4-243-237-13(1)

SONY

Micro Hi-Fi Component System

Operating Instructions



CMT-M373NT CMT-M333NT

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WARNING

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

To prevent fire, do not cover the ventilation of the apparatus with news papers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus. To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

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

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

The following caution label is located inside the apparatus.





Don't throw away the battery with general house waste, dispose of it correctly as chemical waste.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.

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.

Except for European model



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Features

This system is a desktop stereo component that integrates a CD player, an MD player, a Tape, and a tuner. The MD player supports 4x extended recording/playback (MDLP), 4x highspeed dubbing from a CD to an MD, and the Group function that allows you to organize recorded songs into groups that may be treated like albums recorded on an MD. By connecting the system to a personal computer, you can play back songs from the personal computer's hard disk or CD-ROM drive through the system's speakers, and you can also operate the system from the personal computer if it is installed with the supplied software (M-crew or SonicStage for Sony Net MDs).

- For details on connecting the system to a personal computer, see "Connecting a personal computer to the system" on page 48.
- For details on the supplied software, see "About the supplied M-crew" on page 50 and "About the supplied SonicStage for Sony Net MDs" on page 51 before installing the software.

Tips

- For details on the software installation and basic operations of M-crew or SonicStage for Sony Net MDs, refer to the instruction manual of the respective software.
- For details on advanced operations, refer to the online help for the respective software.
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- All other trademarks are trademarks of their respective owners. TM and ® marks are omitted in this manual.

How to use this manual

This manual mainly explains operations using the remote, but the same operations can also be performed using the buttons on the system having the same or similar names.

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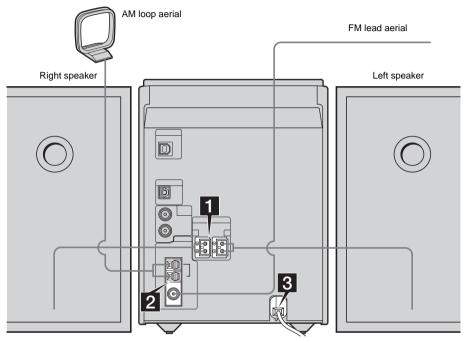
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Getting Started

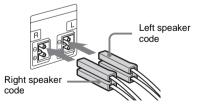
Hooking up the system

Perform the following procedures **1** to **3** to hook up your system using the supplied cords and accessories.



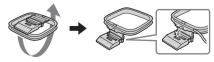
1 Connect the speakers.

Connect the right and left speaker cords to the SPEAKER terminals as shown below.



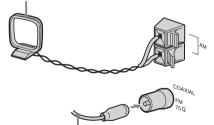
2 Connect the FM and AM aerials.

Set up the AM loop aerial, then connect it.



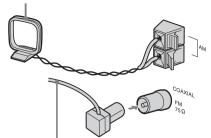
Jack type (A

AM loop aerial



Extend the FM lead aerial horizontally

AM loop aerial



Extend the FM lead aerial horizontally

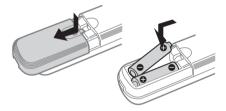
Note

Keep the aerials away from the speaker cords.

3 Connect the mains lead to mains.

If the plug does not fit the wall socket, detach the supplied plug adaptor (only for models equipped with an adaptor). To turn on the system, press I/(1).

Inserting two R6 (size AA) batteries into the remote



Note

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

Тір

When the remote no longer operates the system, replace both batteries with new ones.

Setting the clock

- **1** Press I/ \bigcirc to turn on.
- 2 Press CLOCK/TIMER SET.
- 3 Press I or ►►I repeatedly to set the day.
- 4 Press ENTER/YES or CURSOR \rightarrow .
- 5 Press I ◄ or ►► I repeatedly to set the hour.
- **6** Press ENTER/YES or CURSOR \rightarrow .
- 7 Press I or >> I repeatedly to set the minute.
- 8 Press ENTER/YES.

The clock starts working.

To adjust the clock

- 1 Press CLOCK/TIMER SET.
- 2 Press I or ►►I to select "CLOCK SET", then press ENTER/YES.
- **3** Do the same procedures as step 3 to 8 above.

Note

You cannot set the clock in power save mode.

CD – Play

Loading a disc

1 Press ≜ CD on the unit.

2 Place a disc with the label side up on the disc tray.



3 Press ≜ CD again to close the disc tray.

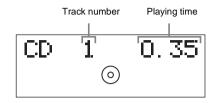
Notes

- Do not use a disc with tape, seals or paste on it as this may cause malfunction.
- Do not forcibly press the disc tray closed with your finger, as this may cause malfunction.

Playing a disc

— Normal Play/Shuffle Play/Repeat Play

This system lets you play the CD in different play modes.



- **1** Press FUNCTION repeatedly to switch the function to CD.
- 2 Press PLAY MODE in stop mode repeatedly until the mode you want appears.

Select	To play
No display (Normal Play)	The tracks on the disc in original order.
SHUF (Shuffle Play)	All tracks on the disc in random order.
PGM (Program Play)	The tracks on the disc in the order you want them to be played (see "Creating your own program" on page 8).

3 Press CD ►II.

Notes

- · You cannot change the play mode during playback.
- If you press ▲ CD to open or close the disc tray while listening to another sound source, the CD icon lights up even if there is no CD in the tray. To turn off the CD icon, press FUNCTION

repeatedly to switch the function to CD.

Other operations

То	Do this
Stop play	Press .
Pause	Press CD I . Press again to resume play.
Select a track	Press I or I repeatedly.
Find a point in a track (Search)	Keep pressing ◀◀ or ▶▶ during playback and release it at the desired point.
Remove a disc	Press \triangleq CD on the unit.

Playing a track by entering the track number

You can also select the desired track you want using the number buttons during Normal Play. To enter a track number 10 or higher, press >10 followed by the number button for the one's digit. To enter 0, press 10/0.

Playing repeatedly

- Repeat Play

You can play all the tracks or a single track on a disc.

Press REPEAT repeatedly until "REP" or "REP1" appears.

REP: For all the tracks on the CD up to five times.

REP1: For a single track only.

To cancel Repeat Play

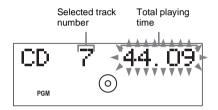
Press REPEAT repeatedly until both "REP" and "REP1" disappear.

Creating your own program

— Program Play

You can make a program of up to 25 steps. You can synchro record the programmed tracks onto an MD or a cassette tape (pages 15 and 40).

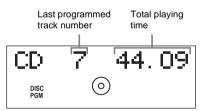
- **1** Press FUNCTION repeatedly to switch the function to CD.
- 2 Press PLAY MODE in stop mode repeatedly until "PGM" appears.
- 3 Press I ← or ► I repeatedly until the desired track number appears.



4 Press ENTER/YES.

The track is programmed.

