

SHARP

MINI KOMPONENTEN SYSTEM
MINI CHAÎNE
SISTEMA MINI
MINI KOMPONENT SYSTEM
MINI SISTEMI
MINI SYSTEEM
MINI COMPONENT SYSTEM

MODELL MODELLO
MODÈLE MODEL
MODELO MODEL
MODELL

CD-S6470H

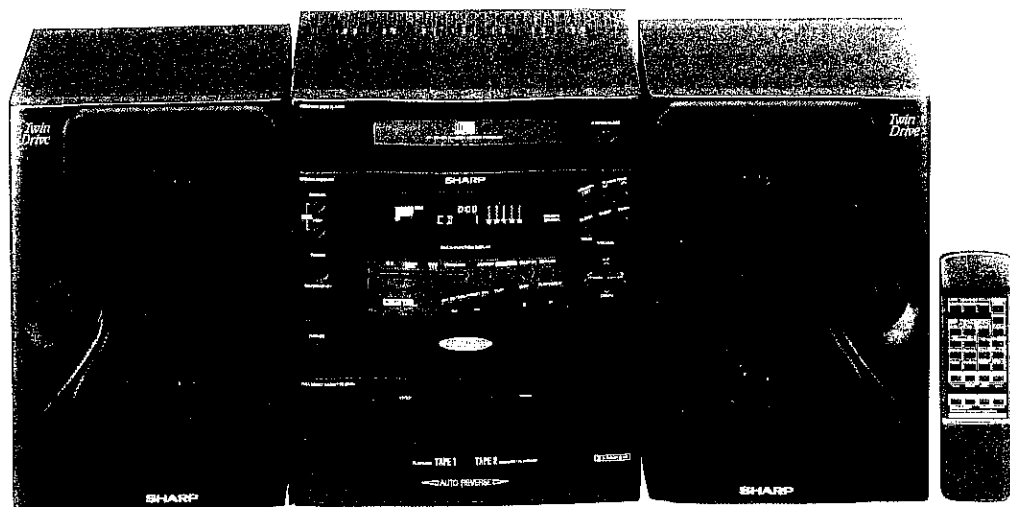
LAUTSPRECHER-SYSTEM
ENCEINTES ACOUSTIQUES
SISTEMA DE ALTAVOCES
HÖGTALARSYSTEM
CASSE ACUSTICHE
LUIDSPREKERSYSTEEM
SPEAKER SYSTEM

MODELL MODELLO
MODÈLE MODEL
MODELO MODEL
MODELL

CP-S6470H CP-S6470

BEDIENUNGSANLEITUNG
MODE D'EMPLOI
MANUAL DE MANEJO
BRUKSANVISNING

MANUALE DI ISTRUZIONI
GEBRUIKSAANWIJZING
OPERATION MANUAL



DEUTSCH

FRANÇAIS

ESPAÑOL

SVENSKA

ITALIANO

NEDERLANDS

ENGLISH

COMPACT
disc
DIGITAL AUDIO

Hinweis:

Das Design und die Spezifikationen der Lautsprecher-Systeme können in einigen Gebieten von den Angaben in der Bedienungsanleitung abweichen.

Note:

Dans certaines régions, la présentation et les caractéristiques techniques des enceintes peuvent différer de celles données dans le mode d'emploi.

Nota:

En algunas zonas, los diseños y especificaciones de los sistemas de altavoces pueden ser distintos de los mencionados en el manual de manejo.

Anmärkning:

I några fall kan högtalarsystemens utformning och specifikationer skilja sig från de som nämns i bruksanvisningen.

Nota:

In qualche zona i modelli e le caratteristiche dei sistemi degli altoparlanti possono differire da quelli menzionati nel manuale di istruzioni.

Opmerking:

In bepaalde landen zullen de geleverde luidsprekers mogelijk kwa ontwerp en technische gegevens iets verschillen van wat in deze handleiding is aangegeven.

Note:



In some areas, the designs and specifications of the speaker systems may differ from the contents mentioned in the operation manual.

**BESONDERE ANMERKUNGEN
REMARQUES SPÉCIALES
NOTAS ESPECIALES
SÄRSKILDA ANMÄRKNINGAR
NOTE PARTICOLARI
BIJZONDERE OPMERKINGEN
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<ul style="list-style-type: none"> ● Les lettres mises en parenthèses du numéro de modèle indiquent la couleur du produit concerné. Le fonctionnement et les caractéristiques ne varient pas selon la couleur du modèle.
<ul style="list-style-type: none"> ● Las letras entre corchetes contenidas en el número del modelo indican el color del producto solamente. El funcionamiento y las especificaciones no quedan afectados.
<ul style="list-style-type: none"> ● Bokstäver inom parentes i modellnummert anger endast produktfärg. Funktioner och tekniska data påverkas inte.
<ul style="list-style-type: none"> ● Le lettere tra parentesi contenute nel numero del modello indicano soltanto il colore del prodotto. Il funzionamento e le caratteristiche non subiscono mutamenti.
<ul style="list-style-type: none"> ● De in het modelnummer opgenomen letters tussen haakjes geven alleen de kleur van het toestel aan, en hebben op geen enkele wijze betrekking op de werking en technische gegevens van het apparaat.
<ul style="list-style-type: none"> ● The letters in brackets contained in the model number indicate the colour of the product only. Operation and specifications are unaffected.



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- Bei Einstellung des POWER-Schalters auf STAND-BY ist die Netzspannung immer noch im Gerät vorhanden.
Wenn die POWER-Schalter auf STAND-BY eingestellt und die Uhr angezeigt wird, kann das Gerät unter Verwendung der (Timer-Betriebsart oder) Fernbedienung in Betrieb gesetzt werden.

Warnung:

In diesem Gerät sind keine vom Benutzer wartbaren Teile vorhanden. Niemals Abdeckungen entfernen, außer wenn Sie dafür qualifiziert sind. In diesem Gerät sind gefährliche Spannungen vorhanden. Vor Ausführung von irgendwelchen Kundendienstarbeiten oder bei längerer Nichtverwendung des Gerätes stets den Netzstecker aus der Netzsteckdose ziehen.

- Lorsque le commutateur POWER est réglé à la position STAND-BY, l'appareil est toujours sous tension.
Lorsque le commutateur POWER se trouve sur la position STAND-BY et que l'horloge est affichée, l'appareil est prêt à fonctionner par la (minuterie ou la) télécommande.

Avertissement:

Cet appareil contient des pièces non réparables par l'utilisateur. Personne non qualifiée n'enlèvera jamais les couvercles. L'appareil contenant des organes portés à haute tension, débrancher l'appareil avant toute réparation ou en période de non-utilisation.

- Cuando el interruptor POWER está puesto en la posición STAND-BY, todavía hay tensión dentro del aparato.
Cuando el interruptor POWER está puesto en la posición STAND-BY y el reloj se enciende, el aparato puede ponerse en funcionamiento utilizando (el modo del temporizador) el controlador remoto.

Advertencia:

Tenga en cuenta que dentro de este aparato no hay piezas que pueda reparar. No quite nunca las tapas a menos que se esté cualificado para hacerlo. Este aparato tiene en su interior tensiones peligrosas. Desenchufe siempre la clavija de la red del tomacorriente antes de realizar cualquier servicio de mantenimiento y cuando no se use el aparato durante un largo período de tiempo.

- När POWER-omkopplaren är i läge STAND-BY, finns nätspänning i apparaten.
Med POWER i läge STAND-BY och när klocktid visas, kan apparaten slås på med (timerfunktion eller) fjärrkontrollen.

Varning:

Apparaten innehåller inga delar som kan åtgärdas av kunden. Höljet får endast öppnas av kvalificerad personal. Apparaten innehåller farliga spänningar. Stickkontakten ska därför dras ut från nätuttaget före reparationsarbeten och bör dras ut om apparaten inte ska användas på mycket länge.

- Når POWER-kontakten er sat på STAND-BY positionen, er der stadig netspænding tilstede i apparatet.
Når POWER-kontakten er sat i STAND-BY-position, og uret vises, kan apparatet startes v.h.j.a. (timer-funktionen eller) fjernbetjeningen.

Advarsel:

Apparatet indeholder ingen dele, der kan repareres af brugeren selv. Fjern aldrig kabinettet med mindre De er kvalificeret hertil. Apparatet indeholder farlig strømspænding. Træk altid stikket ud af stikkontakten før der foretages reparationer, eller hvis apparatet ikke er i brug i længere tid.

- Quando l'interruttore POWER si trova in posizione STAND-BY, all'interno dell'apparecchio c'è ancora la corrente.
Se l'interruttore POWER si trova nella posizione STAND-BY e l'orologio è visualizzato, l'unità può venire accesa (con il modo timer o) con il telecomando.

Avvertenza:

L'apparecchio non contiene parti riparabili dall'utente. Non togliere mai i coperchi, a meno di non essere qualificati per farlo. All'interno dell'apparecchio ci sono tensioni pericolose, per cui si deve sempre staccare la spina del cavo d'alimentazione dalla presa di corrente prima di qualsiasi intervento di manutenzione e quando non si usa l'apparecchio per un lungo periodo di tempo.

- Wanneer de POWER-schakelaar in de STAND-BY stand staat, loopt er nog steeds stroom (netspanning) rond in het toestel.
Wanneer de POWER schakelaar in de STAND-BY staat en de klok in het display oplicht, dan kan het toestel ingeschakeld worden via de afstandsbediening (of timerfunctie).

Waarschuwing:

Dit toestel bevat geen door de gebruiker te repareren onderdelen. Verwijder de behuizing nooit tenzij u deskundig bent op dit gebied. In het toestel loopt een gevaarlijke spanning rond; haal de stekker altijd uit het stopcontact alvorens onderhoud uit te voeren of wanneer het toestel voor langere tijd niet gebruikt wordt.

- When the POWER switch is set at STAND-BY position, mains voltage is still present inside the unit.
When the POWER switch is set at STAND-BY position and the clock is displayed, the unit may be brought into operation by use of (timer mode or) remote control.

Warning:

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.

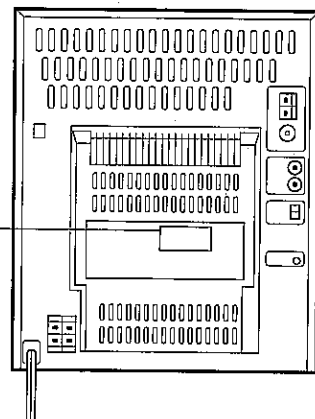
DENNA APPARAT ÄR ANSLUTEN TILL 230 V VÄXELSTRÖM NÄR STICKPROPPEN ÄR INSKJUTEN I VÄGGUTTAGET. FÖR ATT FULLSTÄNDIGT KOPPLA IFRÅN APPARATEN, V.G. DRAG UT STICKPROPPEN.

<ul style="list-style-type: none"> ● This apparatus complies with the requirements of EN 55014, 02.1987.
<ul style="list-style-type: none"> ● Dieses Gerät stimmt mit den Bedingungen der EN 55014, 02.1987.
<ul style="list-style-type: none"> ● Cet appareil répond aux spécifications de la EN 55014, 02.1987.
<ul style="list-style-type: none"> ● Dit apparaat voldoet aan de vereiste EN 55014, 02.1987.
<ul style="list-style-type: none"> ● Apparatet opfylder kravene i EN 55014, 02.1987.
<ul style="list-style-type: none"> ● Questo apparecchio é stato prodotto in conformità alle EN 55014, 02.1987.
<ul style="list-style-type: none"> ● Este aparelho responde às especificações da EN 55014, 02.1987.
<ul style="list-style-type: none"> ● Este aparato cumple las especificaciones de la EN 55014, 02.1987.
<ul style="list-style-type: none"> ● Αυτή η συσκευή τηρεί τις προδιαγραφές της EN 55014, 02.1987.

<ul style="list-style-type: none"> ● Vorsicht: Dieses Produkt enthält einen Niederleistungslaserapparat. Um andauernde Sicherheit zu erhalten, niemals die Abdeckung entfernen oder versuchen, die Innenseite des Produktes zu berühren. Wenden Sie sich für alle Wartungsarbeiten an berechtigten Fachhändler.
<ul style="list-style-type: none"> ● Attention: Ce produit contient un dispositif émettant un laser à faible puissance. Pour assurer la sécurité, ne pas enlever le couvercle ni accéder à l'intérieur du produit. Pour toute réparation, s'adresser à une personne qualifiée.
<ul style="list-style-type: none"> ● Atención: Este producto contiene un dispositivo láser de baja potencia. Para asegurar la seguridad continua, no extraiga la cubierta ni acceda al interior del producto. Para todas las operaciones de reparación, consulte a una persona cualificada.
<ul style="list-style-type: none"> ● Let op: Dit toestel bevat een zwakke lasereenheid. Uit veiligheidsoverwegingen mag de gebruiker zelf daarom nooit afdekkingen of een gedeelte van de behuizing verwijderen. Laat alle onderhouds- en reparatiewerkzaamheden over aan een bevoegde vakman.
<ul style="list-style-type: none"> ● Caution: This product contains a low power laser device. To ensure continued safety do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

CLASS 1 LASER PRODUCT
APPAREIL À LASER DE CLASSE 1
PRODUCTO LASER DE CLASE 1

LASER KLASSE 1
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT



DECLARACION DE CONFORMIDAD DEL FABRICANTE

El que suscribe : Hidetaka Yoshioka
En nombre de SHARP CORPORATION, Communication & Audio
Systems Group.
Iida Hachihonmatsu-cho, Higashihiroshima-shi,
Hiroshima, 739-01 Japan.

Declara bajo su propia responsabilidad, que el :

Equipo : SISTEMA MINI
Fabricado en : MALAYSIA
por : SHARP ROXY CORPORATION (M) SDN. BHD.
Marca : SHARP
Modelo : CD-S6470H

Objeto de esta declaración, cumple con la normativa siguiente :

— Anexo V del reglamento sobre Perturbaciones Radioeléctricas aprobado en el R.D. 138/89.

Hecho en : Hiroshima, Japan
7-4-1994



Hidetaka Yoshioka

Dept. General Manager
Quality and Reliability
Control Center.
Communication & Audio
Systems Group,
Sharp Corporation.

ESTE APARATO TIENE LOS ELEMENTOS ANTIPARASITARIOS PARA CUMPLIR CON LOS LIMITES ESTABLECIDOS SEGUN EL R.D. 138/89.

LAS POSICIONES PARA SU LOCALIZACION SON
C972-C976 EN PLACA QPWB0072AWZZ

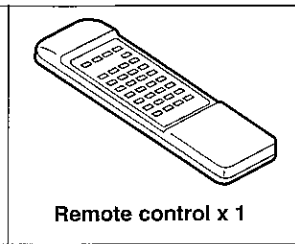
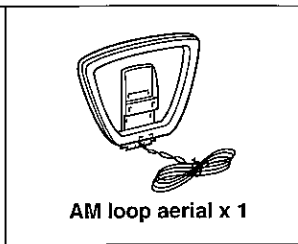
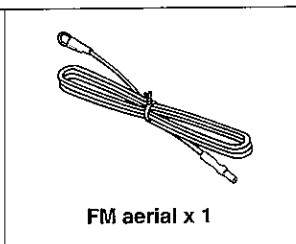
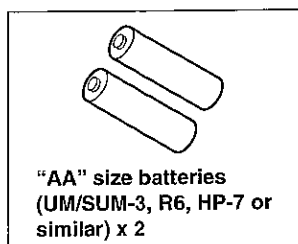
ENGLISH

● Thank you for purchasing this SHARP product.

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ACCESSORIES



Note:

Parts and equipment mentioned in this operation manual other than those shown above are not included.

