

SHARP

MINI COMPONENT SYSTEM

MODEL

CD-E650E

OPERATION MANUAL

COMPACT
disc
DIGITAL AUDIO

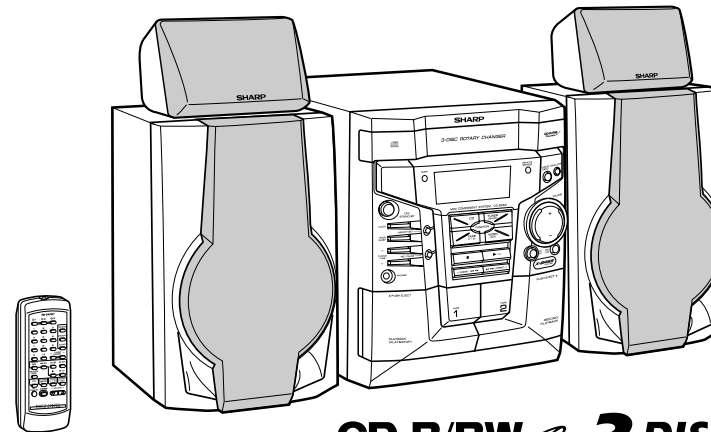
CDE650E_FRONT

1



Thank you for purchasing this SHARP product.
To obtain the best performance from this product, please read this manual carefully. It will guide you in operating your SHARP product.

CD-E650E Mini Component System consisting of CD-E650E (main unit), CP-E650E (front speakers) and GBOXS0125AWM1 (surround speakers).



CD-R/RW
Playable

3-DISC
CD CHANGER
with Play Exchange



03.1.28, 11:34 AM

Special notes

Warning:

- When the ON/STAND-BY button is set at STAND-BY position, mains voltage is still present inside the unit. When the ON/STAND-BY button is set at STAND-BY position, the unit may be brought into operation by the timer mode or remote control.
- This unit contains no user serviceable parts. Never remove covers unless qualified to do so. This unit contains dangerous voltages, always remove mains plug from the socket before any service operation and when not in use for a long period.
- To prevent fire or shock hazard, do not expose this appliance to dripping or splashing. No objects filled with liquids, such as vases, should be placed on the apparatus.

Note for users in Australia:

Copyright may exist in material you wish to record. Copying or broadcasting such material without permission of the relevant licensees or owners of the copyright is prohibited by law. SHARP is not in a position to authorise the copying or broadcasting of copyright materials and nothing in this OPERATION MANUAL should be implied as giving that authority.

For other countries:

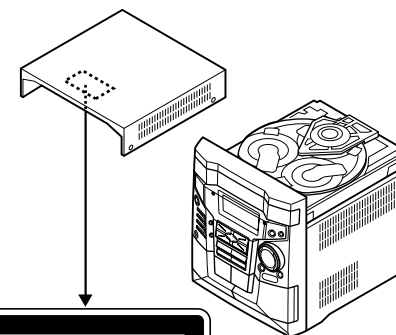
Audio-visual material may consist of copyrighted works which must not be recorded without the authority of the owner of the copyright. Please refer to the relevant laws in your country.

CAUTION

- This product is classified as a CLASS 1 LASER product.
- Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

Laser Diode Properties
 Material: GaAlAs
 Wavelength: 780 nm
 Emission Duration: continuous
 Laser Output: max. 0.6 mW



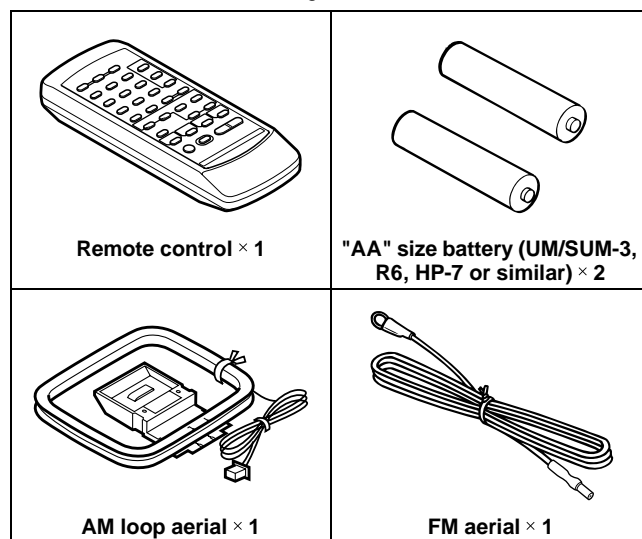
CAUTION-INVISIBLE LASER RADIATION WHEN OPEN.
 DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH
 OPTICAL INSTRUMENTS.

WARNUNG-UNSICHTBARE LASERSTRAHLUNG WENN GERÄT
 GEÖFFNET, NICHT IN DIE STRAHLUNG SCHAUEN ODER
 DIREKT MIT OPTISCHEN HILFSMITTELN BETRACHTEN.

ATTENTION-RAYON LASER INVISIBLE EN CAS D'OUVERTURE.
 NE PAS REGARDER LE FAISCEAU DIRECTEMENT OU AVEC DES
 INSTRUMENTS OPTIQUES.

Accessories

Please confirm that the following accessories are included.



Note:
Only the above accessories are included.

Contents

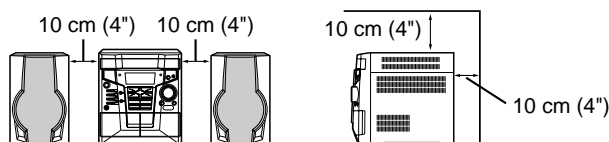
CD-E650E

	Page
■ General Information	
Precautions	4
Controls and indicators	5 - 8
■ Preparation for Use	
Remote control	9
System connections	10 - 13
■ Basic Operation	
Sound control	14
Setting the clock	15
■ CD Playback	
Listening to a CD (CDs)	16, 17
Advanced CD playback	18 - 20
■ Radio	
Listening to the radio	21, 22
■ Tape Playback	
Listening to a cassette tape (TAPE 1 or TAPE 2)	23
■ Tape Recording	
Recording to a cassette tape	24 - 26
■ Advanced Features	
Timer and sleep operation	26 - 28
Enhancing your system	29
■ References	
Troubleshooting chart	30, 31
Maintenance	32
Specifications	32, 33
WARRANTY	End of the manual

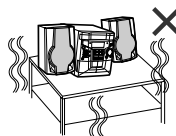
Precautions

■ General

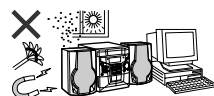
- Please ensure that the equipment is positioned in a well ventilated area and ensure that there is at least 10 cm (4") of free space along the sides, top and back of the equipment.



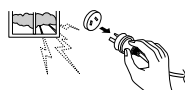
- Use the unit on a firm, level surface free from vibration.



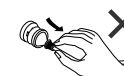
- Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic/electrical equipment (home computers, facsimiles, etc.) which generate electrical noise.



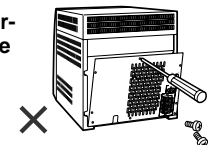
- Do not place anything on top of the unit.
- Do not expose the unit to moisture, to temperatures higher than 60°C (140°F) or to extremely low temperatures.
- If your system does not work properly, disconnect the AC power lead from the wall socket. Plug the AC power lead back in, and then turn on your system.
- In case of an electrical storm, unplug the unit for safety.



- Hold the AC power plug by the head when removing it from the wall socket, as pulling the lead can damage internal wires.



- Do not remove the outer cover, as this may result in electric shock. Refer internal service to your local SHARP service facility.



- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.



- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Attention should be drawn to the environmental aspects of battery disposal.
- This unit should only be used within the range of 5°C - 35°C (41°F - 95°F).

Warning:

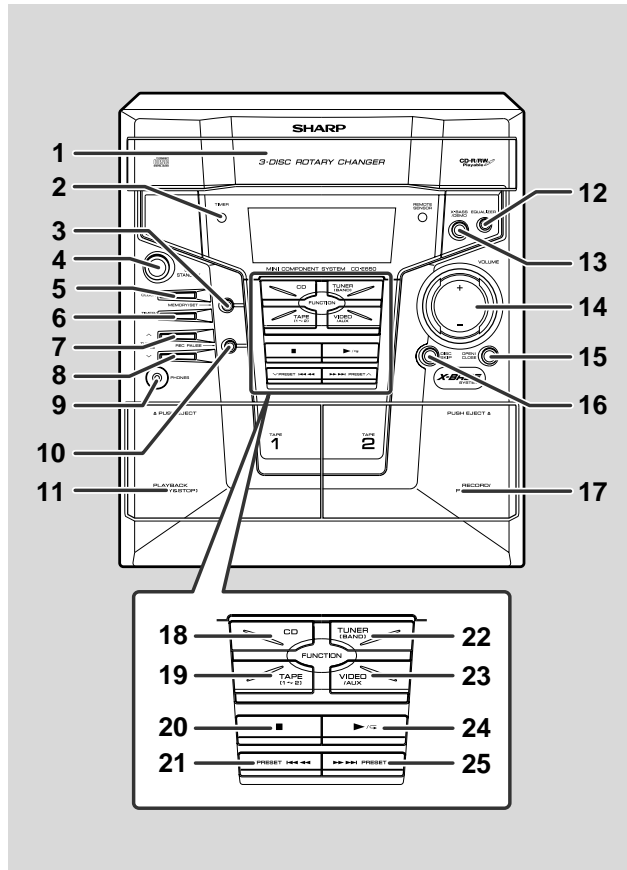
The voltage used must be the same as that specified on this unit. Using this product with a higher voltage other than that which is specified is dangerous and may result in a fire or other type of accident causing damage. SHARP will not be held responsible for any damage resulting from use of this unit with a voltage other than that which is specified.