The step number appears, followed by the track number in the programmed sequence and the total playing time of the program.



- 5 To program additional tracks, repeat steps 3 and 4.
- 6 Press CD ►II.

Program Play starts.

CD – Play

Other operations

То	Do this
Cancel Program Play	Press PLAY MODE in stop mode repeatedly until both "PGM" and "SHUF" disappear.
Check the program order	Press I or I repeatedly during Program Play.
Check the total number of programmed tracks	Press DISPLAY in stop mode. The total number of programmed steps appears.
Add a track to the end of the program	Perform steps 3 and 4 in stop mode.
Erase the program	Press CLEAR in stop mode or in step 4. Each time you press the button, a track is cleared from the end of the program.

Tips

- The program you made remains after Program Play finishes. To play the same program again, press CD > 11. However, the program is cleared when you open the disc tray.
- "----" appears when the total program time exceeds 100 minutes, or when you select a CD track whose number is 21 or over.

Labeling a CD

— Disc Memo

You can label up to 50 CDs with titles of up to 20 symbols and characters. Whenever you load a labeled CD, the title appears.

Notes

• You cannot label a CD for which "TEXT" appears in the display.

• When labeling CDs for the first time, be sure to erase all disc titles stored in the system memory (see "Erasing a disc title" on page 10).

1 Press FUNCTION repeatedly to switch the function to CD.

If "SHUF" or "PGM" appears, press PLAY MODE repeatedly until both disappear.

2 Press NAME EDIT/SELECT in stop mode.

The cursor starts flashing.

3 Press NAME EDIT/SELECT to select the desired type of character.

Character type	Select
Alphabet (upper cases)/ blank space/symbols	Selected AB
Alphabet (lower cases)/ blank space/symbols	Selected ab
Numbers	Selected 12

4 Enter a character.

5

Character type	Do this
Alphabet	Press the corresponding letter button (or I◀◀ or ►► I on the unit) repeatedly until the character to be entered flashes, then press CURSOR→.
Numbers	Press the corresponding number buttons.
Blank space	Press 10/0.
´-/,.():!?	Press 1 repeatedly.
&+<>_=";#\$ % @ * `	Press 1, then press I or ► repeatedly.

Repeat steps 3 and 4 to enter the rest of the name.

9*GB*

6 Press ENTER/YES to complete the labeling procedure.

To change the character

In step 3 or 4, press \leftarrow CURSOR or CURSOR \rightarrow repeatedly until the character to be changed flashes, press CLEAR to erase the character, then repeat steps 3 and 4.

To add a character

After steps 1 and 2, press \leftarrow CURSOR or CURSOR \rightarrow until the cursor comes to the point you want to add a character, then proceed to step 3.

To cancel labeling

Press MENU/NO.

Checking the disc titles

- **1** Press FUNCTION repeatedly to switch the function to CD.
- 2 Press MENU/NO in stop mode.
- 3 Press I ← or ► I repeatedly until "Name Check?" appears, then press ENTER/YES.
- 4 Press I ← or ►►I repeatedly to select the disc titles stored in the system memory between 01 and 50.

To check the current disc title

Press SCROLL in stop mode.

Erasing a disc title

- **1** Press FUNCTION repeatedly to switch the function to CD.
- 2 Press MENU/NO in stop mode.
- 3 Press I d or ►► I repeatedly until "Name Erase?" appears, then press ENTER/YES.
- 4 Press I or ►►I repeatedly to select the disc title you want to erase.

"No Name" appears if no disc title is labeled.

5 Press ENTER/YES again.

"Complete!" appears.

To erase all disc titles

Press I or I repeatedly until "All Erase?" appears in step 3, then press ENTER/YES twice.

To cancel erasing

Press MENU/NO on the remote during step 2 through 4.

Note

The disc titles are saved in the system memory for about a day even if you disconnect the mains lead or a power failure occurs.

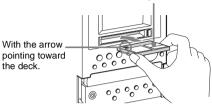
MD – Play

MD – Play

Loading an MD

Insert an MD.

the deck.

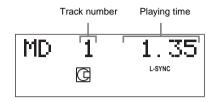


With the label side up, and the shutter on the righthand side.

Playing an MD

- Normal Play/Shuffle Play/Repeat Play

This system lets you play the MD in different play modes.



- 1 Press FUNCTION repeatedly to switch the function to MD.
- 2 Press PLAY MODE in stop mode repeatedly until the mode you want appears.

Select	To play
No display (Normal Play)	The tracks on the MD in original order.
SHUF (Shuffle Play)	All tracks on the MD in random order.
PGM (Program Play)	The tracks on the MD in the order you want them to be played (see "Programming MD tracks" on page 12).

3 Press MD II.

Note

You cannot change the play mode during playback.

Other operations

То	Do this
Stop play	Press .
Pause	Press MD I. Press again to
	resume play.
Select a track	Press I or I repeatedly
	until you find the desired track.
Find a point in a	Keep pressing ◀◀ or ▶▶ during
track	playback and release it at the
	desired point.
Remove the MD	Press \triangleq MD on the unit.

Playing a track by entering the track number

You can also select the desired track using the number buttons during Normal Play. To enter a track number 10 or higher, press >10 followed by the number button for the one's digit. To enter 0, press 10/0.

Playing repeatedly

- Repeat play

Press REPEAT repeatedly until "REP" or "REP1" appears.

- REP: For all the tracks on the MD up to five times.
- REP1: For a single track only.

To cancel Repeat Play

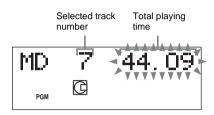
Press REPEAT repeatedly until both "REP" and "REP1" disappear.

Programming MD tracks

— Program Play

You can make a program of up to 25 steps.

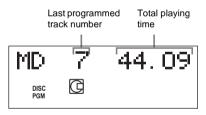
- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press PLAY MODE in stop mode repeatedly until "PGM" appears.
- 3 Press I ← or ► I repeatedly until the desired track number appears.



4 Press ENTER/YES.

The track is programmed.

The step number appears, followed by the track number in the programmed sequence and the total playing time of the program.



5 To program additional tracks, repeat steps 3 and 4.

6 Press MD ►II.

Program Play starts.

MD – Play

Other operations

То	Do this
Cancel Program Play	Press PLAY MODE in stop mode repeatedly until both "PGM" and "SHUF" disappear.
Check the program order	Press I or I repeatedly during Program Play.
Check the total number of programmed tracks	Press DISPLAY in stop mode. The total number of programmed steps appears.
Add a track to the end of the program	Perform steps 3 and 4 in stop mode.
Erase the program	Press CLEAR in stop mode or in step 4. Each time you press the button, a track is cleared from the end of the program.