PRECAUTIONS

- Do not use oil, solvents, petrol, paint thinners or insecticides on the unit.
- Do not expose the unit to moisture, to temperatures higher than 60°C (140°F) or to extreme low temperatures.
- Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic/electrical equipment (home computers, facsimiles, etc.) which generates electrical noise.
- Hold the AC power plug by the head when removing it from the AC socket, since pulling the lead can damage internal wires.
- Remove the AC power plug from the AC socket before cleaning the heads, pinch rollers, etc. This unit contains dangerous voltages. Do not remove the outer cover, as this may result in electric shock. Refer internal service to your local SHARP service facility.
- Use the unit on a firm, level surface free from vibration, and do not put anything on the unit.
- If the unit does not work properly whilst in use, set the POWER switch to STAND-BY and then to ON again.
- If a lightning storm is in the area, it is safest if the AC power lead is disconnected from the AC socket.

Warning:

The voltage used must be the same as that specified on this unit. Using this product with a higher voltage 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 a combination of speaker efficiency, location and various other factors.

It is advisable to avoid exposure to high levels of sound, which occur when turning on the unit with the volume control setting at high, or when continually listening at high levels.

Condensation

Sudden temperature changes and storage or operation in an extremely humid environment may cause condensation inside the cabinet.

Condensation can cause the unit to malfunction.

Follow the procedure below to eliminate condensation.

● CD pickup

Leave the power on with no disc in the unit until normal playback is possible (about 1 hour).

● Tape head

Leave the power on with no cassette in the unit until normal playback is possible (about 1 hour).

Note:

If condensation forms on the tape head, foreign matter may accumulate on it during use.

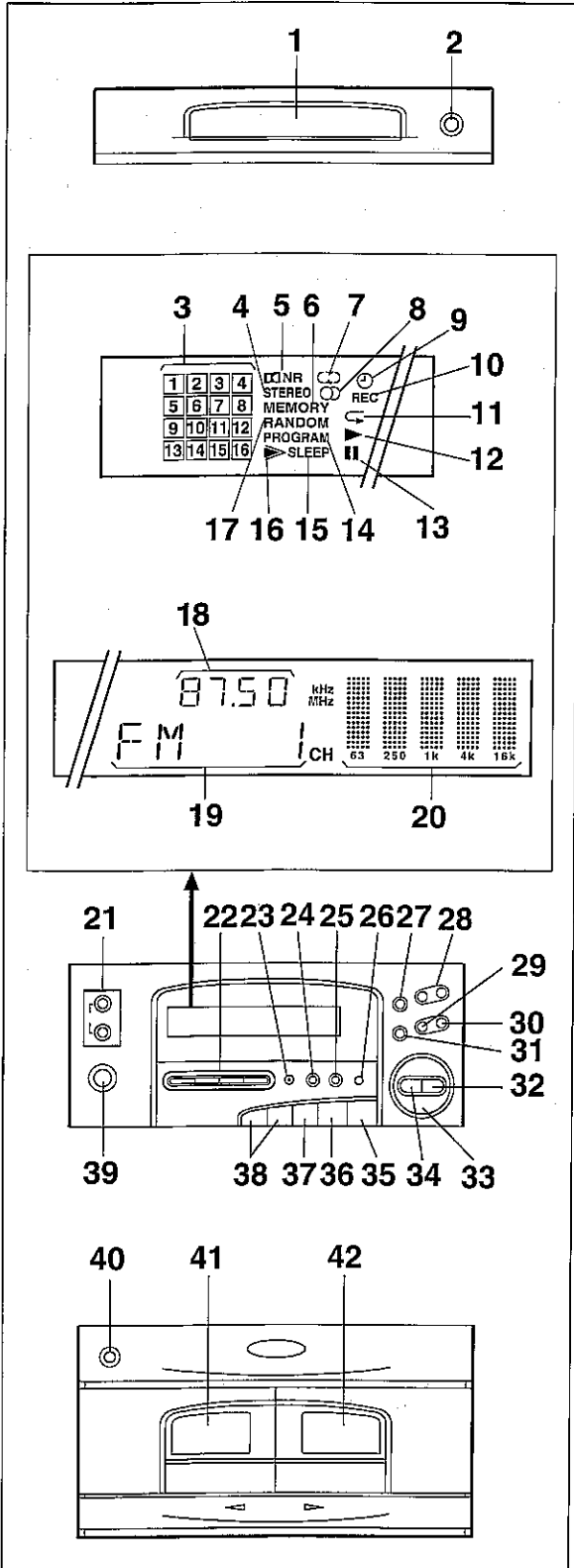
● Remote control

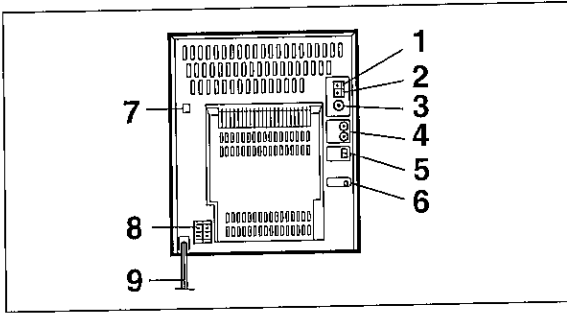
Wipe off any condensation on the transmitter LED with a soft cloth before operating the unit.

NAMES OF CONTROLS AND INDICATORS

■ Front panel

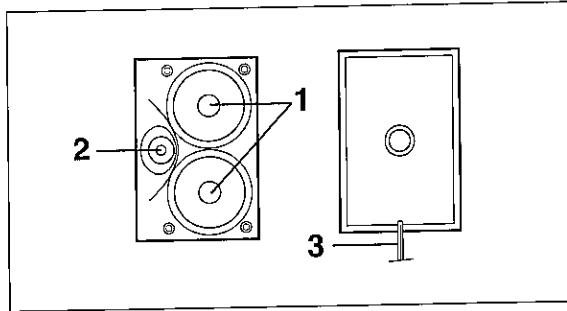
1. Disc Tray
2. Open / Close Button:
3. Music Schedule Indicators
4. FM Stereo Mode Indicator
5. Dolby NR Indicator
6. Memory Indicator
7. Reverse Mode Indicator:
8. FM Stereo Indicator:
9. Timer Indicator:
10. Timer Record Indicator
11. CD Repeat Indicator:
12. CD Play Indicator:
13. CD Pause Indicator:
14. Programme Indicator
15. Sleep Indicator
16. Music Schedule Over Indicator:
17. Random Play Indicator
18. Frequency / CD Counter / Time / Sleep Time Indicator
19. Function / CD Track / Preset Channel / Volume Indicator
20. Spectrum Analyzer / Balance Indicator
21. One Touch Editing Buttons
22. Function Selector Buttons
23. Extra Bass Indicator: X-BASS
24. Record Pause Button and Indicator
25. Dolby NR Button
26. CD Pause Button
27. Memory / Set Button
28. Tuning and Time Up/Down Buttons:
29. Sleep Button
30. Timer Button
31. Clock / Demo Mode Button
32. Equalizer Selector Button
33. Volume Up/Down Buttons:
34. Extra Bass Button: X-BASS
35. CD Play / CD Repeat / Tape Play (Forward) Button:
36. CD / Tape Stop Button:
37. Tape Play (Reverse) Button:
38. CD Track Up/Down, Tape Fast Wind and Tuner Preset Up/Down Buttons:
39. Power Switch
40. Headphones Socket
41. TAPE 1) Cassette Compartment
42. TAPE 2) Cassette Compartment





■ Rear panel

1. AM Aerial Terminal
2. Aerial Earth Terminal
3. FM 75 ohms Aerial Socket
4. Video/Auxiliary (Audio Signal) Input Sockets
5. Beat Cancel Switch
6. Reset Switch
7. CD Digital Output Socket
8. Speaker Terminals
9. AC Power Lead



■ Speaker section

1. Woofer
2. Tweeter
3. Speaker Lead

Note:

In some areas, the designs and specifications of the speaker systems may differ from the contents mentioned in the operation manual.

■ Remote control

1. Remote Control Transmitter LED
2. Balance Control Buttons

● Tuner Control Buttons

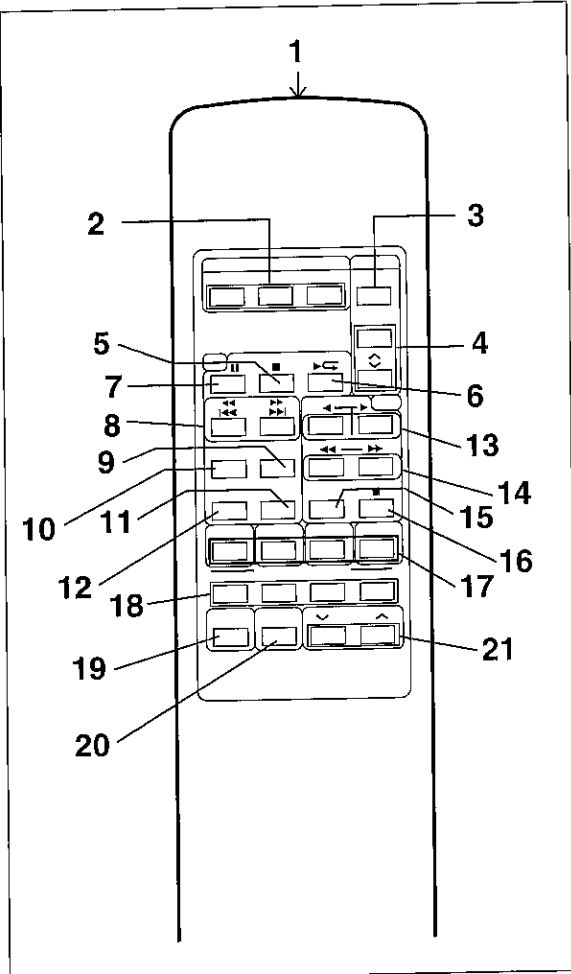
3. Band Selector Button
4. Preset Up/Down Buttons: $\sim\sim$

● CD Control Buttons

5. Stop Button: ■
6. Play/Repeat Button: $\blacktriangleright \square$
7. Pause Button: \parallel
8. Track Up/Down, Cue/Review Buttons: $\blacktriangleleft \blacktriangleright$
9. Clear Button
10. Memory Button
11. Random Play Button
12. Call Button

● Tape Control Buttons

13. Forward/Reverse Play Buttons: $\blacktriangleleft / \blacktriangleright$
14. Fast Wind Buttons: $\blacktriangleleft / \blacktriangleright$
15. Reverse Mode Selector Button
16. Stop Button: ■
17. Function Selector Buttons
18. Equalizer Mode Selector Buttons
19. Power Button
20. Extra bass Button: X-BASS
21. Volume Up/Down Buttons: $\sim\sim$



PREPARATION FOR USE

- Unplug the AC power lead from the AC socket before connecting or disconnecting any wire.

■ Aerial connection

(1) Supplied FM aerial

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

(2) Supplied AM loop aerial

Connect the AM loop aerial wire to the AM and GND terminals.

Position the AM loop aerial for optimum reception.

Place the AM loop aerial in a convenient location or install it on the wall with screws (not supplied).

Notes:

- When static is still heard even after adjusting the position of the AM loop aerial, try reversing the wires.
- To prevent unnecessary interference to radio reception do not place the AM loop aerial and FM aerial near to the power lead or the unit as it contains digital electronic circuitry.

(3) External FM aerial

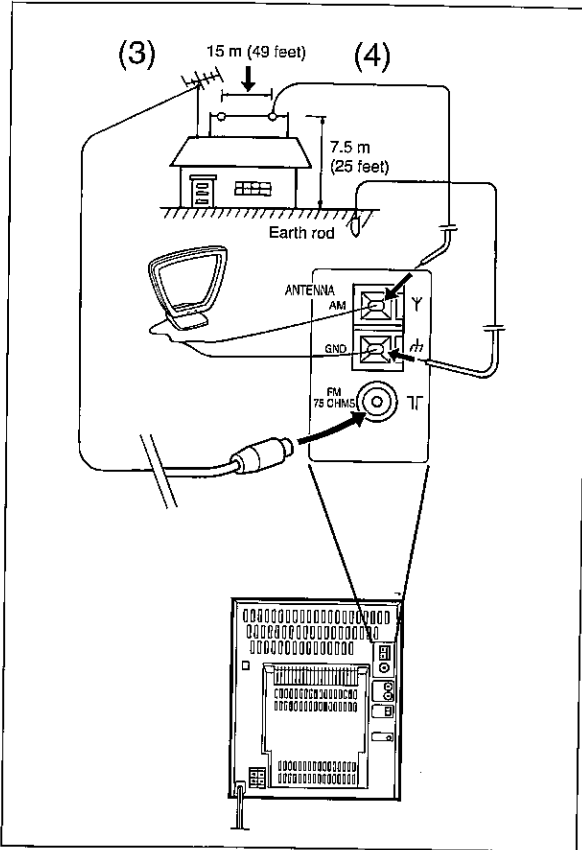
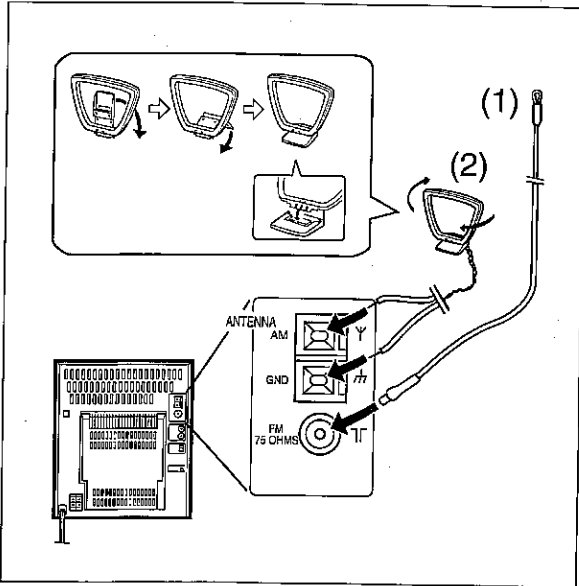
Use an external FM aerial if you need better reception. Consult your dealer.

