

# *Mini Hi-Fi Component System*

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## Operating Instructions

### Owner's Record

The model and serial numbers are located on the rear panel. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_



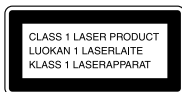
## *MHC-BX3/DX3*

## WARNING

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

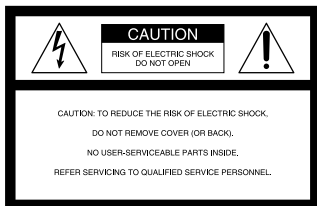
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

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



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

## NOTICE FOR THE CUSTOMERS IN THE U.S.A.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### CAUTION

The use of optical instruments with this product will increase eye hazard.

## INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

## NOTICE FOR THE CUSTOMERS IN CANADA

### CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

## FOR THE CUSTOMERS IN NORTH AMERICA



ENERGY STAR® is a U.S. registered mark.

As an ENERGY STAR® partner, Sony Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.



A946

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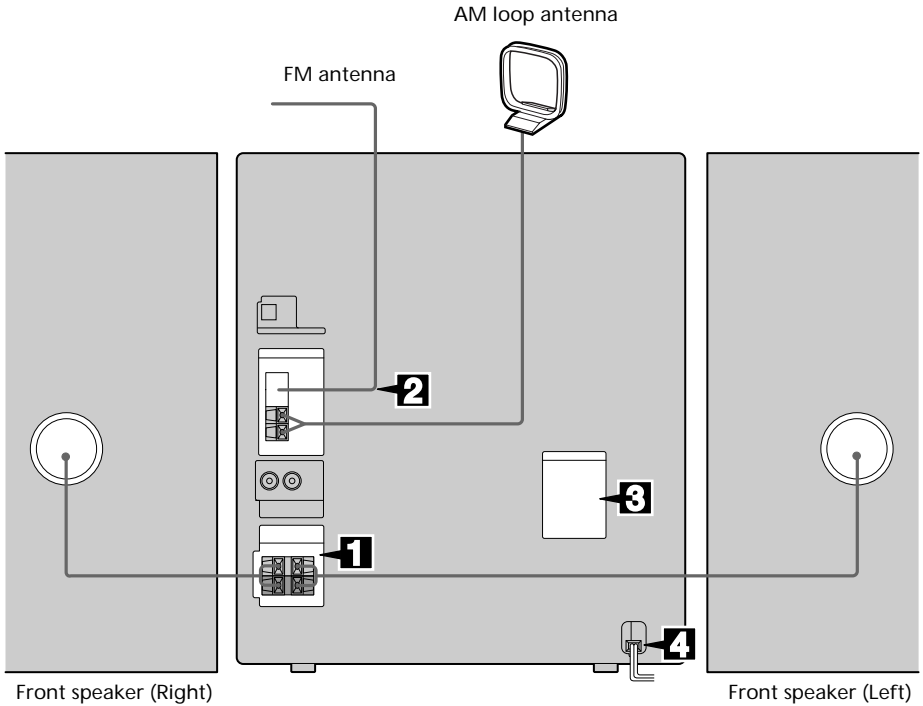
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\* European model only.

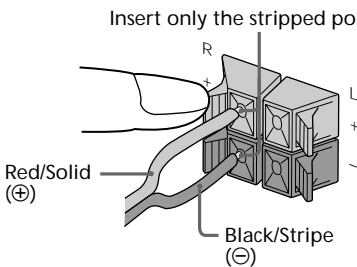
## Step 1: Hooking up the system

Follow steps **1** through **4** of the following procedure to hook up your system using the supplied cords and accessories.



### **1** Connect the speakers.

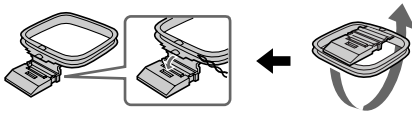
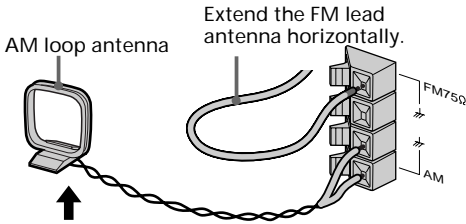
Connect the speaker cords of the front speakers to the SPEAKER jacks as below.



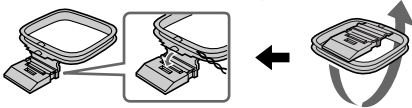
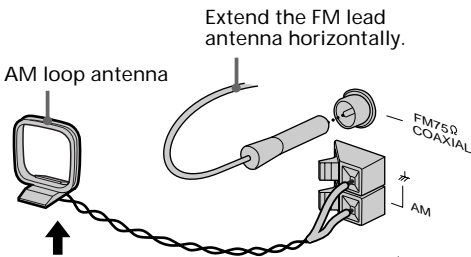
### Notes

- Keep the speaker cords away from the antennas to prevent noise.
- The type of speakers supplied vary according to the model you purchased (see "Specifications" on page 45).

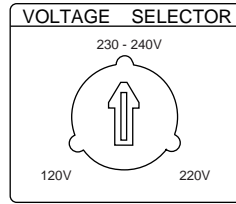
- 2** Connect the FM/AM antennas.  
Set the AM loop antenna up, before connecting it.  
**Jack type ①**



**Jack type ②**



- 3** For models with a voltage selector, set **VOLTAGE SELECTOR** to the local power line voltage.



- 4** Connect the power cord to a wall outlet.

The demonstration appears in the display. When you press I/⏻, the system turns on and the demonstration automatically ends.

If the supplied adapter on the plug does not fit your wall outlet, detach it from the plug (only for models equipped with an adapter).

**To connect optional components**

See page 38.

**To deactivate the demonstration**

When you set the time ("Step 2: Setting the time" on page 6), the demonstration is deactivated.

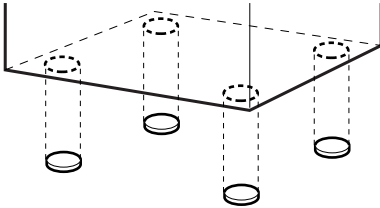
To activate/deactivate the demonstration again, press DISPLAY once (MHC-DX3) or twice (MHC-BX3) while the system is off.

continued

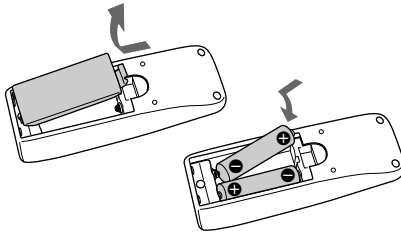
## Step 1: Hooking up the system (continued)

### To attach the front speaker pads

Attach the supplied front speaker pads to the bottom of the speakers to stabilize the speakers and prevent them from slipping.



### 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 prevent possible damage from battery leakage.

### When carrying this system

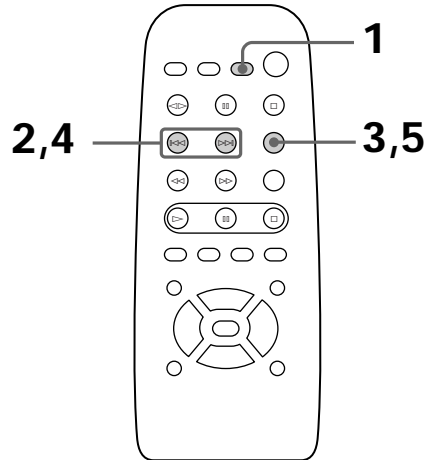
Make sure that all discs are removed from the unit. To protect the CD mechanism, hold down CD and press I/⏻ while the power is on. "LOCK" appears in the display and the power is turned off.

## Step 2: Setting the time

You must set the time before using the timer functions.

The clock uses a 24-hour system on the European model, and a 12-hour system on other models.

The 24-hour system is used for illustration purposes.



### 1 Press CLOCK/TIMER SET.

The hour indication flashes.

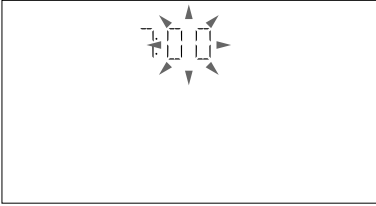


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**2** Press **◀▶** or **▶▶** repeatedly to set the hour.

---

**3** Press **ENTER**.  
The minute indication flashes.



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**4** Press **◀▶** or **▶▶** repeatedly to set the minute.

---

**5** Press **ENTER**.  
The clock starts working.

---

**Tip**  
If you make a mistake, start over from step 1.

### To change the time

The previous explanation shows how to set the time while the power is off. To change the time while the power is on, do the following:

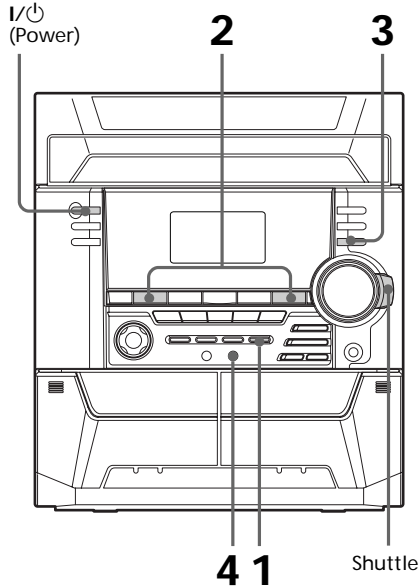
- 1 Press **CLOCK/TIMER SET**.
- 2 Press **◀▶** or **▶▶** repeatedly to select **SET CLOCK**.
- 3 Press **ENTER**.
- 4 Perform steps 2 through 5 above.

**Note**  
The clock settings are canceled when you disconnect the power cord or if a power failure occurs.

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## Step 3: Presetting radio stations

You can preset a total of 30 preset stations (20 for FM and 10 for AM).



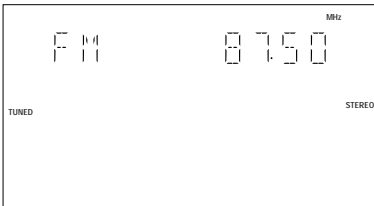
continued

### Step 3: Presetting radio stations (continued)

**1** Press TUNER/BAND repeatedly to select FM or AM.

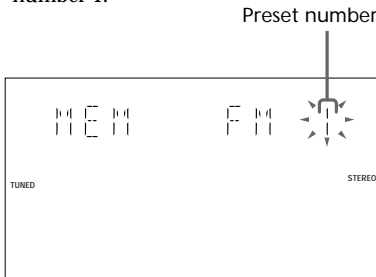
**2** Press and hold + or - (or TUNING +/- on the remote) until the frequency indication starts to change, then release.