Tips

- The program you made remains after Program Play finishes. To play the same program again, press MD > 11. However, the program is cleared after you remove the MD or press GROUP.
- "----" appears when the total program time exceeds 1,000 minutes.

Playing only the tracks in the desired group

This function allows you to listen only to your favorite tracks which you have registered into a group. For details of the Group Function, see "Registering tracks in groups" on page 23.

- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press GROUP in stop mode repeatedly until "GROUP" appears.
- **3** Press GROUP SKIP repeatedly until the desired group appears.
- 4 To start playing from a specific track in the group, press I ◄ or ►►I repeatedly until the desired track appears.

Proceed to step 5 when you start playing from the first track in the group.

5 Press MD ►II.

Playback starts.

When the playing of the last track in the group finishes, the MD deck stops automatically.

Note

If you select a group that does not have any tracks registered and press MD \blacktriangleright II, playback starts from the first track of the first group on the MD.

Tips

- You can change play mode (Normal Play/Shuffle Play/Repeat Play/Program Play) only for the tracks in the group. To select the desired play mode, select the play mode before step 3.
- You can perform the operations described under "Playing an MD" (page 11) and "Programming MD tracks" (page 12) only for the tracks in the group.

MD – Recording

Before you start recording

MDs (MiniDisc) let you digitally record and play music with high quality sound. Another feature of MDs is track marking. The track marking feature lets you quickly locate a specific point or easily edit the recorded tracks. However, depending on the source you record, the recording method and the way the track numbers are recorded differ.

When the source you record from is:

- CDs loaded in this system's CD player
- The MD deck performs digital recording.^{*1}
- Track numbers are automatically marked as on the original CD. However, track numbers are not marked depending on the track (page 63).
- Other digital components connected to the DIGITAL OPTICAL IN jack
- The MD deck performs digital recording.^{*1}
- Track numbers are marked differently depending on the source you record.
- This system's tuner or other analog components connected to the ANALOG IN jacks
- The MD deck performs analog recording.^{*2}
- A track number is marked at the beginning of a recording only, but when you turn on the Level Synchro Recording Function (page 19), track numbers are automatically marked in sync with the level of the input signal.
- A personal computer
- Only tracks that have been checked out using the Net MD function can be recorded from a personal computer.

When you use a partially recorded MD

You cannot record while overwriting the recorded tracks.

Recording starts after the recorded tracks. If you want to erase the recorded tracks, erase the tracks using Erase Function (page 29).

Note on MD track numbers

On an MD, the track numbers (track sequence), track start and end point information, etc., are recorded in the TOC^{*3} area independent of the sound information. You can edit recorded tracks quickly by modifying the TOC information.

About recording errors

- With the following kinds of discs, you may experience a reading failure or noise when recorded on an MD:
 - Discs with adhesive labels attached to them
 - Irregularly shaped discs (for example, heart- or star- shaped)
 - Discs with printed text concentrated on one side only
 - Scratched discs
 - Dirty discs
 - Warped discs
- If the following occurs during CD playback or recording, a reading error may occur or noise may be produced in the recorded results:
 - The disc tray or other part of the system is bumped.
 - The system is placed on an uneven or soft surface.
 - The system is located near a speaker, door, or other source of vibration.
- If the above reading errors occur, an extra soundless track may be created. You can erase these extra tracks using Erase Function (page 29).
- ^{*1} For details on the limitations of digital recording, see "System limitations of MDs" on page 63.
- *2 Even if you connect a digital component, the MD deck performs analog recording.
- *3 TOC: Table Of Contents

After recording

Press \triangleq MD on the unit to remove the MD or press I/ \bigcirc (power) to turn off the system.

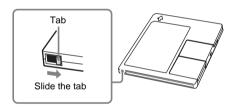
"TOC writing" or "STANDBY" starts flashing. The TOC is updated and recording is completed.

Before pulling out the mains lead

MD recording is completed when the MD Table of Contents (TOC) is updated. The TOC is updated when you eject the MD or press I/\bigcirc to turn off the system. Do not pull out the mains lead before updating the TOC or while updating the TOC (while "TOC" lights up or flashes) to ensure a complete recording.

Protecting a recorded MD

• To protect a recorded MD, slide the tab on the side of the MD to open the slot. In this position, the MD cannot be recorded. To record on the MD, slide the tab to close the slot.



• If the MD is record protected, "C11" and "Protected" appear alternately and the MD cannot be recorded. Remove the MD, then slide the record protection tab to the closed position.

Recording a CD on an MD

— CD-MD Synchro Recording/High-Speed CD-MD Synchro Recording

You can record a whole CD on an MD. You can select the recording time by switching the recording mode.

In addition to recording at normal speed, you can also record at high speed (approximately $4 \times$ normal speed).

Use buttons on the unit for the operation.

- 1 Load a recordable MD.
- **2** Load a CD you want to record.

3 Press REC MODE repeatedly to select the recording mode.

Select the desired recording time.

Recording time	Select (Recording mode)
Standard	no indication (stereo)
Double	LP2 (LP2 stereo)
Quadruple	LP4 (LP4 stereo)
Double (change the stereo	MONO (monaural)
signal to monaural)	

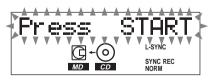
4 Press SYNCHRO MODE repeatedly until "CD→MD SYNC" appears.

To record using High-Speed CD-MD Synchro Recording, press the button until "HISPEED SYNC" appears.

5 Press ENTER/START.

"Press START" flashes.

The MD deck stands by for recording and the CD player pauses for play.



6 Press ENTER/START while "Press START" flashes.

Recording starts.

When the recording is completed, the CD player and the MD deck stop automatically.

To stop recording

Press .

To record using the Group Function

Press GROUP repeatedly until "GROUP" appears after step 2. Press GROUP SKIP repeatedly until "New Group" or the desired group appears after step 5.

Recording a CD on an MD and a tape at the same time

Load a recordable tape, then select "DUAL SYNC" in step 4. Even if the MD or the tape ends part-way through the recording, the other continues recording.

To record only your favorite CD tracks

You can record only your favorite CD tracks using the Program Play. Between steps 2 and 3, perform steps 1 to 5 of "Creating your own program" (page 8).

Notes

- You cannot pause the recording.
- If the MD play mode is set to the Repeat Play or Shuffle Play, the play mode switches to Normal Play in step 5.
- The following items are either inoperative or cannot be used during High-Speed CD-MD Synchro Recording:
 - The Auto Cut Function
 - The recording level specified in the Setup menu

Tips

- For details about LP2/LP4 recording, see "Recording for long times" on page 22.
- For details about CD-MD Synchro Recording, see page 22.
- Depending on the disc, CD-TEXT information may also be recorded (except when you record on an MD and a tape at the same time).

Recording a tape on an MD

— TAPE-MD Synchro Recording

You can make an analog recording of a tape on an MD. You can use TYPE I (normal) tape.

