plastic tape. • Clean head with a cleaning stick. • Clean head, capstan and pressure roller with a cleaning stick.
CD player	Disc is not played. Player does not operate correctly; sound is interrupted, noise occurs and tracks cannot be selected. Player does not operate normally when control buttons are pressed.	• Is disc loaded upside down? • Is disc scratched or warped? • Is disc scratched or otherwise flawed? • Is disc soiled? • First press the Stop/Clear button then perform play disc again.

SPECIFICATIONS

• Tuner Section
Circuit system : FM/MW/LW 3 bands
Tuning range : FM : 87.5 to 108.0 MHz (50 kHz step)
MW : 522 to 1,611 kHz (9 kHz step)
LW : 153 to 281 kHz (1 kHz step)
IEC sensitivity : FM : 1.5 μV/75 ohms
(S/N 26 dB) MW: 1,400 μV/m (loop antenna)
LW : 2,500 μV/m (loop antenna)

• Tape Deck Section
Track system : 4 tracks, 2 channels
Recording system : AC bias
Erasing system : AC erase
Tape : TAPE 1 : Playback
TAPE 2 : Recording/Playback
Normal/CrO₂/Metal (playback only)
Tape speed : 4.75 cm/s
Frequency response : Normal: 40 to 15,000 Hz
CrO₂ : 40 to 16,000 Hz

• Amplifier Section
Input sensitivity /
Impedance : AUX : 270 mV (47 kohms)
(US pin sockets)
Output Impedance : External speaker terminals
Suitable impedance: 6 to 16 ohms
Headphones
Suitable impedance: 8 to 100 ohms
Audio output : AX-C12E: 20 W + 20 W
(6 ohms, T.H.D. 1%)
AX-C15E: 35 W + 35 W
(6 ohms, T.H.D. 1%)

• Timer Section
System : Digital quartz clock
Display format : 24-hour cycle
Timer accuracy : Within 60 seconds at monthly rate

• CD Player Section
Number of channels : 2

Frequency response : 10 to 20,000 Hz
Disc : Disc Tray: 12 cm/8 cm
Disc Magazine: 12cm
Pickup : semiconductor laser

• General Specifications
Power supply : AC 240 V, 50 Hz
Power consumption : AX-C12E: 55 W
AX-C15E: 65 W
Dimensions : HTC-C15E:225(W)x170(H)x309(D) mm
HAD-12E: 225 (W) x 170 (H) x 324 (D) mm
HAD-15E: 225 (W) x 170 (H) x 350 (D) mm
Weight : HTC-C15E: 3.9 kg
HAD-12E: 5.2 kg
HAD-15E: 6.0 kg

• Speaker Section
System : 3-way speaker system (HS-AX15)
2-Way speaker system (HS-AX12)
Speakers : Bass reflex; 14 cm x 1; 5 cm x 1;
2 cm x 1 (HS-AX15)
Bass reflex; 14 cm x 1; 5 cm x 1
(HS-AX12)
Impedance : 6 ohms
Maximum Input Power: 35 W (HS-AX12) (musical peak signal)
50 W (HS-AX15) (musical peak signal)
Dimensions : 170 (W) x 340 (H) x 204 (D) mm
Weight : 5.8 kg/pair (HS-AX12)
6.0 kg/pair (HS-AX15)

• Accessories
AM loop antenna : 1
Disc Magazine : 1
Disc title label : 1
System connector cable (7P) : 1
System connector cable (13P) : 1
Remote control (RB-AXC15): 1
Speaker wire (for HS-AX15): 2

Changes in specifications are for better performance and may be brought about without our giving prior notice.

