SONY®

3-859-543-**11**(1)

Mini Hi-Fi Component System

Operating Instructions

COMPACT
disc
DIGITAL AUDIO

## *MHC-RX70*
MHC-RX80

©1996 by Sony Corporation

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT
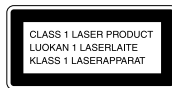
This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

This caution label is located inside the unit.

CAUTION	:	INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
ADVARSEL	:	USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDS ÆTTELSE FOR STRÅLING.
VARO!	:	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA LASERSÄTEILYLLE.
VARNING	:	LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD.
ADVARSEL	:	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN.

This stereo sytem is equipped with the Dolby* B-type noise reduction system.
* Dolby noise reduction manufactured under licence from Dolby Laborotories Licencing Corporation.
"DOLBY" and the double-D symbol □□ are trademarks of the Dolby Laborotories Licencing Corporation.

2

Table of Contents

GB

3

Step 1: Hooking up the system

Do the following procedure **1** to **5** to hook up your system using the supplied cords and accessories.

Right surround speaker

AM loop aerial

Left surround speaker

FM lead aerial

5

3

1

1

2

1

4

Right front speaker

Left front speaker

---
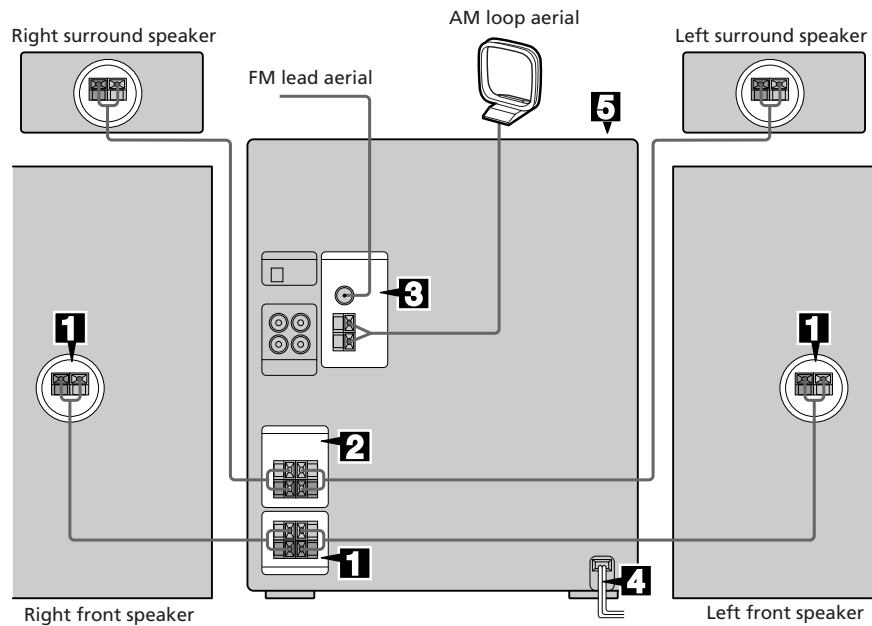
1 Connect the front speakers.

Connect the speaker cords to the SPEAKER jacks of the same colour.

Keep the speaker cords away from the aerials to prevent noise.

Insert only the stripped portion.
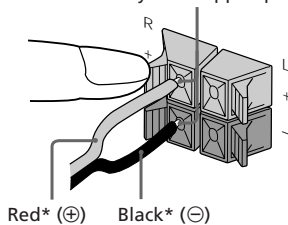
R

L

+

−

Red* (⊕)   Black* (⊖)

* The colour of your speaker cords might be different. See the speakers' manual for details if supplied.

2 Connect the surround speakers. (For MHC-RX80 only)

Connect the speaker cords to the SPEAKER jacks of the same colour.

Insert only the stripped portion.
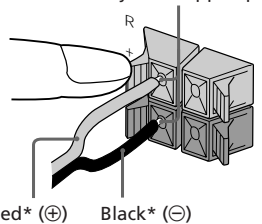
R

L

+

−

Red* (⊕)   Black* (⊖)

* The colour of your speaker cords might be different. See the speakers' manual for details if supplied.

4

3 Connect the FM/AM aerials.

Set up the AM loop aerial, then connect it.

AM loop aerial (supplied)

Extend the FM lead aerial horizontally.

FM75Ω COAXIAL

AM
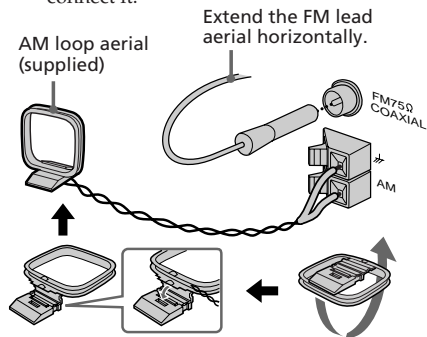
4 Connect the mains lead to a wall outlet.

Demo mode appears in the display.

5 Deactivate the demo mode by pressing DISPLAY/DEMO when the system power is turned off.

The demo mode is also deactivated when you set the time.

Inserting two size AA (R6) batteries into the remote
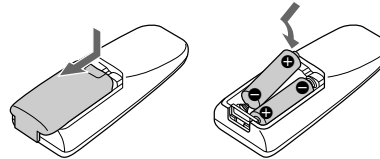
Tip

With normal use, the batteries should last for about six months. When the remote no longer operates the system, replace both batteries with new ones.

Note

If you do not use the remote for a long period of time, remove the batteries to avoid possible damage from battery leakage.

When carrying this system

Do the following to protect the CD mechanism.

1 Press FUNCTION repeatedly until "CD" appears in the display.

2 Hold down PLAY MODE and press POWER to turn off the power.

5

Step 2: Setting the time

You must set the time before using the timer functions.

1 Press CLOCK TIMER SET.

The hour indication flashes.

2 Turn the jog dial to set the hour.

The clock is on a 12-hour system.

3 Press ENTER/NEXT.

The minute indication flashes.
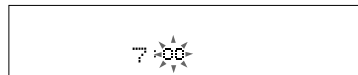
4 Turn the jog dial to set the minute.

5 Press ENTER/NEXT.

The clock starts working.

Tips
• If you've made a mistake, start over from step 1.
• Setting the time deactivates the demo mode .
  If you want to display the demo mode, press
  DISPLAY/DEMO when the power is off.

Note

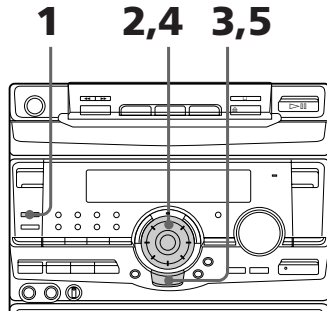When setting the time, set the equalizer display to anything other than Spectrum analyzer pattern 3. (See "To change the equalizer display" on page 30.)

6

Step 3: Presetting radiostations

The 3 band model lets you preset up to 40 stations, 20 for FM, 10 for MW and 10 for LW. The 4band model lets you preset up to 45 stations, 20 for FM, 10 for MW and 5 for UKV.
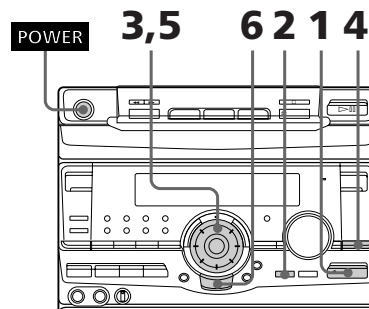
1 Press TUNER/BAND repeatedly until the band you want appears in the display.

the bands you can recieve vary depending on the model you purchased. Be sure to check which bands you can recieve.

Every time you press this button, the band changes as follows:

3 band models:

FM → MW → LW

4 band model:

FM → MW → LW → UKV*

* "STEREO PLUS" is displayed when you select UKV.

2 Press TUNING MODE repeatedly to select "AUTO".

3 Turn the jog dial.

The frequency indication changes and scanning stops when the system tunes in a station. "TUNED" and "STEREO" (for a stereo programme) appear.
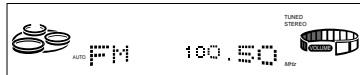
4 Press TUNER MEMORY.

A preset number appears in the display.
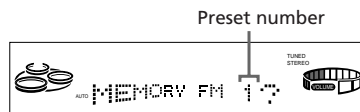
Preset number

5 Turn the jog dial to select the preset number you want.

6 Press ENTER/NEXT.

The station is stored.

7 Repeat steps 1 to 6 to store other stations.

To tune in a station with a weak signal

Press TUNING MODE repeatedly to select "MANUAL" in step 2, then turn the jog dial to tune in the station.

To change the preset number

Start over from step 1.

Tip

The preset stations are retained for half a day even if you unplug the power cord or if a power failure occurs.

Connecting optional AV components

To enhance your system, you can connect optional components. Refer to the instructions of each component.

Connecting audio components

Select one of the following two connections, depending on the equipment to be connected and method of connecting.

Connecting an MD deck for digital recording

You can record from CD into the MD deck digitally by connecting an optical cable.

To the DIGITAL IN jack of the MD deck

7

Connecting optional AV components (continued)

Connecting an MD deck for analog recording

Make sure to match the colour of the plugs and the connectors. To listen to the sound of the connected MD deck, press FUNCTION repeatedly until "MD" appears.

To the audio output of the MD deck   To the audio input of the MD deck
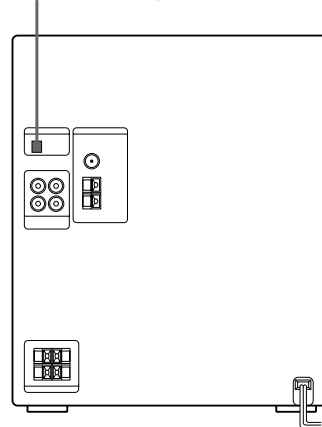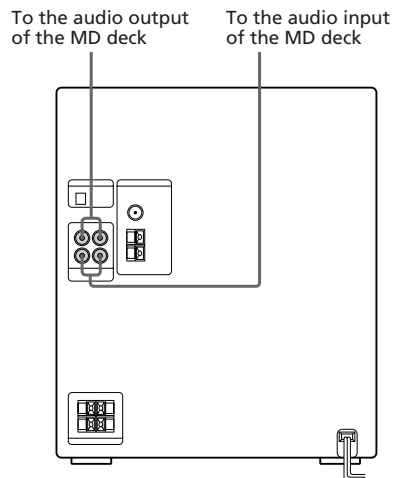
Tip

If you connect a turntable with MM cartridge, connect it to VIDEO/MD IN using the optional MM cartridge equalizer EQ-2 and an audio connecting cord. To listen to the sound, press FUNCTION repeatedly until "VIDEO" appears.

Notes

• You need to connect both left and right surround speakers. Otherwise, the sound will not be heard (MHC-RX80 only).
• If you cannot select "MD" even when you have pressed FUNCTION, press POWER while pressing FUNCTION when the power is turned off. "VIDEO" will be switched to "MD". To return to "VIDEO" do the same procedure.