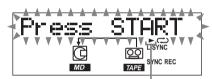
Use buttons on the unit for the operation.

- 1 Load a recordable MD.
- 2 Press ▲ PUSH OPEN/CLOSE and load a tape you want to record.
- 3 Press SYNCHRO MODE repeatedly until "TAPE→MD SYNC" appears.

4 Press ENTER/START.

"Press START" flashes.

The MD deck stands by for recording and the tape deck pauses for play.



Tape playback side

- 5 Press DIRECTION repeatedly until appears to record on one side or ⇒) to record on both sides.
- 6 Press ENTER/START while "Press START" flashes.

Recording starts.

When the recording is completed, the tape deck and the MD deck stop automatically.

To stop recording

Press
.

To record using the Group Function

Press GROUP repeatedly until "GROUP" appears after step 2. Press GROUP SKIP repeatedly until "New Group" or the desired group appears after step 5.

Recording on an MD manually

— Manual Recording

You can record just the portions you like from a CD, or other connected component.

1 Load a recordable MD.

2 Press FUNCTION repeatedly to select the desired source to record.

- CD: To record from this system's CD player.
- TAPE: To record from this system's cassette deck.
- TUNER: To record from this system's tuner.
- OPTICAL IN: To record from the optional component connected to the DIGITAL OPTICAL IN jack.
- ANALOG IN: To record from the optional component connected to the ANALOG IN jacks.

3 Press REC MODE on the unit repeatedly to select the recording mode.

Select the desired recording time.

Recording time	Select (Recording mode)
Standard	no indication (stereo)
Double	LP2 (LP2 stereo)
Quadruple	LP4 (LP4 stereo)
Double	MONO (monaural)
(change the stereo	
signal to monaural)	

4 Press MD ●.

The MD deck stands by for recording.

5 Press MD ►II, then start playing the desired source to record.

To stop recording

Press **•**.

To record using the Group Function

Press GROUP repeatedly until "GROUP" appears after step 2. Press GROUP SKIP repeatedly until "New Group" or the desired group appears after step 4.

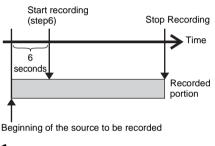
Tips

- If you want to record manually in the middle of a track loaded in this system, press CD II before step 4 to pause the playback, then press CD II in step 5 to start playback.
- You can check the remaining recordable time on the MD during recording by pressing DISPLAY.
- If cyclical static noise is heard while recording an AM radio program, move the AM loop aerial to reduce the noise or connect a ground wire to the $\frac{1}{m}$ terminal.
- For details about LP2/LP4 recording, see "Recording for long times" on page 22.
- You can adjust the recording level (page 21).

Starting recording with 6 seconds of prestored audio data

— Time Machine Recording

When recording from an FM or satellite broadcast, the first few seconds of material are often lost due to the time it takes you to ascertain the contents and press the record button. To prevent the loss of this material, the Time Machine Recording feature constantly stores the most recent audio data in a buffer memory. This lets you record the sound from 6 seconds before starting recording, as shown in the illustration below:



- 1 Load a recordable MD.
- 2 Press FUNCTION repeatedly to select the desired source to record.
- **3** Press REC MODE on the unit repeatedly to select the recording mode.

Select the desired recording time.

Recording time	Select (Recording mode)
Standard	no indication (stereo)
Double	LP2 (LP2 stereo)
Quadruple	LP4 (LP4 stereo)
Double change the stereo ignal to monaural)	MONO (monaural)

4 Press MD ●.

The MD deck stands by for recording.

- 5 Start playing the desired source to record.
- 6 Press ENTER/YES at the desired point to start recording.

To stop Time Machine Recording

Press
.

Note

The MD deck starts storing audio data when the deck stands by for recording in step 4 and you start playing the source. If less than 6 seconds have passed when you press ENTER/YES, Time Machine Recording starts with less than 6 seconds of audio data.

Тір

For details about LP2/LP4 recording, see "Recording for long times" on page 22.

Marking track numbers

After recording

Use the Divide Function (page 33).

At any point during recording

— Track Mark

You can mark track numbers during manual recording of any source.

Press MD • during manual recording at the point you want to add a track mark.

Presetting to automatically mark track numbers before recording

— Level-Synchro Recording

The Level Synchro Recording Function is factory set to on, so the track numbers are automatically marked. Track numbers are automatically marked when the input signal is continuously below a certain level for more than two seconds and then exceeds that level. If "L-SYNC" does not appear during recording, turn on the Level Synchro Recording as follows.

- **1** Press FUNCTION repeatedly to switch the function to MD.
- **2** Press MENU/NO.
- 3 Press I ← or ►►I repeatedly until "Setup?" appears, then press ENTER/ YES.
- 4 Press I ← or ►►I repeatedly until "T.Mark" appears, then press ENTER/ YES.
- 5 Press I ◄ or ►►I repeatedly until "T.Mark LSync" appears, then press ENTER/YES.

"L-SYNC" lights up.

6 Press MENU/NO.

To continue recording, follow the procedures described for each type of recording.

Other operations

То	Do this
Turn off the Level Synchro Recording Function	In step 5, press I≪ or ►►I repeatedly until "T.Mark Off" appears, then press ENTER/ YES.
Change the trigger lever for Level Synchro Recording*	After step 3, press I ← or ► I repeatedly until "LS(T)" appears, then press ENTER/ YES. Press I ← or ► I repeatedly to select the level between -72 dB and 0 dB (in 2 dB steps), press ENTER/YES, then press MENU/NO.

* When the recording source is tape or radio program and the track numbers are not marked properly because of noise, set this level higher so that track numbers are marked easily. The factory setting is "-50 dB".

Notes

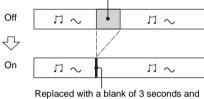
- Track numbers are not marked depending on the track.
- Track numbers are not marked automatically if the source sound to be recorded is noisy (e.g., tapes or radio programs).
- When recording a CD, track numbers are marked where you paused recording. In addition, the tracks might be recorded as the same single track with a single track number when the same single track of the same CD is recorded repeatedly.

Making a space between tracks 3 seconds long automatically

— Smart Space

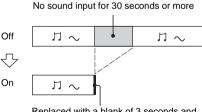
Smart Space: Lets you make the blank spaces between tracks 3 seconds long automatically while making a digital recording from a CD. For other types of recording, if the Smart Space Function is on and there is no sound input for about 3 seconds or more (but less than 30 seconds) while recording, the MD deck replaces this silence with a blank of about 3 seconds and continues recording. The Smart Space Function is factory set to on.