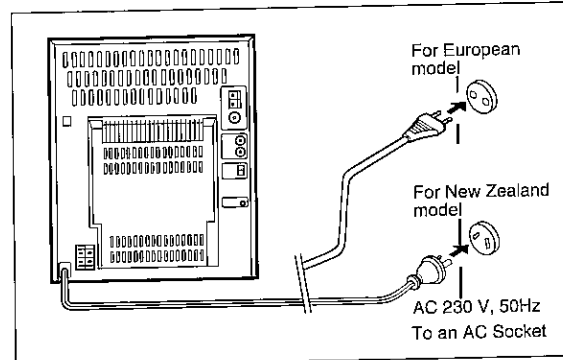
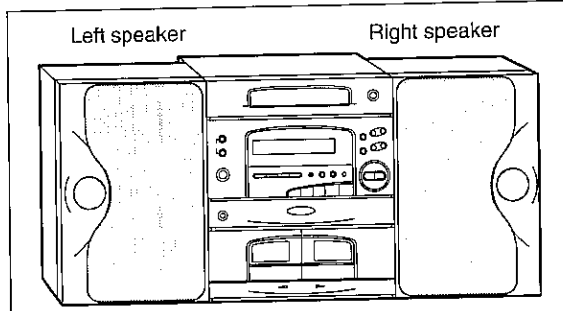
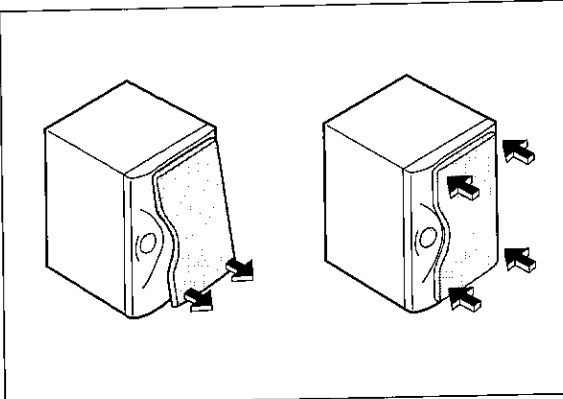
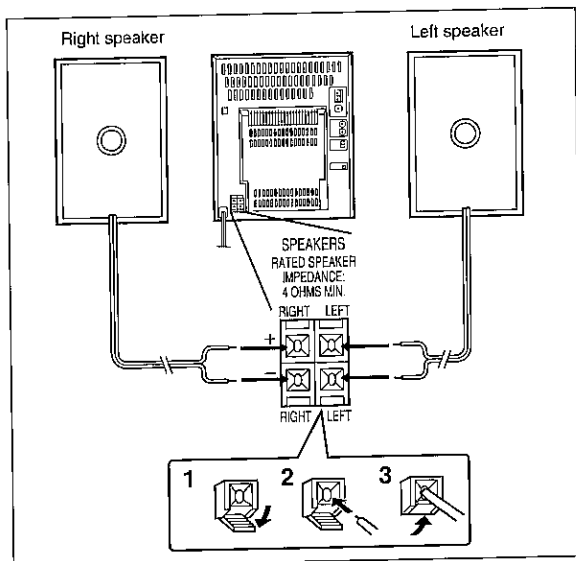
(4) External AM aerial

Use an external AM aerial if you need better reception. Consult your dealer.

Note:

When using an external AM aerial, be sure to keep the wire of the AM loop aerial connected.





■ Speaker connection

Note:
In some areas, the designs and specifications of the speaker systems may differ from the contents mentioned in the operation manual.

Connect each speaker wire to the SPEAKER terminals as shown.
Use speakers with an impedance of 4 ohms or more, since lower impedance speakers can damage the unit.

■ Cautions:

- Connect the wire with the line (or black wire) to the minus (-) terminal and the plain (or red) wire to the plus (+) terminal.
- Do not mistake the right channel for the left channel when connecting the speakers to the unit.
- Do not let the bare speaker wires touch each other as this could damage the amplifier and/or speakers.

■ Removing the speaker grilles

- 1 Remove the lower part of the speaker grille first.
- 2 Remove the upper part of the speaker grille.

Caution:
Whilst the speaker grilles are removed, the speaker diaphragms are exposed. Make sure nothing comes into contact with the speaker diaphragms.

■ Mounting the speaker grilles

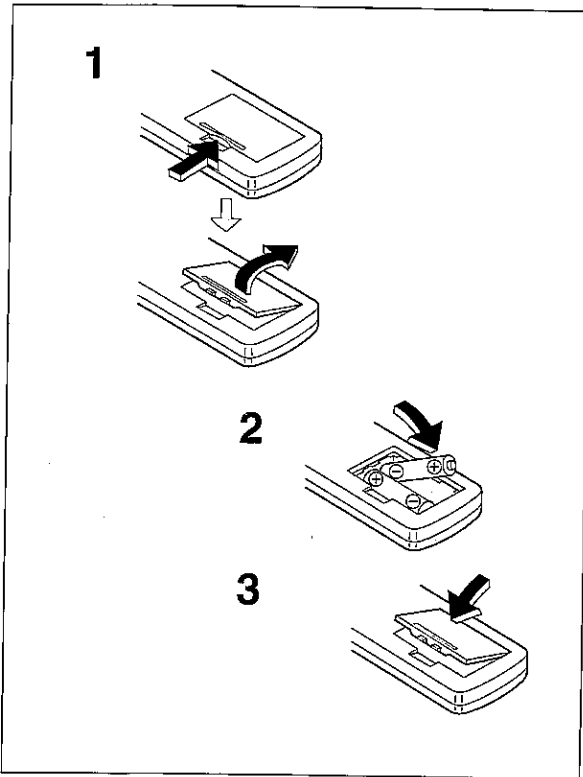
Fit the four posts on the speaker grille into the mounting holes and push them lightly with the palm of your hand to secure.

■ Placing the speaker system

In this speaker system, the tweeter and the woofer are positioned differently for the left and right speakers. For best performance, place the speakers according to the diagram to the left.

■ Connecting the AC power lead

- After connecting the speakers, plug the AC power lead into a convenient AC socket.
- Unplug the AC power lead from the AC socket if the unit will not be used for a prolonged period of time.



■ Loading the batteries for the remote control

- 1 Remove the battery compartment cover.
- 2 Insert 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar) into the battery compartment.
 - When inserting the batteries, push them towards the ⊖ battery terminals.
 - Placing the batteries the wrong way round can cause the unit to malfunction.
- 3 Replace the battery compartment cover.

Battery removal:

- Push batteries towards the ⊖ battery terminals and remove them.

Precautions for battery use:

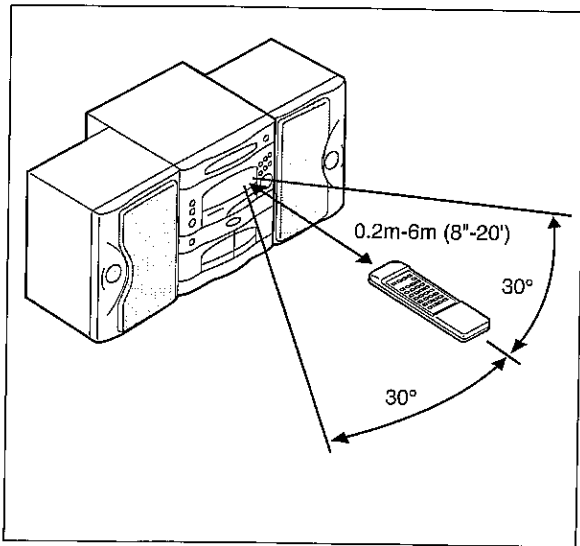
- Insert the batteries according to the direction indicated in the battery compartment.
- Replace all of the batteries with new ones at the same time.
- Remove the batteries if weak or if the unit is not in use for long periods to prevent potential damage due to battery leakage.
- Don't mix normal batteries with rechargeable batteries.
- Don't mix old and new batteries.

■ Proper use of the remote control

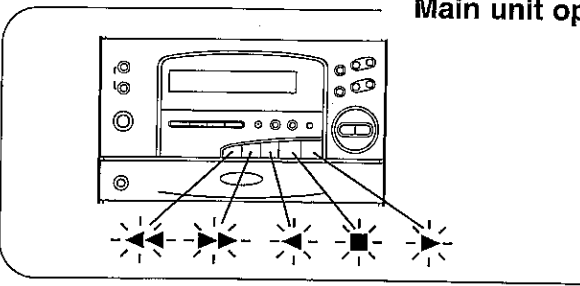
Aim the remote control at the remote control sensor within 60°, with no obstacles, and operate as shown.

Notes concerning use:

- Replace the batteries if the effective control distance decreases or operation becomes erratic.
- Periodically clean the transmitter LED on the remote control and the sensor on the main unit with a soft cloth.
- Exposing the sensor on the main unit to strong light can interfere with operation. Change the lighting or the direction of the unit.
- Keep the remote control away from moisture, excessive heat, shock and vibrations.
- The remote control's usable range is between 0.2m (8") and 6m (20') away from the sensor.



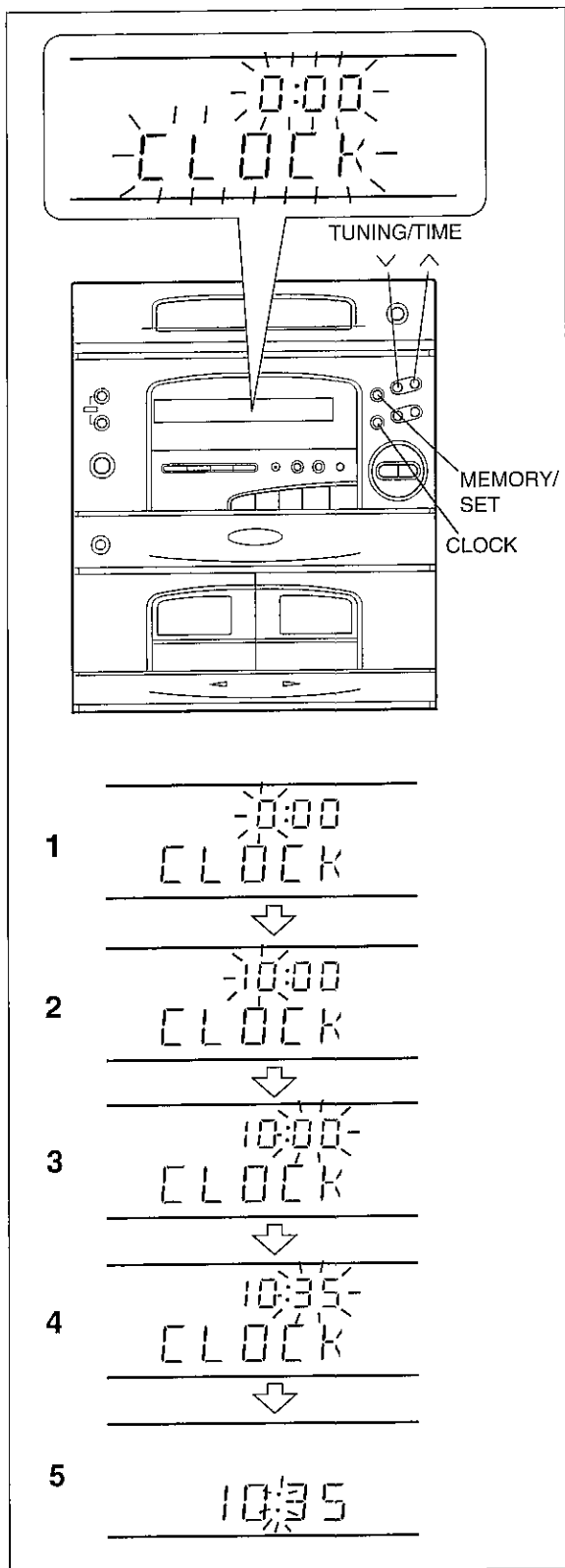
Main unit operating buttons:



The main unit operating buttons are the buttons which are commonly used by all of the CD/Tape/Radio functions. There are operating buttons which cannot be used according to the function that is selected.

When a button indicator is lit, the corresponding button can be used.

SETTING THE CLOCK



- When the AC power lead is first connected, the unit will indicate "0:00 CLOCK".

- 1 Press the MEMORY/SET button.
- 2 Press the TUNING/TIME (∨ or ∧) button to adjust the hour.
- Press the TUNING/TIME (∨ or ∧) button once to advance the time by one hour. Hold it down for more than 0.5 seconds to advance the time continuously.
- 3 Press the MEMORY/SET button.
- 4 Press the TUNING/TIME (∨ or ∧) button to adjust the minutes.
- Press the TUNING/TIME (∨ or ∧) button once to advance the time by one minute. Keep the button pressed for more than 0.5 seconds to make the time change in 5 minute intervals.
- The hour setting will not advance, even if the minutes setting changes from "59" to "00".
- 5 Press the MEMORY/SET button.
- The clock will start operating from "0" seconds (seconds are not displayed.)

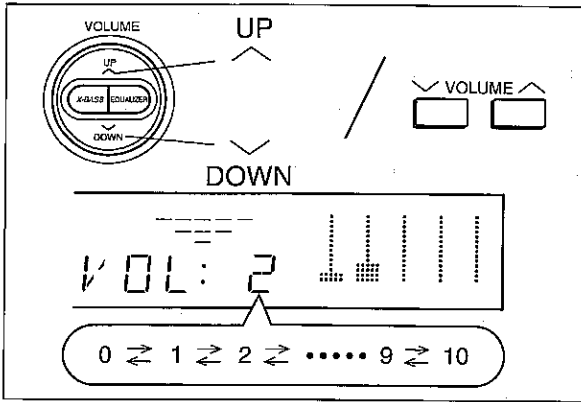
Note:

- In the event of power failure or when the AC power lead is disconnected, the clock display will go out. When the AC power supply is restored, the clock display will flash on and off to indicate that the time must be reset.

To change the clock time

- 1 Press the CLOCK button. Then, within 5 seconds, press the MEMORY/SET button.
- 2 Perform steps 2 - 5 above.

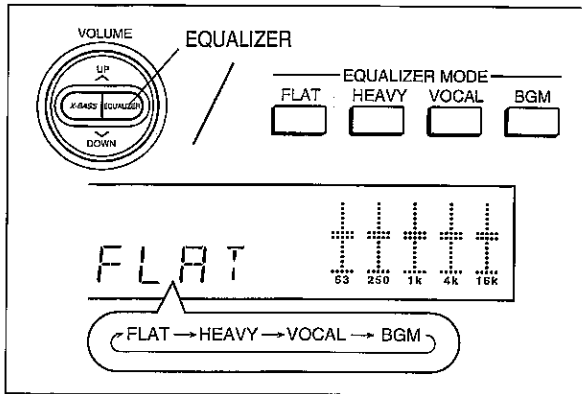
SOUND CONTROL



■ Volume

[Main unit/remote control operation]

Press the VOLUME \wedge (UP) button to increase the volume and the VOLUME ∇ (DOWN) button to decrease the volume.



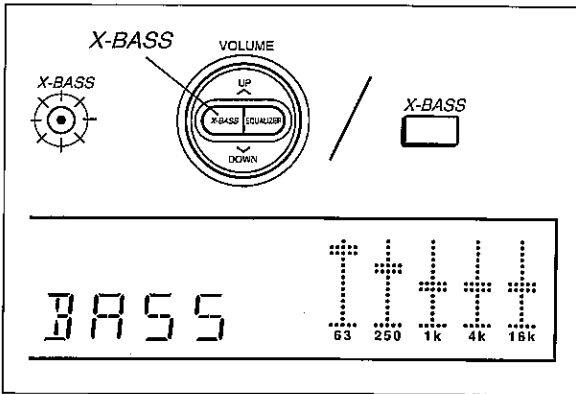
■ Pre-programmed equalizer

[Main unit operation]

When the EQUALIZER button is pressed, the current mode settings will be displayed. To change to a different mode, press the EQUALIZER button repeatedly.

[Remote control operation]

Select the mode you want using the EQUALIZER MODE button.



■ Extra-bass (X-BASS)

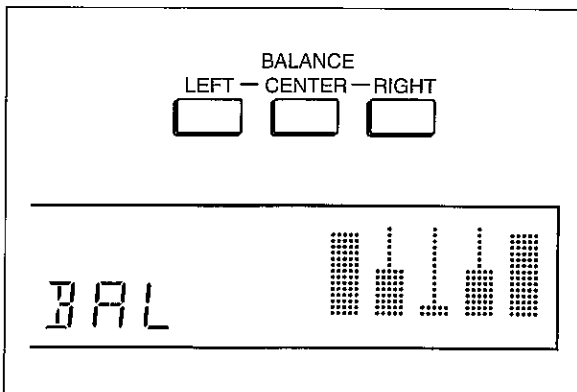
[Main unit/remote control operation]

Press the X-BASS button to emphasise the bass region of the frequency spectrum.

- The X-BASS indicator will light up.

Press the X-BASS button again to cancel the extra bass mode.

- The X-BASS indicator will go out.