■ Volume control

The sound level at a given volume setting depends on speaker efficiency, location, and various other factors. It is advisable to avoid exposure to high volume levels. Do not turn the volume on to full at switch on and listen to music at moderate levels.

Controls and indicators

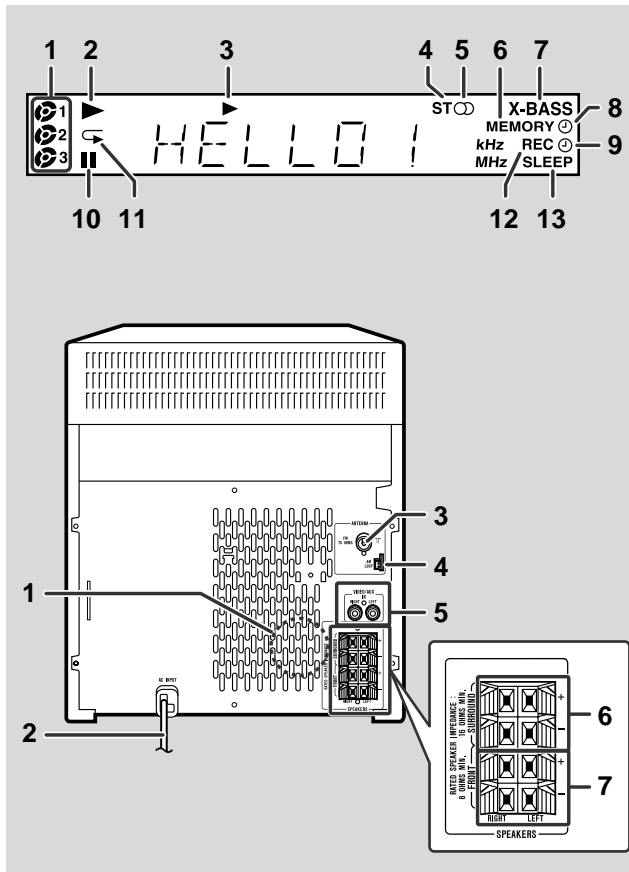
CD-E650E



■ Front panel

	Reference page
1. Disc Tray	16
2. Timer Set Indicator	27
3. Memory/Set Button	15, 20, 22
4. On/Stand-by Button	13
5. Clock Button	15, 26, 27
6. Timer/Sleep Button	26, 27, 28
7. Tuning and Time Up Button	15, 21
8. Tuning and Time Down Button	15, 21
9. Headphone Socket	29
10. Tape 2 Record Pause Button	24, 25, 26
11. Tape 1 Cassette Compartment	23
12. Equaliser Mode Select Button	14
13. Extra Bass/Demo Mode Button	13, 14
14. Volume Up and Down Buttons	14
15. Disc Tray Open/Close Button	16
16. Disc Skip Button	16
17. Tape 2 Cassette Compartment	23
18. CD Button	16, 19, 23
19. Tape (1 → 2) Button	17, 22, 23
20. CD or Tape Stop Button	17, 23
21. CD Track Down or Fast Reverse, Tape 2 Rewind, Tuner Preset Down Button	17, 22, 23
22. Tuner (Band) Button	21
23. Video/Auxiliary Button	29
24. CD Play or Repeat, Tape Play Button	16, 19, 23
25. CD Track Up or Fast Forward, Tape 2 Fast Forward, Tuner Preset Up Button	17, 22, 23

Controls and indicators (continued)



■ Display

1. Disc Number Indicators
2. CD Play Indicator
3. Tape Play Indicator
4. FM Stereo Mode Indicator
5. FM Stereo Receiving Indicator
6. Memory Indicator
7. Extra Bass Indicator
8. Timer Recording Indicator
9. Timer Play Indicator
10. CD Pause Indicator
11. CD Repeat Play Indicator
12. Tape 2 Record Indicator
13. Sleep Indicator

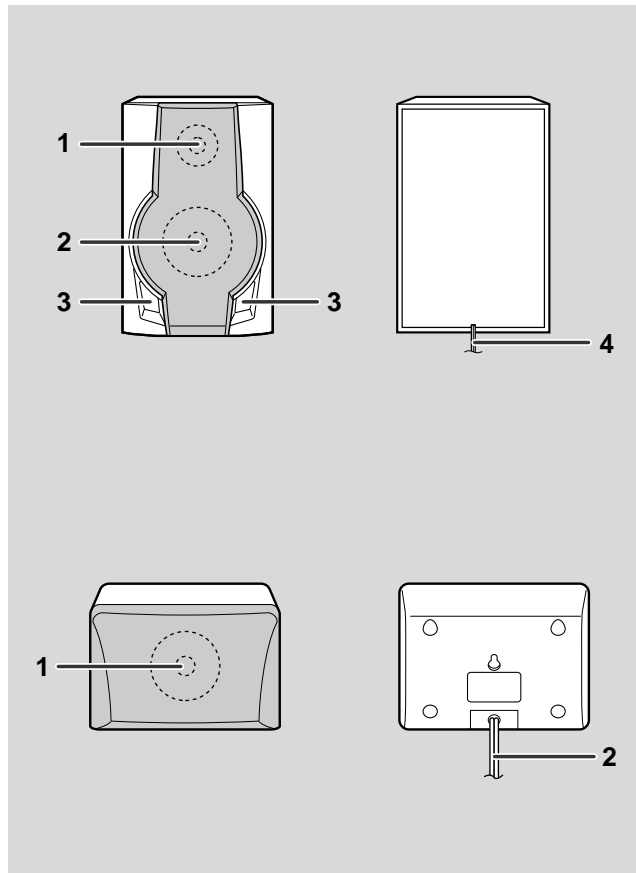
■ Rear panel

Reference page

1. Cooling Fan
2. AC Power Lead 10, 13
3. FM 75 Ohms Aerial Socket 10, 11
4. AM Loop Aerial Socket 10, 11
5. Video/Auxiliary (Audio Signal) Input Sockets 29
6. Surround Speaker Terminals 10, 11
7. Front Speaker Terminals 10, 11

Note:

This product is equipped with a cooling fan inside, which begins to run at a specified volume level for better heat radiation.



■ Front speaker

1. Tweeter
2. Woofers
3. Bass Reflex Ducts
4. Speaker Wire

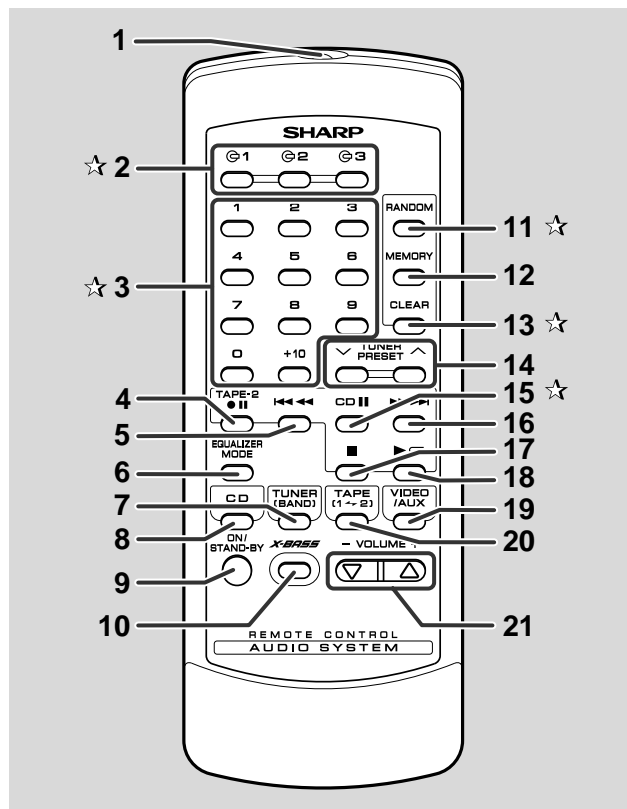
■ Surround speaker

1. Full-Range Speaker
2. Speaker Wire

Note:

The speaker grilles on the front and surround speakers are not removable.

Controls and indicators (continued)



Buttons with "☆" mark in the illustration or highlighted in bold on the right can be operated on the remote control only.

■ Remote control

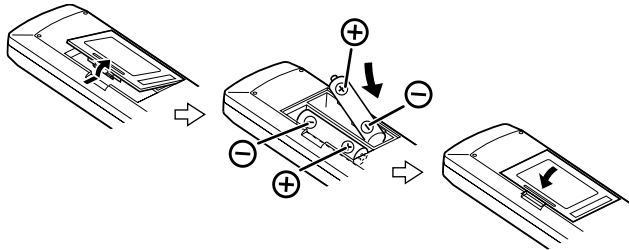
	Reference page
1. Remote Control Transmitter	9
2. Disc Number Select Buttons	16, 20, 24
3. Direct Search Buttons	18
4. Tape 2 Record Pause Button	24, 25, 26
5. CD Track Down or Fast Reverse, Tape 2 Rewind Button	17, 23
6. Equaliser Mode Select Button	14
7. Tuner (Band) Button	21
8. CD Button	16
9. On/Stand-by Button	9
10. Extra Bass Button	14
11. CD Random Button	19
12. CD Memory Button	20
13. Programme Clear Button	20
14. Tuner Preset Up and Down Buttons	22
15. CD Pause Button	17
16. CD Track Up or Fast Forward, Tape 2 Fast Forward Button	17, 23
17. CD or Tape Stop Button	17, 23
18. CD Play or Repeat, Tape Play Button	16, 19, 23
19. Video/Auxiliary Button	29
20. Tape (1 - 2) Button	23
21. Volume Up and Down Buttons	14

Remote control

CD-E650E

■ Battery installation

- 1 Remove the battery cover.
- 2 Insert the batteries according to the direction indicated in the battery compartment.
When inserting or removing the batteries, push them towards the ⊖ battery terminals.
- 3 Replace the cover.