Scanning stops automatically when a station is tuned in. "TUNED" and "STEREO" (for a stereo program) appear.



**3** Press TUNER MEMORY.

A preset number appears in the display. The stations are stored from preset number 1.



**4** Press ENTER.  
The station is stored.

**5** Repeat steps 1 through 4 to store other stations.

### To tune in a station with a weak signal

Press + or - (or TUNING +/- on the remote) repeatedly in step 2 to tune in the station manually.

### To set another station to an existing preset number

Start over from step 1. After step 3, turn the shuttle until it clicks to select the preset number where you want to store the other station.

You can preset a new station in the selected preset number.



## To erase a preset station

- 1 Press and hold TUNER MEMORY until a preset number appears in the display.



- 2 Turn the shuttle until it clicks to select the preset number you want to erase. Select "ALL ERASE" when you want to erase all the preset stations.
- 3 Press ENTER.

"COMPLETE" appears. When you erase a preset number, the preset number decreases by one and all preset numbers following the erased one are renumbered.

## To change the AM tuning interval (Except for the European and Middle Eastern models)

The AM tuning interval is factory-preset to 9 kHz (10 kHz in some areas). To switch the AM tuning interval, tune in any AM station first, then turn off the power. While holding down ENTER, turn the power back on. When you change the interval, AM preset stations are erased. To switch back to the original interval, repeat the same procedure.

### Tip

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

## Saving the power in standby mode

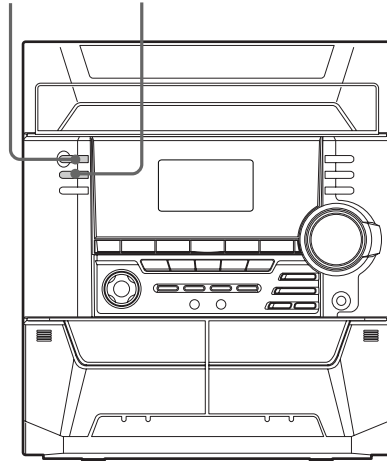
### (MHC-BX3 only)

You can lower the power consumption to a minimum (Power Saving Mode) and save energy in the standby mode.

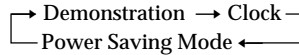


(Power)

DISPLAY



- ➔ Press DISPLAY repeatedly when the power is off. Every time you press the button, the system switches as follows:



The system is turned on/off by pressing I/⏻.

### Tips

- I/⏻ indicator and timer indicator (when the timer is set) light even in the Power Saving Mode.
- The timer functions in the Power Saving Mode.

### Note

You cannot set the time in the Power Saving Mode.

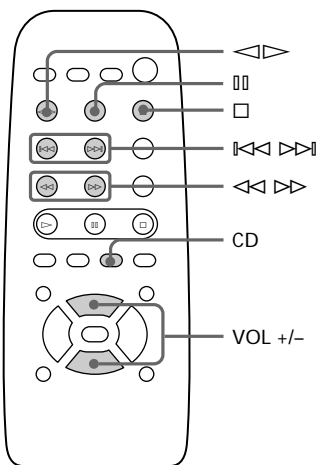
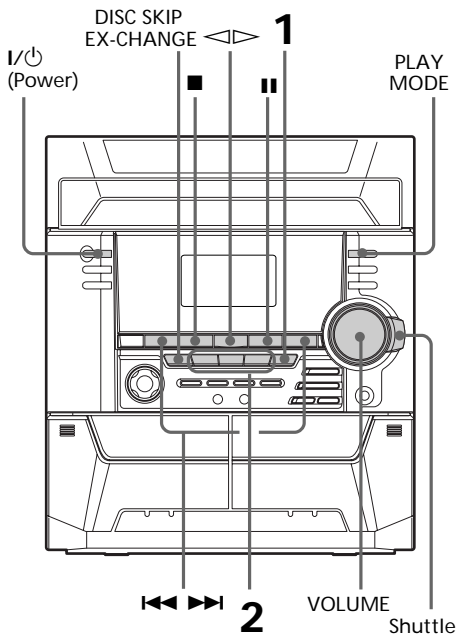
### To cancel the Power Saving Mode

Press DISPLAY once to show the demonstration, twice to show the clock display.

## Playing a CD

### — Normal Play

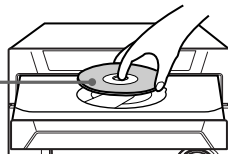
You can play up to three CDs in a row.



- 1 Press **▲ OPEN/CLOSE** and place a CD on the disc tray.

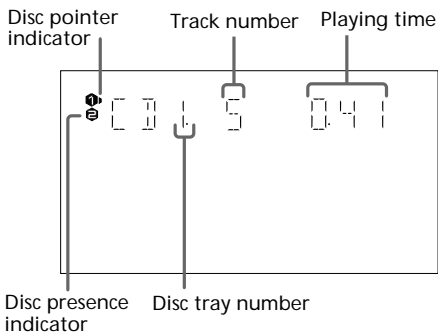
If a disc is not placed properly, it will not be recognized.

Place with the label side up. When you play a CD single (8 cm CD), place it on the inner circle of the tray.



To insert a second and 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 playback starts. If you press **◀▶** when CD is selected as the function and the disc tray is closed, playback starts from the CD loaded on the tray whose disc pointer indicator is lit.



| To                                 | Do this  |
|------------------------------------|--|
| Stop playback                      | Press ■.   |
| Pause                              | Press ■. Press again to resume playback.   |
| Select a track                     | During play or pause, press ►► (to go forward) or ◀◀ (to go back).   |
| Find a point in a track            | Turn the shuttle clockwise (to go forward) or counterclockwise (to go back) until it clicks and hold (or press and hold down ▷▷ or ◀◀ on the remote). Release it when you find the desired point . |
| Select a CD in stop mode           | Press a DISC 1~3 button or DISC SKIP EX-CHANGE (or D. SKIP on the remote).   |
| Play only the CD you have selected | Press PLAY MODE repeatedly until "CONTINUE 1 DISC" or "SHUFFLE 1 DISC" appears.  |
| Play all CDs                       | Press PLAY MODE repeatedly until "CONTINUE ALL DISCS" or "SHUFFLE 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

- You can switch from another source to the CD player and start playing a CD just by pressing one of 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 holding a CD is selected (or the CD in the disc tray is playing) the disc pointer indicator lights. When a disc tray holding a CD is not selected, the disc presence indicator lights, but the disc pointer indicator does not light. When all disc trays are empty, both the disc presence indicator and disc pointer indicator light.

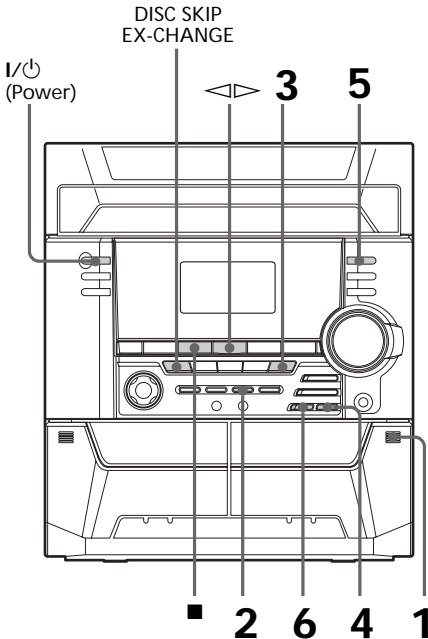
## Note

When a tray has not been read by the unit, the disc presence indicator may light even though there is no disc on the tray.

# Recording a CD

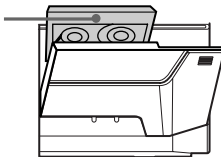
## — CD Synchro Recording

The CD SYNC HI-DUB button lets you record from a CD to a tape easily. You can use TYPE I (normal) tape.



- 1 Press and insert a recordable tape into deck B.

With the side you want to record facing forward



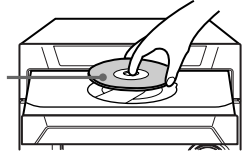
- 2 Press CD.

- 3 Press OPEN/CLOSE and place a CD.

Then press OPEN/CLOSE again to close the disc tray.

When the CD you want to record is not selected, press DISC SKIP EX-CHANGE repeatedly to select the CD you want.

Place with the label side up. When you play a CD single (8 cm CD), place it on the inner circle of the tray.



- 4 Press CD SYNC HI-DUB. Deck B stands by for recording and the CD player stands by for playback. The indicator on REC PAUSE/START flashes.

- 5 Press DIRECTION repeatedly to select to record on one side. Select (or RELAY) to record on both sides.

- 6 Press REC PAUSE/START. Recording starts.

### To stop recording

Press .

### Tips

- If you want to record from the reverse side, press TAPE A/B repeatedly to select deck B after step 1. Press to start playback of the reverse side, then press where you want to start recording. The reverse indicator of deck B lights (see page 16).
- 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.

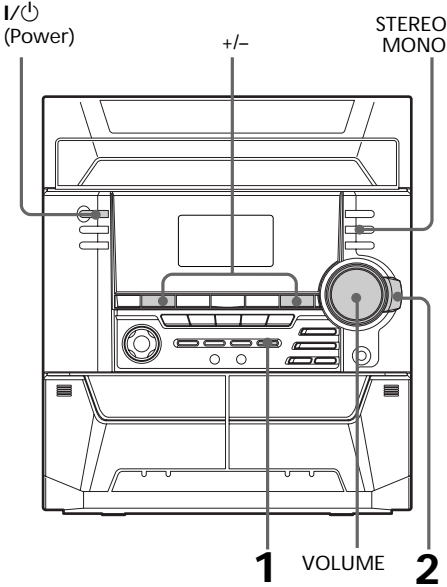
### Note

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" on page 7).



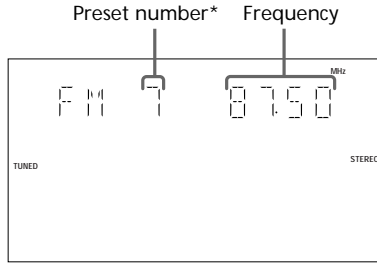
**1** Press TUNER/BAND repeatedly to select FM or AM.