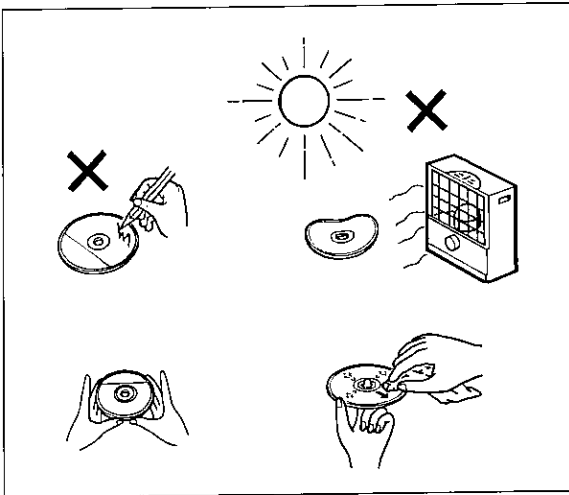
■ Balance

[Remote control operation]

Press the BALANCE LEFT button to decrease the level of the right speaker, and press the BALANCE RIGHT button to decrease the level of the left speaker.

When the BALANCE CENTER button is pressed, the balance will move to the centre position automatically.

COMPACT DISC OPERATION



■ 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. Signals are read from the non-label side. 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.

■ CD playback

- 1 Set the POWER switch to ON.
- 2 Press the CD button.
- 3 Press the OPEN/CLOSE button to open the disc tray.
- 4 Place a disc on the tray, label side up.
 - Be sure to place the 8 cm (3") disc in the middle of the tray.

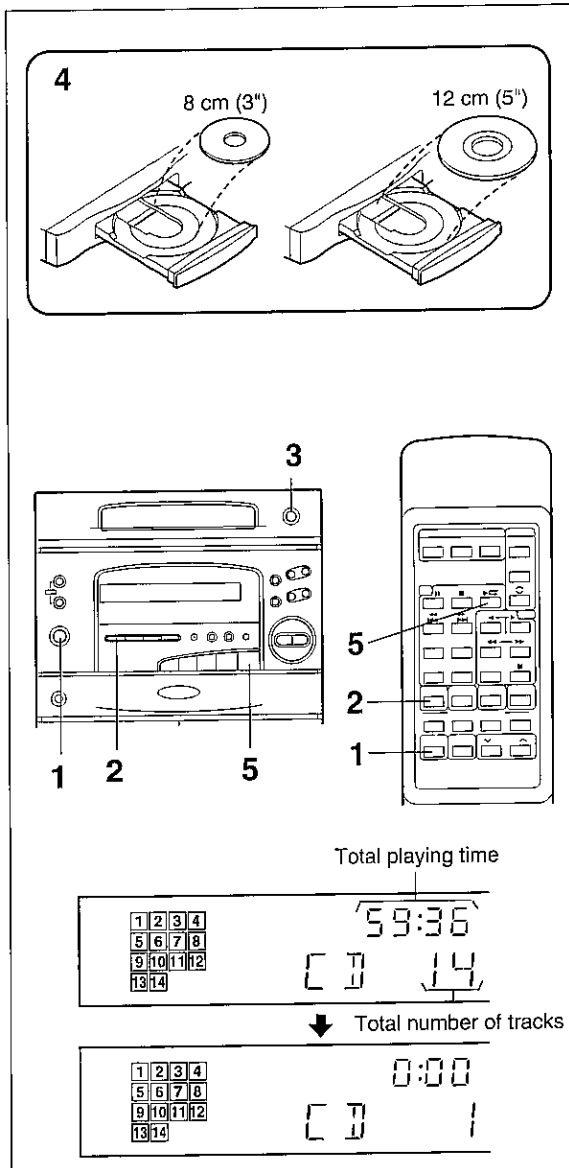
Caution:

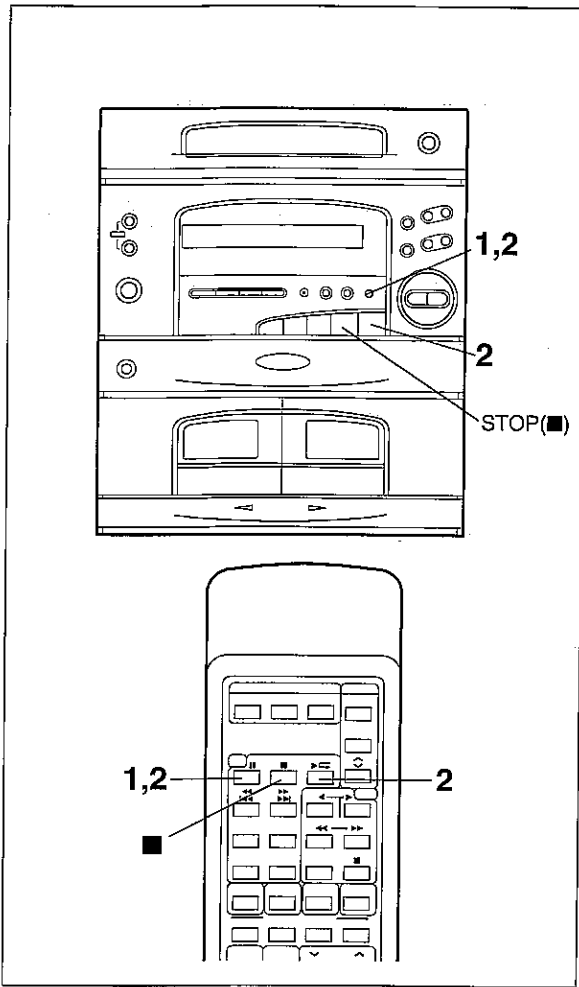
Do not stack CDs in the tray. This could damage the player and the CDs.

- 5 Press the PLAY/REPEAT (▶◀) button to close the disc tray and begin playback from track 1.
 - The "▶" indicator will appear and playback will begin.
 - The music schedule will be displayed only for the number of tracks on the disc.
 - If the CD contains more than 17 tracks, the "▶" indicator will light up.




Note:

- When a disc is placed on the disc tray and the disc tray is closed by either pressing the OPEN/CLOSE button or lightly pushing on the front of the disc tray, the total number of tracks and the total playing time will be displayed for several seconds.





To interrupt playback:

- 1** Press the CD PAUSE (CD ) button.
 - The "II" indicator will light up.
- 2** Press the CD PAUSE (CD ) or PLAY/REPEAT () button to resume playback from the same point.

To stop playback:

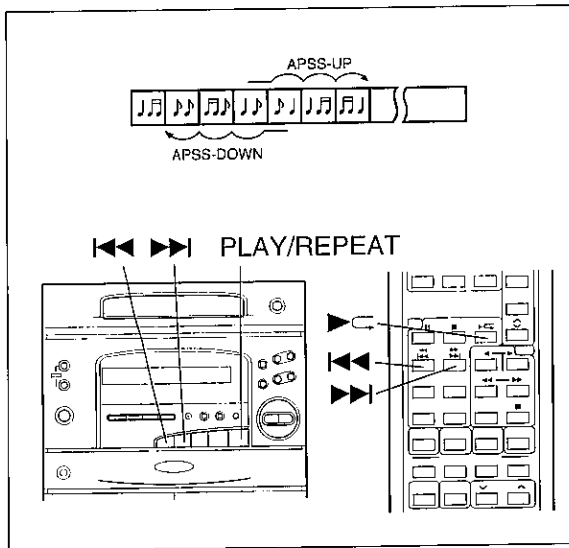
Press the STOP () button.

To switch the unit off after use:

Set the POWER switch to STAND-BY.

Cautions:

- Do not place two CDs.
- Do not push the disc tray whilst it is moving.
- If power fails whilst the disc tray is open, wait until the power supply returns or gently push the disc tray manually to close it.
- If the disc tray is stopped forcibly, "ERROR" is displayed and the unit will not function. When this occurs, turn off the POWER switch and turn it on again.
- If TV or radio interference occurs during CD operation, move the unit away from the TV or radio.
- If the disc is damaged, dirty, or loaded upside down, the display will show the following indication:
 - "ERROR" is displayed.
Clean, replace or reload the disc properly.



■ APSS (Auto Program Search System)

APSS automatically locates the beginning of any track.

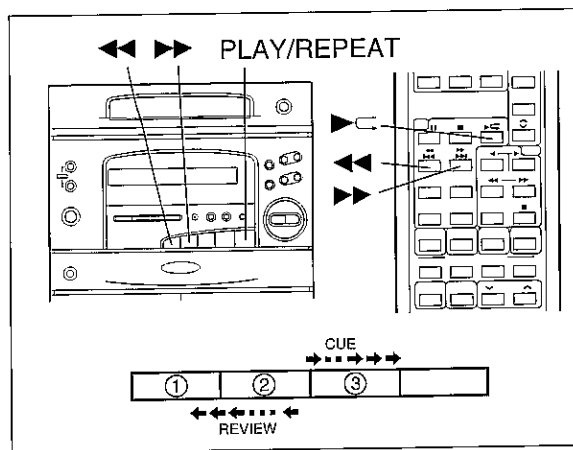
To listen to the track being played again:
Press the **⏮** button during playback.

To move to the beginning of the next track:
Press the **⏭** button during playback.

- To skip a number of tracks at one time, press the **⏮** or **⏭** button repeatedly until the desired track number is shown.
- To start playing at a desired track, press the **⏮** or **⏭** button whilst in the stop mode to select the track number, and then press the **▶◁** button.

Note:

APSS will move forward or backward from any point on the disc before playback begins. It will not move forward during playback of the final track.

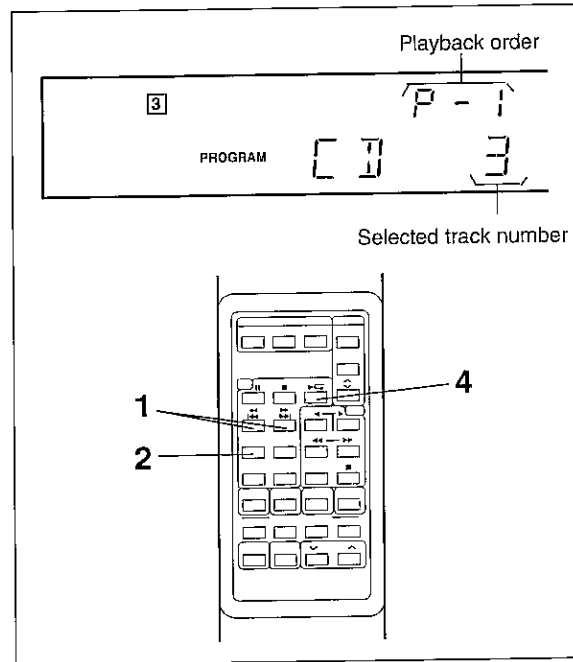


■ Cue and review

- 1 Load the CD and begin playback.
- 2 Hold the **⏭** button down for audible fast forward, and hold the **⏮** button down for audible fast reverse.
- 3 Normal playback will resume when the **⏮** or **⏭** button is released.

Note:

● If the end of the disc is reached whilst cueing, the "End" indicator lights up and CD operation is paused. Press the **⏮** button for fast reverse or press the **■** button to stop CD operation.



■ APMS

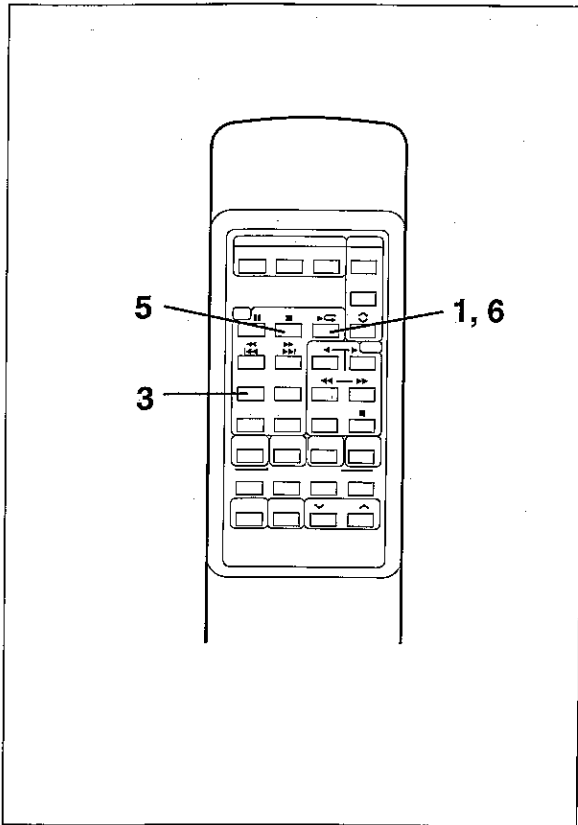
(Automatic Programmable Music Selector)

[Remote control operation]

You can play back the tracks on the CD in any order desired. By specifying the track numbers from 1 to 99, you can choose up to 32 selections for playback in the order you like.

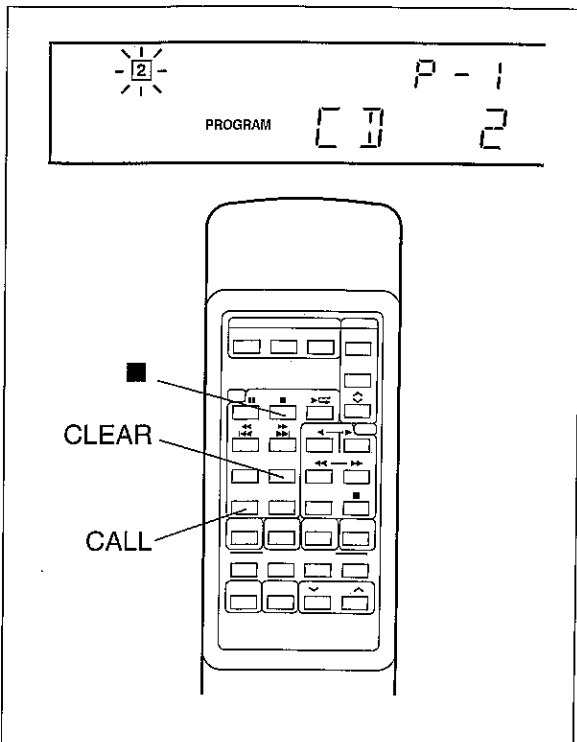
Programming in the stop mode:

- 1 Press the **⏮** or **⏭** button to select the desired track.
 - The selected track number will be displayed.
- 2 Press the **MEMORY** button.
 - The "PROGRAM" indicator will light to show that the programmed sequence is being entered into memory.
- 3 Repeat steps 1-2 for any other track. Up to 32 tracks can be programmed.
- 4 Press the **▶◁** button to start playback of the programmed selections.



Programming whilst listening to the desired track(s):

- 1** Load the CD and press the PLAY/REPEAT (▶◀) button.
 - Do not play back in the APMS mode.
- 2** Play the track to be stored in memory.
- 3** Whilst playing the track to be stored in memory, press the MEMORY button. (This button can be pressed at any time whilst the track is being played.)
 - Even if the MEMORY button is pressed many times during the same track, the track is stored into memory only once.
 - The "PROGRAM" indicator will light to show that the programmed sequence is being entered into memory.
 - After several seconds, the original display will reappear.
- 4** Repeat steps 2 - 3 for any other track. Up to 32 tracks can be programmed.
- 5** After programming is completed, press the STOP (■) button.
- 6** Press the PLAY/REPEAT (▶◀) button to start playback of the programmed selections.



To call the programmed selections:

Press the CALL button whilst the disc is stopped.

- The playback sequence and track numbers will be displayed for easy confirmation.

Note:

When the CALL button is pressed during playback or pause, the subsequent playback sequence and track numbers will be displayed.