Precautions for battery use:

- Replace all old batteries with new ones at the same time.
- Do not mix old and new batteries.
- Remove the batteries if the unit is not to be used for long periods of time. This will prevent potential damage due to battery leakage.

Caution:

- Do not use rechargeable batteries (nickel-cadmium battery, etc.).
- Installing the batteries incorrectly may cause the unit to malfunction.

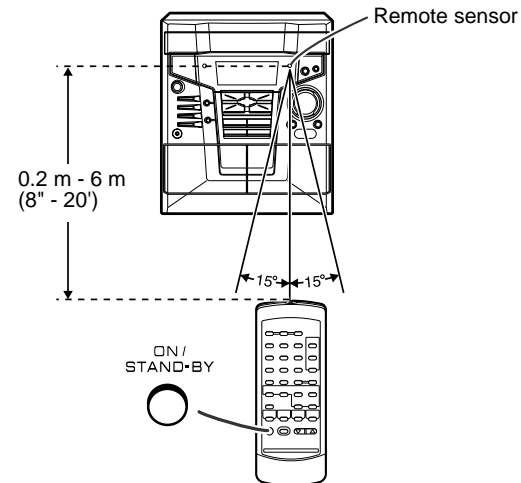
Notes concerning use:

- Replace the batteries if the operating distance is reduced or if the operation becomes erratic. Purchase 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar).
- Periodically clean the transmitter on the remote control and the sensor on the unit with a soft cloth.
- Exposing the sensor on the unit to strong light may interfere with operation. Change the lighting or the direction of the unit.
- Keep the remote control away from moisture, heat, shock, and vibrations.

■ Test of the remote control

Check the remote control after checking all the connections (see pages 10 - 13).
Point the remote control directly at the remote sensor on the unit.

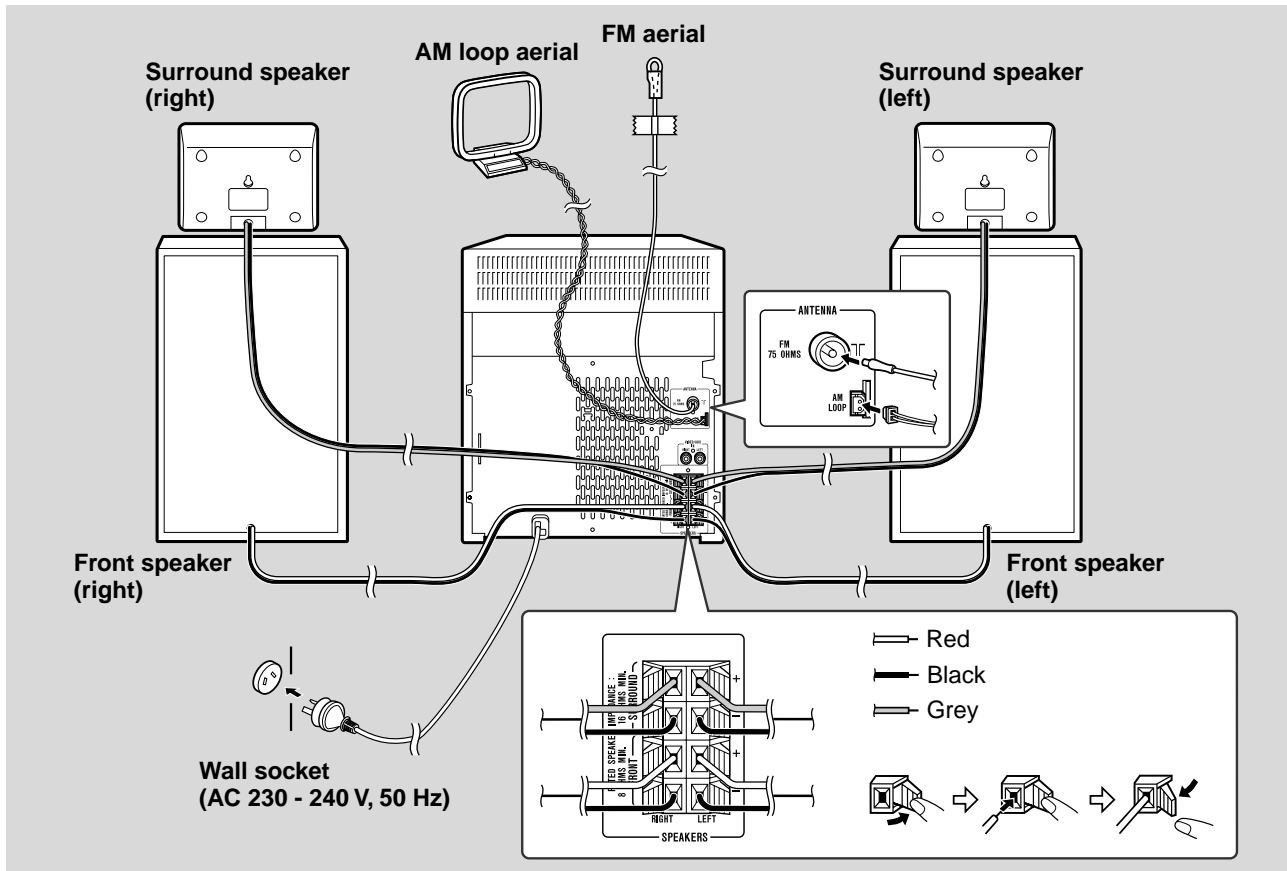
The remote control can be used within the range shown below:
Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy music.



Preparation for Use

System connections

Preparation for Use



■ Aerial connection

Supplied FM aerial:

Connect the FM aerial wire to the FM 75 OHMS socket and position the FM aerial wire in the direction where the strongest signal can be received.

Supplied AM loop aerial:

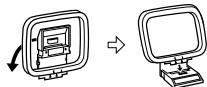
Connect the AM loop aerial to the AM LOOP socket. Position the AM loop aerial for optimum reception. Place the AM loop aerial on a shelf, etc., or attach it to a stand or a wall with screws (not supplied).

Note:

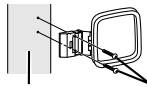
Placing the aerial on the stereo system or near the AC power lead may cause noise pickup. Place the aerial away from the stereo system for better reception.

Installing the AM loop aerial:

< Assembling >



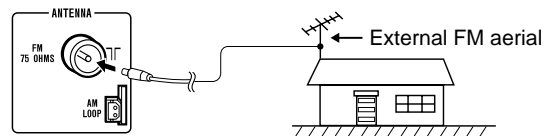
< Attaching to the wall >



Wall Screws (not supplied)

External FM aerial:

Use an external FM aerial if you require better reception. Consult your dealer.



■ Speaker connection

Front speakers

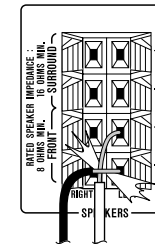
Connect the black wire to the FRONT (-) terminal, and the red wire to the FRONT (+) terminal.

Surround speakers

Connect the black wire to the SURROUND (-) terminal, and the grey wire to the SURROUND (+) terminal.

Caution:

- If you use other speakers with impedance lower than that specified, the unit may be damaged. Front speakers: 8 ohms Surround speakers: 16 ohms
- Do not mistake the right and the left channels. The right speaker is the one on the right side when you face the unit.
- **Do not let the bare speaker wires touch each other.**
- Do not allow any objects to fall into or to be placed in the bass reflex ducts.
- Do not stand or sit on the speakers. You may be injured.

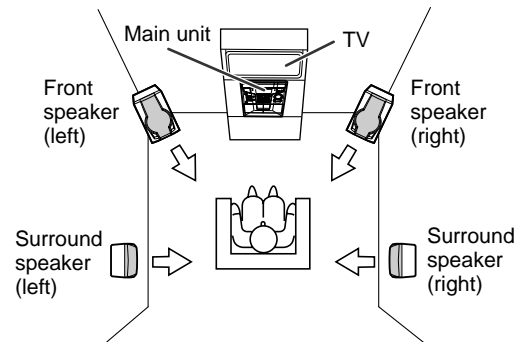


Incorrect

System connections (continued)

■ Placing the speaker system

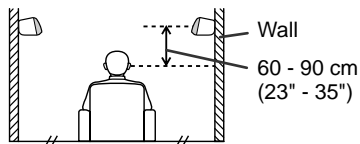
To enjoy the surround effect, we recommend that you place each speaker as shown to the below.



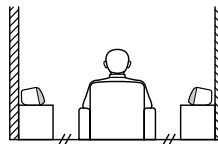
Installation of the surround speakers:

To enjoy the perfect surround effect, mount the surround speakers on the wall. Install them 60 cm - 90 cm (23" - 35") above the height of your ears when you are seated.

Example:
when installed on the wall

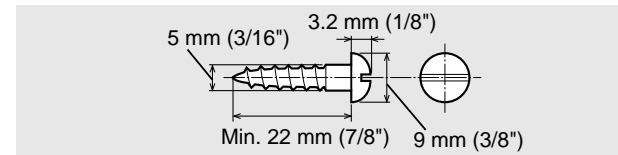


Example:
when installed vertically

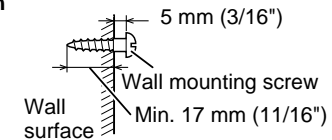


■ To mount the surround speakers on the wall

The design of the surround speakers allows them to be hung on the wall. Be sure to use the type and size of screw that is shown to the below.