Connecting a VCR

Make sure to match the color of the plugs and the connectors. To listen to the sound of the connected VCR, press FUNCTION repeatedly until "VIDEO" appears.

To the audio output of the VCR
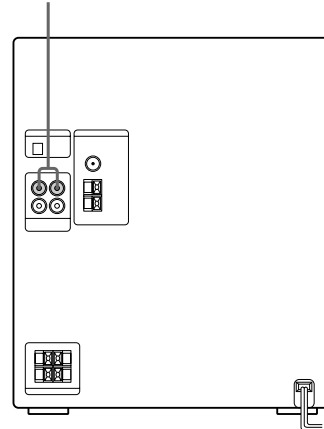
Note

If the sound is distorted when selecting "VIDEO", switch to "MD" (see previous "Notes").

8

Connecting outdoor aerials

Connect the outdoor aerial to improve the reception.

FM aerial

Connect the optional FM outdoor aerial. You can also use the TV aerial instead.

IEC standard socket connector (not supplied)

Screw clamp

FM75Ω COAXIAL

AM

Ground wire (not supplied)
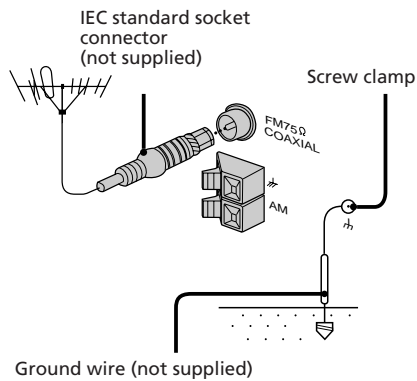
AM aerial

Connect a 6- to 15- meter (20- to 50- feet) insulated wire to the AM aerial terminal. Leave the supplied AM loop aerial connected.

Insulated wire (not supplied)

Screw clamp

FM75Ω COAXIAL

AM

Ground wire (not supplied)
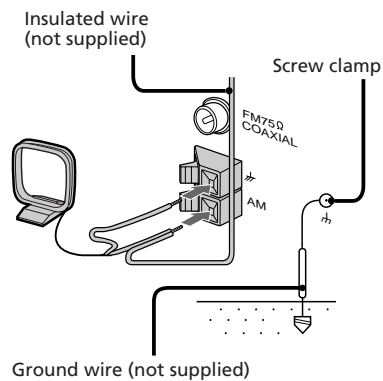
Important

If you connect an outdoor aerial, ground from ⏚ terminal with the screw clamp. To prevent a gas explosion, do not connect the ground wire to a gas pipe.

9

Etape 1: Raccordement de la chaîne

Effectuez les opérations **1** à **5** pour relier les différents éléments de la chaîne avec les cordons et les accessoires fournis.

Enceinte surround droite

Antenne cadre AM

Enceinte surround gauche

Antenne FM

Enceinte avant droite

Enceinte avant gauche
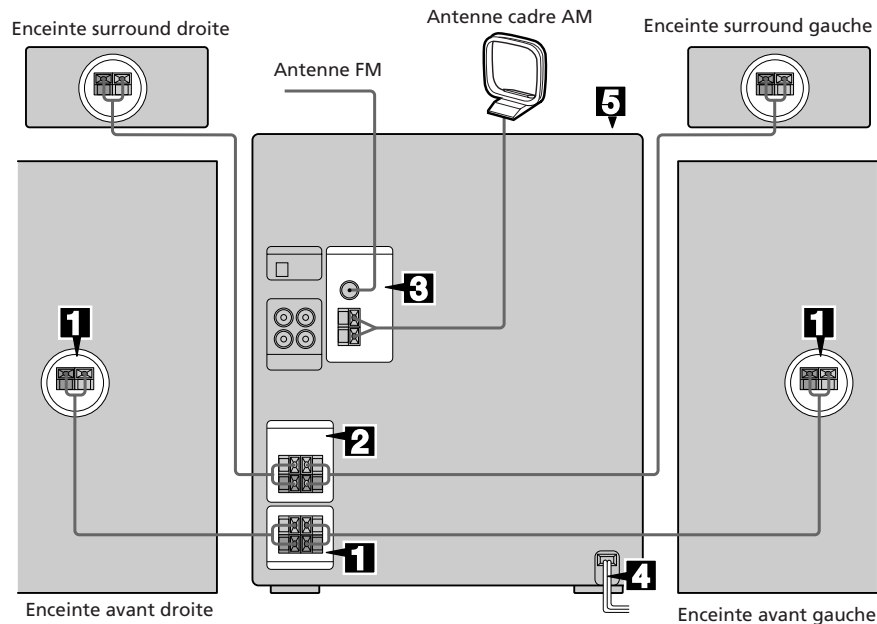
1 Raccordez les enceintes.

Raccordez les cordons d'enceintes aux prises SPEAKER de la même couleur.

Eloignez les cordons d'enceintes des antennes pour éviter que les antennes ne captent du bruit.

Insérez seulement la partie dénudée du cordon.
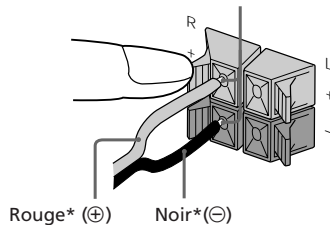
R

L

+

−

Rouge* (⊕)   Noir*(⊖)

* La couleur de vos cordons d'enceintes peut être différente. Reportez-vous au mode d'emploi des enceintes pour les détails.

2 Raccordez les enceintes surround.

(MHC-RX80 seulement)

Raccordez les cordons d'enceinte surround aux prises SPEAKER de même couleur.

Insérez seulement la partie dénudée du cordon.

Insérez seulement la partie dénudée du cordon.

R

L

+

−

Rouge* (⊕)   Noir* (⊖)

* La couleur de vos cordons d'enceintes peut être différente. Reportez-vous au mode d'emploi des enceintes pour les détails.

4

3 Raccordez les antennes FM et AM. Préparez l'antenne cadre AM, puis raccordez-la.

Antenne cadre AM (fourinie)

Etendez l'antenne fil FM à l'horizontale.

FM75Ω COAXIAL

AM

4 Raccordez le cordon d'alimentation secteur à un prise murale.

Le mode de démonstration apparaît sur l'afficheur.

5 Désactivez le mode de démonstration en appuyant sur DISPLAY/DEMO quand la chaîne est éteinte.

Le mode de démonstration est aussi désactivé quand vous réglez l'horloge.

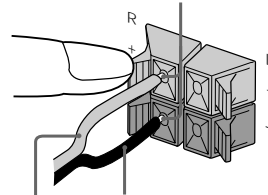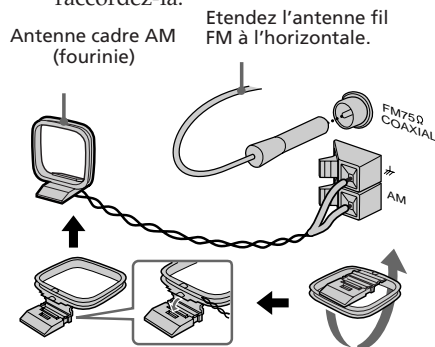## Mise en place des deux piles de format AA (R6) dans la télécommande
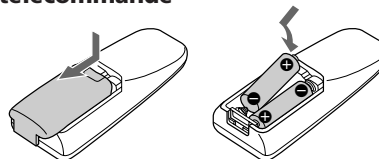
Conseil

Normalement, les piles devraient durer environ six mois. Quand vous ne pouvez plus faire fonctionner la chaîne avec la télécommande, remplacez les deux piles par des neuves.

Remarque

Si vous ne comptez pas utiliser la télécommande pendant un certain temps, enlevez les piles pour éviter tout dommage dû à une fuite de l'électrolyte.

Pour transporter la chaîne

Protégez le mécanisme du lecteur de CD de la façon suivante.

1 Appuyez de façon répétée sur FUNCTION jusqu'à ce que "CD" apparaisse sur l'afficheur.

2 Tout en tenant PLAY MODE enfoncée, appuyez sur POWER pour éteindre la chaîne.

5

Etape 2: Réglage de l'heure

Vous devez mettre l'horloge à l'heure avant d'utiliser les fonctions de programmation.

1   2,4   3,5

1 Appuyez sur CLOCK TIMER SET.

Les chiffres des heures se mettent à clignoter.

2 Tournez la molette pour régler l'heure.

L'horloge fonctionne selon un cycle de 12 heures.

3 Appuyez sur ENTER/NEXT.

Les chiffres des minutes se mettent à clignoter.
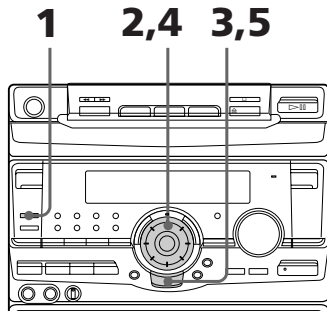

4 Tournez la molette pour régler les minutes.

5 Appuyez sur ENTER/NEXT.

L'horloge se met en marche.

Conseils

• En cas d'erreur, recommencez à partir de l'étape 1.
• Le réglage de l'heure désactive automatiquement le mode de démonstration.
  Si vous voulez afficher le mode de démonstration, appuyez sur DISPLAY/DEMO quand la chaîne est hors tension.

6

Remarque

Quand vous réglez l'heure, vous pouvez choisir n'importe quel affichage de l'égaliseur sauf le motif 3 de l'analyseur de spectre. (Voir "Pour changer l'affichage de l'égaliseur" à la page 30.)

Etape 3: Préréglage de stations radio

Le modèle à 3 gammes permet de prérégler 40 stations, 20 FM, 10 PO et 10 GO.

Le modèle à 4 gammes permet de prérégler 45 stations, 20 FM, 10 PO, 10 GO et 5 UKV.

POWER **3,5   6 2 1 4**
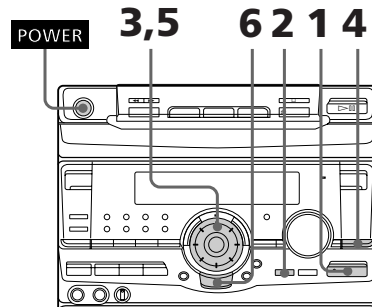
1 Appuyez de façon répétée sur TUNER/BAND jusqu'à ce que la gamme souhaitée apparaisse sur l'afficheur.

Les gammes de fréquences que vous pouvez recevoir dépendent du modèle que vous avez acheté.

Vérifiez les gammes que vous pouvez recevoir.

A chaque pression sur cette touche, la gamme change dans l'ordre suivant:

Modèle à 3 gammes

FM → MW → SW

Modèle à 4 gammes

FM → MW → LW→ UVK*

*"STEREO PLUS" apparaît quand vous sélectionnez la gamme UKV.

2 Appuyez de façon répétée sur TUNING MODE pour sélectionner "AUTO".

3 Tournez la molette.

L'indication de la fréquence change et le balayage s'arrête quand une station est accordée. "TUNED" et "STEREO" (lors d'une émission en stéréo) apparaissent.