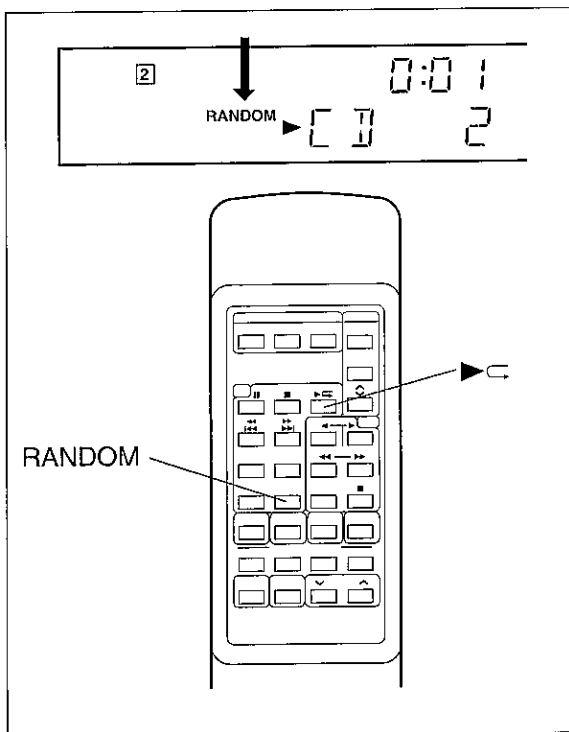
To clear the programmed selections:

Press the CLEAR button whilst the disc is stopped.

- Each time the button is pressed, one track will be cleared, beginning with the last track programmed.

Notes:

- Opening the disc tray automatically cancels the programmed selections.
- Even if the POWER switch is set to STAND-BY or the function is changed from CD to some other function, the programmed selections will not be cleared.



■ Random play

[Remote control operation]

The tracks on the CD can be played in random order automatically.

- 1 Load the CD and close the disc tray.
- If you wish to select specific tracks for random play, use the APMS function. (See page 11)
- 2 Press the RANDOM button to begin random play.
- The "RANDOM" indicator will light up.

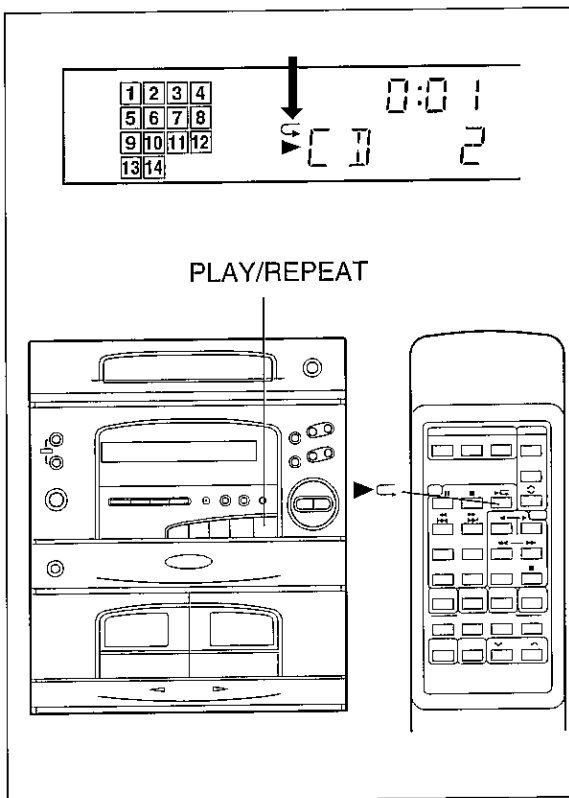
Note:

- When using random play, be sure to remember to press the ■ button, or switch off the power when you have finished listening. Otherwise the disc will play continuously.

To cancel random play:

Press the PLAY/REPEAT (▶◀) button.

- The "RANDOM" indicator goes out.



■ Repeat play

All tracks on disc, or a programmed sequence can be continuously repeated.

To repeat all tracks:

Press the PLAY/REPEAT (▶◀) button and press it again.

- The "◀" indicator will light up.

To repeat a programmed sequence:

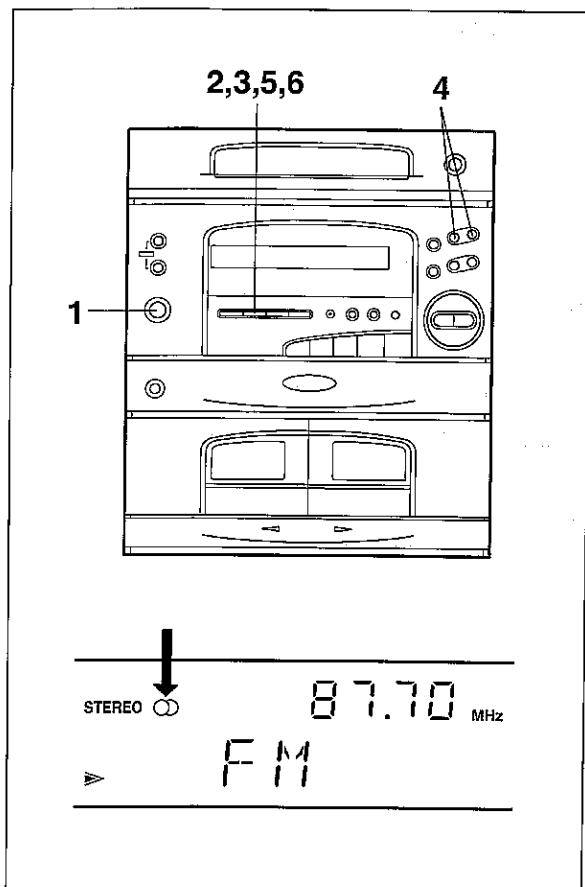
- 1 Programme a sequence of up to 32 tracks.
- 2 Press the PLAY/REPEAT (▶◀) button and press it again.
- The "◀" indicator will light up.

To cancel the repeat play:

Press the PLAY/REPEAT (▶◀) button again.

- The "◀" indicator goes out.

RADIO OPERATION



■ Tuning

- 1 Set the POWER switch to ON.
- 2 Press the TUNER/BAND button.
- 3 Select the desired frequency band.
(FM STEREO, FM or AM)
- 4 Use the TUNING/TIME (∨ or ∧) button to tune in to the desired station.

Manual tuning:

Press the TUNING/TIME (∨ or ∧) button multiple times to adjust the frequency display to the frequency of the desired station.

Auto scan tuning:

When the TUNING/TIME (∨ or ∧) 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 during auto scan tuning, auto scan tuning may stop automatically at that point.
 - If a weak station signal is found during auto scan tuning, the station will be skipped.
 - To stop the auto scanning, press the TUNING/TIME (∨ or ∧) button for less than half a second.
- 5 To receive an FM stereo transmission, press the TUNER/BAND button so that the "STEREO" indicator on the display lights up.
 - The "∞" indicator lights up when an FM broadcast is in stereo.
 - 6 If the FM reception is weak, press the TUNER/BAND button so that the "STEREO" indicator goes out.
 - Although the reception changes to monaural, the sound becomes clearer.

To switch the unit off after use:

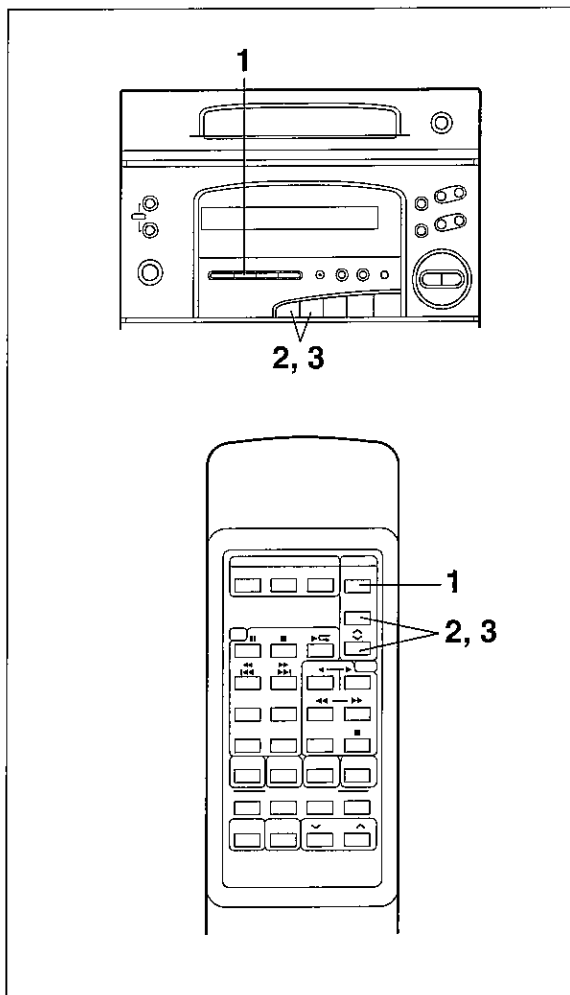
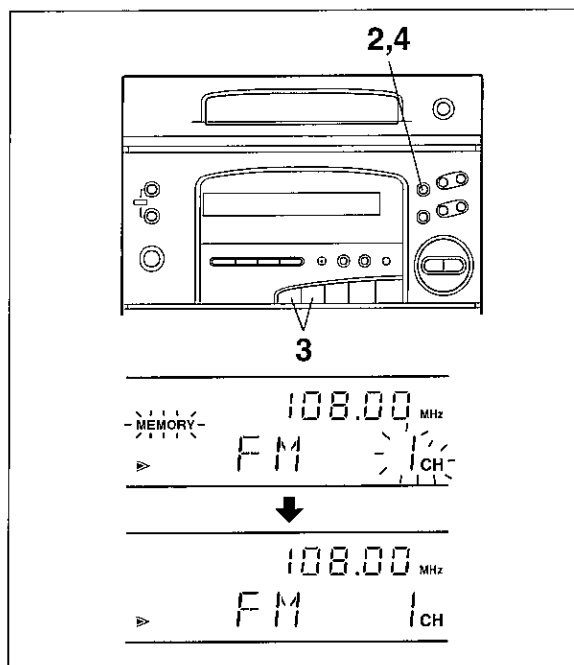
Set the POWER switch to STAND-BY.

Note:

The memory recalls the last station received even after changing the TUNER/BAND selector button or setting the POWER switch to STAND-BY.

Note for users in New Zealand:

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



■ Preset tuning

You can store up to 40 stations (20 FM stations and 20 AM stations) and recall them at the push of a button.

- 1 Perform steps 1 - 6 of the "Tuning" section.
- 2 Press the MEMORY/SET button.
- 3 Within 6 seconds, press the CD/TAPE/PRESET (◀◀ or ▶▶) button until the preset number to be programmed flashes in the display.
 - Store the stations in memory, in order, starting with preset channel 1.
- 4 Within 6 seconds, press the MEMORY/SET button to store that station in the selected station preset number memory.
 - 20 FM stations can be preset (preset channels 1 through 20).
 - 20 AM stations can be preset (preset channels 1 through 20).
- 5 Repeat steps 1 - 4 to set the other preset stations, or to change a preset station.

Note:

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

■ To recall a memorised station

- 1 Select the desired frequency band.
(FM STEREO, FM or AM)
- 2 Press the CD/TAPE/PRESET (◀◀ ◀◀ or ▶▶ ▶▶) button on the main unit or PRESET (∧ or ∨) button on the remote control for less than 0.5 seconds to select the desired station.
 - The preset channel number and the frequency will appear in the display.

Note:

When searching for a memorised station, do not press the PRESET button for more than 0.5 seconds.

When the PRESET button is pressed for more than 0.5 seconds, the preset memory scan mode will be entered.

Backup function:

The backup function protects all station presets for a few hours even if there should be a power failure or the AC power lead is removed from the AC socket.

■ Preset memory scan

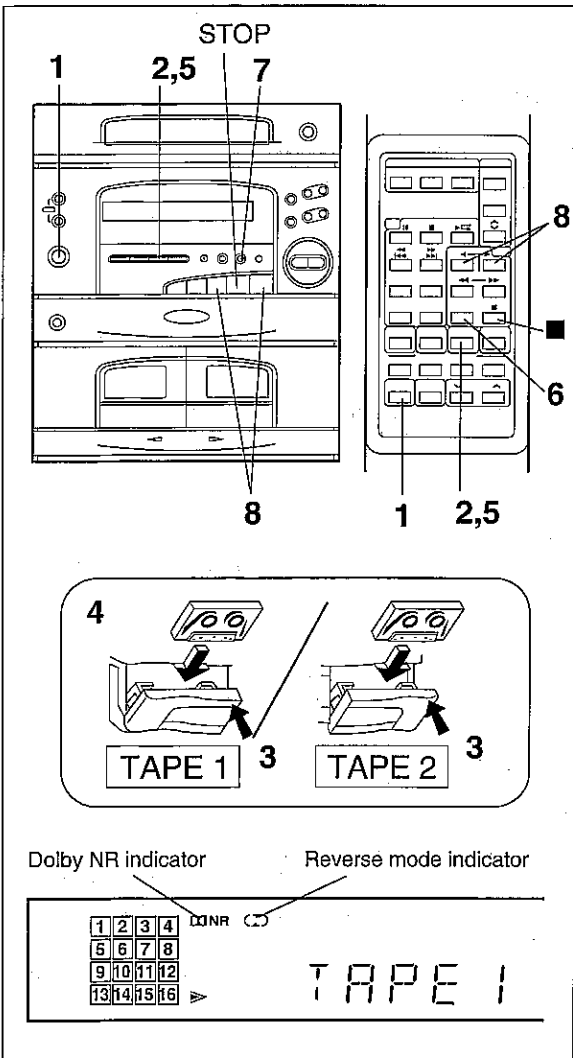
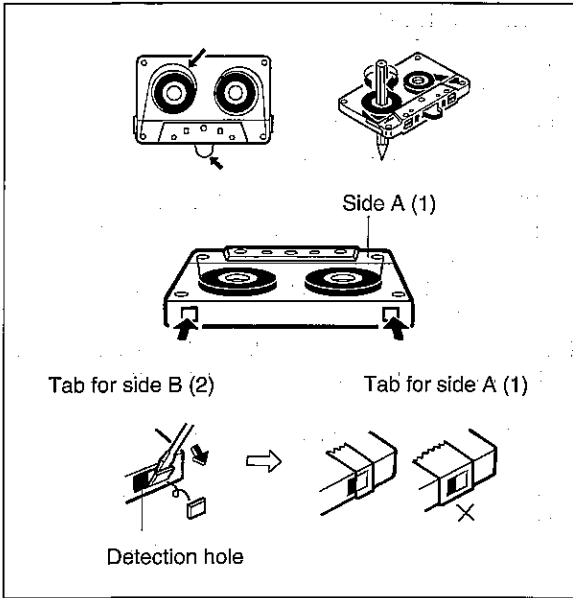
The stations saved in the preset memory can be scanned automatically.

- 1 Select the desired frequency band.
(FM STEREO, FM or AM)
- 2 To scan the preset stations, press the CD/TAPE/PRESET (◀◀ or ▶▶) button on the main unit or PRESET (∧ or ∨) button on the remote control for more than 0.5 seconds.
 - The programmed stations are received for 5 seconds each.
- 3 Press the PRESET button again to stop the memory scan at the desired station.

Note:

When the preset memory does not have any stations stored in it, the preset memory scan will not function.

CASSETTE OPERATION



General information

- For playback, use normal (low-noise), CrO₂ or metal tape for the best sound. For recording, use normal (low-noise) or CrO₂ tape. Metal tape cannot be used for recording.
- Do not use C-120 tapes, tapes with large diameter reels, or poor-quality tapes, since they can cause malfunctions.
- Before loading a tape into the cassette compartment, tighten the slack tape with a pen or pencil.
- Cassettes have removable tabs which prevent accidental recording or erasing from taking place. Removing the tab will protect the corresponding side from being erased. Cover the tab holes with adhesive tape to erase or record again.
- TAPE 1: Playback only.
TAPE 2: Playback or recording.
- This deck features an auto tape selector. Just load the tape, and the tape formula being used will be sensed automatically.
- When covering erasure prevention tab holes, do not cover the CrO₂ and metal detection holes located between them. Otherwise, the deck will sense the tape as normal tape.