No sound input for less than 30 seconds



Replaced with a blank of 3 seconds and recording continues

Auto Cut: When the Smart Space Function is on, if there is no sound input for 30 seconds or more, the MD deck replaces this silence with a blank of about 3 seconds and enters recording pause.



Replaced with a blank of 3 seconds and recording pauses

- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press MENU/NO.

- 3 Press I ← or ►►I repeatedly until "Setup?" appears, then press ENTER/ YES.
- 4 Press I ← or ►►I repeatedly until "S.Space" appears, then press ENTER/ YES.
- 5 Press I ← or ►►I repeatedly until "S.Space On" appears, then press ENTER/YES.

6 Press MENU/NO.

To continue recording, follow the procedures described for each type of recording.

To turn off the Smart Space Function

In step 5, press I or ►► repeatedly until "S.Space Off" appears, then press ENTER/YES.

Adjusting the recording level

When recording on an MD, you can adjust the recording level to the desired volume. You can adjust the recording level not only when making an analog recording, but also when making a digital recording from a CD, etc.

- 1 Press FUNCTION repeatedly to select the desired source to record.
- 2 Press MD ●.

The MD deck stands by for recording.

- **3** Start playing the desired source to record.
- 4 Press MENU/NO to display "Setup?", then press ENTER/YES.
- 5 Press I d or ► repeatedly until "LevelAdjust?" appears, then press ENTER/YES.

6 Press I ← or ►►I repeatedly to adjust the recording level.

Adjust to the optimum level while making sure that "OVER" does not appear in the display at the loudest portion.



Adjust the level so as not to light up "OVER".

- 7 Press ENTER/YES.
- 8 Press MENU/NO.

9 Press ■.

The MD deck stops.

To continue recording, follow the procedures described for each type of recording.

Tips

- You can also adjust the recording level during recording.
- Once adjusted, the recording level is maintained until you adjust it again.
- You cannot adjust the recording level during CD-MD Synchro Recording.

Recording for long times

This system has two long time recording modes: LP2 and LP4 (MDLP recording).

Press REC MODE on the unit to select the recording mode. Refer to each pages about recording (pages 15, 17 and 18).

MDs recorded in MDLP Stereo mode are played back only on the system with the following marks.

MDLP MDLP

MDs recorded in MDLP Stereo mode cannot be played back on the system that does not support MDLP mode.

Notes

- Even if the recording mode is set to "MONO", the sound from the speakers are output as recorded in the source (in stereo when recording the stereo source).
- You cannot use S.F Edit and some other MD edit functions for tracks recorded in MDLP mode.
- Some MDs recorded in MDLP Stereo mode are edited so that "LP:" is displayed to indicate that playback is not possible when an attempt is made to play back these MDs on a system that does not support MDLP mode. However, this system supports MDLP mode, so "LP:" is not displayed when these MDs are played back.

Tips

- LP4 stereo mode (4× long time recording mode) achieves a long stereo recording time by use of a special compression system. When placing emphasis on sound quality, Stereo recording or LP2 stereo recording (2× long time recording mode) is recommended.
- You can mix the recording mode in an MD.
- The selected recording mode is kept even after recording has finished. To change the recording mode, press REC MODE on the unit repeatedly.

High-Speed CD-MD Synchro Recording

When recording an entire CD as is or in the programmed track order, you can record at higher speed than normal (approximately $4\times$ normal speed).

If you cannot use High-Speed CD-MD Synchro Recording

When "Retry" flashes

A reading failure has occurred, and the system is trying to read the data again.

- If the retry was successful, the system continues with High-Speed CD-MD Synchro Recording.
- If the condition of the inserted CD or the system is poor, and retry fails, High-Speed CD-MD Synchro Recording is disabled. In this case, "Retry" and "NORM" flash in the display and the MD deck automatically starts recording in normal CD-MD Synchro Recording. Note that monitoring of the recorded signal is not possible when this occurs.

Notes

- You cannot record over existing tracks. The new tracks are recorded after the existing tracks.
- When recording all the tracks on a CD, be sure to use a recording MD with a longer remaining time than the CD play time.
- You cannot pause recording during CD-MD Synchro Recording and High-Speed CD-MD Synchro Recording.
- If the MD play mode is set to Repeat Play or Shuffle Play, it automatically switches to Normal Play.
- The following items are either inoperative or cannot be used during High-Speed CD-MD Synchro Recording:
 - The Auto Cut Function
 - The recording level specified in the Setup menu
- There is no sound from the tape output jack during High-Speed CD-MD Synchro Recording.

MD – Editing

Editing tips

Before you start editing

You can edit an MD only when:

- · The MD is recordable.
- The MD play mode is Normal Play. Check the following, before editing.
- 1 Check the tab of the MD to be edited. Slide the tab to close the slot. If the MD is protected, you cannot edit the MD.
- 2 Press PLAY MODE repeatedly until both "SHUF" and "PGM" disappear.

You can edit the MD only in Normal Play mode. You cannot edit the MD in Shuffle or Program Play mode.

To quit while editing

Press MENU/NO.

After editing

Press \triangleq MD on the unit to remove the MD or press I/($^{\circ}$) (power) to turn off the system.

"TOC" or "STANDBY" starts flashing. The TOC is updated and editing is completed.

Before pulling out the mains lead

MD editing is completed when the MD Table of Contents (TOC) is updated. The TOC is updated when you eject the MD or press I/\bigcirc to turn off the system. Do not pull out the mains lead before updating the TOC or while updating the TOC (while "TOC" lights up or flashes) to ensure a complete editing.

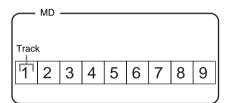
Registering tracks in groups

— Group Function

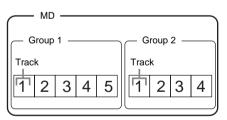
What is the Group Function?

The Group Function allows you to play, record and edit the tracks on an MD in groups. For example, you can register tracks 1 to 5 on an MD to the "Rock" group, and tracks 6 to 9 to the "Pops" group. Then you can listen to the tracks in only the desired group, add new tracks to a group, and perform other operations. In addition, the Group Function can be easily turned on and off simply by pressing GROUP.

Group Function: Off



Group Function: On



Operations using the Group Function

- Playing only the tracks in the desired group (page 13)
- Recording a CD (page 15)
- Recording a tape (page 16)
- Recording on an MD manually (page 17)
- Starting recording with 6 seconds of prestored audio data (page 18)
- Labeling a group (page 25)
- Creating a new group (page 27)
- Releasing group registrations (page 28)

Note

MDs recorded using the Group Function of this system can be used with other system that supports the Group Function. However, note that the Group Function operations of other system may differ from the operations for this system.

How is group information recorded?

When recording using the Group Function, the group management information is automatically recorded on the MD as the disc title.

Specifically, a character string such as the following is written in the disc title recording area.