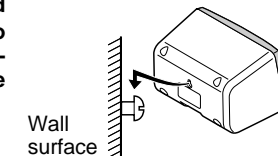


1 Drive one screw through the wall for each speaker.



- Make sure that both the screw and the wall can support a load of 20 kg (45 lbs.).
- Drive the screws, so there is about a 5 mm (3/16") space between the wall and the head of the screw.

2 Mount the surround speaker on the wall so that the screw head is inserted into the slot on the surround speaker.



Caution:

The speaker may fall if mounted improperly. Check the stability of the wall thoroughly. Sharp is not liable for accidents caused by poor wall stability or improper mounting.

■ Connecting the AC power lead

After checking all the connections have been made correctly, plug the AC power lead of this unit into the wall socket. If you plug in the unit first, the unit will enter the demonstration mode.

Notes:

- The unit will start the tape initialisation when plugged in to the AC socket. During this process, initialising sound will be heard and the unit cannot be turned on. Wait until the process is finished.
- Unplug the AC power lead from the wall socket if the unit will not be in use for a prolonged period of time.

■ Demonstration mode

The first time the unit is plugged in, the unit will enter the demonstration mode. You will see words scroll.

HELLO!

To cancel the demonstration mode:

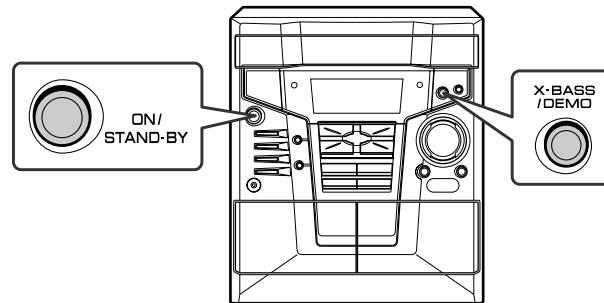
When the unit is in the power stand-by mode (demonstration mode), press the X-BASS/DEMO button. The demonstration mode will be cancelled and the display will disappear.

To return to the demonstration mode:

When the unit is in the power stand-by mode, press the X-BASS/DEMO button again.

Note:

When the power is on, the X-BASS/DEMO button can be used to select the extra bass mode.



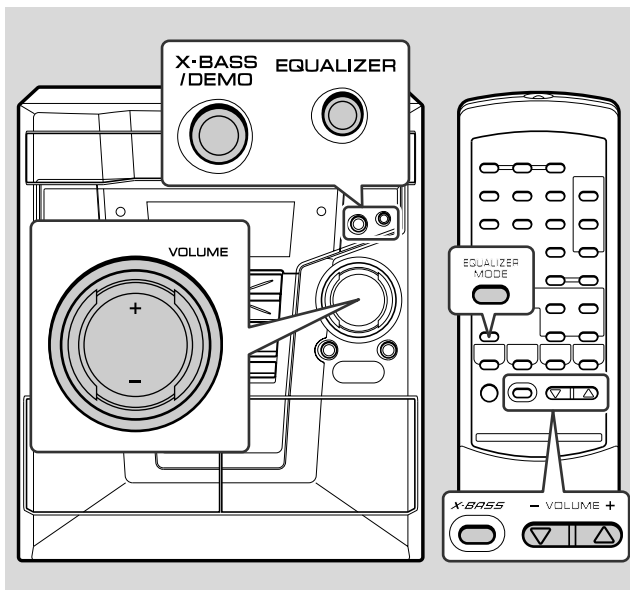
■ To turn the power on

Press the ON/STAND-BY button to turn the power on.

After use:

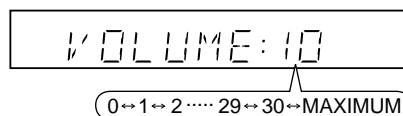
Press the ON/STAND-BY button to enter the power stand-by mode.

Sound control



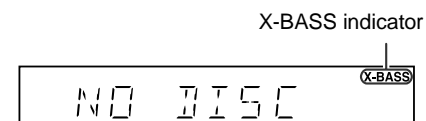
■ Volume control

Press the VOLUME (+ or -) button to increase or decrease the volume.



■ Bass control

When the power is first turned on, the unit will enter the extra bass mode which emphasises the bass frequencies, and "X-BASS" will appear. To cancel the extra bass mode, press the X-BASS/DEMO (X-BASS) button.



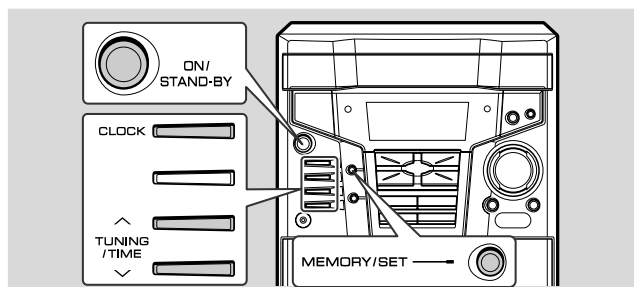
■ Equaliser

When the EQUALIZER (EQUALIZER MODE) button is pressed, the current mode setting will be displayed. To change to a different mode, press the EQUALIZER (EQUALIZER MODE) button repeatedly until the desired sound mode appears.

- FLAT The sound is not modified.
- ↓
- ROCK Bass and treble are emphasised.
- ↓
- CLASSIC Treble is cut a little.
- ↓
- POPS Bass and treble are slightly emphasised.
- ↓
- VOCAL Vocals (midrange tones) are emphasised.
- ↓
- JAZZ Treble is slightly emphasised.

Setting the clock

CD-E650E



In this example, the clock is set for the 24-hour (0:00) display.

- 1 Press the ON/STAND-BY button to turn the power on.**
- 2 Press the CLOCK button and within 5 seconds, press the MEMORY/SET button.**
- 3 Press the TUNING/TIME (∨ or ∧) button to select 24-hour or 12-hour display and then press the MEMORY/SET button.**

"0:00" → The 24-hour display will appear. (0:00 - 23:59)

"AM 12:00" → The 12-hour display will appear. (AM 12:00 - PM 11:59)

"AM 0:00" → The 12-hour display will appear. (AM 0:00 - PM 11:59)

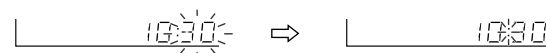
Note that this can only be set when the unit is first installed or it has been reset. [Refer to "Clearing all the memory (reset)" on page 31 for details.]

- 4 Press the TUNING/TIME (∨ or ∧) button to adjust the hour and then press the MEMORY/SET button.**



- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 hour. Hold it down to advance continuously.
- When the 12-hour display is selected, "AM" will change automatically to "PM".

- 5 Press the TUNING/TIME (∨ or ∧) button to adjust the minutes and then press the MEMORY/SET button.**



- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 minute. Hold it down to change the time in 5-minute intervals.
- The hour will not advance even if minutes advance from "59" to "00".

To confirm the time display:

Press the CLOCK button.
The time display will appear for about 5 seconds.



Note:

The "CLOCK" or time will flash at the push of the CLOCK button when the AC power supply is restored after a power failure or unplugging the unit.
Readjust the clock as follows.

To readjust the clock:

Perform "Setting the clock" from step 1. If the "CLOCK" is not flashing in step 2, step 3 (for selecting the 24-hour or 12-hour display) will be skipped.

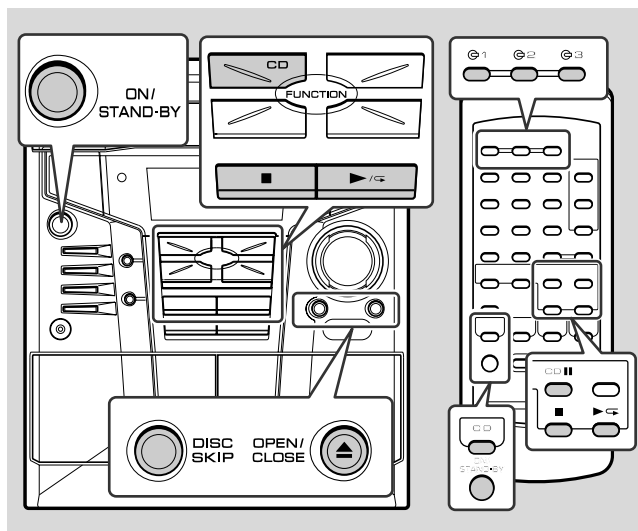
To change the 24-hour or 12-hour display:

- 1 Clear all the programmed contents. [Refer to "Clearing all the memory (reset)" on page 31 for details.]
- 2 Perform "Setting the clock" from step 1.

Listening to a CD (CDs)

This system can also play audio CD-R and CD-RW discs, but cannot record.

Some audio CD-R and CD-RW discs may not be playable due to the state of disc or the device that was used for recording.

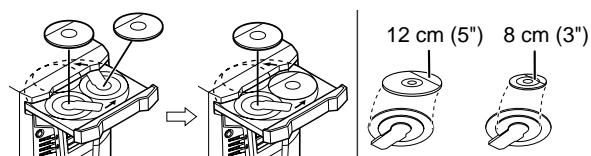


- 1** Press the ON/STAND-BY button to turn the power on.
- 2** Press the CD button.
- 3** Press the OPEN/CLOSE \blacktriangle button to open the disc tray.