**2** Turn the shuttle until it clicks (or press PRESET +/- on the remote) to tune in the desired preset station.

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

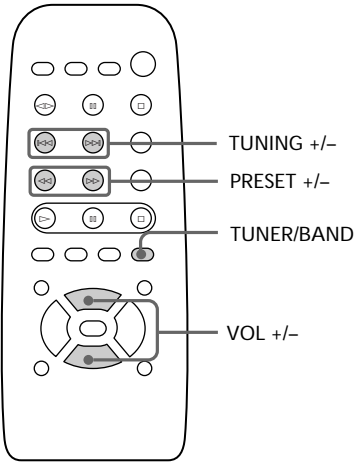


Turn clockwise (or press PRESET + on the remote) for higher preset numbers.



\* When only one station is preset, "ONE PRESET" appears in the display.

continued



## Listening to the radio (continued)

| To                 | Do this                                       |
|--------------------|---|
| Turn off the radio | Press I/⏻.                                    |
| Adjust the volume  | Turn VOLUME (or press VOL +/- on the remote). |

### To listen to non-preset radio stations

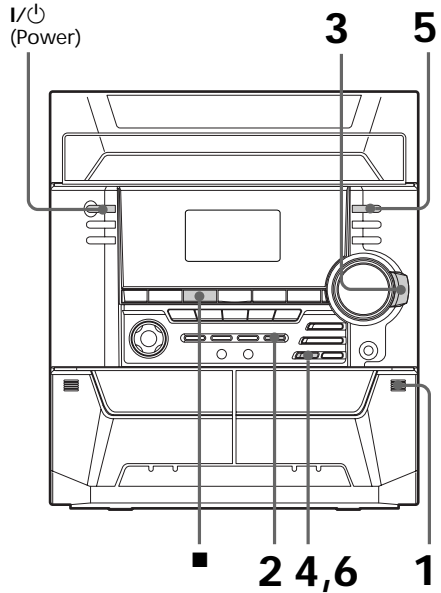
Use manual or automatic tuning in step 2. For manual tuning, press + or - (or TUNING +/- on the remote) repeatedly. For automatic tuning, press and hold + or - (or TUNING +/- on the remote).

#### Tips

- You can switch from another source to the radio just by pressing TUNER/BAND (Automatic Source Selection).
- When an FM program 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, adjust the supplied antennas.

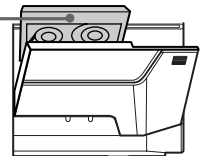
## Recording from the radio

You can record the radio program on a tape by calling up a preset station. You can use TYPE I (normal) tape.



- 1** Press  and insert a recordable tape into deck B.

With the side you want to record facing forward



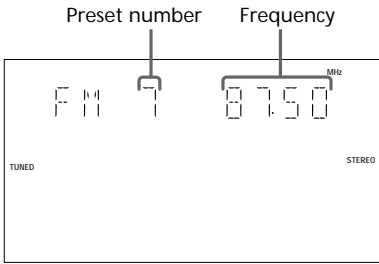
- 2** Press TUNER/BAND to select the band you want.

- Turn the shuttle until it clicks to tune in a preset station.

Turn counter-clockwise for lower preset numbers.



Turn clockwise for higher preset numbers.



- Press REC PAUSE/START. Deck B stands by for recording.

- Press DIRECTION repeatedly to select  $\rightleftarrows$  to record on one side. Select  $\leftrightarrow$  (or RELAY) to record on both sides.

- Press REC PAUSE/START. Recording starts.

### To stop recording

Press ■.

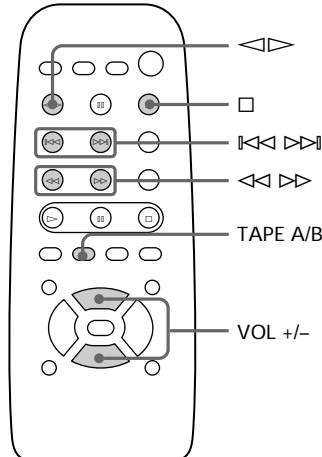
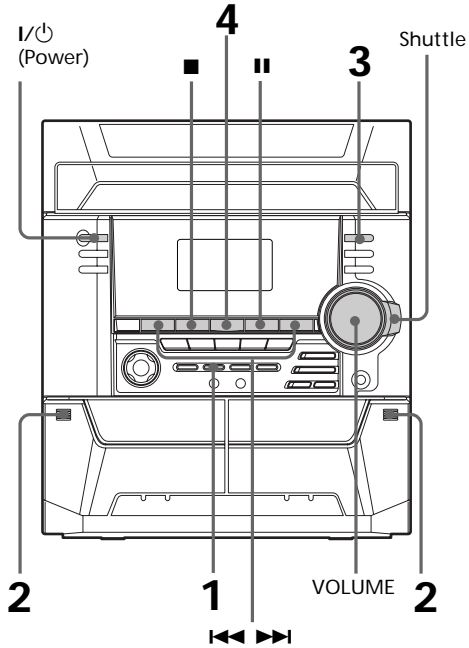
### Tips

- If you want to record from the reverse side, press TAPE A/B repeatedly to select deck B after step 1. Press  $\triangleleft$  to start playback of the reverse side, then press ■ where you want to start recording. The reverse indicator of deck B lights (see page 16).
- 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, use + and - in step 3 to tune in the desired station manually.
- If noise is heard while recording from the radio, move the respective antenna to reduce the noise.

## Playing a tape

You can use TYPE I (normal) tape. You can also use  $\blacktriangleleft/\blacktriangleright$  to quickly search for songs you want to hear (AMS\* function). To select either deck A or B, press TAPE A/B repeatedly.


\* AMS (Automatic Music Sensor)



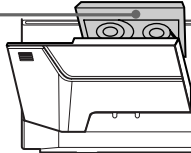
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

## Playing a tape (continued)





- 1 Press TAPE A/B.  
To select deck A or B, press TAPE A/B repeatedly.

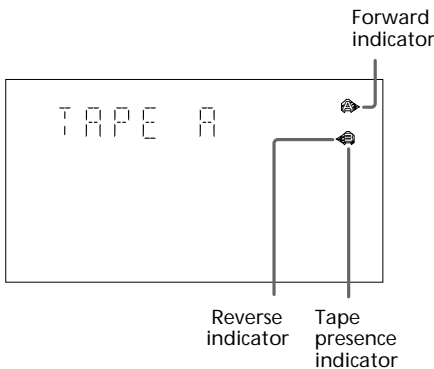
- 2 Press  and insert a recorded tape in deck A or B.

With the side you want to play facing forward

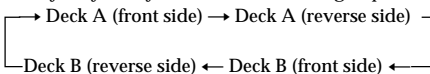









- 3 Press DIRECTION repeatedly to select  to play one side. Select  to play both sides.  
To play both decks in succession, select RELAY (Relay Play)\*.

- 4 Press  .  
Press   again to play the reverse side. The tape starts playing.





\* Relay Play always follows the following sequence:



| To                  | Do this   |
|---------------------|---|
| Stop playback       | Press  .   |
| Pause               | Press  . Press again to resume playback.   |
| Fast-forward        | Turn the shuttle clockwise until it clicks while playing the front side or counterclockwise until it clicks while playing the reverse side (or press  or  on the remote). |
| Rewind              | Turn the shuttle counterclockwise until it clicks while playing the front side or clockwise until it clicks while playing the reverse side (or press  or  on the remote). |
| Remove the cassette | Press  .   |
| Adjust the volume   | Turn VOLUME (or press VOL +/- on the remote).   |

## Searching for the beginning of a track (AMS\*)

During playback, press  or  repeatedly for the number of songs you want to skip forward (or backward).

The search direction, + (forward) or - (back), and number of songs being skipped (1-9) appear in the display.

Example: searching forward 2 songs

TAPE A) : +2

\* AMS (Automatic Music Sensor)

## Tip

When no tapes are inserted, all the indicators light. When a tape (tapes) is (are) inserted, corresponding presence and forward/reverse indicators light.

## Notes

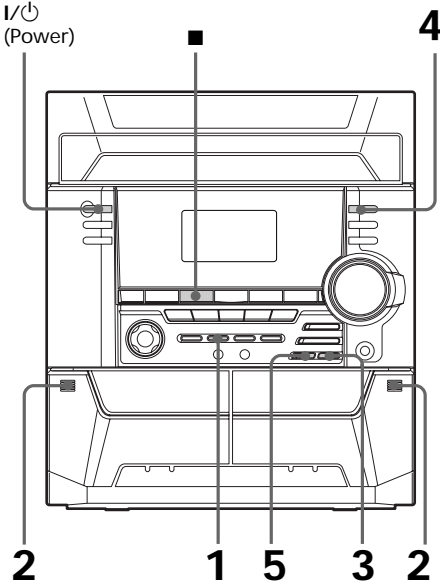
- The deck stops automatically after repeating the sequence five times.
- The AMS function may not operate correctly under the following circumstances:
  - When the unrecorded space between songs is less than 4 seconds long.
  - If completely different information is recorded on the left and right channels.
  - When there are continuous sections of extremely low level or low frequency sound (like those of a baritone sax).
  - When the unit is placed near a television. (In this case, we recommend moving the unit farther away from the television or turning off the television.)



# Recording from a tape

## — High-speed Dubbing

You can use TYPE I (normal) tape.



- 4 Press DIRECTION repeatedly to select  $\overleftarrow{\rightarrow}$  to record on one side. Select  $\leftrightarrow$  (or RELAY) to record on both sides.

- 5 Press REC PAUSE/START. Dubbing starts.

### To stop dubbing

Press ■.

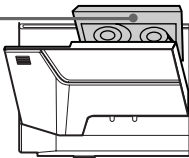
### Tips

- 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  $\leftrightarrow$  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.

- 1 Press TAPE A/B.

- 2 Press  $\triangle$  and insert a recorded tape in deck A and a recordable tape in deck B.

With the side you want to play/record facing forward



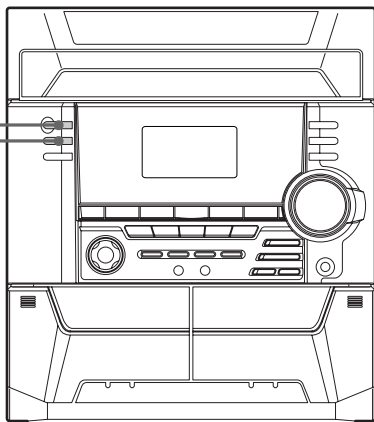
- 3 Press CD SYNC HI-DUB. Deck B stands by for recording.