Disc title recording area

- (1) The disc title is "Favorites".
- ② Tracks 1 to 5 are registered in the "Rock" group.
- ③ Tracks 6 to 9 are registered in the "Pops" group.

Therefore, when an MD recorded using the Group Function is loaded on a system that does not support the Group Function or on this system with the Group Function turned off, the above character string is displayed in its entirety as the disc title.

Note that if you rewrite this character string by mistake using the Name Function, you may be unable to use the Group Function of that MD.*

* "GROUP" flashes. To use the Group Function again, first perform the procedure for "Releasing all groups on an MD" (page 28) and release the registrations of all tracks on the MD.

If "Group Full!" appears during operation

You cannot start recording because there is insufficient character space for group management. Delete unnecessary characters (disc title or track titles) until group recording is possible (page 26).

Notes

- The Group Function setting is stored even if you eject the MD or turn off the system.
- When the Group Function is on, tracks which are not registered to a group are not displayed and cannot be played.
- You cannot change the group order.
- The new group is added after any existing groups with tracks registered.
- When you newly record a track into an existing group, the new track is added after any existing tracks in the group.
- Up to 99 groups can be registered on a single MD.
- When you newly record a track into an existing group, the track numbers following the newly recorded track may change when the Group Function is turned off.
- If you load a disc with group management information written in other than the proper format, "GROUP" flashes. In this case you cannot use the Group Function.

MD – Editing

Labeling an MD/group/ track

— Name Function

You can create titles for your recorded MDs, tracks, and groups as follows.

After recording

Use Name Function.

You can input a total of approximately 1,700 characters for the disc title, track titles and group titles on a single MD.

When labeling an MD recorded using the Group Function, be sure to label the disc with the Group Function on so as not to rewrite the group management information by mistake.

For details on the group management information, see "How is group information recorded?" on page 24.

- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Perform the following procedure depending on what you want to label:

To label a track

Press I or I repeatedly until the desired track number appears, then press NAME EDIT/SELECT.

To label an MD

Press NAME EDIT/SELECT while the total number of tracks (or groups when the Group Function is on) is displayed.

To label a group

Press GROUP repeatedly until "GROUP" appears, then press GROUP SKIP repeatedly until the desired group appears. Press NAME EDIT/SELECT while the total number of tracks within the desired group is displayed.



The cursor starts flashing.

3 Press NAME EDIT/SELECT to select the desired type of character.

Character type	Select
Alphabet (upper cases)/ blank space/symbols	Selected AB
Alphabet (lower cases)/ blank space/symbols	Selected ab
Numbers	Selected 12

4 Enter a character.

Character type	Do this
Alphabet	Press the corresponding
-	letter button (or 🖂 or
	►► on the unit) repeatedly
	until the character to be
	entered flashes, then press
	$CURSOR \rightarrow .$
Numbers	Press the corresponding
	number buttons.
Blank space	Press 10/0.
´-/,.():!?	Press 1 repeatedly.
&+<>_=";#\$	Press 1, then press I or
%@ * `	►► repeatedly.

Repeat steps 3 and 4 to enter the rest of the name.

6 Press ENTER/YES.

5

To change the character

In step 3 or 4, press \leftarrow CURSOR or CURSOR \rightarrow repeatedly until the character to be changed flashes, press CLEAR to erase the character, then repeat steps 3 and 4.

To add a character

After steps 1 and 2, press \leftarrow CURSOR or CURSOR \rightarrow until the cursor comes to the point you want to add a character, then proceed to step 3.

Note

If you enter the symbol "//" between the characters in disc titles such as "abc//def", you may be unable to use the Group Function.

Тір

You can label a track title during playback. The playback repeats until you finish labeling.

Presetting to automatically assign titles before recording (only CDs with CD-TEXT information)

During the CD-MD Synchro Recording (page 15), CD-TEXT information is recorded automatically. The factory setting is "On".

To cancel recording the CD-TEXT information automatically

Change the setting as follows.

- 1 Press FUNCTION repeatedly to switch the function to MD.
- 2 Press MENU/NO.
- 3 Press I or ►► repeatedly until "Setup?" appears, then press ENTER/YES.
- 4 Press I d or ►► repeatedly until "Txt Save" appears, then press ENTER/YES.
- 5 Press I or ►► repeatedly until "Txt Save Off" appears, then press ENTER/YES.
- 6 Press MENU/NO.

Note

Even when "Txt Save Off" is selected, the CD-TEXT information is recorded automatically depending on the disc.

Checking the titles

To check the disc titles, press SCROLL in stop mode. To check the track title, press SCROLL during playback. The title appears scrolling in the display.

To check the group titles, press GROUP repeatedly in stop mode until "GROUP" appears, press GROUP SKIP repeatedly until the desired group appears, then press SCROLL. To stop scrolling, press SCROLL. Press the button again to resume scrolling.

Erasing the titles

- To erase group titles, press GROUP repeatedly in stop mode until "GROUP" appears.
- 2 Press MENU/NO in stop mode.
- 3 Press I ← or ►►I repeatedly until "Nm Erase?" appears, then press ENTER/ YES.

To erase disc titles

Press I or ►► repeatedly until "Nm Ers Disc" appears, then press ENTER/YES.

To erase track titles

Press I or ►► repeatedly until the desired track number appears, then press ENTER/YES.

To erase group titles

Press I or I repeatedly until the group number appears, press GROUP SKIP repeatedly until the desired group number appears, then press ENTER/YES.

"Complete!" appears.

Note

You cannot erase the title of a group that does not have any tracks registered.

MD – Editing

Creating a new group

— Create Function

The Create Function allows you to create a new group without registering any tracks, or to create a new group and register one or more consecutive tracks into that group. Only tracks that have not yet been registered into any group can be registered.

For details on the Group Function, see "Registering tracks in groups" on page 23.

- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press GROUP repeatedly until "GROUP" appears.
- **3** Press MENU/NO.
- 4 Press I d or ►►I repeatedly until "Gp Create?" appears, then press ENTER/ YES.
- 5 Perform steps 3 to 6 of "Labeling an MD/group/track" (page 25).
- 6 Press I ← or ►►I repeatedly until "Assign None" appears, then press ENTER/YES.

Note

When creating a group without registering any tracks, you must enter the group title.

To register tracks into a group

In step 6, press I ◄ or ►► I repeatedly to select the number of the first track you want to register, then press ENTER/YES.

When registering only one track, press ENTER/ YES again.

When registering two or more tracks, press I ← or ► repeatedly to select the number of the last track you want to register, then press ENTER/YES.

Notes

- You cannot register the same track to more than one group.
- If you do not enter a group title in step 5, "Group ** (group number)" appears as the group title.

Тір

You can also register tracks that were recorded on a system that does not support the Group Function.