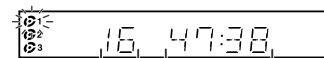
4 Place the CD(s) on the disc tray, label side up.

When loading a third disc, press the DISC SKIP button to turn the disc tray, then place the CD in the open position.

- CDs can be placed on any open position on the disc tray.
- Be sure to place 8 cm (3") CDs in the middle of the disc positions.



5 Press the OPEN/CLOSE \blacktriangle button to close the disc tray.



Total number of tracks on the CD whose number is flashing

Total playing time of the CD whose number is flashing

6 To select the CD you want to listen to first, press one of the $\odot 1 - \odot 3$ buttons on the remote control.

7 Press the $\blacktriangleright / \square$ button to start playback.

- Playback will begin from track 1 on the disc you have selected to play. After that disc finishes playing, the next disc will automatically start playback.
- When the last track on the third disc has finished playing, the CD player will automatically stop.
- When there is no CD in one of the disc 1 - 3 positions, that position will be skipped and the next CD will begin to play.

To interrupt playback:

Press the CD **||** button on the remote control.
To resume playback from the same point, press the **▶ ◀** button.

To stop playback:

Press the **■** button.

To remove the CDs:

Whilst in the stop mode, press the OPEN/CLOSE **▲** button.
The disc tray will open. Remove the two discs. Then, press the DISC SKIP button to rotate the disc tray and remove the remaining disc.

Caution:

- Do not place two CDs in one disc tray.
- Do not play discs with special shapes (heart- or octagon-shaped). It may cause malfunctions.
- Do not push the disc tray whilst it is moving.
- Do not turn the disc tray by hand. This may cause malfunctions.
- If the power fails whilst the tray is open, wait until the power is restored.
- If the disc tray is stopped with force, "ER-CD10" will appear on the display for 3 seconds and the unit will not function. If this occurs, press the ON/STAND-BY button to enter the power stand-by mode and then turn the power on again.
- If TV or radio interference occurs during CD operation, move the unit away from the TV or radio.
- If a disc is damaged, dirty, or loaded upside down, the disc will skip or not play back.

■ To locate the beginning of a track**To move to the beginning of the next track:**

Press the **▶▶▶▶** button for less than 0.5 seconds during playback.

To restart the track being played:

Press the **◀◀◀◀** button for less than 0.5 seconds during playback.

Notes:

- You can locate the beginning of a track on a single disc only.
- You can skip to any track by pressing the **◀◀◀◀** or **▶▶▶▶** button repeatedly until the desired track number appears.

■ To locate the desired portion**For audible fast forward:**

Press and hold down the **▶▶▶▶** button during playback.

For audible fast reverse:

Press and hold down the **◀◀◀◀** button during playback.

Notes:

- Normal playback will resume when the **◀◀◀◀** or **▶▶▶▶** button is released.
- You can locate the desired portion on a single disc only.
- When the end of the last track is reached during fast forward, "END" will appear on the display and CD operation will be paused. When the beginning of the first track is reached during fast reverse, the unit will enter the playback mode.

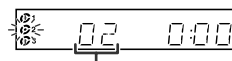
Advanced CD playback

■ Direct search of the track

By using the direct search buttons, the desired tracks can be played.

1 Whilst in the stop mode, press one of the \odot 1 - \odot 3 buttons on the remote control or DISC SKIP button to select the desired disc.

2 Use the direct search buttons on the remote control to select the desired track.

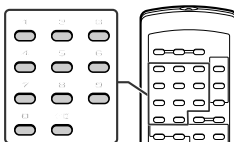


Selected track number

- The direct search buttons allow you to select up to number 9.
- When selecting number 10 or more, use the "+10" button.

A. For example, to choose 13

- 1 Press the "+10" button once.
- 2 Press the "3" button.



B. For example, to choose 30

- 1 Press the "+10" button three times.
- 2 Press the "0" button.

3 Press the $\blacktriangleright / \triangleleft$ button to start playback.

Playback of the selected track is started. When the end of the last track is reached, the next disc will automatically be started.

To stop playback:

Press the \blacksquare button.

Notes:

- The selected track can be started simply by pressing the direct search buttons during playback. (It is not necessary to press the $\blacktriangleright / \triangleleft$ button.)
- A track number higher than the number of tracks on the disc cannot be selected.
- During random play, direct search is not possible.

■ Repeat play

All tracks on up to 3 discs, or a programmed sequence can be continuously repeated.

To repeat all tracks on up to 3 discs:

Press the ► / ◀ button twice.



To repeat a desired track:

Perform steps 1 - 4 in the "Programmed play" section on page 20 and then press the ► / ◀ button twice.

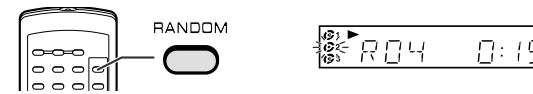
To cancel repeat play:

Press the ► / ◀ button again. "◀" will go out.

■ Random play

The tracks on the disc(s) can be played in random order automatically.

Press the RANDOM button on the remote control to begin random play.



To cancel random play:

Press the ► / ◀ button.

Notes:

- If you press the ►►►► button during random play, you can move to the track selected next by the random operation. On the other hand, the ◀◀◀◀ button does not allow you to move to the previous track. The beginning of the track being played will be located.
- In random play, the CD player will select and play tracks automatically. (You cannot select the order of the tracks.)

Caution:

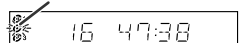
After performing repeat or random play, be sure to press the ■ button. Otherwise, the disc(s) will play continuously.

Advanced CD playback (continued)

■ Programmed play

You can choose up to 32 selections for playback in the order you like.

1 Whilst in the stop mode, press one of the 1 - 3 buttons on the remote control to select the desired disc.



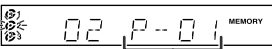
Selected disc number


2 Press the direct search buttons on the remote control to select the desired track.

Selected track number


You can also select a track by pressing the ◀◀ or ▶▶ button.

3 Press the MEMORY/SET (MEMORY) button to save the track number.

MEMORY/SET →  / MEMORY  

Playback order

When the track is memorised, "MEMORY" will appear.

4 Repeat steps 1 - 3 for other tracks. Up to 32 tracks can be programmed.

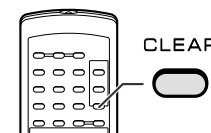
If you make a mistake, the programmed tracks can be cleared by pressing the CLEAR button.

5 Press the ▶ / □ button to start playback.

To clear the programmed selections:

Whilst the "MEMORY" indicator is lit, set the CD to the stop mode and then press the CLEAR button.

Each time the button is pressed, one track will be cleared, beginning with the last track programmed. When all the tracks are cleared, "MEMORY" will disappear.



Adding tracks to the programme:

If a programme has been previously stored, the "MEMORY" indicator will be displayed. Then follow steps 1 - 3 to add tracks. The new tracks will be stored after the last track of the original programme.

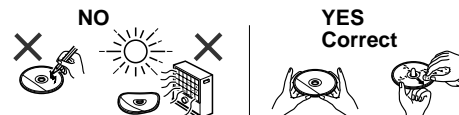
Notes:

- Opening the disc tray automatically cancels the programmed sequence.
- Even if you press the ON/STAND-BY button to enter the stand-by mode or change the function from CD to another, the programmed selections will not be cleared.
- During programme operation, random play is not possible.

■ Care of compact discs

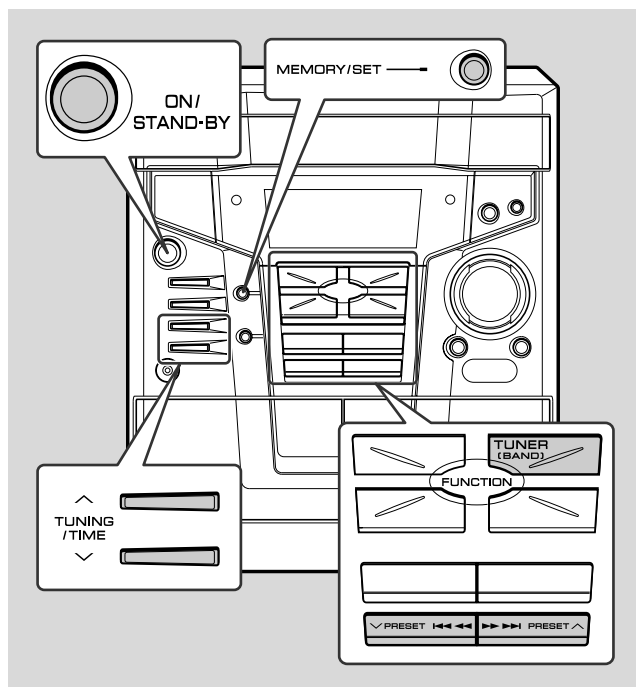
Compact discs are fairly resistant to damage, however mistracking can occur due to an accumulation of dirt on the disc surface. Follow the guidelines below for maximum enjoyment from your CD collection and player.

- Do not write on either side of the disc, particularly the non-label side from which signals are read. Do not mark this surface.
- Keep your discs away from direct sunlight, heat, and excessive moisture.
- Always hold the CDs by the edges. Fingerprints, dirt, or water on the CDs can cause noise or mistracking. If a CD is dirty or does not play properly, clean it with a soft, dry cloth, wiping straight out from the centre, along the radius.



Listening to the radio

CD-E650E



■ Tuning

- 1 Press the **ON/STAND-BY** button to turn the power on.
- 2 Press the **TUNER (BAND)** button repeatedly to select the desired frequency band (FM or AM).

- 3 Press the **TUNING/TIME** (∇ or \blacktriangle) button to tune in to the desired station.