## Using the CD display

You can check the remaining time of the current track or the entire CD.

When a CD TEXT disc is loaded, you can check the information stored on the disc, such as the disc titles or artist names. When the unit detects CD TEXT discs, the “CD-TEXT” indication appears in the display.

I/⏻  
(Power)



DISPLAY

➔ Press DISPLAY.

Each time you press the button during normal playback or in the stop mode, the display changes as follows:

### During normal playback

- ➔ Playing time of the current track
- ↓
- Remaining time of the current track
- ↓
- Remaining time of current CD (1 DISC mode) or “---” display (ALL DISCS mode)
- ↓
- Title name of the current track\*
- ↓
- Clock display (for eight seconds)
- ↓
- Effect status

### In the stop mode

During Program Play mode when there is a program

- ➔ The last track number of the program and the total playing time
- ↓
- Total number of programmed tracks (for eight seconds)
- ↓
- Title name and the artist name of the CD\*
- ↓
- Clock display (for eight seconds)
- ↓
- Effect status

### In other conditions

- ➔ Total number of tracks and total playing time
- ↓
- Title name and the artist name of the CD\*
- ↓
- Clock display (for eight seconds)
- ↓
- Effect status

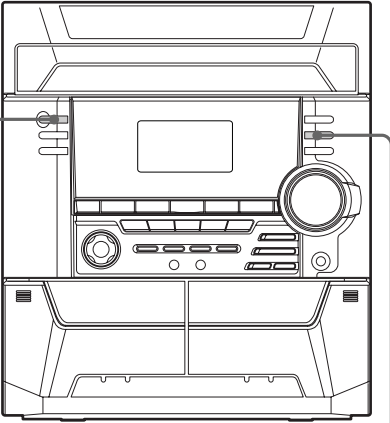
\* With CD TEXT discs only (certain characters cannot be displayed). Depending on the disc, some CD TEXT information may not appear.

# Playing the CD tracks repeatedly

## — Repeat Play

This function lets you repeat a single CD or all CDs in Normal Play, Shuffle Play, and Program Play.

I/⏻  
(Power)



REPEAT

## To cancel Repeat Play

Press REPEAT repeatedly until “REPEAT” or “REPEAT 1” disappears from the display.

## Notes

- If you press PLAY MODE until “SHUFFLE ALL DISCS” appears, “REPEAT” is canceled automatically.
- During Program Play, the program is also repeated up to five times.

➔ 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 up to five times | PLAY MODE repeatedly until “CONTINUE 1 DISC” or “SHUFFLE 1 DISC” appears in the display.              |
| All the tracks on all CDs up to five times        | PLAY MODE repeatedly until “CONTINUE 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. |

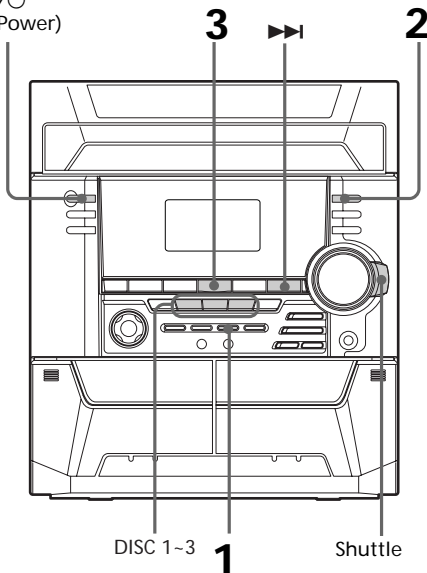
# Playing the CD tracks in random order

## — Shuffle Play

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

I/⏻

(Power)



## To cancel Shuffle Play

Press PLAY MODE repeatedly until "SHUFFLE" or "PGM" 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, press ►►.

---

**1** Press CD, then place a CD.

---

**2** Press PLAY MODE repeatedly until "SHUFFLE 1 DISC" or "SHUFFLE ALL DISCS" appears in the display. "SHUFFLE ALL DISCS" shuffles all the CDs in the player. "SHUFFLE 1 DISC" shuffles tracks on the CD whose disc pointer indicator is lit.

---

**3** Press ◀▶.

All the tracks play in random order.

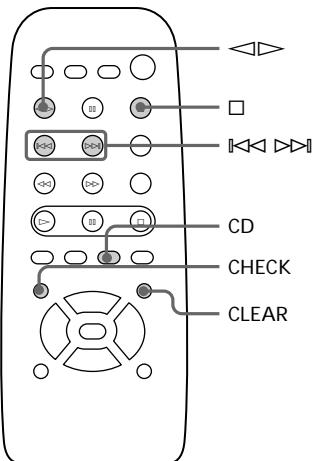
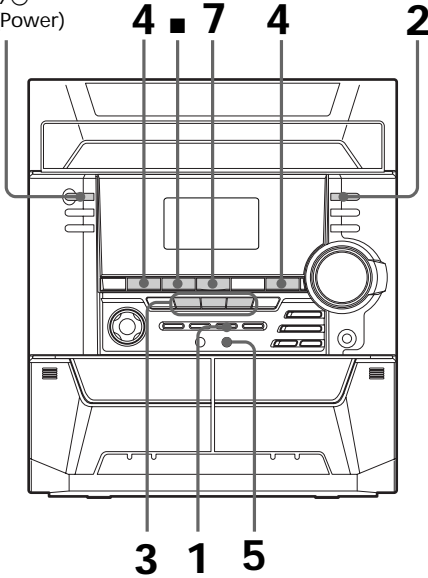
---

# Programming the CD tracks

## — Program Play

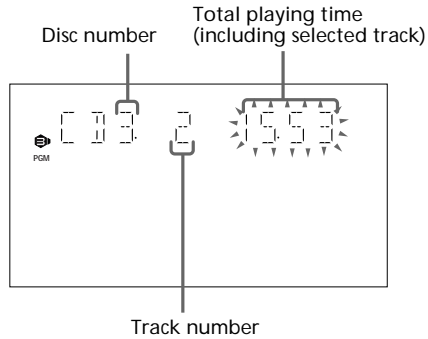
You can make a program of up to 32 tracks from all the CDs in the order you want them to be played.

I/⏻  
(Power)



- 1** Press CD, then place a CD.
- 2** Press PLAY MODE repeatedly until “PGM” appears in the display.
- 3** Press one of the DISC 1~3 buttons to select a CD.  
To program all the tracks on a CD at once, proceed to step 5 while “AL” appears in the display.

- 4** Press ⏮ or ⏭ until the desired track appears in the display.



- 5** Press ENTER.  
The track is programmed. The program step number appears, followed by the total playing time.

- 6** To program 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.

continued

## ***Programming the CD tracks (continued)***

### **To cancel Program Play**

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

| To                                      | Press   |
|---|---|
| Check the program                       | 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 appears, then press CLEAR.            |
| Add a track to the program in stop mode | 1 Select the disc tray with a DISC 1~3 button.<br>2 Select the track by pressing <b>⏮/⏭</b> .<br>3 Press ENTER. |
| Clear the entire program                | ■ once in stop mode or twice during playback.   |

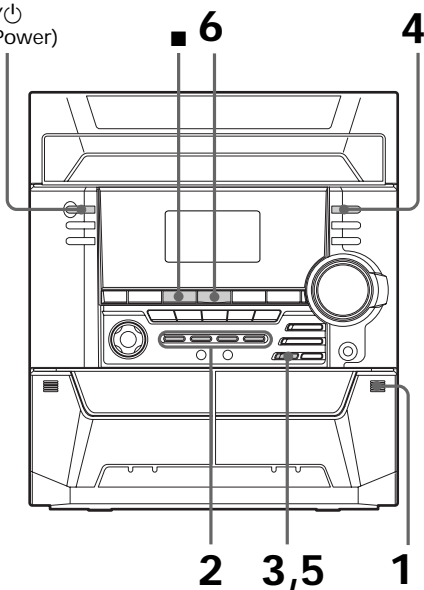
### **Tips**

- The program you made remains in the system's memory even after it has been played back. Press CD, then press **◀▶** to play the same program 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.

## 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.

I/⏻  
(Power)



**4** Press **DIRECTION** repeatedly to select  $\leftarrow$  to record on one side. Select  $\leftrightarrow$  (or **RELAY**) to record on both sides.

**5** Press **REC PAUSE/START**.  
Recording starts.

**6** Press  $\triangleleft \triangleright$  to start playing the source to be recorded.

| To              | Press            |
|-----------------|------------------|
| Stop recording  | ■                |
| Pause recording | REC PAUSE/START. |

### Tips

- If you want to record from the reverse side, press **TAPE A/B** repeatedly to select deck B after step 1. Press  $\triangleleft \triangleright$  to start playback of the reverse side, then press ■ where you want to start recording. The reverse indicator of deck B lights (see page 16).
- When recording from a CD, you can use  $\lll$  or  $\ggg$  to select tracks during rec pause mode (after pressing **REC PAUSE/START** in step 3 and before pressing again in step 5).

**1** Insert a recordable tape into deck B.

**2** Press the function button of the source you want to record (e.g., CD).

When you want to record from **TAPE A**, press **TAPE A/B** repeatedly until **TAPE A** is selected.

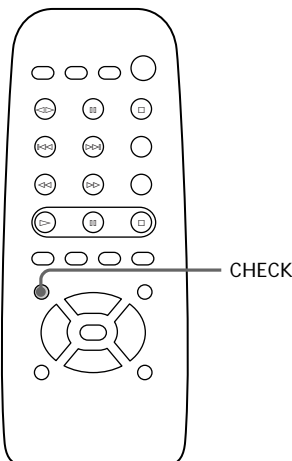
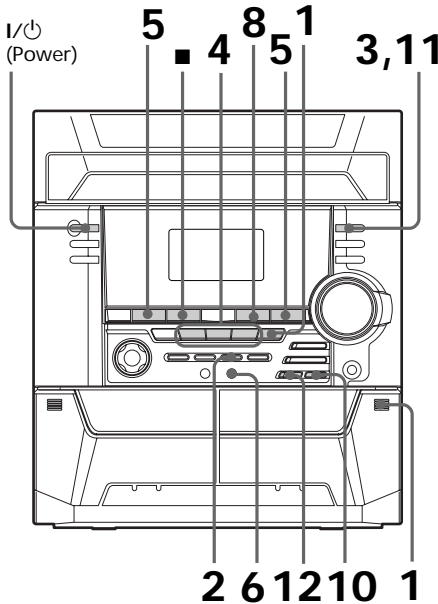
**3** Press **REC PAUSE/START**.