4 Appuyez sur TUNER MEMORY.

Un numéro de préréglage apparaît sur l'afficheur.

Numéro de préréglage
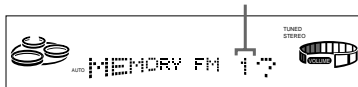
5 Tournez la molette pour sélectionner le numéro de préréglage souhaité.

6 Appuyez sur ENTER/NEXT.

La station est mémorisée.

7 Répétez les étapes 1 à 6 pour prérégler d'autres stations.

Pour accorder une station de faible puissance

Appuyez de façon répétée sur TUNING MODE pour sélectionner "MANUAL" à l'étape 2, puis tournez la molette pour accorder vous-même la station.

Pour changer de numéro de préréglage

Recommencez à partir de l'étape 1.

Remarque

Les stations préréglées restent mémorisées une demi-journée même si vous débranchez la chaîne ou si une coupure de courant a lieu.

7

Raccordement d'appareils AV en option

Pour tirer le meilleur parti de votre chaîne, vous pouvez raccorder des appareils disponibles en option. Reportez-vous au mode d'emploi de chaque appareil pour le détail des opérations.
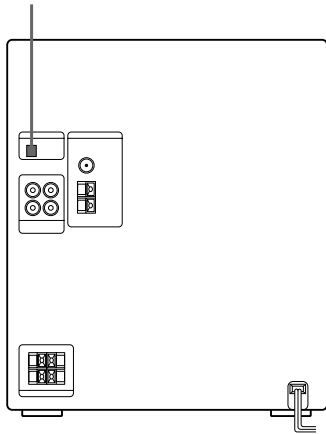
Raccordement d'appareils audio

Selon l'appareil qui sera raccordé et la méthode de raccordement, choisissez une des deux liaisons suivantes.

Raccordement d'une platine MD pour l'enregistrement numérique

Vous pouvez enregistrer numériquement un CD sur une platine MD en utilisant un câble optique pour la liaison.

à la prise DIGITAL IN de la platine MD

Raccordement d'une platine MD pour l'enregistrement analogique

Veillez à bien faire correspondre la couleur des fiches et des prises. Pour écouter le son fourni par la platine MD raccordée, appuyez de façon répétée sur FUNCTION jusqu'à ce que "MD" apparaisse.

à la sortie audio de la platine MD   à l'entrée audio de la platine MD
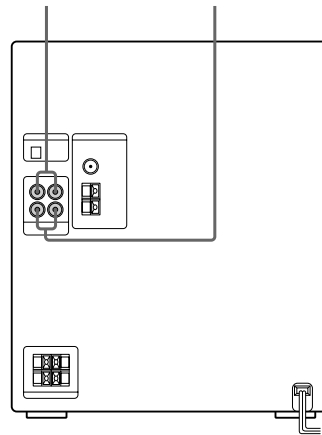
Remarques
• Vous devez raccorder les deux enceintes surround (gauche et droite) pour entendre le son (MHC-RX80 seulement).
• Si vous ne pouvez pas sélectionner "MD" même après avoir appuyé sur FUNCTION, appuyez simultanément sur POWER et FUNCTION quand la chaîne est éteinte. L'affichage "VIDEO" est remplacé par "MD". Pour revenir à l'affichage de "VIDEO", faites la même opération.

Conseil

Si vous raccordez une platine tourne-disque avec tête de lecture MM, raccordez-la à VIDEO/MD IN en utilisant un égaliseur EQ-2 optionnel pour tête de lecture MM et un cordon de liaison. Pour écouter le son, appuyez de façon répétée sur FUNCTION jusqu'à ce que "VIDEO" apparaisse.

8

Raccordement d'un magnétoscope

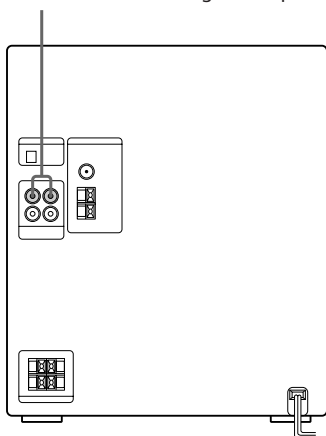Veillez à faire correspondre la couleur des fiches et des prises. Pour écouter le son fourni par un magnétoscope raccordé, appuyez de façon répétée sur FUNCTION jusqu'à ce que "VIDEO" apparaisse.

à la sortie audio du magnétoscope

Remarque

Si le son présente de la distorsion quand vous sélectionnez "VIDEO", réaffichez "MD" (voir les remarques précédentes).

Raccordement d'antennes extérieures

Raccordez une antenne extérieure pour améliorer la réception.

Antenne FM

Raccordez une antenne extérieure FM optionnelle. Vous pouvez utiliser l'antenne de télévision comme antenne extérieure.

Connecteur femelle norme IEC (non fourni)   Serre-joint
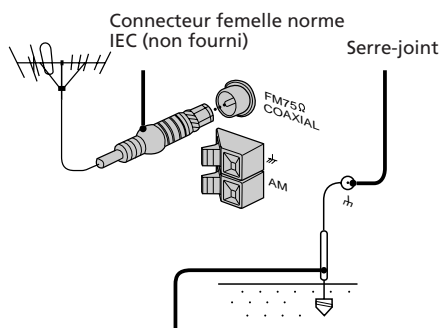
Fil de terre (non fourni)

Antenne AM

Raccordez un fil isolé de 6 à 15 mètres (20 à 50 pieds) à la borne d'antenne AM. Laissez l'antenne cadre AM fournie raccordée.

Fil isolé (non fourni)   Serre-joint
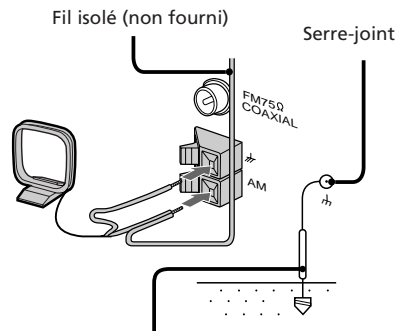
Fil de terre (non fourni)

Important

Si vous raccordez une antenne extérieure, reliez la borne de terre ⊥ à la terre avec un serre-joint. Afin d'éviter tout risque d'explosion, ne raccordez pas le fil de terre à un tuyau de gaz.

9

Playing a CD

— *Normal play*

You can play up to three CDs in a row.

POWER ◄◄ ►► **2 1** ►/▐▐

1/ALL DISCS   DISC SKIP □ VOLUME
               EX-CHANGE

CD ►

▐▐
■
I◄◄ ►►I
◄◄ ►►

VOL +/–
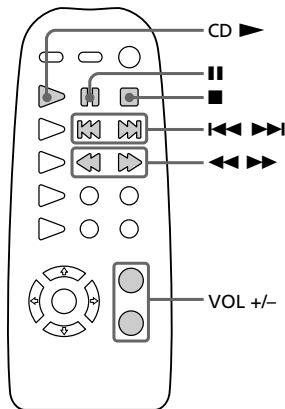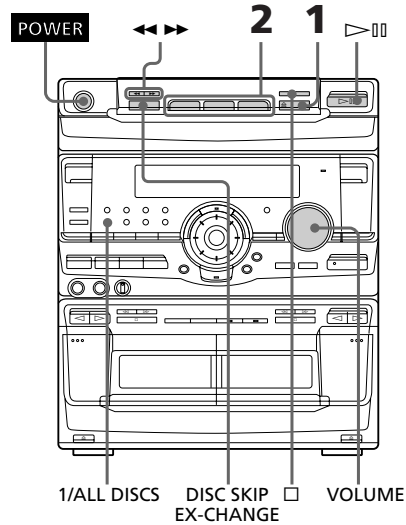
1 Press ▲ OPEN/CLOSE and place up to two CDs on the disc tray.

If a disc is not placed properly it will not be recognized.

With the label side up. When you play a single CD, place it on the inner circle of the tray.
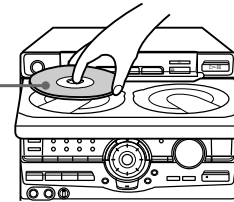
To insert a third disc, press DISC SKIP EX-CHANGE to rotate the disc tray.

2 Press one of the DISC 1~3 buttons.

The disc tray closes and play starts.

If you press ►/▐▐ (or ► on the remote) when the disc tray is closed, play starts from the CD loaded on the tray whose button is lit green.

Disc tray number   Playing time

ALL DISCS   CD1   0.03

Track number

10
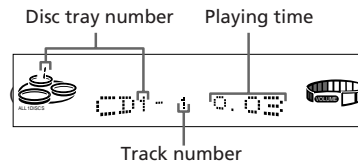
To	Do this
Stop play	Press □ (■ on the remote).
Pause	Press ▷⏸ (⏸ on the remote). Press again to resume play.
Select a track	During play or pause, turn the jog dial clockwise (to go forward) or counterclockwise (to go back) and release it when you reach the desired track. Or press ▶▶| (to go forward) or |◀◀ (to go back) on the remote.
Find a point in a track	Press and hold down ▶▶ or ◀◀ (or ▶▶/◀◀ on the remote) during play and release it at the desired point.
Select a CD in stop mode	Press a DISC 1~3 button or DISC SKIP EX-CHANGE.
Play only the CD you have selected	Press 1/ALL DISCS repeatedly until "1 DISC" appears.
Play all CDs	Press 1/ALL DISCS repeatedly until "ALL DISCS" appears.
Remove the CD	Press ⏏ OPEN/CLOSE.
Exchange other CDs while playing	Press DISC SKIP EX-CHANGE.
Adjust the volume	Turn VOLUME (or press VOL +/− on the remote).

Tips
- Pressing ▷⏸ when the power is off automatically turns the power on and starts CD playback if there is a CD in the tray (One Touch Play).
- You can switch from another source to the CD player and start playing a CD just by pressing ▷⏸ or the DISC 1~3 buttons (Automatic Source Selection).
- If there is no CD in the player, "CD NO DISC" appears in the display.
- When a disc tray is selected or the CD placed on that tray is playing, the DISC 1~3 button for the respective tray lights green.

Basic Operations

11

Recording a CD

— CD Synchro Recording

The CD SYNCHRO button lets you record from a CD to a tape easily. You can use TYPE I (normal) or TYPE II (CrO2) tapes. The recording level is adjusted automatically.

POWER DISC SKIP EX-CHANGE **4 2**

DOLBY NR **3 5 □ 1**
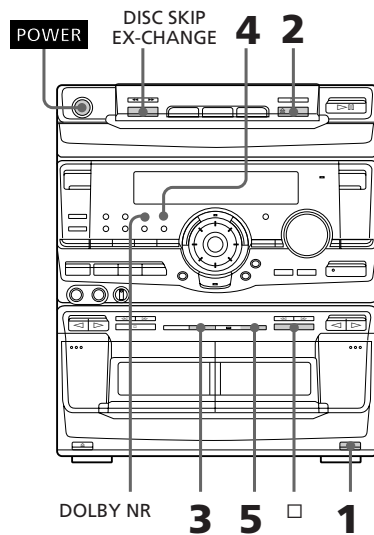
1 Press ⏏ EJECT and insert a blank tape into deck B.