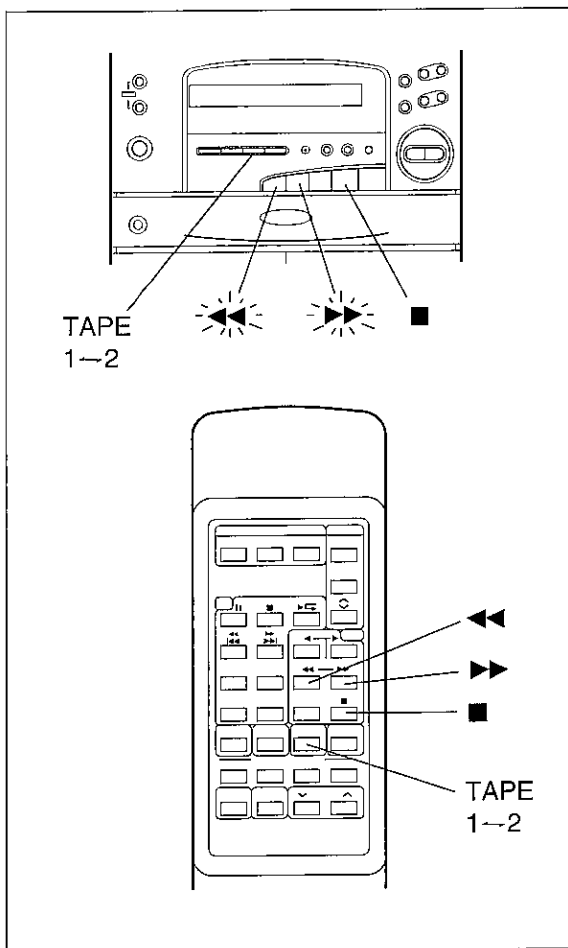
TAPE 1 or TAPE 2 playback

- 1 Set the POWER switch to ON.
- 2 Press the TAPE 1—2 button.
- 3 Open the cassette door by pushing the area marked "▲ PUSH EJECT".
- 4 Load a cassette into the TAPE 1 or TAPE 2 cassette compartment.
 - Insert the cassette with side A(1) facing you.
- 5 With cassettes in both decks, press the TAPE 1—2 button to switch operation from one deck to the other.
- 6 Press the REVERSE MODE button on the remote control to select the reverse mode.
 - ▶ ... To listen to one side of the tape.
 - ◀ ... To listen to both sides of the tape.
 - ∞ ... For endless repeat of both sides of the tape.
- 7 Select the Dolby NR mode by pressing the DOLBY NR button.
 - When a tape recorded with the Dolby NR system is used, turn on the Dolby NR indicator.
 - When a tape not recorded with the Dolby NR system is used, turn off the Dolby NR indicator.
- 8 Press the ▶ button to listen to side A(1) or the ◀ button for side B(2).
 - To play both sides of the tape (∞), start from side A(1). When the tape starts playback from side B(2), side A(1) will not be played after side B(2) finishes.

To stop playback:
Press the STOP (■) button.

Notes:

- When removing the cassette tape, press the STOP (■) button, and then open the cassette compartment.
- When the TAPE 1—2 button is pressed whilst TAPE 1 is playing back, TAPE 2 will be displayed. However, the side of the tape which is actually being played back is still TAPE 1. The reverse is also true. At this point, the ◀ or ▶ button indicator will be lit. However, even if one of these buttons is pressed, the unit will not operate.



■ To fast wind the tape

- 1 Press the STOP (■) button, then press the TAPE 1-2 button to select the desired tape.
 - 2 To fast wind the tape onto the left reel, press the ◀◀ button whilst the tape is stopped.
 - 3 To fast wind the tape onto the right reel, press the ▶▶ button whilst the tape is stopped.
- Whilst the tape is being wound, the ◀◀ or ▶▶ indicator will flash.
 - When the tape has been wound to the desired point, press the STOP (■) button.

■ Auto Program Search System (APSS)

Perform the following operation during playback to find desired points on the tape.

- 1 To listen to the same section again, press the APSS (◀◀ or ▶▶) button in the direction opposite from that of current playback.
- 2 To listen to the next section, press the APSS (◀◀ or ▶▶) button in the same direction as that of current playback.

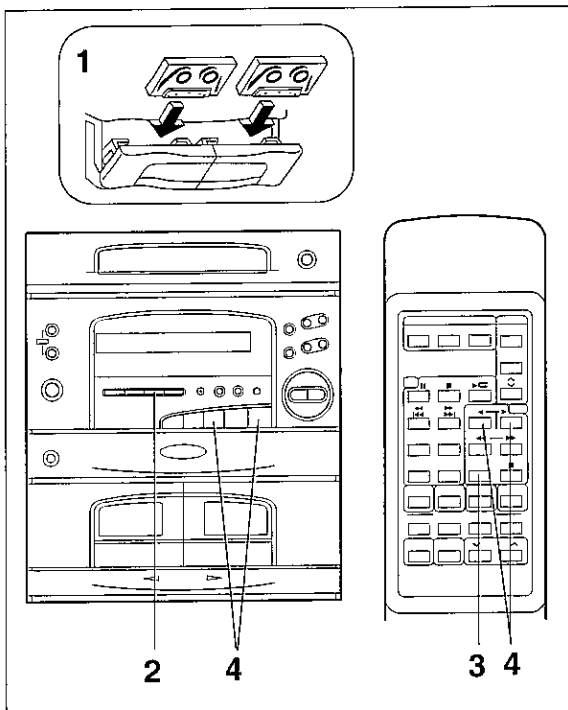
Note:

APSS may not work for tapes with:

- Material with long pauses or quiet passages.
- Low recording levels or excessive noise.
- Pauses of less than 3 seconds between selections.

Note:

When APSS operation is used very close to the beginning or end of a track, the tape may not stop at the first unrecorded section.



■ Continuous playback

- 1 Load the cassettes into the TAPE 1 and TAPE 2 cassette compartments.
- 2 Press the TAPE 1-2 button to select TAPE 1.
- 3 Set the REVERSE MODE button on the remote control as desired.

The REVERSE MODE button can be operated before or during playback, and changes tape playback as follows:

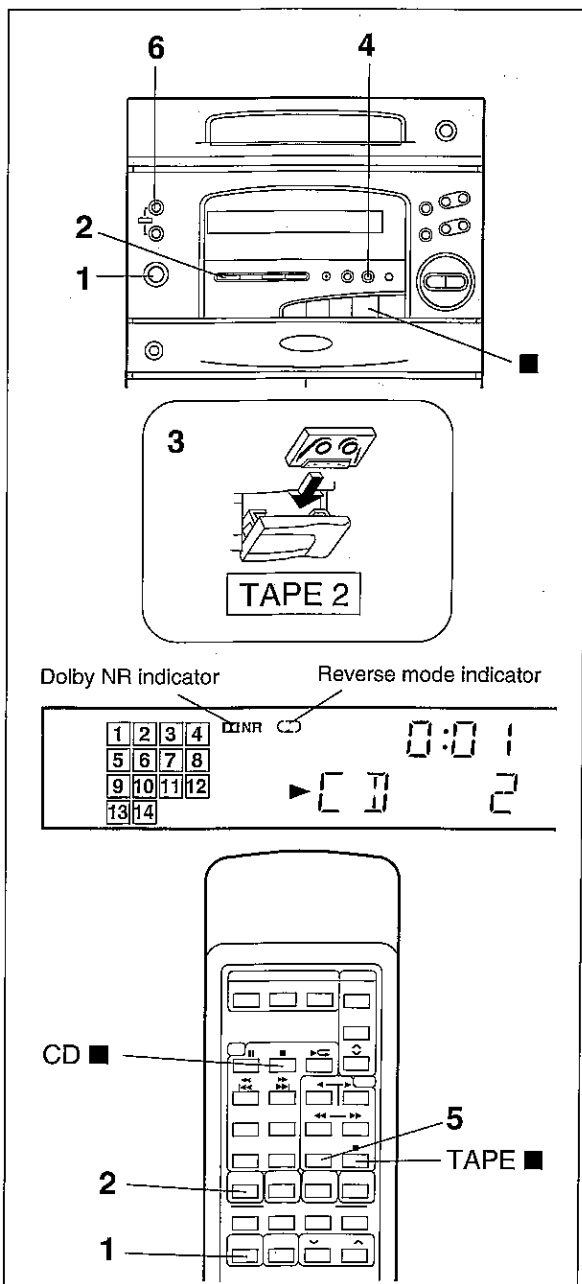
	↺	↻
	TAPE 1 Side A → B → TAPE 2 Side A → B	TAPE 1 Side A → B → TAPE 2 Side A → B Continuous play
	TAPE 1 Side B → TAPE 2 Side A → B	TAPE 1 Side B → TAPE 2 Side A → B → TAPE 1 Side A Continuous play

- 4 Press the ▶ button to listen to side A(1), or the ◀ button for side B(2).

RECORDING

- When recording important selections, be sure to make a preliminary test to ensure that the desired material is being properly recorded.
- The ALC (Automatic Record Level Control) circuit automatically controls the level of the input signal used for recording.

- The VOLUME, BALANCE, X-BASS and EQUALIZER controls may be adjusted with no effect on the recorded signal. (Variable Sound Monitor)
- Metal tape cannot be used for recording or dubbing.



■ Recording from the built-in CD player (CD Synchronised Recording System)

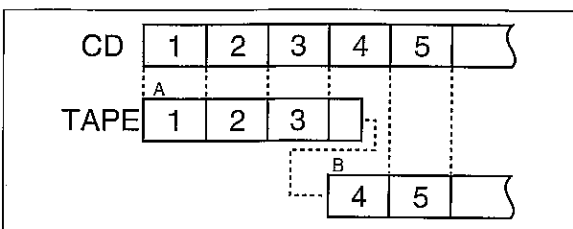
- 1 Set the POWER switch to ON.
- 2 Press the CD button.
- 3 Load a cassette into the TAPE 2 cassette compartment.
 - Load the tape with side A(1) facing you.
 - Rewind the tape onto the left-side reel.
- 4 Select the Dolby NR mode by pressing the DOLBY NR button.
 - When recording with the Dolby NR system, turn on the Dolby NR indicator.
 - When not recording with the Dolby NR system, turn off the Dolby NR indicator.
- 5 Press the REVERSE MODE button on the remote control to select the reverse mode.
 - Σ ... To record on only one side.
 - ∞ ... To record on both sides.
- 6 Press the NORMAL EDIT button.
 - At this point, the HIGH EDIT button will not work.
 - CD playback will start approximately 8 seconds after the tape starts (after the leader of the tape on which recording can not be performed is wound.)
 - Recording starts from side A(1).

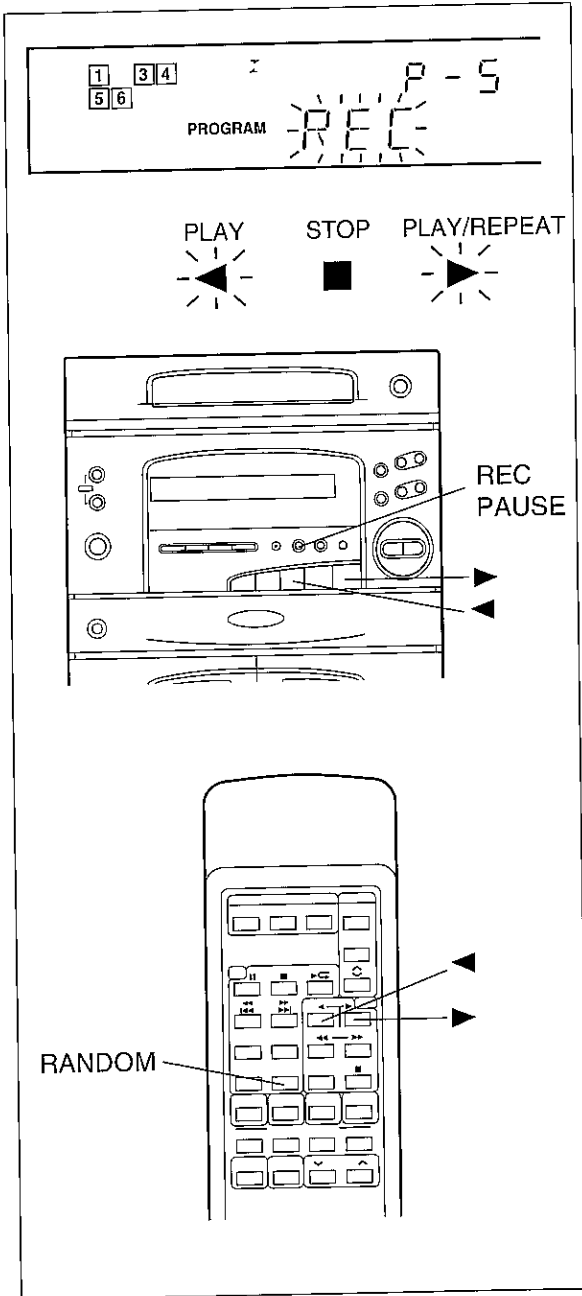
To stop recording:

- Press the STOP (■) button on the main unit or the CD ■ button on the remote control.
The CD will stop, and 2 seconds later, the tape will stop.
- When the TAPE ■ button on the remote control is pressed, only the tape will stop. The CD will continue playback.

Auto restart function:

- When recording continuously on both sides of the tape:
Even if the last track of side A(1) is not finished recording, side B(2) will automatically start recording from the beginning of that track.
The recording will be made without cutting the beginning of the track on side B(2).





● **To record using programmed selection play**

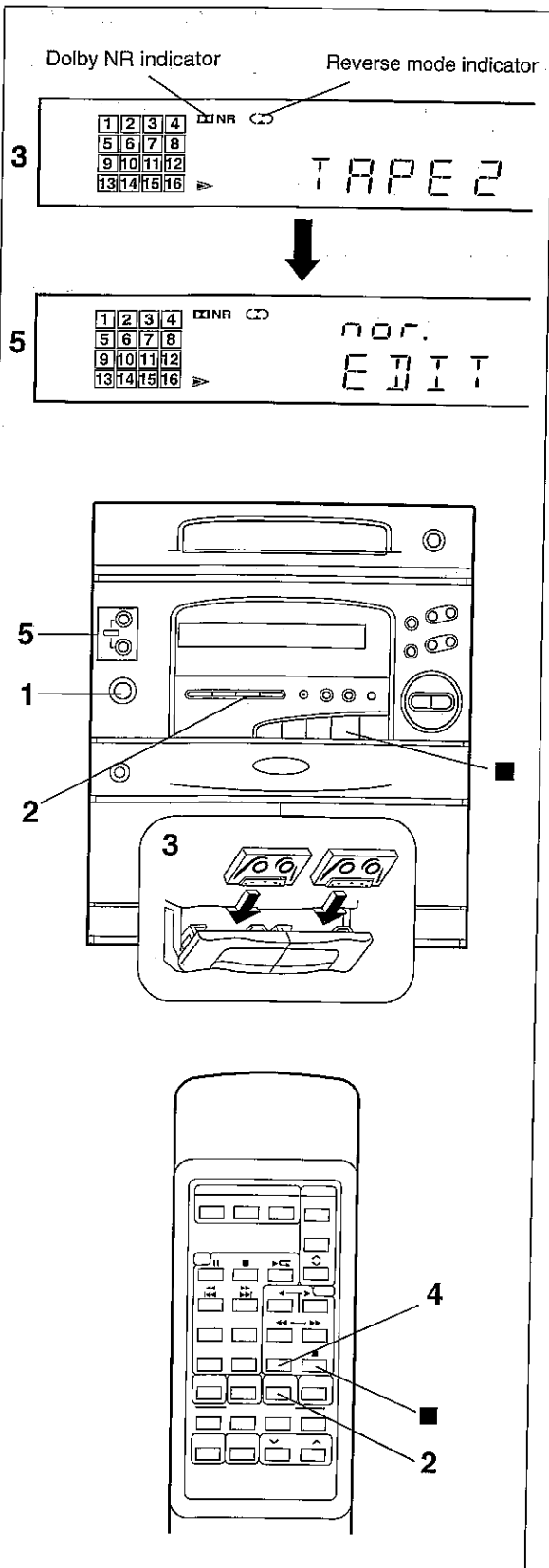
- 1 Load a cassette into the TAPE 2 cassette compartment.
- Wind past the leader tape on which recording can not be performed.
- 2 Use APMS function to store the tracks you want to record in memory. (See page 11)
- 3 Press the REC PAUSE button.
 - The "REC" indicator will flash.
- 4 Press the ► button to record side A(1), or the ◀ button to record side B(2).
 - CD playback will start approximately 2 seconds after the tape starts.
 - To record on both sides, begin on side A(1). [If recording is started from side B(2), the tape will not switch over to side A(1).]