Deck B stands by for recording. The indicator on **REC PAUSE/START** flashes.

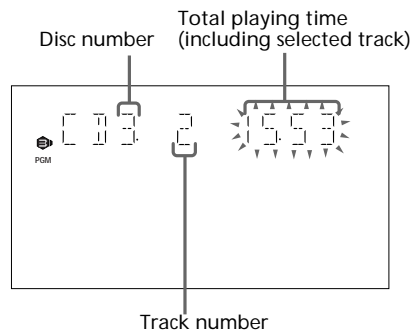
# Recording a CD by specifying track order

## — Program 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.



- 1 Place a CD and insert a recordable tape into deck B.
- 2 Press CD.
- 3 Press PLAY MODE repeatedly until "PGM" appears in the display.
- 4 Press one of the DISC 1~3 buttons to select a CD.  
To program all the tracks on a CD at once, proceed to step 6 while "AL" appears in the display.
- 5 Press ◀◀ or ▶▶ until the desired track appears in the display.



- 6 Press ENTER.  
The track is programmed. The program step number appears, followed by the total playing time.
- 7 To program additional tracks to be recorded on side A, repeat steps 4 to 6.  
Skip step 4 to select tracks from the same disc.



---

**8** Press **II** 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 program the remaining tracks to be recorded on side B.

---

**10** Press **CD SYNC HI-DUB**.  
Deck B stands by for recording and the CD player stands by for playback. The indicator on **REC PAUSE/START** flashes.

---

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

---

**12** Press **REC PAUSE/START**.  
Recording starts.

---

### To stop recording

Press **■**.

### To check the order

Press **CHECK** on the remote repeatedly. After the last track, “CHECK END” appears.

### To cancel Program Edit

Press **PLAY MODE** repeatedly until “PGM” 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 over 20 tracks.

---

**1** Place a CD.

---

**2** Press **CD**.

---

**3** Press **EDIT** once, so that “EDIT” flashes.

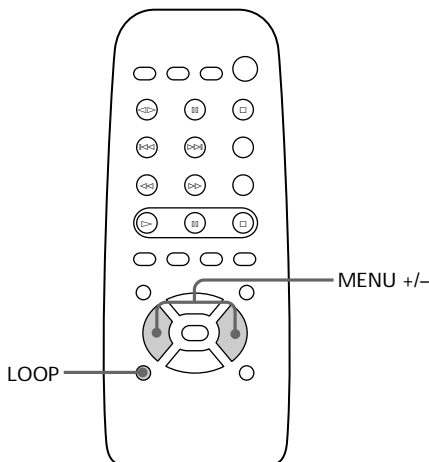
The required tape length for the currently selected CD appears, followed by the total playing time for side A and side B respectively.

---

## 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.



➔ Press and hold LOOP on the remote during playback at the point you want to start the Loop function, and release to resume normal play.

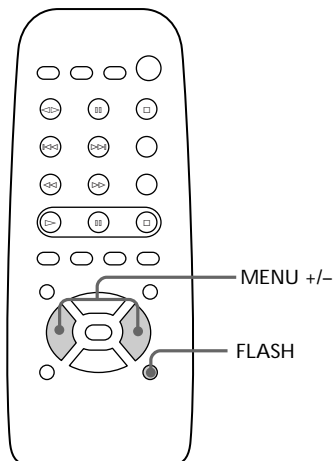
### To adjust the loop length

Press MENU +/- on the remote while pressing LOOP 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.



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

### To adjust the flash length

Press MENU +/- on the remote while pressing FLASH 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.

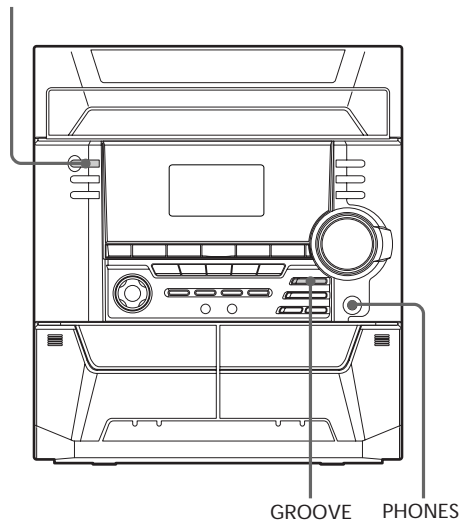
### Note

The loop and flash length cannot be adjusted during this operation. Adjust the loop and flash lengths independently beforehand if necessary.

## Adjusting the sound

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

I/⏻  
(Power)



### For a powerful sound (GROOVE)

Press GROOVE. The volume switches to power mode, the equalizer curve changes, and the GROOVE button lights. Press GROOVE again to return to the previous volume.

### To listen through the headphones

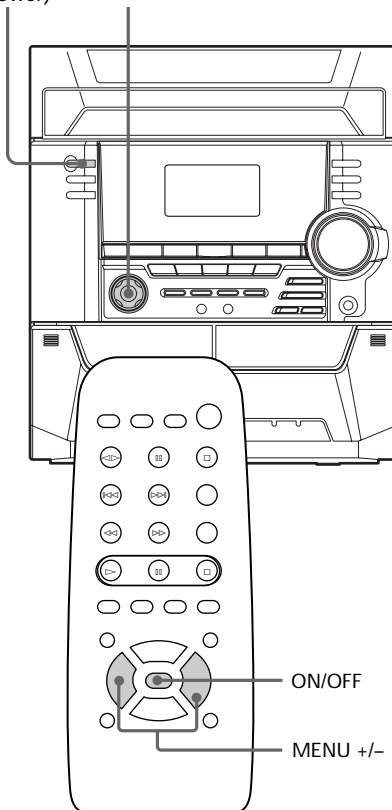
Connect the headphones to PHONES jack. No sound will come from the speakers.

## Selecting the audio emphasis

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

## Selecting the effect from the music menu

I/⏻  
(Power) Controller



continued

## Selecting the audio emphasis (continued)

- ➔ Press ◀ or ▶ on the controller (or MENU +/- on the remote) to select the preset you desire.

The preset name appears in the display.  
See the chart “Music menu options”.

### To select USER FILE

Press ▲ on the controller.

### To cancel the effect

Press ▼ on the controller or ON/OFF on the remote repeatedly so that “EFFECT OFF” appears in the display.

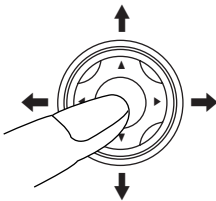
### Music menu options

“SURROUND” appears if you select an effect with surround effects.

| Effect    | For  |
|-----------|--|
| ROCK      | Standard music sources                       |
| POP       |  |
| JAZZ      |  |
| DANCE     |  |
| SOUL      |  |
| ORIENTAL  |  |
| ACTION    | Soundtracks and special listening situations |
| DRAMA     |  |
| SF        |  |
| GAME      |  |
| USER FILE | See page 29                                  |

### Tip

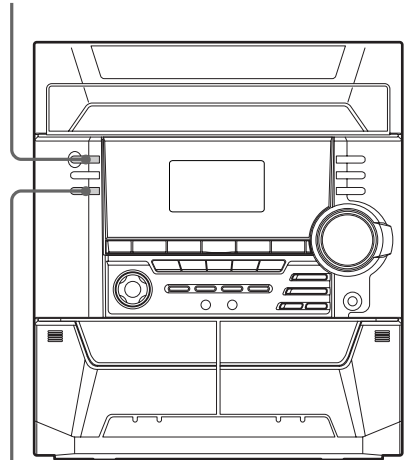
Refer to the illustration to use the controller.  
Put your finger in the hollow and move in the direction you want (▲/▼/◀/▶).



## Changing the spectrum analyzer display

You can enjoy changing the display while listening to the music.

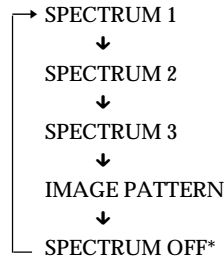
I/⏻  
(Power)



SPECTRUM

- ➔ Press SPECTRUM.

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

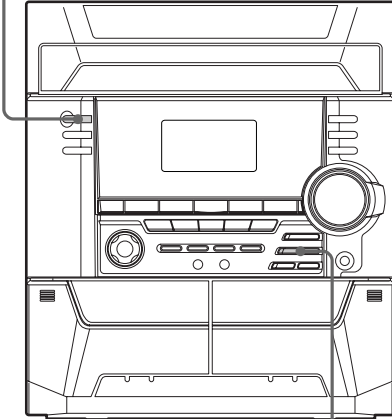


\* The display slightly dims.

## Selecting surround effect

You can enjoy surround effect.

I/⏻  
(Power)



SURROUND

➔ Press SURROUND repeatedly to select the surround effect you desire.

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

SURROUND ON (SURROUND)



SURROUND OFF (off)

### Note

When you choose other sound effect, the surround effect will be canceled.

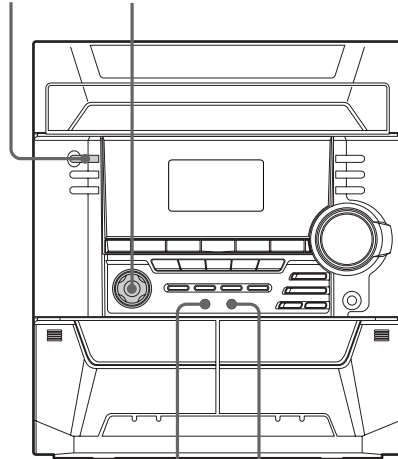
## Adjusting the graphic equalizer

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.

I/⏻  
(Power)

2,3



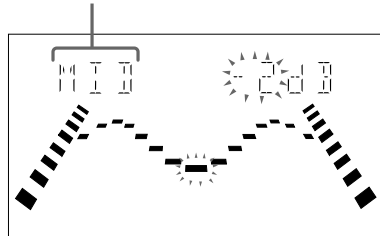
1

5

1 Press EQ EDIT.

2 Press ◀ or ▶ on the controller repeatedly to select a frequency band.

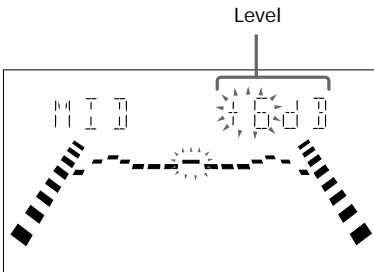
Frequency band



continued

## Adjusting the graphic equalizer (continued)

- 3** Press ▲ or ▼ on the controller to adjust the level.