With the side you want to record facing forward
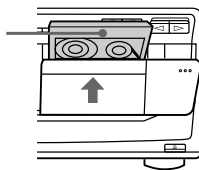
2 Press ⏏ OPEN/CLOSE and place a CD.

Then press again to close the disc tray. If the indicator for the tray you want to record is not lit green, press DISC SKIP EX-CHANGE repeatedly so that it lights green.

With the label side up. When you play a single CD, place it on the inner circle of the tray.

3 Press CD SYNCHRO.

Deck B stands by for recording and the CD player stands by for playback. ▷ (for front side) lights up.

4 Press DIRECTION repeatedly to select ⇌ to record on one side. Select ↻ (or RELAY) to record on both sides.

5 Press ⅡⅠ on deck B.

Recording starts.

To stop recording

Press □ on deck B or on the CD player.

12

Tips
- If you want to record from the reverse side, press ◁ so that ◁ (for reverse side) lights up.
- When you record on both sides, be sure to start from the front side. If you start from the reverse side, recording stops at the end of the reverse side.
- When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR B" appears after pressing CD SYNCHRO.
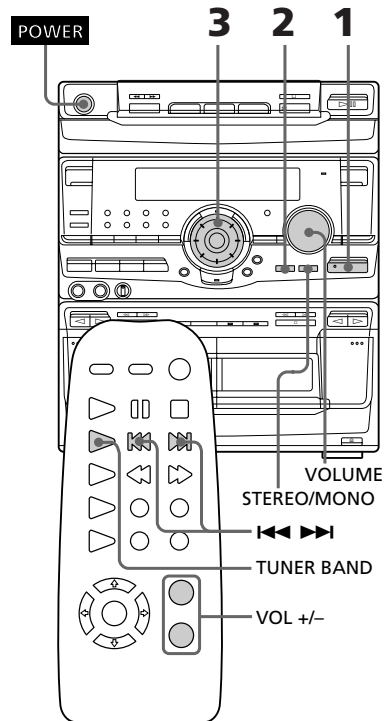
Note
You cannot listen to other sources while recording.

Listening to the radio

— *Preset Tuning*

Preset radio stations in the tuner's memory first (see "Step 3: Presetting radio stations").

POWER

3 2 1

VOLUME
STEREO/MONO

|◀◀ ▶▶|

TUNER BAND

VOL +/–

Listening to the radio (continued)

1 Press TUNER/BAND repeatedly until the band you want appears in the display.

the bands you can recieve vary depending on the model you purchased. Be sure to check which bands you can recieve.

Every time you press this button, the band changes as follows:

3 band models:

FM → MW → LW

4 band model:

FM → MW → LW → UKV*
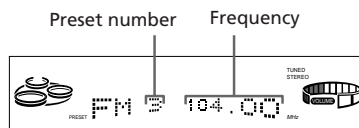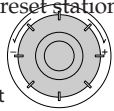
* "STEREO PLUS" is displayed when you select UKV.

2 Press TUNING MODE repeatedly so that "PRESET" appears in the display.

MANUAL → AUTO → PRESET

3 Turn the jog dial (or press ⏮ or ⏭ on the remote) to tune in the desired preset station.

Turn counter-clockwise (or press ⏮ on the remote) for lower preset numbers.

Turn clockwise (or press ⏭ on the remote) for higher preset numbers.

Preset number   Frequency

To	Do this
Turn off the radio	Press POWER.
Adjust the volume	Turn VOLUME (or press VOL +/– on the remote).

To listen to non-preset radio stations

Press TUNING MODE repeatedly so that "MANUAL" appears in step 2, then tune in the station by turning the jog dial.

Tips
- Pressing TUNER/BAND when the power is off automatically turns the power on and tunes to the last received station (One Touch Play).
- You can switch from another source to the radio just by pressing TUNER/BAND (Automatic Source Selection).
- When an FM programme is noisy, press STEREO/MONO so that "MONO" appears in the display. There will be no stereo effect, but the reception will improve. Press the button again to restore the stereo effect.
- To improve broadcast reception, reorient the supplied aerials.

14

Recording from the radio

You can record the radio programme on a tape by calling up a preset station. You can use TYPE I (normal) or TYPE II (CrO2) tapes. The recording level is automatically adjusted.

POWER

6 3 2 1

DOLBY NR **5 7** □ **4**
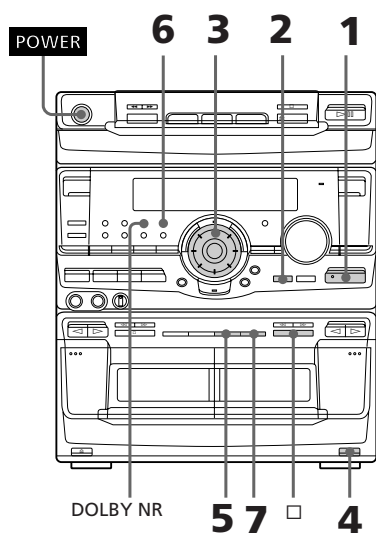
1 Press TUNER/BAND to select the band you want.

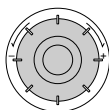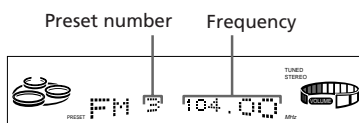**2** Press TUNING MODE so that "PRESET" appears in the display.

3 Turn the jog dial to tune in a preset station.

Turn counter-clockwise for lower preset numbers.

Turn clockwise for higher preset numbers.

Preset number   Frequency

FM 2 104.00

TUNED STEREO

PRESET   MHz

4 Press ⏏ EJECT and insert a blank tape into deck B.

With the side you want to record facing forward
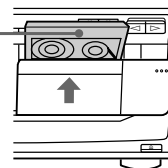
5 Press ●.
Deck B stands by for recording.

6 Press DIRECTION repeatedly to select ⇌ to record on one side. Select ⟲ (or RELAY) to record on both sides.

7 Press ▯▯ on deck B.
Recording starts.

To stop recording
Press □ on deck B.

Tips
• If you want to record from the reverse side, press ◁ so that ◁ (for reverse side) lights up.
• When you record on both sides, be sure to start from the front side. If you start from the reverse side, recording stops at the end of the reverse side.
• To record non-preset stations, select "MANUAL" in step 2, then turn the jog dial to tune in the desired station.
• When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR B" appears after pressing ●.
• If noise is heard while recording from the radio, move the respective aerial to reduce the noise.

Playing a tape

You can use any type of tape, TYPE I (normal), TYPE II (CrO2) or TYPE IV (metal) , since the deck automatically detects the tape type. To select either deck A or B, press DECK A or DECK B on the remote.

POWER   DOLBY NR   **2**   VOLUME

3 1   □   ◁◁/▷▷   ❙❙   □   **1 3**

❙❙

■

◀◀ ▶▶

DECK A ▶

DECK B ▶

VOL +/−
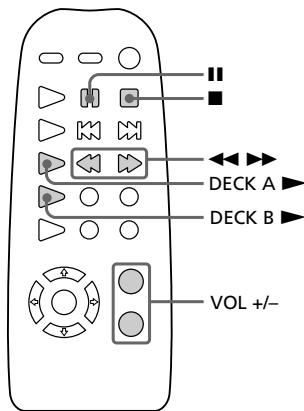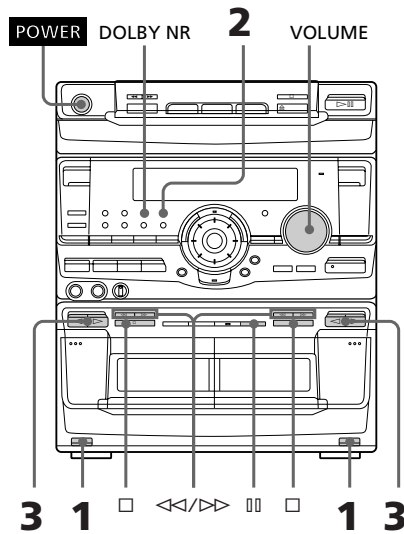
1   Press ⏏ EJECT and insert a recorded tape in deck A or B.

With the side you want to play facing forward

2   Press DIRECTION repeatedly to select ⇌ to play one side. Select ↻* to play both sides.

To play both decks in succession, select RELAY (relay play).**

3   Press ▷.

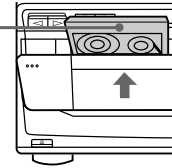Press ◁ to play the reverse side. The tape starts playing.

*   The deck stops automatically after repeating the sequence five times.
** Relay play always follows the following sequence:
Deck A (front side), Deck A (reverse side), Deck B (front side), Deck B (reverse side).

To	Do this
Stop play	Press □ (or ■ on the remote).
Pause (Deck B only)	Press ❙❙. Press again to resume play.
Fast-forward	Press ▷▷ while playing the front side or ◁◁ while playing the reverse side.
Rewind	Press ◁◁ while playing the front side or ▷▷ while playing the reverse side.
Remove the cassette	Press ⏏ EJECT.
Adjust the volume	Turn VOLUME (or press VOL +/− on the remote).

16

Tips
- Pressing ▷ or ◁ when the power is off automatically turns the power on and starts tape playback if there is a tape in the deck (One Touch Play).
- You can switch from another source to the tape deck just by pressing ▷ or ◁ (Automatic Source Selection).
- When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR B" appears.
- When dubbing tapes originally recorded with Dolby NR B, the dubbed tape is automatically played with Dolby NR B.

Recording from a tape

— High-speed Dubbing

You can use TYPE I (normal) or TYPE II (CrO2) tapes. The recording level is automatically adjusted.
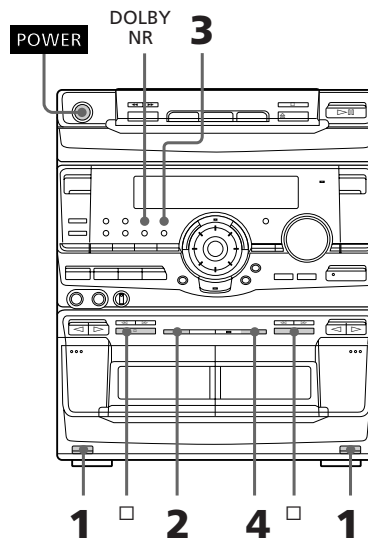
1 Press ⏏ EJECT and insert a recorded tape in deck A and a blank tape in deck B.