Manual tuning:

Press the TUNING/TIME button as many times as required to tune in to the desired station.

Auto tuning:

When the TUNING/TIME button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.

Notes:

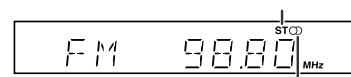
- When radio interference occurs, auto scan tuning may stop automatically at that point.
- Auto scan tuning will skip weak signal stations.
- To stop the auto tuning, press the TUNING/TIME button again.

To receive an FM stereo transmission:

Press the TUNER (BAND) button to display the "ST" indicator.

- "∞" will appear when an FM broadcast is in stereo.

FM stereo mode indicator



FM stereo receiving indicator

- If the FM reception is weak, press the TUNER (BAND) button to extinguish the "ST" indicator. The reception changes to monaural, and the sound becomes clearer.

Note:

This product can receive FM stereo/FM monaural and AM monaural broadcasts. AM stereo broadcasts will not be played in stereo.

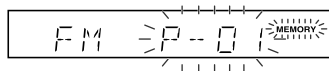
Listening to the radio (continued)

■ Memorising a station

You can store 40 AM and FM stations in memory and recall them at the push of a button. (Preset tuning)

1 Perform steps 1 - 3 in "Tuning" on page 21.

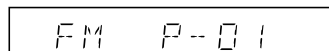
2 Press the MEMORY/SET button to enter the preset tuning saving mode.



3 Within 30 seconds, press the PRESET (∨ or ∧) button to select the preset channel number.

Store the stations in memory, in order, starting with preset channel 1.

4 Within 30 seconds, press the MEMORY/SET button to store that station in memory.



If the "MEMORY" and preset number indicators go out before the station is memorised, repeat the operation from step 2.

5 Repeat steps 1 - 4 to set other stations, or to change a preset station.

When a new station is stored in memory, the station previously memorised will be erased.

Note:

The backup function protects the memorised stations for a few hours should there be a power failure or if the AC lead is disconnected.

■ To recall a memorised station

Press the PRESET (∨ or ∧) button for less than 0.5 seconds to select the desired station.

This can be operated by pressing the TUNER PRESET (∨ or ∧) button on the remote control.

■ To scan the preset stations

The stations saved in memory can be scanned automatically. (Preset memory scan)

- 1 Press the PRESET (∨ or ∧) button for more than 0.5 seconds.
 - The preset number will flash and the programmed stations will be tuned in sequentially, for 5 seconds each.
 - This can be operated by pressing the TUNER PRESET (∨ or ∧) button on the remote control.
- 2 Press the PRESET (∨ or ∧) button again when the desired station is located.

■ To erase entire preset memory

- 1 Press the ON/STAND-BY button to enter the stand-by mode.
- 2 Whilst pressing down the TUNER (BAND) button and the X-BASS/DEMO button, press the ON/STAND-BY button until "TUNER CL" appears.

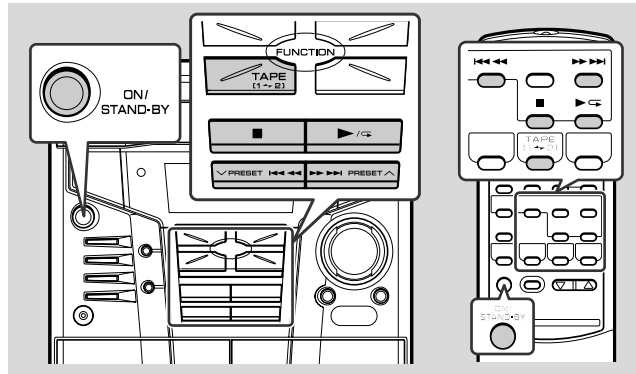


Listening to a cassette tape (TAPE 1 or TAPE 2)

CD-E650E

Before playback:

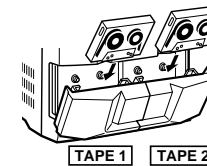
- For playback, use normal or low-noise tapes for the best sound. (Metal or CrO₂ tapes are not recommended.)
- Do not use C-120 tapes or poor-quality tapes, as they may cause malfunctions.
- Before loading a tape into the cassette compartment, tighten the slack with a pen or a pencil.



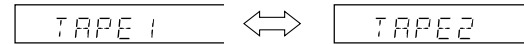
Playback is possible in the TAPE 1 compartment as well as the TAPE 2 compartment.

- 1 Press the ON/STAND-BY button to turn the power on.**
- 2 Open the cassette door by pushing the area marked "PUSH EJECT".**

- 3 Load a cassette into the TAPE 1 compartment or TAPE 2 compartment with the side to be played facing toward you.**



- 4 Press the TAPE (1 ~ 2) button to select the cassette you want to listen to.**



- 5 Press the ► / ◀ button to start playback.**

To stop playback:

Press the ■ button.

Fast forward/rewind: (TAPE 2 only)

- 1 Press the ■ button, then press the TAPE (1 ~ 2) button to select TAPE 2.
- 2 To advance the tape, press the ►► button. To rewind it, press the ◀◀ button.

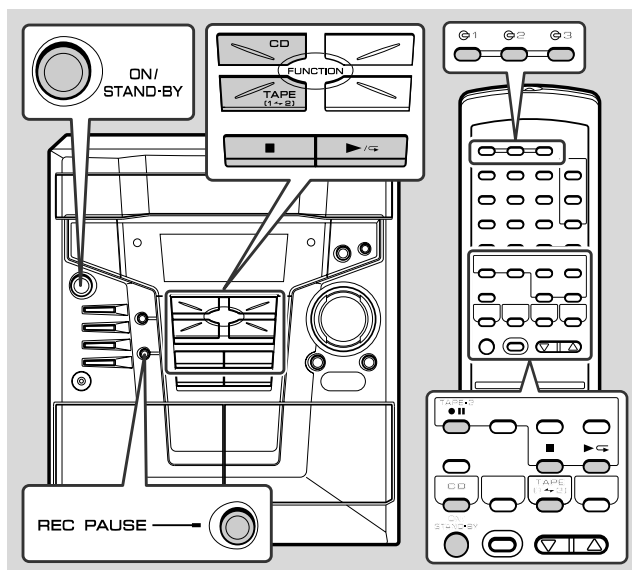
Caution:

- To remove the cassette, press the ■ button, and then open the compartment.
- Before changing from one tape operation to another, press the ■ button.
- If a power failure occurs during tape operation, the tape head will remain engaged with the tape and the cassette door will not open. In this case, wait until the power is restored.

Recording to a cassette tape

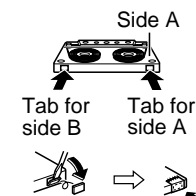
Before recording:

- When recording important selections, make a preliminary test to ensure that the desired material is properly recorded.
- SHARP is not liable for damage or loss of your recording arising from malfunction of this unit.
- The volume and sound controls can be adjusted with no effect on the recorded signal (Variable Sound Monitor).
- **For recording, use only normal tapes. Do not use metal or CrO₂ tapes.**
- Recording can be operated in the TAPE 2 compartment only. The TAPE 1 compartment is for playback only.



Erase-prevention tab of cassette tapes:

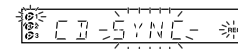
- When recording on a cassette tape, make sure that the erase-prevention tabs are not removed. Cassettes have removable tabs that prevent accidental recording or erasing.
- To protect the recorded sound, remove the tab after recording. Cover the tab hole with adhesive tape to record on the tape without the tab.



Recording from a CD (CDs)

You can record 3 CDs continuously.

- 1 Press the ON/STAND-BY button to turn the power on.**
- 2 Load a cassette into the TAPE 2 cassette compartment with the side to be recorded on facing you.**
Wind past the leader of the tape, on which recording cannot be performed.
- 3 Press the CD button and load the desired disc.**
- 4 Press one of the 1 - 3 buttons on the remote control to select the disc to be recorded first.**
- 5 Press the REC PAUSE (TAPE-2 ●||) button.**
Recording will be paused.



6 Press the ► / ◀ button to start recording.

- CD playback will start approximately 7 seconds after the tape starts.
- Recording is started from the selected CD. When the playback of the last disc is finished or the end of the tape is reached, the CD and the cassette will stop automatically.

To perform programmed recording:

- 1 Programme discs and tracks. (See page 20.)
- 2 Press the REC PAUSE (TAPE-2 ●||) button.
- 3 Press the ► / ◀ button.

To stop recording:

Press the ■ button.
The CD and tape will stop.

Notes:

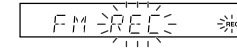
- When the end of the tape is reached whilst recording, the CD player will display the track number which was being played at that time, and stop automatically. If you want to restart recording from the beginning of the interrupted track, turn over the tape, press the REC PAUSE (TAPE-2 ●||) button and then the ► / ◀ button. (If tracks have been stored in memory by programming, recording will restart from the first track stored in memory.)
- Whilst recording, OPEN/CLOSE ▲ button is deactivated. It is recommended to perform CD recording after closing the disc tray.

■ Recording from the radio**1 Tune in to the desired station. (See page 21.)****2 Load a cassette into the TAPE 2 cassette compartment with the side to be recorded on facing you.**

Wind past the leader of the tape, on which recording cannot be performed.

3 Press the REC PAUSE (TAPE-2 ●||) button.

Recording will be paused.

**4 Press the ► / ◀ button to start recording.****To interrupt recording:**

Press the REC PAUSE (TAPE-2 ●||) button.
To resume recording, press the ► / ◀ button.

To stop recording:

Press the ■ button.

Note:

If you hear a whistling noise whilst recording an AM station, move the AM loop aerial.