- 4** Repeat steps 2 and 3.

- 5** Press ENTER when finished.  
This setting is automatically stored as  
USER FILE.

### Tips

- If you want to select the previously adjusted equalizer settings (USER FILE), press ▲ on the controller. (When using the remote, press ON/OFF to activate the equalizer effect and press MENU +/- repeatedly until "USER FILE" appears in the display.)
- To use the controller, see page 28.

# Using the Radio Data System (RDS)

(European model only)

## What is the Radio Data System?

Radio Data System (RDS) is a broadcasting service that allows radio stations to send additional information along with the regular program signal. This tuner offers convenient RDS features like station name display and location of stations by program type. RDS is available only on FM stations.\*

### Note

RDS may not work properly if the station you are tuned to is not transmitting the RDS signal properly or if the signal strength is weak.

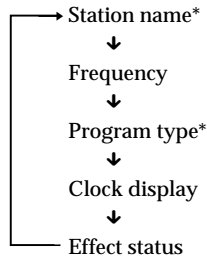
\* Not all FM stations provide RDS service, nor do they provide the same types of services. If you are not familiar with the RDS system, check with your local radio stations for details on RDS services in your area.

## Receiving RDS broadcasts

➔ Simply select a station from the FM band. When you tune in a station that provides RDS services, the station name appears in the display.

## To check the RDS information

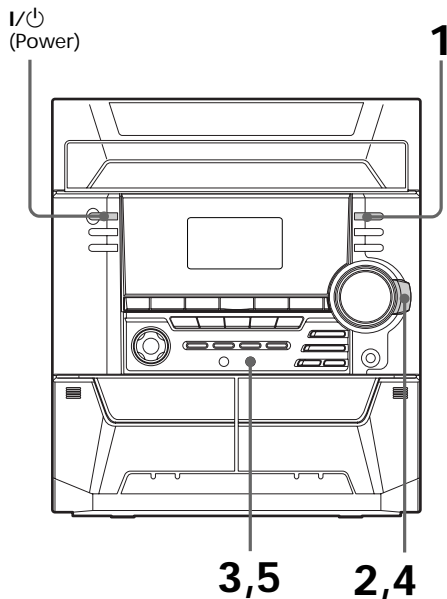
Each time you press DISPLAY, the display changes as follows:



\* If the RDS broadcast is not received, the station name and program type may not appear in the display.

## Locating a station by program type (PTY)

You can locate a station you want by selecting a program type. The unit tunes in the type of programs currently being broadcast from the RDS stations stored in the tuner's preset memory.



## **Using the Radio Data System (RDS) (continued)**

---

- 1** Press **PTY/DIRECTION** while listening to the radio.

---

  - 2** Turn the shuttle until it clicks to select the program type you want. See the “List of program types” section below.

---

  - 3** Press **ENTER**.  
The unit starts searching the preset RDS stations (“SEARCH” and the selected program type are shown alternately in the display).  
When the tuner receives a program, the preset station number flashes.

---

  - 4** Turn the shuttle until it clicks to display the preset station number you desire.

---

  - 5** Press **ENTER** while the preset station number is flashing.
- 

### **To cancel PTY search**

Press **PTY/DIRECTION** again.

### **List of program types (PTY)**

---

#### **NEWS**

News programs.

---

#### **AFFAIRS**

Topical programs that expand on current news.

---

#### **INFO**

Programs about consumer affairs, medical advice.

---

#### **SPORT**

Sports programs.

---

#### **EDUCATE**

Educational programs, such as “how-to” programs and advice.

---

#### **DRAMA**

Radio plays and serials.

---

#### **CULTURE**

Programs about national or regional culture, language, and social concerns.

---

#### **SCIENCE**

Programs about the natural sciences.

---

#### **VARIED**

Programs containing celebrity interviews, panel games, and comedy.

---

#### **POP M**

Popular music programs.

---

#### **ROCK M**

Rock music programs.

---

#### **EASY M**

Easy listening (middle of the road music).

---

#### **LIGHT M**

Classical music, such as instrumental, vocal, and choral works.

---

#### **CLASSICS**

Performances of major orchestras, chamber music, opera, etc.

---

#### **OTHER M**

Music, such as rhythm and blues and reggae.

---

#### **WEATHER**

Weather information.

---

#### **FINANCE**

Stock market reports and trading, etc.

---

#### **CHILDREN**

Programs for young.

---

#### **SOCIAL**

Programs about people and the things that affect them.

---

#### **RELIGION**

Programs of religious contents.

---

#### **PHONE IN**

Programs where members of the public express their views by phone or in a public forum.



---

**TRAVEL**

Programs about travel. Not for announcements that are located TP/TA.

---

**LEISURE**

Programs on recreational activities such as gardening, fishing, cooking, etc.

---

**JAZZ**

Jazz programs.

---

**COUNTRY**

Country music programs.

---

**NATION M**

Programs featuring the popular music of the country or region.

---

**OLDIES**

Programs featuring oldies music.

---

**FOLK M**

Folk Music Programs.

---

**DOCUMENT**

Investigative features.

---

**TEST**

Test signal for emergency broadcasts.

---

**ALARM**

Emergency broadcasts.

---

**NONE**

Any programming not defined above.

---

**Note**

"NO PTY" appears when the program type you select is not currently being broadcast.

---

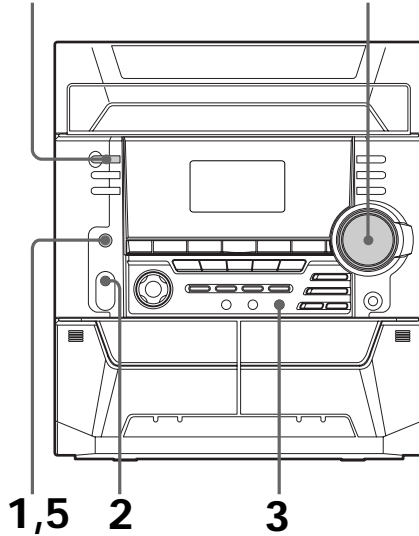
# Singing along: Karaoke

**(MHC-DX3 only)**

You can sing along by turning down the singer's voice. You need to connect an optional microphone.

I/⏻  
(Power)

VOLUME



---

**1** Turn MIC LEVEL to MIN to turn down the microphone control level.

---

**2** Connect an optional microphone to MIC.

---


**3** Press KARAOKE PON repeatedly to obtain the karaoke effect you desire. Every time you press the button, the display changes as follows:

KARAOKE PON



Effect status before entering  
KARAOKE PON mode\*

\* KARAOKE PON is canceled.


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

continued

## Singing along: Karaoke (continued)

- 4 Start playing the music and adjust the volume.
- 5 Adjust the microphone volume by turning MIC LEVEL.

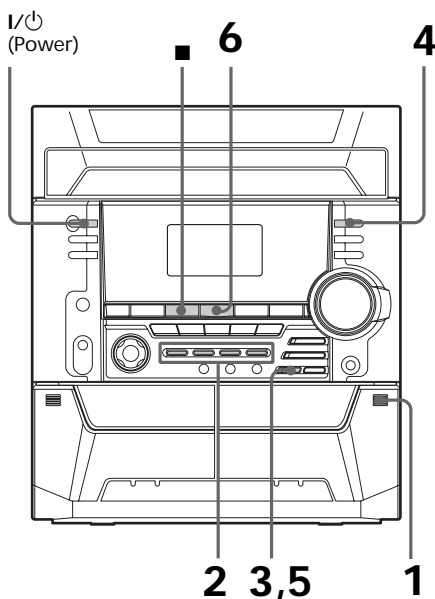
### When you are done

Turn MIC LEVEL to MIN and disconnect the microphone from MIC, then press KARAOKE PON repeatedly until “” disappears.

### Notes

- With some songs, vocals may not be canceled when you select “KARAOKE PON”.
- During KARAOKE PON, equalizer and surround settings cannot be changed.
- If you press ◀/▶/▲/▼ on the controller (or ON/OFF or MENU +/- on the remote) or recall a sound effect, the karaoke mode is canceled.
- 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 center.
  - the voice on the source is singing in high soprano or tenor.

## Mixing and recording sounds



- 1 Do the procedure for singing along (steps 1 through 5 on pages 33 and 34). Then, insert a tape in deck B.
- 2 Press the function button of the source you want to record (e.g., CD).  
When you want to record from TAPE A, press TAPE A/B repeatedly until TAPE A is selected.
- 3 Press REC PAUSE/START.  
Deck B stands by for recording. The indicator on REC PAUSE/START flashes.

---

**4** Press DIRECTION repeatedly to select  $\rightleftarrows$  to record on one side. Select  $\leftrightarrow$  (or RELAY) to record on both sides.

---

**5** Press REC PAUSE/START. Recording starts.

---

**6** Press  $\triangleleft \triangleright$  to start playing the source to be recorded. Start singing along with the music.

---

### To stop recording

Press ■.

### Tips

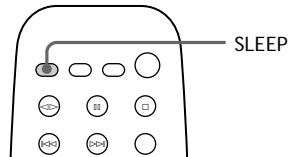
- If acoustic feedback (howling) occurs, move the microphone away from the speakers or change the direction of the microphone.
- If you want to record your voice through the microphone only, you can do so by selecting the CD function and not playing a CD.
- When high level sound signals are input, the unit automatically adjusts the recording level to prevent distortion of the recorded sound signal (Auto Level Control function).

---

## Falling asleep to music

### — Sleep Timer

You can set the system to turn off at a preset time, so you can fall sleep to music. You can preset the time to be turned off in 10 minutes increments.



---

### ➔ Press SLEEP.

Every time you press the button, the minute display (the turn-off time) changes as follows:

AUTO → 90 → 80 → 70

→ ... → 10 → 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

Press SLEEP repeatedly until the time you want appears.