With the side you want to play/record facing forward

2 Press HIGH SPEED DUBBING.
Deck B stands by for recording.

17

Recording from a tape (continued)

3 Press DIRECTION repeatedly to select ⇌ to record on one side. Select ⟳ (or RELAY) to record on both sides.

4 Press ❙❙.
Dubbing starts.
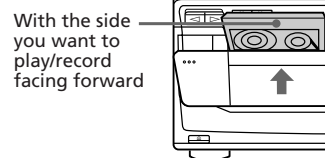
To stop dubbing
Press ☐ on deck A or B.

Tips
• When you dub on both sides, start recording from the front side. If you record from the reverse side, recording stops at the end of the reverse side.
• If you set DIRECTION to ⟳ when the tapes you use have different lengths, the tape in each deck reverses independently. If you select RELAY, the tapes in both decks reverse together.
• You don't have to set DOLBY NR, since the tape in deck B is automatically recorded in the same state as the tape in deck A.

18

Using the CD display

You can check the remaining time of the current track or that of the CD.
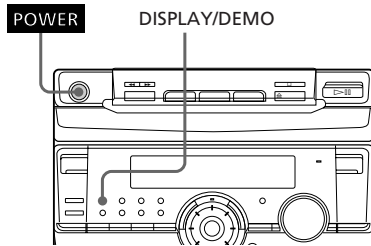
POWER   DISPLAY/DEMO

➜ Press DISPLAY/DEMO during playback.

Each time you press the button during normal playback, the display changes as follows:

→ Playing time on the current track
  ↓
  Remaining time on the current track
  ↓
  Remaining time on current CD (1 DISC mode) or
  "PLAY" display (ALL DISCS mode)
  ↓
  Clock display (for eight seconds)
  ↓
  Effect (P FILE) name or "EFFECT ON (OFF)"

To check the total playing time and the number of tracks on a CD

Press DISPLAY/DEMO in the stop mode.
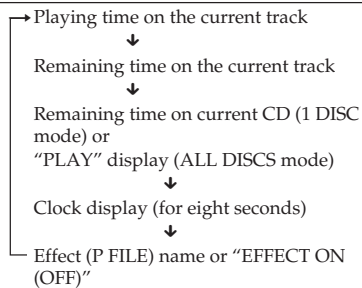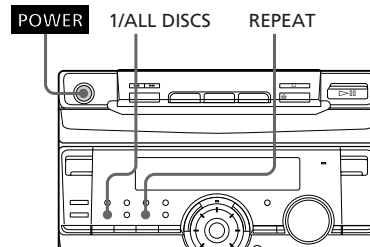
If you press DISPLAY/DEMO again, the clock display appears for eight seconds then the display returns to the previous indication.

Playing the CD tracks repeatedly

— Repeat Play

This function lets you repeat a single CD or all CDs in normal play, Shuffle Play and Programme Play.

POWER   1/ALL DISCS   REPEAT

➜ Press REPEAT during playback until "REPEAT" appears in the display.

Repeat Play starts. Do the following procedure to change the repeat mode.

To repeat	Press
All the tracks on the current CD	1/ALL DISCS repeatedly until "1 DISC" appears in the display.
All the tracks on all CDs	1/ALL DISCS repeatedly until "ALL DISCS" appears in the display.
Only one track*	REPEAT repeatedly until "REPEAT 1" appears in the display while playing the track you want to repeat.

* You can't repeat a single track during Shuffle Play and Programme Play.
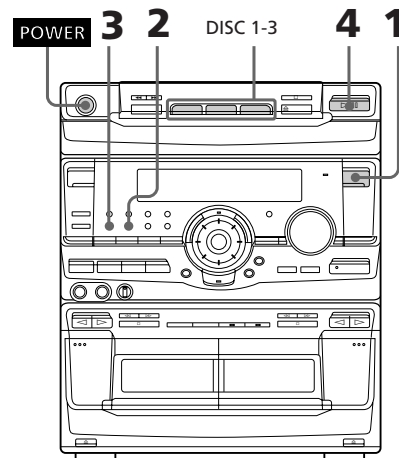
To cancel Repeat Play

Press REPEAT so that "REPEAT" or "REPEAT 1" disappears from the display.

19

Playing the CD tracks in random order

— Shuffle Play

You can play all the tracks on one CD or all CDs in random order.

POWER **3 2** DISC 1-3 **4 1**

1 Press FUNCTION repeatedly until "CD" appears in the display, then place a CD.

2 Press PLAY MODE repeatedly until "SHUFFLE" appears in the display.

3 Press 1/ALL DISCS to choose "1 DISC" or "ALL DISCS".

"ALL DISCS" shuffles all the CDs in the player. "1 DISC" shuffles the CD whose DISC indicator is green.

4 Press ▷⏸.

"⊏⊐" appears and then all the tracks play in random order.

To cancel Shuffle Play

Press PLAY MODE repeatedly until "SHUFFLE" or "PROGRAM" disappears from the display. The tracks continue playing in their original order.
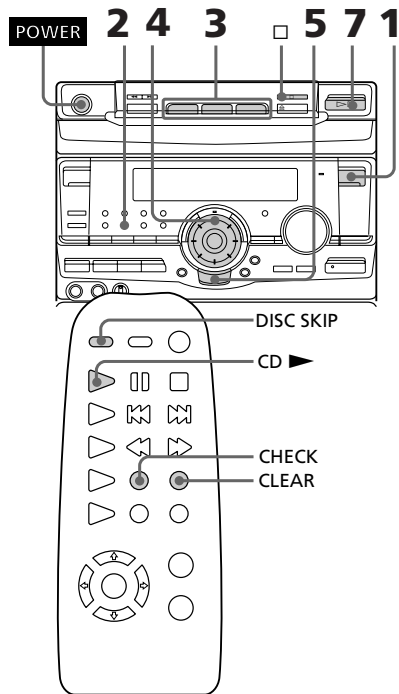
To select a desired CD

Press DISC 1~3.

Tips
• You can start Shuffle Play during normal play by pressing PLAY MODE repeatedly to select "SHUFFLE".
• To skip a track, turn the jog dial clockwise (or press ▶▶I on the remote).

20

Programming the CD tracks

— Programme Play

You can make a programme of up to 32 tracks from all the CDs in the order you want them to be played.

DISC SKIP

CD ►

CHECK

CLEAR

1 Press FUNCTION repeatedly until "CD" appears in the display, then place a CD.

2 Press PLAY MODE repeatedly until "PROGRAM" appears in the display.

3 Press one of the DISC 1~3 buttons to select a CD.

4 Turn the jog dial until the desired track appears in the display.
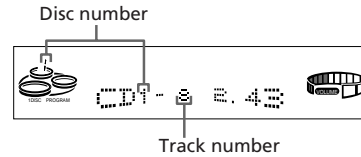
Disc number

Track number

5 Press ENTER/NEXT.
The track is programmed. "STEP" and the programmed playing order appear, followed by the total playing time.

Total playing time

The last programmed track
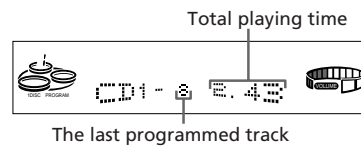
6 To programme additional tracks, repeat steps 3 to 5.
Skip step 3 to select tracks from the same disc.

7 Press ▷〓.
All the tracks play in the order you selected.

To cancel Programme Play

Press PLAY MODE repeatedly until "PROGRAM" or "SHUFFLE" disappears from the display.

21

Programming the CD tracks
(continued)

To	Press
Check the programme	CHECK on the remote repeatedly. After the last track, "CHECK END" appears.
Clear a track from the end	CLEAR on the remote in stop mode.
Clear a specific track	CHECK on the remote repeatedly until the number of the track to be erased lights up, then press CLEAR.
Add a track to the programme	1 Select the disc tray with a DISC 1~3 button. 2 Select the track by turning the jog dial. 3 Press ENTER/NEXT.
Clear the entire programme	□ once in stop mode or twice while playing.

Tips
• The programme you made remains in the CD player even after it has been played back. Press ▷॥ to play the same programme again.
• If "--.--" appears instead of the total playing time during programming, this means:
  – you have programmed a track number which exceeds 20
  – the total playing time has exceeded 100 minutes.

Playing CDs without interruption

— Non Stop Play

You can play CDs without pausing between tracks.

POWER **2** **3** **1**
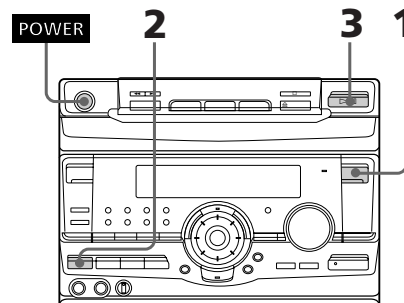
1 Press FUNCTION repeatedly until "CD" appears in the display, then place a CD.

2 Press NON-STOP so that the indicator on the button lights up.

3 Press ▷॥.

To cancel Non Stop Play
Press NON-STOP so that the indicator on the button goes out.

22

Recording on a tape manually
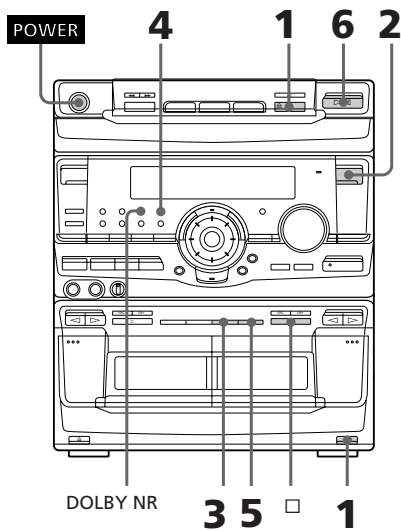
You can record from CD, tape, or radio as you like. For example, you can record just the songs you want or record from the middle of the tape. The recording level is adjusted automatically.

POWER   **4**   **1   6   2**

DOLBY NR   **3 5** □   **1**

1 Insert a blank tape into deck B.

2 Press FUNCTION repeatedly until the source you want to record (e.g., CD) appears.

3 Press ●.
Deck B stands by for recording. ▷ (for front side) lights up.

4 Press DIRECTION repeatedly to select ⇄ to record on one side. Select ⟳ (or RELAY) to record on both sides.

5 Press ❙❙ on deck B.
Recording starts.

6 Start playing the source to be recorded.

To	Press
Stop recording	□ on the deck B
Pause recording	❙❙ on the deck B

Tips
- If you want to record from the reverse side, press ◁ so that ◁ (for reverse side) lights up.
- When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR B" appears after pressing ●.
- To skip tracks while recording from a tape, press ▷▷ or ◁◁ on deck A. Deck B stands by for recording, and you can skip tracks. To resume dubbing, press ❙❙ on deck B.

23

Recording a CD by specifying track order

— Programme Edit

You can record tracks from all the CDs in the order you want. When programming, make sure the playing times for each side do not exceed the length of one side of the tape.