● **To record from random play**

- 1 Load a cassette into the TAPE 2 cassette compartment.
- Wind past the leader tape on which recording can not be performed.
- Load the tape with side A(1) facing you.
- 2 Press the REC PAUSE button.
- 3 Press the RANDOM button.
 - CD playback will start approximately 2 seconds after the tape starts. [Recording starts from side A(1).]

Note:

If it takes more than 4 seconds to locate the beginning of the next track, the tape will be paused automatically. When the beginning of the track is found, recording will start again.



■ Dubbing from tape to tape

- 1 Set the POWER switch to ON.
- 2 Press the TAPE 1 — 2 button.
- 3 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 be the same time length as the master tape.
- 4 Press the REVERSE MODE button on the remote control to select the reverse mode.
 - Σ ... To record on only one side.
 - Σ ... To record on both sides.
- 5 Press the NORMAL EDIT button to edit at normal speed dubbing, or HIGH EDIT button to edit at high speed dubbing.
 - Dubbing will begin with side A(1).

To stop dubbing:

Press the STOP (■) button.

- TAPE 1 and TAPE 2 simultaneously stop.

After dubbing

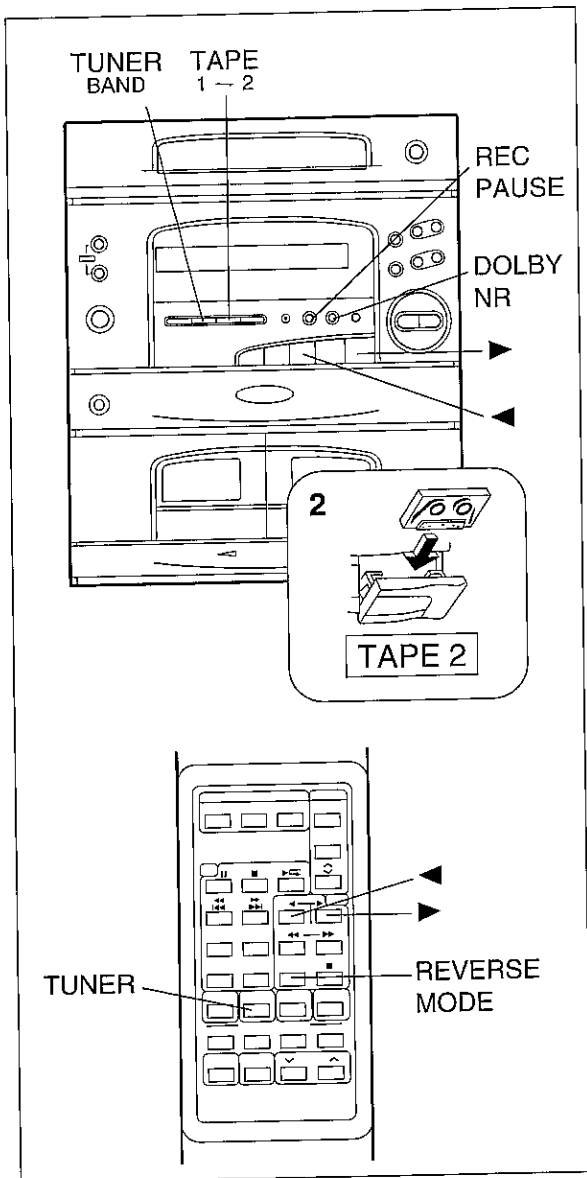
The tape operation indicator (TAPE 1/TAPE 2) is automatically switched to "TAPE 2". Only after the tape is rewound and played back can the contents currently dubbed be confirmed.

Note:

- Only tapes originally encoded with Dolby NR will be dubbed into tapes with Dolby NR encoding. The DOLBY NR button will have no effect on the recording of TAPE 2 during dubbing. However, the playback tonal quality of TAPE 1 will change according to the DOLBY NR button position.

Synchro-reverse editing function

When tapes which are different in length are used for recording and dubbing continuously on both sides, as soon as one tape finishes, the other is automatically fast forwarded. Editing starts from the beginning of the other side.



■ Recording from the built-in radio

- 1 Tune in to the desired station. (See pages 14-15.)
- 2 Load a cassette into the TAPE 2 cassette compartment.
 - Load the tape with the side to be recorded facing you.
 - Wind past the leader of the tape, on which recording can not be performed.
- 3 Select the Dolby NR mode by pressing the DOLBY NR button.
 - When recording with the Dolby NR system, turn on the Dolby NR indicator.
 - When not recording with the Dolby NR system, turn off the Dolby NR indicator.
- 4 Press the REVERSE MODE button on the remote control to select the reverse mode.
 - ∑ ... To record on only one side.
 - ∑ ... To record on both sides.
- 5 Press the REC PAUSE button.
 - The "REC" indicator will flash.
- 6 Press the ► button to record side A(1), or the ◀ button to record side B(2).
 - To record on both sides, begin on side A(1). [If recording is started from side B(2), the tape will not switch over to side A(1).]

Beat cancel switch (on the rear panel)

If a whistling noise occurs when recording from AM, set the BEAT CANCEL switch to A or B, whichever gives the best reception.

To interrupt recording:

- ① Press the REC PAUSE button.
- ② To resume recording, press the same ◀ or ► button as the ◀/► indicator is flashing.

To stop recording:

Press the STOP (■) button on the tape.

■ Erasing recorded tapes

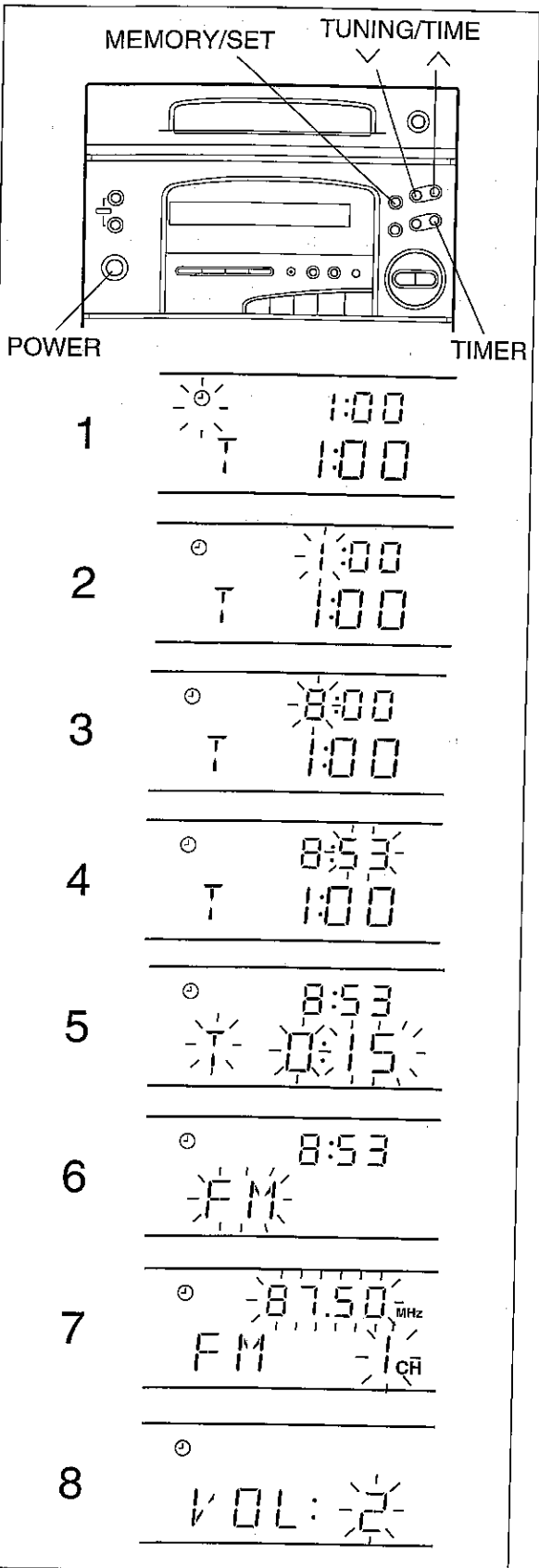
- Make sure that TAPE 1 is not in use.
- 1 Load the tape to be erased into the TAPE 2 cassette compartment.
 - 2 Press the TAPE 1 → 2 button.
 - 3 Press the REVERSE MODE button on the remote control to select the reverse mode.
 - ∑ ... To erase only one side.
 - ∑ ... To erase both sides.
 - 4 Press the REC PAUSE button.
 - 5 Press the ► button to erase side A(1), or the ◀ button to erase side B(2).
 - To erase both sides, begin on side A(1). Erasing stops automatically at the end of side B(2).

■ APSS spacing

APSS requires blank spaces of 4 - 5 seconds between selections to function properly. Make the blank spaces as follows:

- 1 Press the REC PAUSE button when the selection being recorded ends.
 - 2 Press the VIDEO/AUX button.
- Note:**
- Do not connect anything to the VIDEO/AUX sockets.
- 3 Press the same ◀ or ► button as the ◀/► indicator is flashing. Let the tape run for 4 - 5 seconds.
 - 4 Press the REC PAUSE button again.
 - 5 Press the TUNER/BAND button to return to the original source.
 - 6 Start the next recording.

HOW TO USE THE BUILT-IN TIMER



- Before setting the timer, make sure that the clock setting is correct.

■ Timer playback

- When the POWER switch is in the ON or STAND-BY position, the timer playback can be set.
- 1 Press the TIMER button once to turn on the "⊙" indicator. At this point, make sure that the "REC" indicator is not lit.
 - 2 Within 5 seconds, press the MEMORY/SET button.
 - If more than 5 seconds have passed, start again from step 1.
 - 3 Press the TUNING/TIME (∨ or ∧) buttons to set the hour at which to start and then press the MEMORY/SET button.
 - 4 Press the TUNING/TIME (∨ or ∧) buttons to set the minute at which to start and then press the MEMORY/SET button.
 - 5 Press the TUNING/TIME (∨ or ∧) buttons to set the playback time, and then press the MEMORY/SET button.
 - The maximum playback time that you can specify is 2 hours, and the minimum playback time is 1 minute.
 - 6 Press the TUNING/TIME (∨ or ∧) buttons to select the desired function (CD, FM, AM, TAPE or VIDEO) and then press the MEMORY/SET button.
 - When the FM or AM function is selected, go to step 7. When any other function is selected, go to step 8.
 - 7 When FM or AM is selected.
 - Press the TUNING/TIME (∨ or ∧) buttons to select a previously programmed radio station and then press the MEMORY/SET button.
 - 8 Press the TUNING/TIME (∨ or ∧) buttons to adjust the sound volume and then press the MEMORY/SET button.
 - 9 When the setting is performed with the POWER switch ON, change the POWER switch to STAND-BY.
 - The unit will display the time.
 - 10 When the preset time is reached, the volume will increase gradually until it reaches the preset volume level.

Notes:

- Once the timer is set, this time will be displayed until the setting is changed.
- The timer cannot control the component connected to the VIDEO/AUX sockets.

To confirm the timer setting:

Press the TIMER button once.

- The programmed contents will appear in order.

To cancel timer operation:

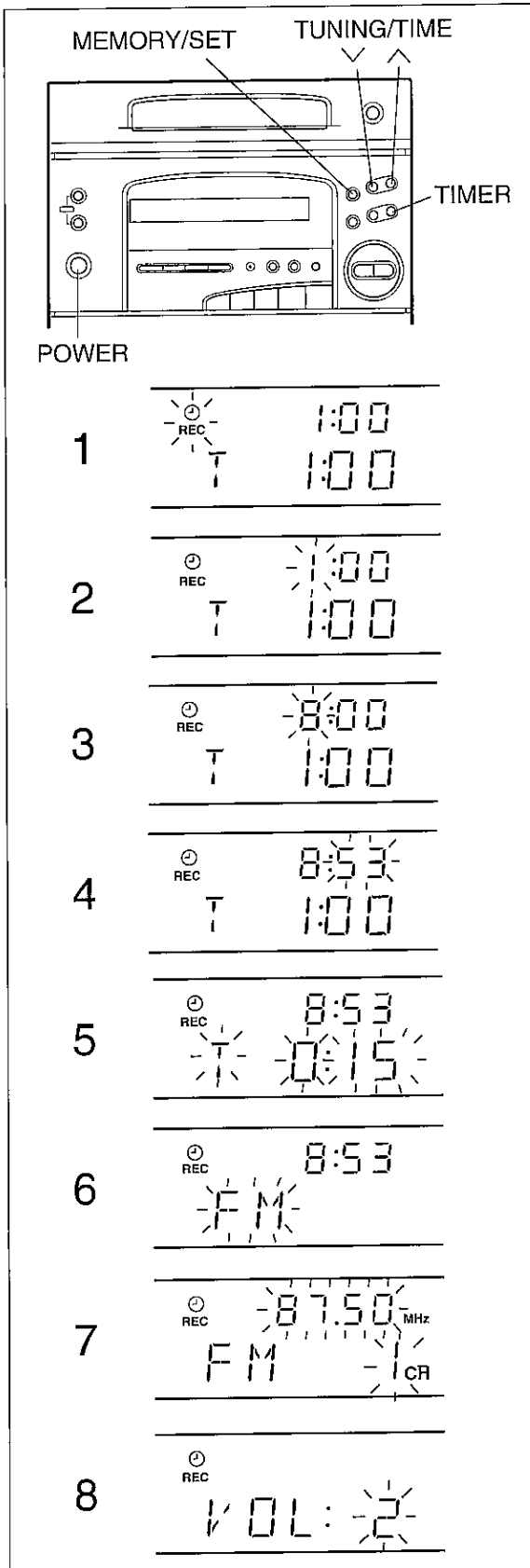
Press the TIMER button repeatedly to turn off the "⊙" indicator.

To change the programmed contents:

Start again from step 1.

To stop play during timer playback:

Set the POWER switch to STAND-BY.



- Before setting the timer, make sure that the clock setting is correct.
- Load a cassette for recording into the TAPE 2 cassette compartment.