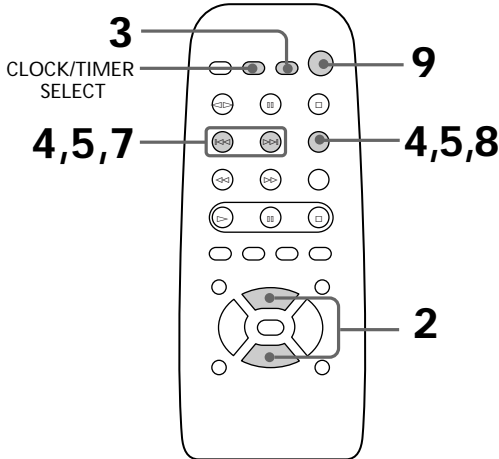
### To cancel the Sleep Timer function

Press SLEEP repeatedly until "SLEEP OFF" appears.

# Waking up to music

## — Daily 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” on page 6).



**1** Prepare the music source you want to play.

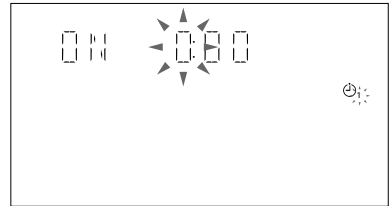
- CD: Insert a CD. To start from a specific track, make a program (see “Programming the CD tracks” on page 21).
- Tape: Insert a tape with the side you want to play facing forward.
- Radio: Tune in the preset station you want (see “Listening to the radio” on page 13).

**2** Adjust the volume.

**3** Press CLOCK/TIMER SET.  
“SET (DAILY 1)” appears.

**4** Press  $\lll$  or  $\ggg$  repeatedly to select “DAILY 1 (or 2)”, then press ENTER.

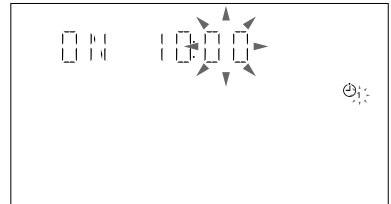
“ON” appears and the hour indication flashes in the display.



**5** Set the time to start playback.

Press  $\lll$  or  $\ggg$  repeatedly to set the hour, then press ENTER.

The minute indication starts flashing.

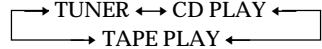


Press  $\lll$  or  $\ggg$  repeatedly to set the minute, then press ENTER.

The hour indication flashes again.

**6** Set the time to stop playback following the above procedure.

**7** Press  $\lll$  or  $\ggg$  repeatedly until the music source you want appears. The indication changes as follows:



---

## 8 Press ENTER.

The type of timer (DAILY 1 or DAILY 2), followed by the start time, stop time, and the music source, appear, then the original display appears.

---

## 9 Turn off the power.

---

### To check the setting

Press CLOCK/TIMER SELECT and press  $\lll$  or  $\ggg$  repeatedly to select the respective mode (DAILY 1 or DAILY 2), then press ENTER.

To change the setting, start over from step 1.

### To cancel the timer operation

Press CLOCK/TIMER SELECT and press  $\lll$  or  $\ggg$  repeatedly to select "TIMER OFF", then press ENTER.

### Tip

The power turns on 15 seconds before the preset time.

### Notes

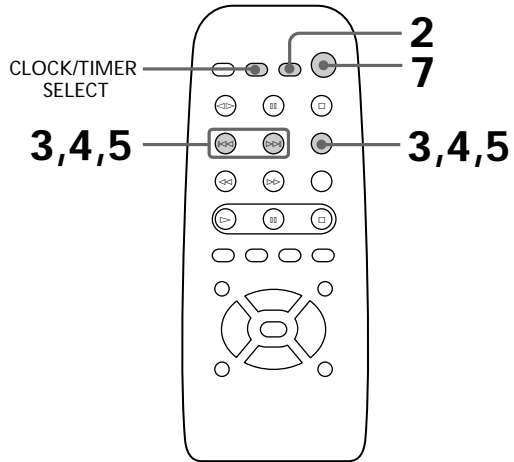
- You cannot activate DAILY 1 and DAILY 2 Timer at the same time.
- You cannot set the timer if the starting time and stopping time are the same.
- When you use the Sleep Timer, Daily Timer will not turn on the system until the Sleep Timer turns it off.
- You cannot activate Daily Timer and Timer-recording at the same time.

---

# Timer-recording radio programs

You can record a preset radio station from a specified time.

To timer-record, you must preset the radio station (see "Step 3: Presetting radio stations" on page 7) and set the clock (see "Step 2: Setting the time" on page 6) beforehand.



---

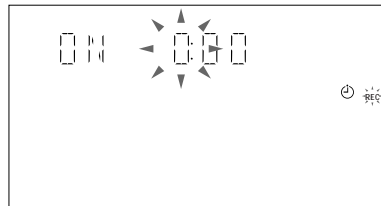
**1** Tune in the preset radio station (see "Listening to the radio" on page 13).

---

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

---

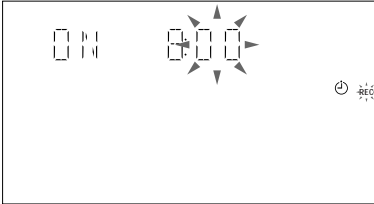
**3** Press  $\lll$  or  $\ggg$  repeatedly to select "REC", then press **ENTER**.  
"ON" appears and the hour indication flashes in the display.



continued

## Timer-recording radio programs (continued)

- 4** Set the time to start recording.  
Press **⏮** or **⏭** repeatedly to set the hour, then press **ENTER**.  
The minute indication starts flashing.



Press **⏮** or **⏭** repeatedly to set the minute, then press **ENTER**.  
The hour indication flashes again.

- 5** Set the time to stop recording following the above procedure.  
The start time, followed by the stop time, the preset radio station to be recorded (e.g., "TUNER FM 5") appear, 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 **CLOCK/TIMER SELECT** and press **⏮** or **⏭** repeatedly to select "REC", then press **ENTER**.

To change the setting, start over from step 1.

### To cancel the timer operation

Press **CLOCK/TIMER SELECT** and press **⏮** or **⏭** repeatedly to select "TIMER OFF", then press **ENTER**.

### Notes

- If the power is on at the preset time, the recording will not be made.
- You cannot set the timer if the starting time and stopping time are the same.
- When you use the Sleep Timer, Timer-recording will not turn on the system until the Sleep Timer turns it off.
- You cannot activate Timer-recording and Daily Timer at the same time.

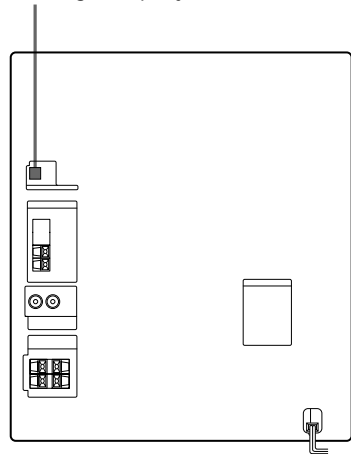
## Connecting audio components

Select one of the following connections, depending on the component to be connected and method of connecting. Refer to the instructions of each component.

### Connecting an MD deck for digital recording

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

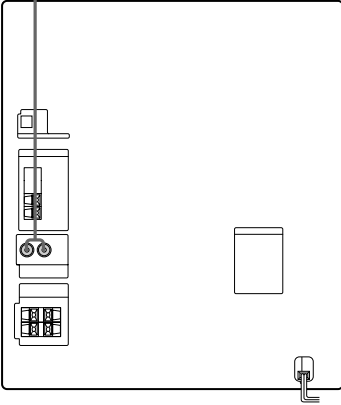
To the digital input jack of the MD deck



## Connecting an MD deck for listening to music

Make sure to match the color of the plugs and the connectors. To listen to the sound of the connected MD deck, press MD (VIDEO).

To the audio output of the MD deck



### Tip

When you connect a Sony MD deck, you can use the MD  $\triangleright$ ,  $\square$ , and  $\square$  buttons on this unit's remote to perform play, pause, and stop operations.

### Note

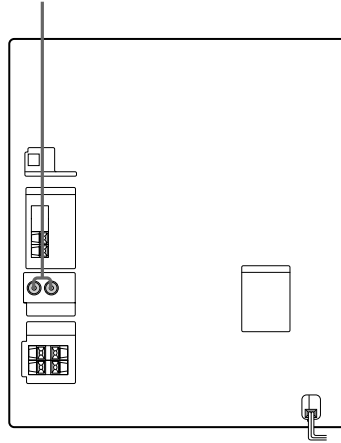
If you cannot select "MD" when you press MD (VIDEO), press I/⏻ while pressing MD (VIDEO) when the power is turned off. "VIDEO" will be switched to "MD". To return to "VIDEO", do the same procedure. However, you cannot switch from MD to VIDEO or from VIDEO to MD when the system is in the Power Saving Mode (see page 9).

## Connecting a VCR

By connecting the audio output jacks of your VCR to the MD/VIDEO (AUDIO) IN jacks using an optional audio cable, you can enjoy video playback in powerful stereo sound.

Make sure to match the color of the plugs and the connectors. To listen to the sound of the connected VCR, hold down MD (VIDEO) and press I/⏻ when the power is turned off. This switches the "MD" function to "VIDEO". Once you enable the "VIDEO" function, just press MD (VIDEO).

To the audio output of the video deck



### Notes

- You cannot switch from MD to VIDEO or from VIDEO to MD when the system is in the Power Saving Mode (see page 9).
- To return to "MD", press I/⏻ while pressing MD (VIDEO) again when the power is turned off.
- When you connect a VIDEO CD deck, set to "MD".

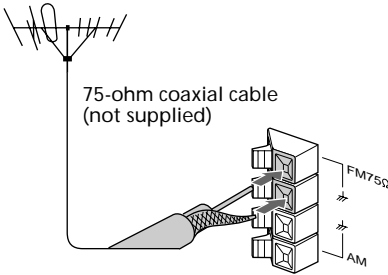
# Connecting external antennas

Connect the external antenna to improve the reception. Refer to the instructions of each component.

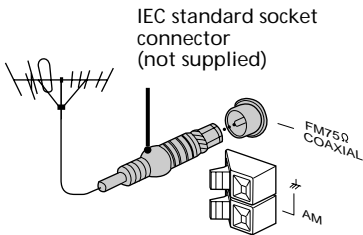
## FM antenna

Connect the optional FM external antenna. You can also use the TV antenna instead.