POWER **3 11 4   1   2**

5   6   10 12 □   1

8

CHECK
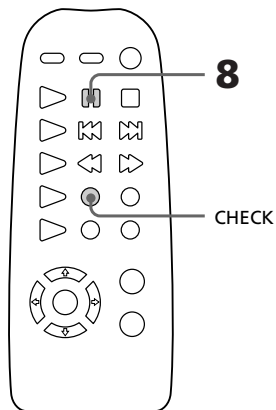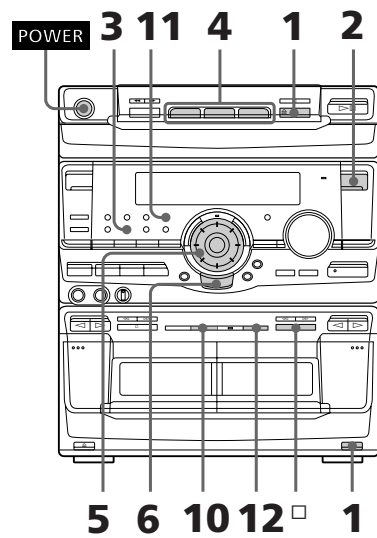
1 Place a CD and insert a blank tape into deck B.

2 Press FUNCTION repeatedly until "CD" appears in the display.

3 Press PLAY MODE repeatedly until "PROGRAM" appears in the display.

4 Press one of the DISC 1~3 buttons to select a CD.

5 Turn the jog dial until the desired track appears in the display.

Disc number   Total playing time (including selected track)

Track number

6 Press ENTER/NEXT.
The track is programmed. "STEP" and the programmed playing order appear, followed by the total playing time.

Total playing time

Previously selected track

7 To programme additional tracks to be recorded on side A, repeat steps 4 to 6.
Skip step 4 to select tracks from the same disc.

24

8 Press ❙❙ on the remote to insert a pause at the end of side A.

"P" appears in the display and the total playing time resets to "0.00" in the display.

9 Repeat steps 5 and 6 for tracks from the same disc or steps 4 to 6 for tracks from another disc to programme the remaining tracks to be recorded on side B.

10 Press CD SYNCHRO.

Deck B stands by for recording and the CD player stands by for playback. ▷ (for front side) lights up.

11 Press DIRECTION repeatedly to select ⇄ to record on one side. Select ↻ (or RELAY) to record on both sides.

12 Press ❙❙ on deck B.

Recording starts.

To stop recording

Press ☐ on the deck B or on the CD player.

To check the order

Press CHECK on the remote repeatedly. After the last track, "CHECK END" appears.

To cancel Programme Edit

Press PLAY MODE repeatedly until "PROGRAM" or "SHUFFLE" disappears from the display.

Selecting tape length automatically

— *Tape Select Edit*

You can check the most suitable tape length for recording a CD. Note that you cannot use Tape Select Edit for discs containing more than 20 tracks.

➡ After inserting a CD, press EDIT once, so that "EDIT" flashes.

The required tape length for the currently selected CD appears, followed by the total playing time and tracks for side A and side B.
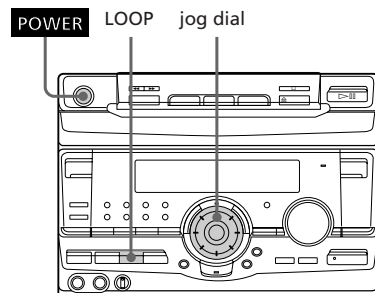
Note

You cannot use this function after programming. In order to use this function, you must first erase the programme (see "To clear the entire program" on page 22).

25

Looping part of a CD
— Loop

With the loop function, you can repeat part of a CD during playback. This lets you create original recordings.

POWER   LOOP   jog dial

➡ Press and hold LOOP during playback at the point you want to start the Loop function, and release to resume normal play.
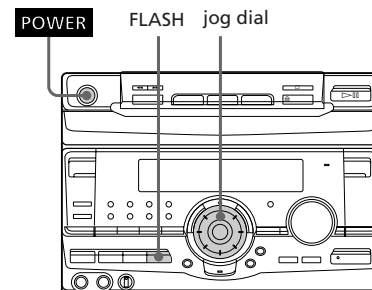
To adjust the loop length
Turn the jog dial while holding LOOP (or press MUSIC MENU ✦ or ➧ while holding LOOP on the remote) to select different loop lengths (LOOP 1~20).

Flashing part of a CD
— Flash

With the flash function, you can "flash" the CD sound during playback. This lets you create original recordings.

POWER   FLASH   jog dial

➡ Press and hold FLASH during playback at the point you want to start the Flash function, and release to resume normal play.

To adjust the flash length
Turn the jog dial while holding FLASH (or press MUSIC MENU ✦ or ➧ while holding FLASH on the remote) to select different flash lengths (FLASH 1~20).

To use LOOP and FLASH together
Press and hold both LOOP and FLASH at the same time.

Notes
• The loop and flash length cannot be adjusted during this operation. Adjust the loop and flash lengths independently beforehand if necessary.
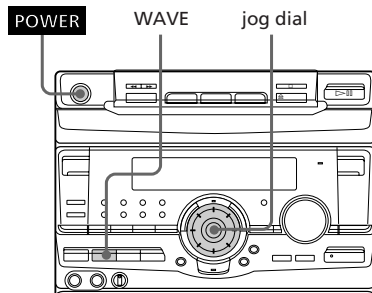• To record the flash effect, use the analog (VIDEO/MD OUT) connections or this unit's tape deck.

26

Waving the equalizer
— *Wave*

With the Wave function, you can fluctuate the graphic equalizer automatically. This effect can be used with any source, but it cannot be recorded.

POWER   WAVE   jog dial

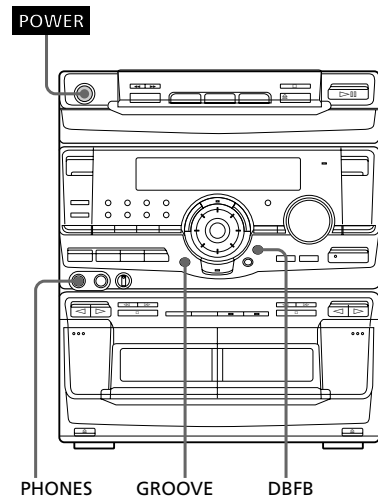➡ Press and hold WAVE to start the Wave function, and release to resume normal listening.

To adjust the wave length

Turn the jog dial while holding WAVE to select a different wave length (WAVE1~10).

27

Adjustingthesound

You can reinforce the bass, create a more powerful sound, and listen with headphones.

PHONES   GROOVE   DBFB

To reinforce bass (DBFB)

Press DBFB*.

Every time you press the button, the display changes as follows:

DBFB ◣\\ → DBFB ◣\\\\\ → display off

"DBFB ◣\\\\\" is more effective than "DBFB ◣\\".

* DBFB = Dynamic Bass Feedback

For a powerful sound (GROOVE)

Press GROOVE. The volume switches to power mode, DBFB is automatically set to full strength, the equalizer curve changes, and the "GROOVE" button lights up. Press GROOVE again to return to the previous volume.

Notes
• With some songs, the music will sound distorted when you use the DBFB system with the graphic equalizer if the bass is too strong. Adjust the bass slowly while listening to music so that you can monitor the effect of the adjustment.
• Cancelling GROOVE sets DBFB to "DBFB ◣\\" and flattens the equalizer curve. To cancel the DBFB level, press DBFB until the indication disappears. Adjust the equalization to obtain the effect you desire.

To listen through the headphones

Connect the headphones to PHONES jack. No sound will come from the speakers.

28

Selecting the audio emphasis

The audio emphasis menu lets you select the sound characteristic according to the sound you are listening to.

The personal file function (see "Making a personal audio emphasis file") lets you store your own effects.

POWER **1** **2** EFFECT ON/OFF

3
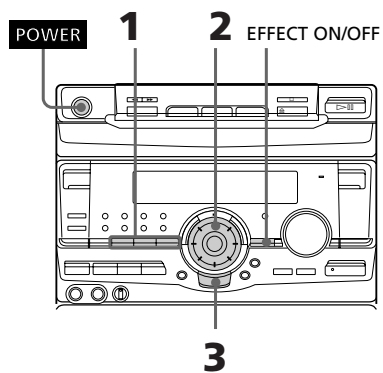
1 Press MUSIC, MOVIE, or GAME (or MUSIC MENU ♦/♦ on the remote repeatedly) to select a menu.
   See the chart "Music menu options" below. The last effect chosen from that menu appears in the display.

2 Use the jog dial (or press MUSIC MENU ♦ /♦ on the remote repeatedly) to select the preset you desire.
   The preset name appears in the display.

3 Press ENTER/NEXT.
   You don't need to press ENTER/NEXT when you use the remote.

To cancel the effect
Press EFFECT ON/OFF repeatedly (or MUSIC MENU ON/OFF on the remote) so that "EFFECT OFF" appears in the display.

Music menu options
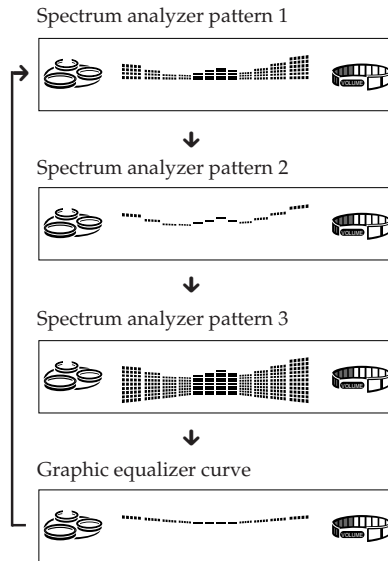"SUR ⅢⅢ■Ⅲ" appears if you select an effect with surround effects.

MENU button	Effect	For
MUSIC	ROCK POP JAZZ DANCE SOUL	Standard music sources
MOVIE	ACTION SF ROMANCE DRAMA SPORTS	Soundtracks and special listening situations
GAME	SHOOTING RACING RPG BATTLE ADVENTURE	Video games

29

Selecting the audio emphasis (continued)

To change the equalizer display

Each time you press DISPLAY/DEMO, the equalizer display changes to show one of the four displays below.

Spectrum analyzer pattern 1

↓

Spectrum analyzer pattern 2

↓

Spectrum analyzer pattern 3

↓

Graphic equalizer curve

Adjusting the audio emphasis

You can adjust the audio emphasis using the graphic equalizer and surround effect.

Adjusting the graphic equalizer

You can adjust the sound by raising or lowering the levels of specific frequency ranges.

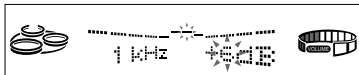Before operation, first select the audio emphasis you want for your basic sound.
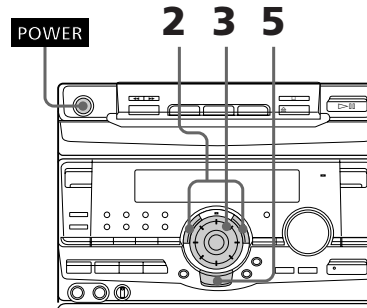
1 Select the audio emphasis you want for your basic sound (see "Selecting the audio emphasis").

2 Press HIGH FREQUENCY or LOW FREQUENCY repeatedly to select a frequency band.

30
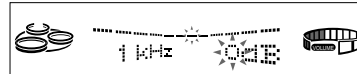
**3** Turn the jog dial to adjust level.