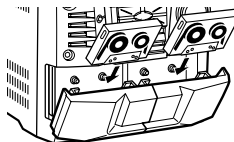
Recording to a cassette tape (continued)

■ Dubbing from tape to tape

You can record from TAPE 1 to TAPE 2.

1 Press the ON/STAND-BY button to turn the power on.

2 Load a prerecorded cassette into the TAPE 1 cassette compartment. Insert a blank tape into the TAPE 2 cassette compartment.

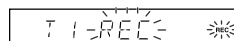


It is recommended that the recording tape is the same length as the master tape.

3 Press the TAPE (1 → 2) button until "TAPE 1" appears on the display.

4 Press the REC PAUSE (TAPE-2 ●||) button.

Recording will be paused.



5 Press the ► / ◀ button to start dubbing.

To stop dubbing:

Press the ■ button.
TAPE 1 and TAPE 2 will simultaneously stop.

■ Erasing recorded tapes

- 1 Load the tape to be erased into the TAPE 2 cassette compartment with the side to be erased facing toward you.
- 2 Press the TAPE (1 → 2) button until "TAPE 2" appears on the display.
- 3 Press the REC PAUSE (TAPE-2 ●||) button.
- 4 Press the ► / ◀ button to start erasing.

Note:

Make sure that the TAPE 1 is not in use.

Timer and sleep operation

Timer playback:

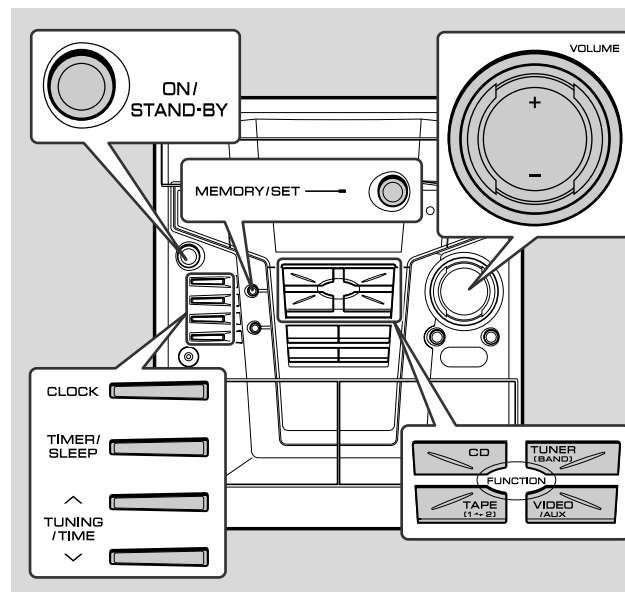
The unit turns on and plays the desired source (CD, tuner, tape) at the preset time.

Timer recording:

The unit turns on and starts recording from the tuner at the preset time.

Sleep operation:

The radio, compact disc and cassette tape can all be turned off automatically.



■ Timer playback or timer recording

Before setting timer:

- 1 Press the CLOCK button to check that the clock is set to the correct time. (Refer to page 15.)
- 2 For timer playback:
Load a cassette or discs to be played.
For timer recording:
Load a cassette for recording in the TAPE 2 cassette compartment.



- 1 Press the ON/STAND-BY button to turn the power on.
- 2 Press the CD, TUNER (BAND) or TAPE (1 ~ 2) button to select the desired function.
To select the timer playback source:
Press CD, TUNER (BAND) or TAPE (1 ~ 2).
To select the timer recording source:
Press TUNER (BAND).
When you select the TUNER (BAND), tune into the desired station.
- 3 Adjust the volume using the VOLUME buttons.
Do not turn the volume up too high.
- 4 Press the TIMER/SLEEP button repeatedly to select timer playback or timer recording.
Display the white "☉" for timer playback and the red "☉" for timer recording.



- 5 Press the TUNING/TIME (∨ or ∧) button to specify the hour to start, then press the MEMORY/SET button.

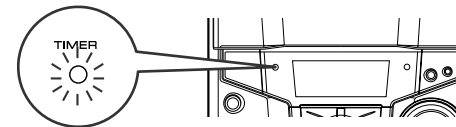


The illustrations show the timer playback setting.

- 6 Press the TUNING/TIME (∨ or ∧) button to specify the minutes, then press the MEMORY/SET button.



The unit will enter the timer stand-by mode automatically.



- To cancel the timer playback/timer recording:**
Press the ON/STAND-BY button to turn the power on.

- 7 When the preset time is reached, playback or recording will start.

The volume will increase gradually until it reaches the volume you were listening to before your system entered the timer stand-by mode.

In timer playback:

If you select CD or TAPE, the unit will enter the stand-by mode after the playback. If you select TUNER, it will enter the stand-by mode one hour after the timer playback starts.

In timer recording:

When the recording tape reaches its end, the timer recording will end, and the unit will enter the stand-by mode.

Timer and sleep operation (continued)

To reset or change the timer setting:

Perform "Timer playback or timer recording" from the beginning.

Note:

When performing timer playback or recording using another unit connected to the VIDEO/AUX IN sockets, select "VIDEO/AUX" in step 2 (page 27).

At this time, only this unit will be turned on or enter the power stand-by mode automatically. It will enter the power stand-by mode when the end of the recording tape is reached in timer recording or 1 hour after the playback starts in timer playback. However, the other unit will not be turned on or off.

■ Sleep operation

1 Play back the desired sound source.

2 Press the TIMER/SLEEP button repeatedly until "SLEEP" is displayed.



To change the sleep time:

Whilst the sleep time is displayed, press the TUNING/TIME (✓ or ^) button.

(Maximum: 3 hours - Minimum: 1 minute)

- 3 hours - 5 minutes → 5-minute intervals
- 5 minutes - 1 minute → 1-minute intervals

3 Press the MEMORY/SET button.

4 Your system will enter the power stand-by mode automatically after the preset time has elapsed.

The volume will be turned down 1 minute before the sleep operation finishes.

To cancel the sleep operation:

Press the ON/STAND-BY button whilst the sleep timer is set.

To confirm the remaining sleep time:

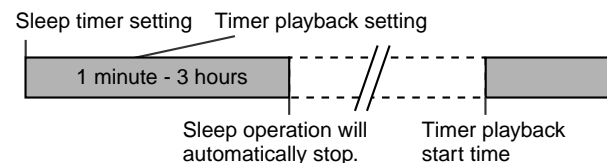
Press the TIMER/SLEEP button whilst the sleep timer is set. The remaining sleep time is displayed for about 5 seconds.

■ To use timer and sleep operation together

Example: To fall asleep and wake up to the same radio station You can play back the same source only (the function cannot be switched).

1 Set the sleep time (see left, steps 1 - 3).

2 Whilst the sleep timer is set, set the desired playback time (steps 4 - 6, page 27).



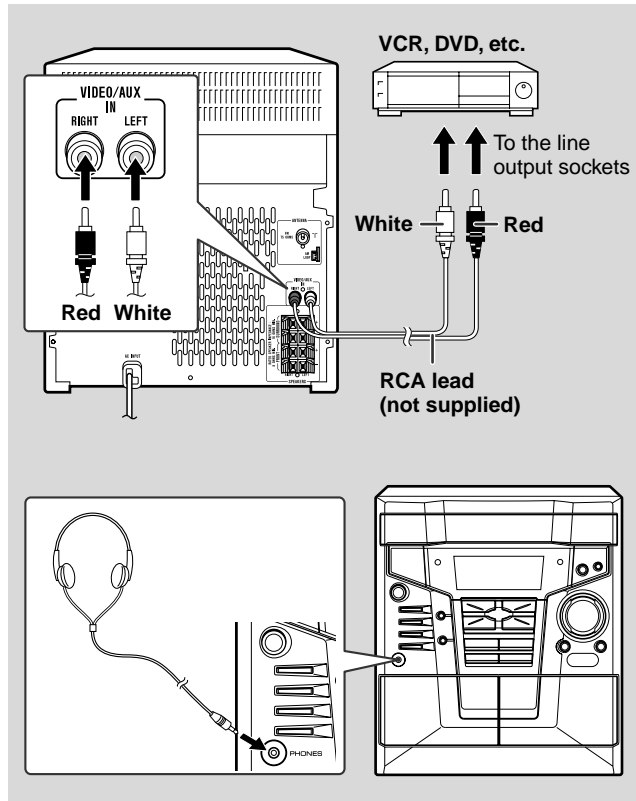
Caution:

When using the cassette deck, be sure the tape length is long enough to perform both functions. If you want to sleep and wake up listening to a tape, and the length of the tape is shorter than the sleep timer setting, timer playback will not be possible.

Enhancing your system

CD-E650E

The connection lead is not included. Purchase a commercially available lead as shown below.



■ Listening to the playback sounds from VCR, DVD, etc.

- 1 Use a connection lead to connect the VCR, DVD, etc. to the VIDEO/AUX IN sockets.

When using video equipment, connect the audio output to this unit and the video output to a television.

- 2 Press the ON/STAND-BY button to turn the power on.
- 3 Press the VIDEO/AUX button.
- 4 Play the connected equipment.

Note:

To prevent noise interference, place the unit away from the television.

■ To record on a tape

- 1 Insert a cassette in the TAPE 2 cassette compartment.
- 2 Press the VIDEO/AUX button.
- 3 Press the REC PAUSE (TAPE-2 ●II) button.
- 4 Press the ► / ◀ button.
- 5 Play the VCR, DVD, etc.