### Jack type Ⓐ



### Jack type Ⓑ

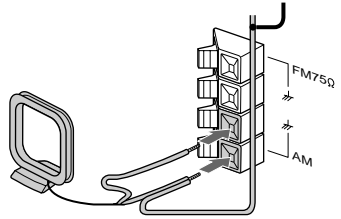


## AM antenna

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

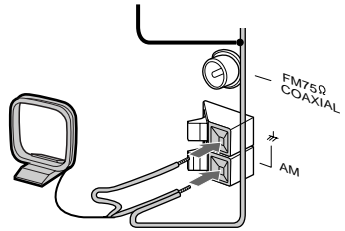
### Jack type Ⓐ

Insulated wire (not supplied)



### Jack type Ⓑ

Insulated wire (not supplied)





## 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 a 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

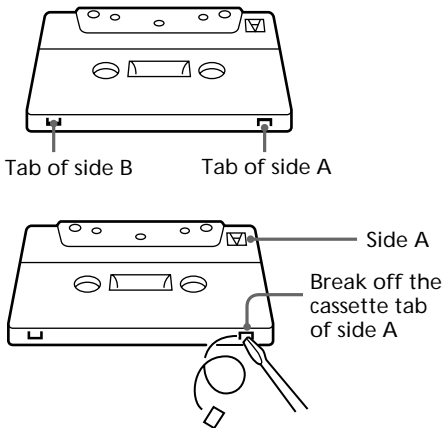
- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.
- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave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

## Cleaning the cabinet

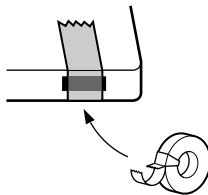
Use a soft cloth slightly moistened with mild detergent solution.

## 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.



continued

## Precautions (continued)

### 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 once (MHC-DX3) or twice (MHC-BX3) when the power is turned off. The demonstration disappears.

The demonstration mode appears automatically the first time you plug in the power cord or if there is a power outage lasting longer than half a day.

---

The clock setting/radio presetting/timer is canceled.

- The power cord is disconnected or a power failure occurs longer than half a day.  
Redo the following:
  - “Step 2: Setting the time” on page 6
  - “Step 3: Presetting radio stations” on page 7

If you have set the timer, also redo “Waking up to music” on page 36 and “Timer-recording radio programs” on page 37.

---

There is no sound.

- Turn VOLUME clockwise.
- The headphones are connected.
- Insert only the stripped portion of the speaker cord into the SPEAKER jack. Inserting the vinyl portion of the speaker cord will obstruct the speaker connections.
- There is no audio output during timer recording.

---

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 MD (VIDEO), switch the display to "MD" (see "Note: Connecting audio components" on page 39).

---

"0:00" (or "12:00 AM") flashes in the display.

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

---

The timer does not function.

- Set the clock correctly.

---

DAILY 1, DAILY 2, and REC do not appear when you press CLOCK/TIMER SET.

- 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 from the speakers or change the direction of the microphone.

---

The color irregularity on a TV screen persists.

- Turn off the TV set once, then turn it on after 15 to 30 minutes. If the color irregularity still persists, place the speakers farther away from the TV set.

---

"PROTECT" and "PUSH POWER" appear alternately.

- A strong signal was input. Press I/⏻ to turn off the power, leave the system turned off for a while, then press I/⏻ again to turn on the power. If "PROTECT" and "PUSH POWER" appear alternately even after the power is turned on again, press I/⏻ to turn off the power and check the speaker cord.
- 

## Speakers

---

Sound comes from one channel or unbalanced left and right volume.

- Check the speaker connection and speaker placement.

---

Sound lacks bass.

- Check that the speaker's + and - jacks are connected correctly.
- 

## 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 program or shuffle mode. Press PLAY MODE repeatedly until "PGM" or "SHUFFLE" disappear.

---

"OVER" is displayed.

- You have reached the end of the CD. Turn the shuttle counterclockwise until it clicks and hold.
- 

continued

## Troubleshooting (continued)

### 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 41).
  - 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 42).
  - The record/playback heads are magnetized. Demagnetize them (see “Demagnetizing the tape heads” on page 42).
- 

The tape does not erase completely.

- The record/playback heads are magnetized. Demagnetize them (see “Demagnetizing the tape heads” on page 42).
- 

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 42).
- 

Noise increases or the high frequencies are erased.

- The record/playback heads are magnetized. Demagnetize them (see “Demagnetizing the tape heads” on page 42).
- 

After pressing ◀▶ or ⏏, there is a mechanical noise, “EJECT” appears in the display, and the unit enters standby mode automatically.

- The cassette tape was not inserted correctly. Eject the tape and turn the power back on.
- 

### Tuner

---

There is severe hum or noise (“TUNED” or “STEREO” flashes in the display).

- Adjust the antenna.
  - The signal strength is too weak. Connect the external antenna.
- 

A stereo FM program 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 ■, ENTER, and I/⏏ at the same time.
- 4 Press I/⏏ to turn on the power.

The system is reset to the factory settings. All the settings you made, such as the preset stations, clock, and timer are cleared. You should set them again.

# Specifications

## AUDIO POWER SPECIFICATIONS: (MHC-BX3 U.S.A. model only)

### POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

with 6 ohm loads both channels driven, from 120-10,000 Hz; rates 75 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

## Amplifier section

### Canadian model:

#### MHC-BX3:

Continuous RMS power output (reference)

60 + 60 watts  
(6 ohms at 1 kHz,  
10% THD)

Total harmonic distortion less than 0.07%

(6 ohms at 1 kHz, 35 W)

### European model:

#### MHC-BX3:

DIN power output (rated) 45 + 45 watts  
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference)

60 + 60 watts  
(6 ohms at 1 kHz,  
10% THD)

Music power output (reference)

150 + 150 watts  
(6 ohms at 1 kHz,  
10% THD)

### Other model:

#### MHC-DX3:

The following measured at AC 120, 220, 240 V  
50/60 Hz

DIN power output (rated) 75 + 75 watts  
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference)

100 + 100 watts  
(6 ohms at 1 kHz,  
10% THD)

## Inputs

MD/VIDEO IN:

(phono jacks)

MIC:

(mini jack)

voltage 450/250 mV,

impedance 47 kilohms

sensitivity 1 mV,

impedance 10 kilohms

## Outputs

PHONES:

(stereo mini jack)

SPEAKER:

MHC-BX3:

accepts headphones of  
8 ohms or more

MHC-DX3:

accepts impedance of 6 to  
16 ohms

accepts impedance of 6 to  
16 ohms

## CD player section

System

Compact disc and digital  
audio system

Laser

Semiconductor laser  
( $\lambda=780$  nm)

Emission duration:  
continuous

Laser output

Max. 44.6  $\mu$ W\*

\*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.

Wavelength

780 - 790 nm

Frequency response

2 Hz - 20 kHz ( $\pm 0.5$  dB)

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

660 nm

Output Level

-18 dBm

continued

## Specifications (continued)

### Tape player section

|                    |   |
|--------------------|---|
| Recording system   | 4-track 2-channel stereo  |
| Frequency response | 40 – 13,000 Hz ( $\pm 3$ dB),<br>using Sony TYPE I<br>cassette            |
| Wow and flutter    | $\pm 0.15\%$ W.Peak (IEC)<br>0.1% W.RMS (NAB)<br>$\pm 0.2\%$ W.Peak (DIN) |

### Tuner section

FM stereo, FM/AM superheterodyne tuner

#### FM tuner section

|                        |                   |
|------------------------|-------------------|
| Tuning range           | 87.5 – 108.0 MHz  |
| Antenna                | FM lead antenna   |
| Antenna terminals      | 75 ohm unbalanced |
| Intermediate frequency | 10.7 MHz          |

#### AM tuner section

|                                     |   |
|-------------------------------------|---|
| Tuning range                        |   |
| Pan-American models:                | 530 – 1,710 kHz<br>(with the interval set at<br>10 kHz)<br>531 – 1,710 kHz<br>(with the interval set at<br>9 kHz) |
| European and Middle Eastern models: | 531 – 1,602 kHz<br>(with the interval set at<br>9 kHz)  |
| Other models:                       | 531 – 1,602 kHz<br>(with the interval set at<br>9 kHz)<br>530 – 1,710 kHz<br>(with the interval set at<br>10 kHz) |
| Antenna                             | AM loop antenna   |
| Antenna terminals                   | External antenna terminal   |
| Intermediate frequency              | 450 kHz   |

### Speaker

|   |                                 |
|---|---------------------------------|
| SS-BX3 for MHC-BX3/SS-DX3 for MHC-DX3/<br>SS-DX3B for MHC-DX3 |                                 |
| Speaker system  | 2-way, bass-reflex type         |
| Speaker units   |                                 |
| Woofers:  | 15 cm, cone type                |
| Tweeters:   | 10 cm, cone type                |
| Nominal impedance   | 6 ohms                          |
| Dimensions (w/h/d)  | Approx. 215 x 325 x 275 mm      |
| Mass  | Approx. 4 kg net per<br>speaker |

## General

### Power requirements

|                       |  |
|-----------------------|--|
| North American model: | 120 V AC, 60 Hz  |
| European model:       | 230 V AC, 50/60 Hz   |
| Australian model:     | 230-240 V AC, 50/60 Hz   |
| Mexican model:        | 120 V AC, 60 Hz  |
| Other models:         | 120 V, 220 V or 230 - 240<br>V AC, 50/60 Hz<br>Adjustable with voltage<br>selector |

### Power consumption

|                 |           |
|-----------------|-----------|
| U.S.A. model:   |           |
| MHC-BX3:        | 140 watts |
| Canadian model: |           |
| MHC-BX3:        | 130 watts |
| European model: |           |
| MHC-BX3:        | 130 watts |
| Other models:   |           |
| MHC-DX3:        | 170 watts |

### Dimensions (w/h/d)

|              |                            |
|--------------|----------------------------|
| MHC-BX3/DX3: | Approx. 280 x 325 x 403 mm |
|--------------|----------------------------|

### Mass

|                 |                |
|-----------------|----------------|
| U.S.A. model:   |                |
| MHC-BX3:        | Approx. 7.8 kg |
| Canadian model: |                |
| MHC-BX3:        | Approx. 7.8 kg |
| European model: |                |
| MHC-BX3:        | Approx. 7.9 kg |
| Other models:   |                |
| MHC-DX3:        | Approx. 8.9 kg |

|                       |   |
|-----------------------|---|
| Supplied accessories: | AM loop antenna (1)<br>Remote Commander (1)<br>Batteries (2)<br>FM lead antenna (1)<br>Front speaker pads (8) |
|-----------------------|---|

Design and specifications are subject to change without notice.

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