Releasing group registrations

— Release Function

These functions allow you to release group registrations simply by specifying the group for which you want to release the registrations. In addition, you can also release the registrations of all groups on an MD at once.

For details on the group management information, see "Registering tracks in groups" on page 23.

Releasing a single group

- Group Release Function

You can release a specified group and erase that group. (However, note that the tracks are not erased.)

- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press GROUP repeatedly until "GROUP" appears.
- **3** Press GROUP SKIP repeatedly until the desired group appears.
- 4 Press MENU/NO.

5 Press I◀◀ or ▶▶I repeatedly until "Gp Release?" appears, then press ENTER/ YES.

"REL Gp** (selected group number)??" appears.

6 Press ENTER/YES.

Releasing all groups on an MD

- All Release Function

You can release all groups on an MD at once.

- 1 Press GROUP repeatedly in stop mode until "GROUP" appears.
- 2 Press MENU/NO.
- 3 Press I or ►►I repeatedly until "Gp All REL?" appears, then press ENTER/ YES.

"All REL??" appears.

4 Press ENTER/YES.

Erasing recordings

— Erase Function

The MD deck lets you erase unwanted tracks quickly and easily.

You can restore the erased contents using the Undo function immediately after the erasing (page 34). However, you cannot restore the erased contents after performing other editing. Before erasing, make sure if it is all right to erase the content.

The three options for erasing recordings are:

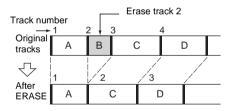
- Erasing a single track (Track Erase Function)
- Erasing all tracks (All Erase Function)
- Erasing a portion of a track (A-B Erase Function)

Erasing a single track

— Track Erase Function

When you erase a track, the total number of tracks on the MD decreases by one and all the tracks following the erased one are renumbered.

Example: Erasing track 2



As the track numbers are renumbered as above, it is recommended to erase from the latter tracks when erasing several tracks, so as not to change the track numbering of unerased tracks.

- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press MENU/NO.
- 3 Press I ← or ►►I repeatedly until "Tr Erase?" appears, then press ENTER/ YES.

Playback of the selected track starts.

4 Press I d or ►►I repeatedly until the desired track number appears.



5 Press ENTER/YES.

"Complete!" appears. The track selected in step 4 is erased and playback of the following track starts. When you erase the last track, the playback of the previous track starts.

Note

If you erase all the tracks within a group, the group itself is also erased.

Erasing all tracks

— All Erase Function

You can erase all the contents recorded on an MD (the disc title, group titles, all recorded tracks and their titles) at once.

- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press MENU/NO.
- 3 Press I ← or ►►I repeatedly until "All Erase?" appears, then press ENTER/ YES.

"All Erase??" appears.

4 Press ENTER/YES again.

Note

If you perform the above operation when the Group Function is on, not only the tracks within the group, but all the tracks on the MD are erased.

Erasing a portion of a track

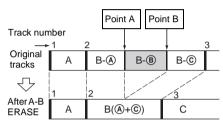
— A-B Erase Function

You can specify a portion within a track and erase the portion with ease. You can shift the desired portion by frame*, minute or second intervals.

This function is convenient to erase the unnecessary parts recorded from satellite broadcast or radio programs.

* 1 frame is 1/86 second.

Example: Erasing a portion of track 2



- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press MENU/NO.
- 3 Press I or ►►I repeatedly until "A-B Erase?" appears, then press ENTER/ YES.

Playback starts.

4 Press I ← or ►► I repeatedly until the desired track number appears, then press ENTER/YES.

"—Rehearsal—" and "Point A ok?" appear alternately while the deck repeats a few seconds of a portion before point A.

5 While monitoring the sound, press ENTER/YES at the starting point of the portion to be erased (point A).

6 Press ENTER/YES if point A is correct.

"Point B set" appears and playback for setting the ending point of the portion to be erased (point B) starts.

If the point A is incorrect, press I ◄ or ► I repeatedly to find the starting point of the portion to be erased (point A) while monitoring the sound, then press ENTER/ YES.

You can shift the point by 1/86 second (1 frame) intervals.*

* You can shift the point by 2-frame intervals (in Monaural mode and LP2 stereo mode) or by 4-frame intervals (in LP4 stereo mode).

7 Continue playback until the deck reaches point B, then press ENTER/ YES.

"A-B Ers" and "Point B ok?" appear alternately and the deck repeats a portion of the few seconds before point A and after point B successively.

8 Press ENTER/YES if point B is correct.

"Complete!" appears for a few seconds and the portion between point A and B is erased. Playback starts from the beginning of the track.

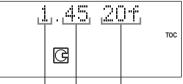
If the point B is incorrect, press I ◄ or ► I repeatedly to find the ending point of the portion to be erased (point B) while monitoring the sound, then press ENTER/ YES.

You can shift the point by 1/86 second (1 frame) intervals.*

* You can shift the point by 2-frame intervals (in Monaural mode and LP2 stereo mode) or by 4-frame intervals (in LP4 stereo mode).

Тір

To shift the point by minute or second intervals in steps 6 and 8, press \blacktriangleleft or \triangleright repeatedly to flash minute, second, or frame indication, then press \blacksquare or \triangleright .



Minute Second Frame

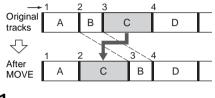
Moving recorded tracks

– Move Function

You can use this function to change the order of any track on the disc. When you move tracks, the tracks are automatically renumbered.

Example: Moving track 3 to position 2

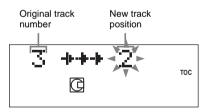
Track number



- 1 Press FUNCTION repeatedly to switch the function to MD.
- 2 Press MENU/NO
- 3 Press I or I repeatedly until "Move?" appears, then press ENTER/ YES.

Playback starts.

- Δ Press I or I repeatedly until the desired track number to move appears, then press ENTER/YES.
- 5 Press I or I repeatedly until the new track position appears.



6 Press ENTER/YES.

"Complete!" appears for a few seconds and the moved track starts playing.

Note

When you move a track to a track number that is registered into a group, the moved track is re-registered into the group. In addition, if you move a track that is registered into a group to a track number that is not registered into a group, the group registration of the moved track is released. However, when the Group Function is on, you can only move tracks within the selected group.

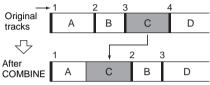
Combining recorded tracks

– Combine Function

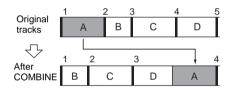
You can use this function to combine 2 tracks into a single track. The total number of tracks decreases by one and all tracks following the combined ones are renumbered.

Example: Combining track 3 to track 1

Track number



Example: Combining track 1 to track 4



- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press MENU/NO.
- 3 Press I d or ►► I repeatedly until "Combine?" appears, then press ENTER/YES.