This appliance conforms with requirements of B.S. 800:1983

Tape deck maintenance

- **Head cleaning**
  Clean the heads, capstan and pressure roller periodically with a head cleaning stick moistened with alcohol, or methylated spirit. Never use a sharp or metallic instrument or tool for cleaning these parts.
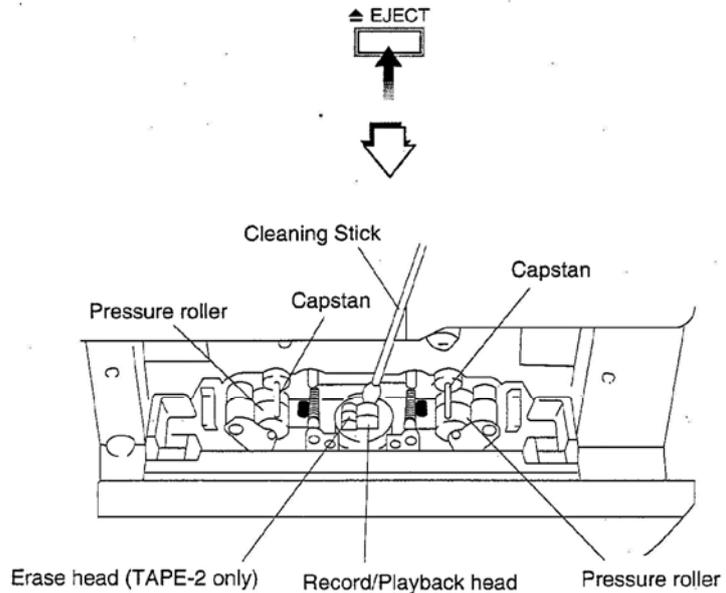
- **Demagnetization**
  The head inevitably becomes magnetized slightly after long use. As a result, high-frequency sound may be lacking or noise is generated. Perform head demagnetization occasionally with a head eraser.
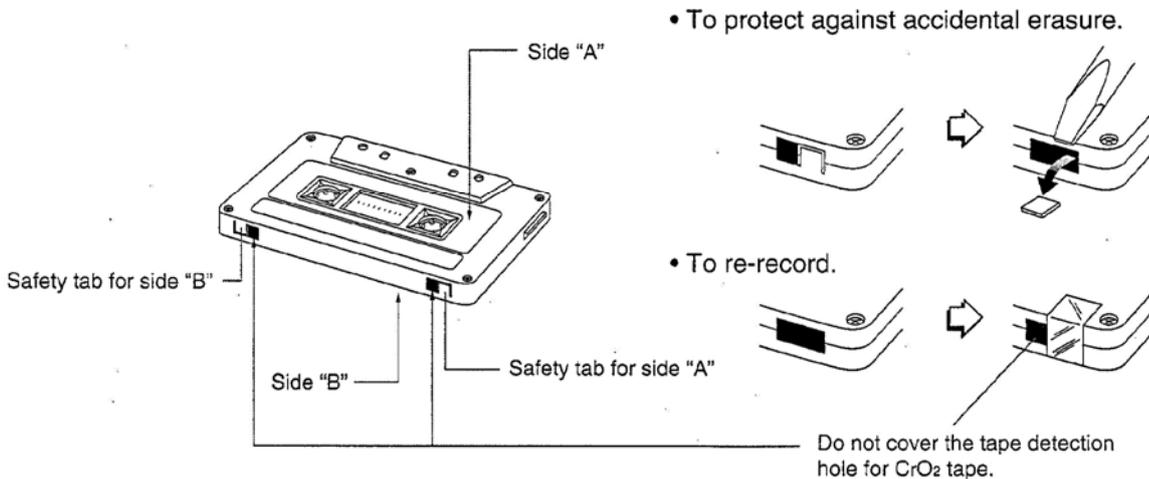
CD player maintenance

- **Treat disc surface carefully**
  Handle the discs so that fingerprints and dust do not adhere to the surface of the discs. To clean-off, use a soft cloth. Do not use a hard cloth since these will mark the disc.

⏏ EJECT

Cleaning Stick

Capstan

Pressure roller   Capstan   Capstan

Erase head (TAPE-2 only)   Record/Playback head   Pressure roller

Recording Protection

Side "A"

Safety tab for side "B"

Side "B"

Safety tab for side "A"

- To protect against accidental erasure.

- To re-record.

Do not cover the tape detection hole for CrO₂ tape.

@ Hitachi, Ltd. Tokyo Japan

Head Office : THE HITACHI ATAGO BLDG.
No. 15-12, 2-chome, Nishi-Shinbashi,
Minato-ku, Tokyo 105, Japan
Tel. Tokyo (03) 3502-2111