■ Timer recording

- When the POWER switch is in the ON or STAND-BY position, the timer recording can be set.
- 1 Press the TIMER button repeatedly to turn on the "Ⓟ" and "REC" indicators.
 - 2 Within 5 seconds, press the MEMORY/SET button.
 - If more than 5 seconds have passed, start again from step 1.
 - 3 Press the TUNING/TIME (∨ or ∧) buttons to set the hour at which to start and then press the MEMORY/SET button.
 - 4 Press the TUNING/TIME (∨ or ∧) buttons to set the minute at which to start and then press the MEMORY/SET button.
 - 5 Press the TUNING/TIME (∨ or ∧) buttons to set the recording time, and then press the MEMORY/SET button.
 - The maximum recording time that you can specify is 2 hours, and the minimum recording time is 1 minute.
 - 6 Press the TUNING/TIME (∨ or ∧) buttons to select the desired function (FM, AM or VIDEO) and then press the MEMORY/SET button.
 - When the FM or AM function is selected, go to step 7. When any other function is selected, go to step 8.
 - 7 When FM or AM is selected.
 - Press the TUNING/TIME (∨ or ∧) buttons to select a previously programmed radio station and then press the MEMORY/SET button.
 - 8 Press the TUNING/TIME (∨ or ∧) buttons to adjust the sound volume and then press the MEMORY/SET button.
 - 9 When the setting is performed with the POWER switch ON, change the POWER switch to STAND-BY.
 - The unit will display the time.

Notes:

- Once the timer is set, this time will be displayed until the setting is changed.
- The timer cannot control the component connected to the VIDEO/AUX sockets.

To confirm the timer setting:

Press the TIMER button once.

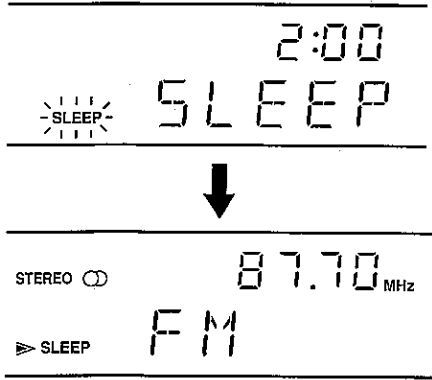
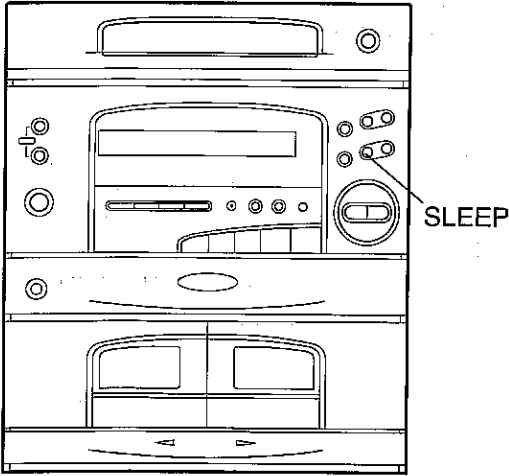
- The programmed contents will appear in order.

To cancel timer operation:

Press the TIMER button repeatedly to turn off the "Ⓟ" and "REC" indicators.

To change the programmed contents:

Start again from step 1.



■ Sleep operation

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

- 1 Play the desired sound source.
- 2 Press the SLEEP button.
 - The sleep timer is first set to 2 hours.

To change the sleep time:

Whilst the sleep time is displayed, every time the SLEEP button is pressed, the time will decrease by the following intervals. (Minimum: 1 minute - Maximum: 2 hours)
The amount of sleep time can also be changed during sleep operation.

- 2 hours – 30 minutes → 10-minute intervals
 - 30 minutes – 5 minutes → 5-minute intervals
 - 5 minutes – 1 minute → 1-minute intervals
- 3 The unit will turn off automatically after the preset time has elapsed.
(The sound volume will be reduced one minute before the preset sleep timer expires.)

Note:

- Once the sleep timer is set, it will remain the same until the setting is changed.

To confirm the sleep timer setting:

Press the SLEEP button.

To cancel the sleep operation:

Press the SLEEP button until the "SLEEP" indicator will go out.

To stop play during sleep operation:

Set the POWER switch to STAND-BY.

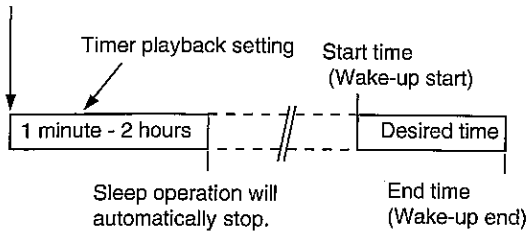
■ Simultaneous sleep and timer operation

- 1 Play the desired item (compact disc, tape, etc.).
- 2 Press the SLEEP button.
- 3 Set the timer, and insert the item (compact disc, tape, etc.) which you want to control with the timer. (See page 22.)
- 4 When the preset sleep time has elapsed, the power will be automatically turned off. When the timer start time is reached, the power will be turned on again.

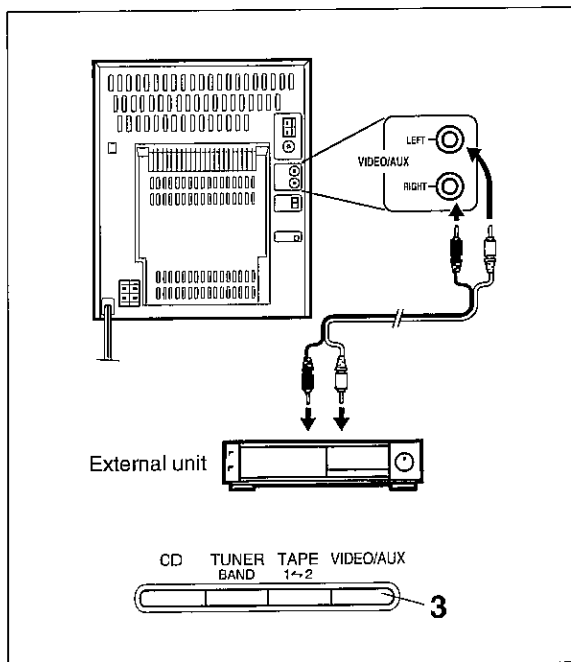
Caution:

- Pay attention to the length of the tape.
If you want to both go to sleep and wake up listening to a tape, if the reverse mode position is set to "⏮", and if the length of the tape is shorter than the sleep timer setting, timer playback will not be possible.
In this case, set the reverse mode position to "⏪".

Sleep timer setting



USING EXTERNAL UNITS



VIDEO/AUX (Audio signal) input

To listen to or record audio signals from external units through this unit:

- 1 Use an RCA lead to connect the desired external unit to the VIDEO/AUX sockets. (red → right channel, white → left channel)
- When using video equipment (LD player, VCR), be sure to connect the audio output to this unit and the video output to a television.
- 2 Set the POWER switch to ON.
- 3 Press the VIDEO/AUX button.
- 4 Operate the external unit.
- 5 To record sound from the external unit in this unit, perform steps 2 - 6 of the "Recording from the built-in radio" section on page 21.

Note:

- To prevent hum interference, do not bring this unit near televisions.

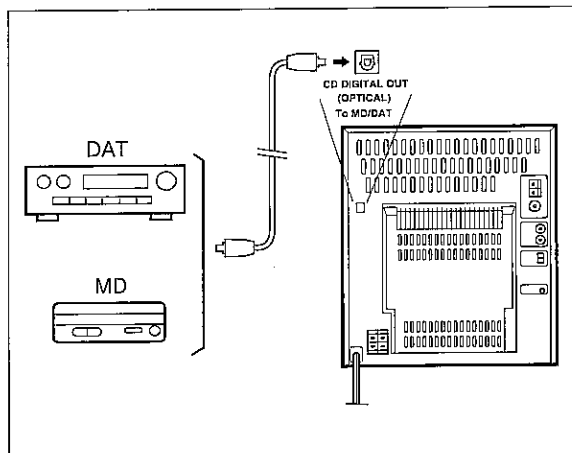
CD digital output (optical)

The CD digital signal from this unit can be recorded by other DAT or MiniDisc recorders.

- 1 Use a commercially available digital cable to connect the unit to the OPTICAL IN socket of a DAT or a MiniDisc recorder.
- 2 Put the external unit in the recording mode.
- 3 Play a CD on this unit.

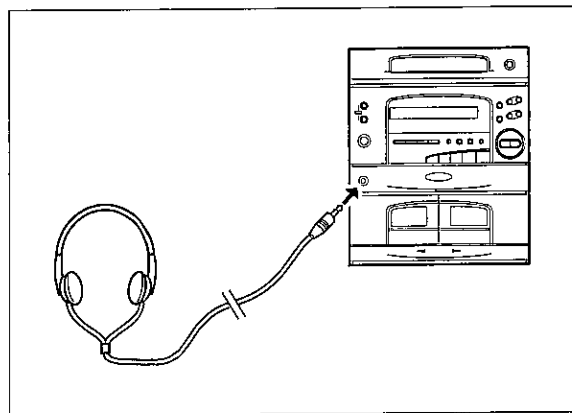
Note:

- Only CD signals can be output.

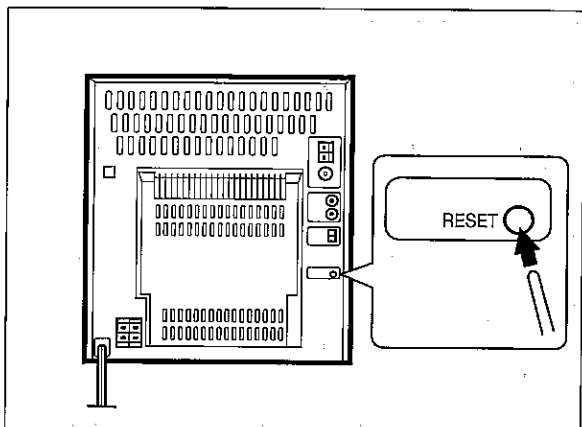


Headphones

- Be sure that your headphones have a 3.5 mm (1/8") diameter plug and are between 16 ohms and 50 ohms impedance. Recommended impedance is 32 ohms.
- When headphones are connected, the speakers are disconnected automatically. Adjust the VOLUME buttons for desired volume.



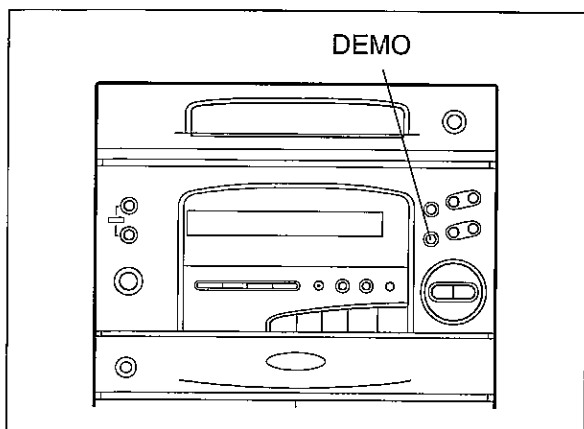
RESETTING THE MICROCOMPUTER



In the cases shown below, press the RESET switch on the rear of the unit.

- To erase all of the stored memory contents.
- If the display does not function properly or the unit does not operate properly because of shock, excessive static electricity or changes in the supply voltage due to lightning.

DEMO MODE

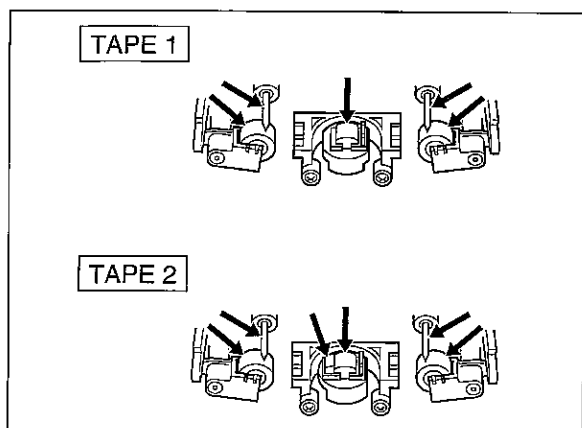


When the DEMO button is pressed down for more than 4 seconds whilst the POWER switch is ON, the unit will enter the demonstration mode.

When the unit enters the demonstration mode, each of the displays, Equalizer, Extra bass and Music calendar, will be shown, in order.

To cancel the demonstration mode, change the POWER switch to STAND-BY.

MAINTENANCE



Internal care

- Dirty heads, capstans and 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.
- 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.

External care

- Periodically wipe the cabinet with a soft cloth and dilute soap solution, then wipe with a dry cloth.
- Do not use chemically treated cleaning cloths or other chemicals.

SPECIFICATIONS

As a 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 V, 50 Hz
Power consumption: 550 W
Dimensions: Width; 270 mm (10-5/8")
Height; 316 mm (12-7/16")
Depth; 365 mm (14-3/8")
Weight: 9.6 kg (21.2 lbs.)

● Amplifier section

Output power: PMPO; 640 W
MPO; 320 W (160 W + 160 W)
(DIN 45 324, 10% T.H.D.)
RMS; 200 W (100W + 100W)
(DIN 45 324, 10% T.H.D.)
Input terminal: VIDEO/AUX; 500 mV/47 kohms
Output terminals: Speakers; 4 ohms
Headphones; 16 – 50 ohms
(recommended; 32 ohms)

● Compact disc player section

Type: Compact disc player
Signal readout: Non-contact, 3-beam semi-conductor laser pickup
Rotational speed: 200 – 500 rpm CLV, Approx.
Error correction: CIRC (Cross Interleave Reed-Solomon Code)
Quantization: 16-bit linear
Filter: 4-times oversampling digital filter and active filter
D/A converter: 16-bit D/A converter
Frequency response: 20 – 20,000 Hz
Signal/noise ratio: 95 dB (1 kHz)
Dynamic range: 90 dB (1 kHz)
Wow and flutter: Unmeasurable
(less than 0.001 % W. peak)

● Tuner section

Frequency range: FM; 87.5 – 108 MHz
AM; 522 – 1,620 kHz
Sensitivity: FM; 1.8 μ V
(75 ohms unbalanced)
AM; 650 μ V/m

● Cassette deck section

Tape: Compact cassette tape
Frequency response: 50 – 14,000 Hz (Normal tape)
50 – 15,000 Hz (CrO₂ tape)
Signal/noise ratio: Dolby NR off; 50 dB
Dolby NR effect; 10 dB
(at over 5 kHz)
Bias and erasure system: AC
Tape speed: 4.76 cm/sec (1-7/8 ips)
Wow and flutter: • For European customers
0.2 % (DIN 45 511, playback)
• For New Zealand customers
0.15 % (WRMS)
Heads: TAPE-1; Playback x 1
TAPE-2; Record/Playback x 1
Erase x 1

● Speaker section (CP-S6470H)

Speakers: 2-way [120 mm (4-3/4") twin woofer and 50 mm (2") tweeter] type
Rated power: 100 W
Maximum power handling capacity: 200 W
Impedance: 4 ohms
Dimensions: Width; 221 mm (8-5/16")
Height; 316 mm (12-7/16")
Depth; 260 mm (10-1/4")

● Speaker section (CP-S6470)

Speakers: 2-way [130 mm (5") twin woofer and 50 mm (2") tweeter] type
Rated power: 100 W
Maximum power handling capacity: 200 W
Impedance: 4 ohms
Dimensions: Width; 210 mm (8-5/16")
Height; 316 mm (12-7/16")
Depth; 270 mm (10-11/16")
Weight: 5.3 kg (11.7 lbs.)/each

Note:

In some areas, the designs and specifications of the speaker systems may differ from the contents mentioned in the operation manual.

SHARP

SHARP CORPORATION

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