■ Headphones

- Before plugging in or unplugging the headphones, reduce the volume.
- Be sure your headphones have a 3.5 mm (1/8") diameter plug and are between 16 ohms and 50 ohms impedance. The recommended impedance is 32 ohms.
- Plugging in the headphones disconnects the speakers automatically. Adjust the volume using the VOLUME buttons.

Troubleshooting chart

Many potential problems can be resolved by the owner without calling a service technician.

If something is wrong with this product, check the following before calling your authorised SHARP dealer or service centre.

■ General

Symptom	Possible cause
<ul style="list-style-type: none"> The clock is not set to the correct time. 	<ul style="list-style-type: none"> Did a power failure occur? Reset the clock. (Refer to page 15.)
<ul style="list-style-type: none"> When a button is pressed, the unit does not respond. 	<ul style="list-style-type: none"> Set the unit to the power stand-by mode and then turn it back on. If the unit still malfunctions, reset it. (Refer to page 31.)
<ul style="list-style-type: none"> No sound is heard. 	<ul style="list-style-type: none"> Is the volume level set to "0"? Are the headphones connected? Are the speaker wires disconnected?

■ CD player

Symptom	Possible cause
<ul style="list-style-type: none"> Playback does not start. Playback stops in the middle or is not performed properly. 	<ul style="list-style-type: none"> Is the disc loaded upside down? Does the disc satisfy the standards? Is the disc distorted or scratched?
<ul style="list-style-type: none"> Playback sounds are skipped, or stopped in the middle of a track. 	<ul style="list-style-type: none"> Is the unit located near excessive vibrations? Is the disc very dirty? Has condensation formed inside the unit?

■ Tuner

Symptom	Possible cause
<ul style="list-style-type: none"> The radio makes unusual noises continuously. 	<ul style="list-style-type: none"> Is the unit placed near the TV or computer? Is the FM aerial or AM loop aerial placed properly? Move the aerial away from the AC power lead if it's located nearby.

■ Cassette deck

Symptom	Possible cause
<ul style="list-style-type: none"> Cannot record. 	<ul style="list-style-type: none"> Is the erase-prevention tab removed?
<ul style="list-style-type: none"> Cannot record tracks with proper sound quality. Cannot erase completely. 	<ul style="list-style-type: none"> Is it a normal tape? (You cannot record on a metal or CrO₂ tape.)
<ul style="list-style-type: none"> Sound skipping. 	<ul style="list-style-type: none"> Is there slack in the tape? Is the tape stretched?
<ul style="list-style-type: none"> Cannot hear treble. Sound fluctuation. 	<ul style="list-style-type: none"> Are the capstans, pinch rollers, or heads dirty?
<ul style="list-style-type: none"> Cannot remove the tape. 	<ul style="list-style-type: none"> If a power failure occurs during playback, the heads remain engaged with the tape. Do not open the compartment with great force.

■ Remote control

Symptom	Possible cause
<ul style="list-style-type: none"> The remote control does not operate. 	<ul style="list-style-type: none"> Is the AC power lead of the unit plugged in? Is the battery polarity correct? Are the batteries dead? Is the distance or angle incorrect? Does the remote control sensor receive strong light?

■ If trouble occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:

- Set the unit to the stand-by mode and turn the power on again.
- If the unit is not restored in the previous operation, unplug and plug in the unit, and then turn the power on.

Note:

If neither operation above restores the unit, clear all the memory by resetting it.

■ Clearing all the memory (reset)

- Press the ON/STAND-BY button to enter the power stand-by mode.
- Whilst pressing down the ► / ◄ button and the X-BASS/DEMO button, press the ON/STAND-BY button until "CLEAR AL" appears.



Caution:

This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

■ Condensation

Sudden temperature changes, storage or operation in an extremely humid environment may cause condensation inside the cabinet (CD pickup, tape heads, etc.) or on the transmitter on the remote control. Condensation can cause the unit to malfunction. If this happens, leave the power on with no disc (or cassette) in the unit until normal playback is possible (about 1 hour). Wipe off any condensation on the transmitter with a soft cloth before operating the unit.

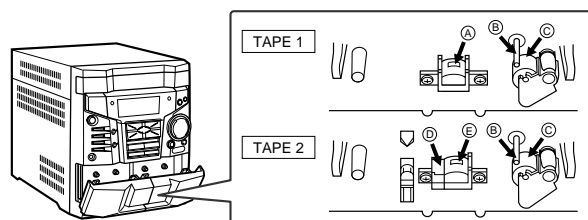
■ Before transporting the unit

- Press the ON/STAND-BY button to turn the power on.
- Press the CD button.
- Press the OPEN/CLOSE ▲ button to open the disc tray. Remove all CDs inserted in the unit.
- Press the OPEN/CLOSE ▲ button to close the disc tray. Make sure that "NO DISC" is displayed.
- Press the ON/STAND-BY button to enter the stand-by mode, and then unplug the AC power lead from the wall socket.

Maintenance

■ Cleaning the tape-handling parts

- Dirty heads, capstans or pinch rollers can cause poor sound and tape jams. Clean these parts with a cotton swab moistened with commercial head/pinch roller cleaner or isopropyl alcohol.
- When cleaning the heads, pinch rollers, etc., unplug the unit which contains high voltages.



- A Playback head
B Capstan
C Pinch roller
D Erase head
E Recording/Playback head

- After long use, the deck's heads and capstans may become magnetised, causing poor sound. Demagnetise these parts once every 30 hours of playing/recording time by using a commercial tape head demagnetiser. Read the demagnetiser's instructions carefully before use.

■ Cleaning the cabinet

Periodically wipe the cabinet with a soft cloth and a diluted soap solution, then with a dry cloth.

Caution:

- Do not use chemicals for cleaning (petrol, paint thinner, etc.). It may damage the cabinet finish.
- Do not apply oil to the inside of the unit. It may cause malfunctions.

Specifications

As part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

■ General

Power source	AC 230 - 240 V, 50 Hz
Power consumption	140 W
Dimensions	Width: 270 mm (10-5/8") Height: 305 mm (12") Depth: 342 mm (13-1/2")
Weight	7.2 kg (15.9 lbs.)

■ Amplifier

Output power	Front speakers: RMS: 120 W (60 W + 60 W) (10 % T.H.D.) RMS: 80 W (40 W + 40 W) (0.9 % T.H.D.) Surround speakers: RMS: 50 W (25 W + 25 W) (10 % T.H.D.) RMS: 40 W (20 W + 20 W) (0.9 % T.H.D.)
Output terminals	Front speakers: 8 ohms Surround speakers: 16 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 k ohms

■ CD player

Type	3-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ Tuner

Frequency range	FM: 87.5 - 108 MHz AM: 522 - 1,620 kHz
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■ Cassette deck

Frequency response	50 - 14,000 Hz (normal tape)
Signal/noise ratio	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.3 % (WRMS)

■ Front speaker

Type	2-way type speaker system 5 cm (2") tweeter 12 cm (4-3/4") woofer
Maximum input power	120 W
Rated input power	60 W
Impedance	8 ohms
Dimensions	Width: 200 mm (7-7/8") Height: 305 mm (12") Depth: 208 mm (8-3/16")
Weight	3.0 kg (6.6 lbs.)/each

■ Surround speaker

Type	8 cm (3-1/8") full-range speaker
Maximum input power	50 W
Rated input power	25 W
Impedance	16 ohms
Dimensions	Width: 160 mm (6-5/16") Height: 110 mm (4-3/8") Depth: 149 mm (5-7/8")
Weight	0.6 kg (1.3 lbs.)/each



MEMO





SHARP

WARRANTY

Consumer Electronic Products

Congratulations on Your Purchase!

This Sharp product is warranted against faults in materials and manufacture for a period of twelve (12) months from the date of original purchase.

If service is required during the warranty period, please contact your nearest Sharp Approved Service Centre. These repairs would be carried out at no charge to the owner, subject to the conditions specified herein.

The owner is responsible for any transportation and insurance costs if the product has to be returned for repair.

This warranty does not extend to accessories, defects or injuries caused by or resulting from causes not attributable to faulty parts or the manufacture of the product, including but not limited to, defect or injury caused by or resulting from misuse, abuse, neglect, accidental damage, improper voltage, liquid spillage, vermin infestation, software, or any alterations made to the product which are not authorised by Sharp.

Please retain your sales documentation, as this should be produced to validate a warranty claim.

This warranty is in addition to and in no way limits, varies or excludes any express and implied rights and remedies under any relevant legislation in the country of sale.



SHARP

**IMPORTANT
DO NOT RETURN THIS PAGE TO SHARP**

For your reference, please enter the particulars of your purchase below and retain, with your purchase documentation.

Model No. _____

Serial No. _____

Date of Purchase _____

Retailer _____

FOR LOCATION ENQUIRIES WITHIN

AUSTRALIA

REGARDING YOUR
LOCAL

SHARP APPROVED SERVICE CENTRE

VISIT OUR WEBSITE AT

www.sharp.net.au

OR CALL SHARP

LOCAL CALL 1 300 135 022

SHARP CORPORATION OF AUSTRALIA PTY. LIMITED
A.B.N. 40 003 039 405
1 Huntingwood Drive Blacktown NSW 2148

FOR PRODUCTS PURCHASED IN

NEW ZEALAND

CONTACT YOUR SELLING DEALER/RETAILER
OR CALL

SHARP CUSTOMER SERVICES

TELEPHONE: 09 - 573 0111

FACSIMILE: 09 - 573 0113

WEB: www.sharpnz.co.nz

SHARP CORPORATION OF NEW ZEALAND LIMITED
59 Hugo Johnston Drive, Penrose Auckland

IMPORTANT NOTICE: This warranty applies only to products sold in Australia & New Zealand

SHARP

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