4 Repeat steps 2 and 3.

5 Press ENTER/NEXT when finished.

Note

If you choose another menu audio emphasis (other than "EFFECT OFF") the adjusted sound effect is lost. To retain the adjusted sound effect for future use, store it in a personal file. (See "Making a personal audio emphasis file".)

Activating the surround effect

You can enjoy the surround effect.
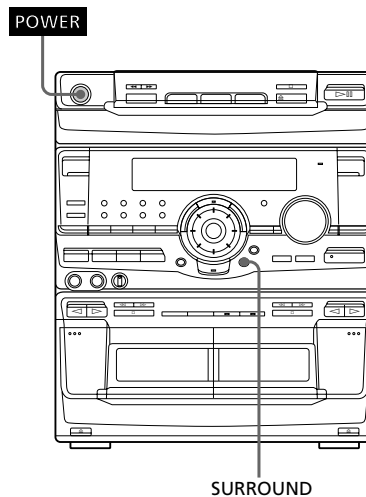
SURROUND

➡ Press SURROUND repeatedly so that "SUR ▓▓▓■▓▓▓" appears in the display.

Note

When you choose other sound effects, the surround effects will be canceled. If you want to memorize the effect, store it into a personal file (see "Making a personal audio emphasis file ").
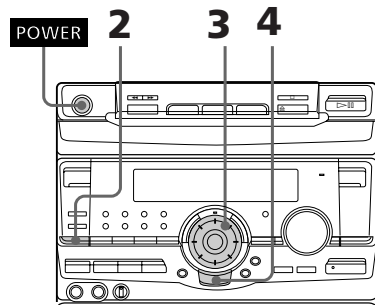
31

Making a personal audio emphasis file

— Personal file

You can create a personal file of audio patterns (surround effect and graphic equalizer) and store them in the memory of the unit. Later call up an audio pattern to play a favorite tape, CD, or radio programme. Create up to five audio files.

Before operation, first select the audio emphasis you want for your basic sound.
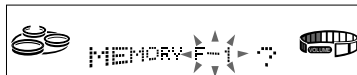

1 Obtain the sound effect you want by using the graphic equalizer and surround effect.

2 Press P FILE MEMORY.
The personal file number appears in the display.

3 Use the jog dial to select the file number (P FILE) where you want to store the sound effect.

4 Press ENTER/NEXT.
The adjusted sound effects are stored under the selected file number. The settings previously stored at this memory location are erased and replaced by the new settings.

32

To call up the personal file

1 Press P FILE (or MUSIC MENU ↟/↡ on the remote repeatedly) to display the last selected personal file.

2 Use the jog dial (or press MUSIC MENU ↞/↟ on the remote repeatedly) to select the personal file you desire.

3 Press ENTER/NEXT.
You don't need to press ENTER/NEXT when you use the remote.

Singingalong: Karaoke

You can sing along with any stereo CD or tape by turning down the singer's voice. You need to connect an optional microphone.

POWER

3

2 **1,5** VOLUME
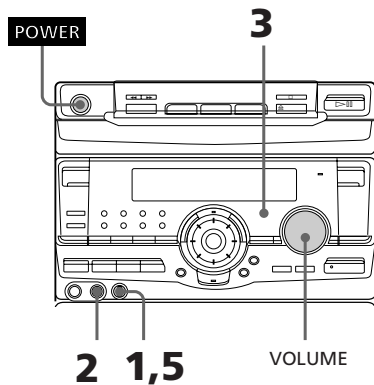
1 Turn MIC LEVEL to MIN to turn down the microphone control level.

2 Connect an optional microphone to MIX MIC.

3 Press KARAOKE PON/MPX repeatedly to obtain the karaoke effect you desire.

Every time you press the button, the display changes as follows:

KARAOKE PON → MPX R → MPX L

⌐—EFFECT OFF ←———⌐

The ⬉ indicator appears in the display when a karaoke mode is activated.

To sing karaoke with decreasing the vocal level of a CD, select KARAOKE PON. To sing karaoke of multiplex CD or tape, select MPX R or MPX L.

4 Start playing the music and adjust the volume.

5 Adjust the microphone volume by turning MIC LEVEL.

When you are done

Turn MIC LEVEL to MIN and disconnect the microphone from MIX MIC, then press KARAOKE PON/MPX repeatedly so that "⬉" disappears.

Mixing and recording sounds

POWER

2 **5**

5 **3** **4** **1**
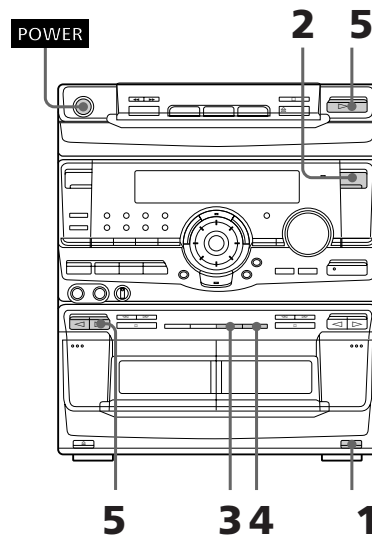
1 Do the above steps 1 to 5. Then, insert a tape in deck B.

2 Press FUNCTION repeatedly to select the source you desire and set it to pause mode.

33

Singing along: Karaoke
(continued)

3 Press ●.

4 Press ⫾⫾.

5 Press ▷ to start playing the CD
player (or tape deck A).
Playback starts. Start singing along with
the music.

To stop recording

Press ■ on deck B and the CD player.

Tips
• If acoustic feedback (howling) occurs, move the
  microphone away from the speakers or change the
  direction of the microphone.
• If you want to record your voice through the
  microphone only, you can do so by selecting the
 CD function and not playing a CD.

Notes
• If you press EFFECT ON/OFF or recall a sound
  effect, the karaoke mode is cancelled.
• The instrumental sound may be reduced as well as
  the singer's voice when the sound is recorded in
  monaural.
• The singer's voice may not be reduced when:
     —only a few instruments are playing
     —a duet is being played
     —the source has strong echoes or chorus
     —the singer's voice deviates from the centre.
     —the voice on the source is singing in high
        soprano or tenor.

Falling asleep to music

— Sleep Timer

You can let the system turn off at the preset
time, so you can sleep to the music. You can
preset the time to be turned off by 10 minutes.
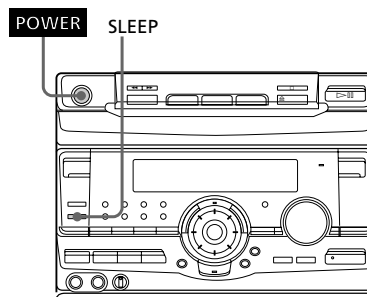
➡ **Press SLEEP.**

Every time you press the button, the
minute display (the turn-off time)
changes as follows:
AUTO → 90min → 80min → 70min
→ ··· → 10min → OFF → AUTO ···

When you choose auto
The power turns off when the current CD or
tape finishes playback (for up to 100
minutes).

To check the remaining time
Press SLEEP once.

To change the time to turn off
Select the time you want by pressing SLEEP.
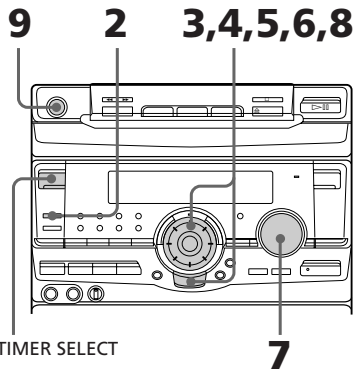
To cancel the Sleep Timer function
Press SLEEP repeatedly until "OFF" appears.

34

Waking up to music

— Wake-up Timer

You can wake up to music at a preset time every day. Make sure you have set the clock (see "Step 2: Setting the time").

9　　**2**　　**3,4,5,6,8**

TIMER SELECT

7

1 Prepare the music source you want to play.
- CD: Insert a CD. To start from a specific track, make a programme (see "Programming the CD tracks").
- Tape: Insert an tape with the side you want to play facing forward.
- Radio: Tune in the preset station you want (see "Step 3: Presetting radio stations").

2 Press CLOCK TIMER SET.
"SET (DAILY 1)" appears.

3 Turn jog dial to select DAILY 1 or 2, then press ENTER/NEXT.
"ON" appears and the hour digits flash in the display.
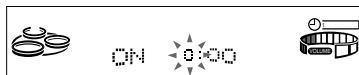
4 Set the time to start playback.
Turn jog dial to set the hour, then press ENTER/NEXT.
The minute indication starts flashing.

Turn jog dial to set the minute, then press ENTER/NEXT.
The hour indication flashes again.

5 Set the time to stop playback following the above procedure.

6 Turn jog dial until the music source you want appears.
The indications change as follows:
TUNER → CD PLAY → TAPE PLAY

7 Adjust the volume.

8 Press ENTER/NEXT.
The start time, followed by the stop time and the music source, appears, then the original display appears.

9 Turn off the power.

35

To check the setting

Press TIMER SELECT and turn the jog dial to select the respective mode (DAILY 1 or DAILY 2), then press ENTER/NEXT. To change the setting, start over from step 1.

To cancel the timer operation

Press TIMER SELECT and turn the jog dial to select "OFF", then press ENTER/NEXT.

**Tip**

The power truns on 15 seconds before the preset time.

Note

When setting the wake-up timer, set the equalizer display to anything other than Spectrum analyzer pattern 3. (See "To change the equalizer display" on page 30.)
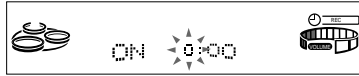
Timer-recordingradio programmes

To timer-record, you must preset the radio station (see "Step 3: Presetting radio stations") and set the clock (see "Step 2: Setting the time") beforehand.
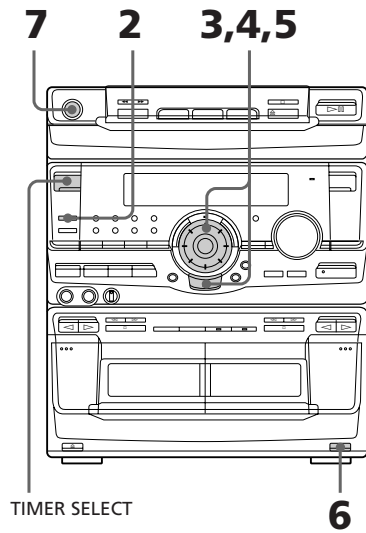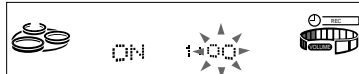

TIMER SELECT

1 Tune in the preset radio station (see "Listening to the radio").

2 Press CLOCK TIMER SET.
"SET (DAILY 1)" appears.

36

3 Turn jog dial to select REC, then press ENTER/NEXT.

"ON" appears and the hour digits flash in the display.

4 Set the time to start recording.

Turn jog dial to set the hour, then press ENTER/NEXT.

The minute indication starts flashing.

Turn jog dial to set the minute, then press ENTER/NEXT.

The hour indication flashes again.

5 Set the time to stop recording following the above procedure.

The start time appears, followed by the stop time, the recording source and the radio station, then the original display appears.

6 Insert a recordable tape.

7 Turn off the power.

When the recording starts, the volume level is set to the minimum.

To check the setting

Press TIMER SELECT and turn the jog dial to select "REC", then press ENTER/NEXT. To change the setting, start over from step 1.

To cancel the timer operation

Press TIMER SELECT and turn the jog dial to select "OFF", then press ENTER/NEXT.

Notes
• When setting the timer-recording, set the equalizer display to anything other than Spectrum analyzer pattern 3. (See "To change the equalizer display" on page 30.)
• If the power is on at the preset time, the recording will not be made.

37

Precautions

On operating voltage

Before operating the system, check that the operating voltage of your system is identical with the voltage of your local power supply.

On safety

• The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
• Unplug the system from the wall outlet (mains) if it is not to be used for an extended period of time. To disconnect the cord (mains lead), pull it out by the plug. Never pull the cord itself.
• Should any solid object or liquid fall into the component, unplug the stereo system and have the component checked by qualified personnel before operating it any further.
• The AC power cord must be changed only at the qualified service shop.

On placement

• Place the stereo system in a location with adequate ventilation to prevent heat build-up in the stereo system.
• Do not place the unit in an inclined position.
• Do not place the unit in locations where it is;
  — Extremely hot or cold
  — Dusty or dirty
  — Very humid
  — Vibrating
  — Subject to direct sunlight

On operation

• If the stereo system is brought directly from a cold to a warm location , or is placed in a very damp room, moisture may condense on the lens inside the CD player. Should this occur, the system will not operate properly. Remove the CD and leave the system turned on for about an hour until the moisture evaporates.
• When you move the system, take out any discs.

If you have any questions or problems concerning your stereo system, please consult your nearest Sony dealer.

Notes on CDs

• Before playing, clean the CD with a cleaning cloth. Wipe the CD from the centre out.
• Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
•Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight.

Cleaning the cabinet

Use a soft cloth slightly moistened with mild detergent solution.

To save a tape permanently

To prevent a tape from being accidentally recorded over, break off the cassette tab from side A or B as illustrated. If you later want to reuse the tape for recording, cover the broken tab with adhesive tape.
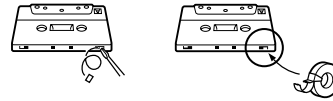
When you are using a TYPE II (CrO2) or TYPE IV (metal) cassette, be careful not to cover the detector slots which allow the tape player to automatically detect the type of tape.

Detector slots

38
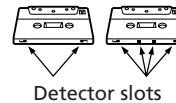
Before placing a cassette in the tape deck

Take up any slack in the tape. Otherwise the tape may get entangled in the parts of the tape deck and become damaged.

When using a tape longer than 90 minutes

The tape is very elastic. Do not change the tape operations such as play, stop, and fast-winding etc. frequently. The tape may get entangled in the tape deck.

Cleaning the tape heads

Clean the tape heads after every 10 hours of use. When the tape heads become dirty
  — the sound is distorted
  — there is a decrease in sound level
  — the sound drops out
  — the tape does not erase completely
  — the tape does not record
Make sure to clean the tape heads before you start an important recording or after playing an old tape. Use separately sold dry-type or wet-type cleaning cassette. For details, refer to the instructions of the cleaning cassette.

Demagnetizing the tape heads

Demagnetize the tape heads and the metal parts that have contact with the tape every 20 to 30 hours of use with a separately sold demagnetizing cassette. For details, refer to the instructions of the demagnetizing cassette.

Troubleshooting

If you run into any problem using this stereo system, use the following check list.

First, check that the power cord is connected firmly and the speakers are connected correctly and firmly.

Should any problem persist, consult your nearest Sony dealer.

General

The display starts flashing as soon as you plug in the power cord even though you haven't turned on the power (demonstration mode).

- Press DISPLAY/DEMO when the power is turned off.

  The demonstration mode appears automatically the first time you plug in the power cord. If there is a power outage lasting longer than half a day, redo the following:
  — Clock setting (see "Step 2: Setting the time")
  — Preset stations (see "Step 3: Presetting radio stations")
  — Timer settings (see "Waking up to music" and "Timer recording radio programmes").

"0:00" flashes in the display.

- A power interruption occurred. Set the clock and timer settings again.

There is no sound.

- Rotate VOLUME clockwise.
- The headphones are connected.
- Insert only the stripped portion of the speaker cord into the SPEAKE jack. Inserting the vinyl portion of the speaker cord will obstruct the speaker connections.

39

Troubleshooting (continued)

There is severe hum or noise.
- A TV or VCR is placed too close to the stereo system. Move the stereo system away from the TV or VCR.

The sound from the connected source is distorted.
- If "VIDEO" appears in the display when you press FUNCTION, switch the display to "MD" (see "Notes: Connecting a VCR").

The timer does not function.
- Set the clock correctly.

DAILY1, DAILY 2, and REC do not appear when you press the TIMER SELECT button.
- Set the timer correctly.
- Set the clock.

The remote does not function.
- There is an obstacle between the remote and the system.
- The remote is not pointing in the direction of the system's sensor.
- The batteries have run down. Replace the batteries.

There is acoustic feedback.
- Decrease the volume level.
- Move the microphone away form the speakers or change the direction of the microphone.

The color irregularity on a TV screen persists.
- Place the speakers farther away from the TV set.

Speakers

Sound comes from one channel or unbalanced left and right volume.
- Check the speaker connection and speaker placement.

There is no sound from the surround speakers (MHC-RX80 only).
- Press SURROUND to turn on the surround effect.

CD Player

The CD tray does not close.
- The CD is not placed properly.

The CD will not play.
- The CD is not lying flat in the disc tray.
- The CD is dirty.
- The CD is inserted label side down.
- Moisture condensation has built up. Remove the CD and leave the system turned on for about an hour until the moisture evaporates.

Play does not start from the first track.
- The player is in programme or shuffle mode. Press PLAY MODE repeatedly until "PROGRAM" or "SHUFFLE" disappear.

"OVER" is displayed.
- You have reached the end of the CD. Press and hold ◄◄ to return.

40

Tape Deck

The tape does not record.
- No tape in the cassette holder.
- The tab has been removed from the cassette (see "To save a tape permanently" on page 38).
- The tape has reeled to the end.

The tape does not record nor play or there is a decrease in sound level.
- The heads are dirty. Clean them (see "Cleaning the tape heads" on page 39).
- The record/playback heads are magnetized. Demagnetize them (see "Demagnetizing the tape heads" on page 39).

The tape does not erase completely.
- The record/playback heads are magnetized. Demagnetize them (see "Demagnetizing the tape heads" on page 39).

There is excessive wow or flutter, or the sound drops out.
- The capstans or pinch rollers are dirty. Clean them (see "Cleaning the tape heads" on page 39).

Noise increases or the high frequencies are erased.
- The record/playback heads are magnetized. Demagnetize them (see "Demagnetizing the tape heads" on page 39).

Tuner

Severe hum or noise ("TUNED" or "STEREO" flashes in the display.
- Adjust the aerial.
- The signal strength is too weak. Connect the external aerial.

A stereo FM programme cannot be received in stereo.
- Press STEREO/MONO so that "STEREO" appears.

If other troubles not described above occur, reset the system as follows:
1 Unplug the power cord.
2 Plug the power cord back in.
3 Press SPECTRUM ANALYZER, ENTER/ NEXT, and DISC 1 at the same time.

41

Specifications

Amplifier section

DIN power output	40 + 40 watts (6 ohms, at 1kHz, DIN)
Continuous RMS power output	
	55 + 55 watts (6 ohms at 1 kHz, 10% THD)
Music power output	95 + 95 watts (6 ohms at 1 kHz, 10% THD)
Inputs	VIDEO/MD IN (phono jacks): voltage 250 mV, impedance 47 kilohms
	MIX MIC (phone jack): sensitivity 1 mV, impedance 10 kilohms
Outputs	VIDEO/MD OUT (phono jacks): voltage 250 mV impedance 1 kilohms
	PHONES (stereo phone jack): accepts headphones of 8 ohms or more.
	SPEAKER: accepts impedance of 8 to 16 ohms.
	SURROUND SPEAKER (MHC-RX80 only): accepts impedance of 16 ohms.

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (λ=780nm) Emission duration: continuous
Laser output	Max. 44.6 μW* *This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Frequency response	2 Hz – 20 kHz (±0.5 dB)
Wavelength	780 – 790 nm
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB
CD OPTICAL DIGITAL OUT (Square optical connector jack, rear panel)	
Wavelength	600 nm
Output Level	–18 dBm

Tape player section

Recording system	4-track 2-channel stereo
Frequency response (DOLBY NR OFF)	60 – 13,000 Hz (±3 dB), using Sony TYPE I cassette 60 – 14,000 Hz (±3 dB), using Sony TYPE II cassette
Wow and flutter	±0.15% W.Peak (IEC) 0.1% W.RMS (NAB) ±0.2% W.Peak (DIN)

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	
3 band type model:	87.5 – 108.0 MHz (50 kHz setp)
4 band type model:	65.0 – 74.0 MHz (10 kHz step) 87.5 – 108.0 MHz (50 kHz step)
Aerial	FM Lead aerial
Aerial terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

UKV tuner section (4 band type model only)

Tuning range	65.0-74.0 MHz (10 kHz step) Polar Stereo

AM tuner section

Tuning range	
	MW: 531 – 1,602 kHz (with interval set at 9 kHz) LW: 153 – 279 kHz (with interval set at 3 kHz)
Aerial	AM loop aerial External aerial terminal
Intermediate frequency	450 kHz

42

Speaker

Front speaker SS-L80

Speaker system	3-way, 3-unit, bass-reflex type
Speaker units	
Woofer:	15 cm dia., cone type
Centre Tweeter:	5 cm dia., cone type
Super Tweeter:	2 cm dia., dome type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 205 x 330 x 315 mm
Mass	Approx. 3.9 kg net per speaker

Rear speaker SS-SR101 (For MHC-RX80 only)

Speaker system	1-way, 1-unit, bass-reflex type
Speaker units	
Full range:	8 cm dia., cone type
Nominal impedance	16 ohms
Dimensions (w/h/d)	Approx. 205 x 95 x 240 mm
Mass	Approx. 1.1 kg net per speaker

General

Power requirements	220 – 230 V AC, 50/60 Hz
Power consumption	115 watts (MHC-RX70)
	130 watts (MHC-RX80)
Dimensions (w/h/d)	Approx. 280 x 330 x 366 mm
Mass	Approx. 8.1 kg
Supplied accessories:	AM loop aerial (1)
	Remote RM-SD70 (1)
	Sony SUM-3 (NS) batteries (2)
	FM lead aerial (1)
	Speaker cords (2)*
	* (4) for MCH-RX80

Design and specifications are subject to change without notice.

43

Index