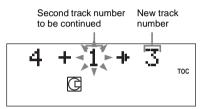
Playback starts.

4 Press I ← or ►►I repeatedly until the first track number of the two to be combined appears, then press ENTER/ YES.

For example, to combine track 1 to 4, select 4.



5 Press I ◄ or ► I repeatedly until the second track number of the two to be combined appears.



6 Press ENTER/YES.

"Complete!" appears for a few seconds. Playback of the track starts.

Notes

- When you combine two tracks that are registered into different groups, the second track is reregistered into the group containing the first track. In addition, if you combine a track that is registered to a group with a track that is not registered to a group, the second track takes the same registration setting as the first track. However, when the Group Function is on, you can only combine tracks within the selected group.
- Tracks recorded in different recording modes (stereo, LP2, LP4 or MONO) cannot be combined.
- If both of the combined tracks have track titles, the title of the second track is erased.

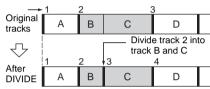
Dividing recorded tracks

Divide Function

You can use this function to mark track numbers after recording. You can also use this function when recording from tapes or radio programs and track numbers are not marked automatically, and want to mark tracks. The total number of tracks increases by one and all the tracks following the divided ones are renumbered.

Example: Dividing track 2 into two tracks

Track number



- 1 Press FUNCTION repeatedly to switch the function to MD.
- 2 Press MENU/NO.
- 3 Press I or I repeatedly until "Divide?" appears, then press ENTER/ YES.

Playback starts.

- 4 Press I or I repeatedly until the desired track number to divide appears.
- 5 While monitoring the sound, press ENTER/YES at the point to be divided.

"-Rehearsal-" appears and the portion to be divided is played repeatedly.

6 Press ENTER/YES again if the point to be divided is correct.

"Complete!" appears for a few seconds and the newly created track starts playing.

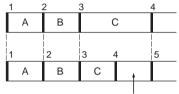
If the point to be divided is incorrect, press \blacksquare or \blacksquare to find the point to be divided, then press ENTER/YES.

You can shift the point by 1/86 second (1 frame) intervals.*

* You can shift the point by 2-frame intervals (in Monaural mode and LP2 stereo mode) or by 4frame intervals (in LP4 stereo mode).

Note

If you divide a labeled track (page 25) into two tracks, only the first track retains the track title. Example:



The new track is not labeled.

Tip

To shift the point by minute or second intervals in step 6, press *d* or *repeatedly to flash minute,* second, or frame indication, then press \bowtie or \bowtie .



Minute Second Frame

Undoing the last edit

— Undo Function

You can use this function to cancel the last edit and restore the contents of the MD to the condition before the edit.

Note, however, that you cannot undo the edit if you do any of the following after the edit:

- Do another edit.
- Do the recording procedure.
- Activate the Net MD function.
- Update the TOC by turning off the system or ejecting the MD.
- Disconnect the mains lead.
- **1** Press MENU/NO in stop mode.
- 2 Press I or ►►I repeatedly until "Undo?" appears.

"Undo?" does not appear when there is no editing function that can be canceled.

3 Press ENTER/YES.

Following message appears depending on the last edit.

Editing	Message	
Labeling discs or tracks	Name Undo?	
Erasing the titles	- Name Ondo:	
Creating a new group	- Group Undo?	
Releasing a group		
Releasing all groups		
Deleting a portion of a		
track	Erase Undo?	
Deleting a track		
Deleting all the tracks		
Moving tracks	Move Undo?	
Dividing a track	Divide Undo?	
Combining tracks	Combine Undo?	

4 Press ENTER/YES again.

Note

You cannot undo the S.F Edit Function.

Changing the recorded level after recording

- S.F Edit Function

You can change the volume of recorded tracks using S.F (Scale Factor) Edit. The original track is recorded over at the new recording level. When changing the recording level, you can select Fade-in Recording to gradually increase the signal level at the start of recording, or Fadeout Recording to gradually decrease the signal level at the end of the recording.

Changing the overall recording level

- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press PLAY MODE in stop mode repeatedly until both "PGM" and "SHUF" disappear.
- **3** Press MENU/NO.
- 4 Press I ← or ►►I repeatedly until "S.F Edit?" appears, then press ENTER/ YES.
- 5 Press I ← or ►►I repeatedly until "Tr Level?" appears, then press ENTER/ YES.

Playback starts.

6 Press I ← or → I repeatedly until the track number you want to change the recording level appears, then press ENTER/YES.

"Level 0dB" appears.

7 While monitoring the sound, press I ← or ►► I repeatedly to change the recorded level.

The recording level can be changed from -12 dB to +12 dB, in 2 dB steps. Change to the optimum level while making sure that "OVER" does not appear in the display at the loudest portion.



Adjust the level so as not to light up "OVER".

8 Press ENTER/YES.

"S.F Edit OK?" appears.

9 Press ENTER/YES again.

The system starts recording over the existing track.

"S.F Edit: ** %" appears while the track is being recorded. An amount of time that is roughly equal to or longer than the playback time of the track is required when recording over the track. When the recording finishes, "Complete!" appears.

Fade-in and Fade-out Recording

- **1** Press FUNCTION repeatedly to switch the function to MD.
- 2 Press PLAY MODE in stop mode repeatedly until both "PGM" and "SHUF" disappear.
- **3** Press MENU/NO.
- 4 Press I ◄ or ►►I repeatedly until "S.F Edit?" appears, then press ENTER/ YES.
- 5 Press I◀◀ or ▶►I repeatedly until "Fade In?" or "Fade Out?" appears, then press ENTER/YES.

Playback starts.

6 Press I ← or ►►I repeatedly until the track number you want to change the recording level appears, then press ENTER/YES.

"Time5.0s" appears.

7 While monitoring the sound, press I◀◀ or ►►I repeatedly to change the Fadein or Fade-out recording time.

The system plays the portion that will be recorded over using Fade-in or Fade-out Recording. You can set the time at any value between 1.0 second and 15.0 seconds, in 0.1 second steps. You cannot set the time longer than the track.

8 Press ENTER/YES.

"S.F Edit OK?" appears.

9 Press ENTER/YES again.

The system starts recording over the existing track.

"S.F Edit: ** %" appears while the track is being recorded. When the recording finishes, "Complete!" appears.

To cancel the operation

Press MENU/NO during step 4 through 8. After pressing ENTER/YES in step 9 to start recording, you cannot interrupt the operation.

Notes

- Do not disconnect the mains lead or move the system while recording is in progress. This may damage the recording data preventing recording from being performed properly.
- You cannot change the recording level of the tracks recorded in MDLP mode.
- Repeatedly changing the recording level results in poor sound quality.
- The recording level will not return to the exact original level once the recording level has been changed even if it returned to the original level.
- The recording level cannot be changed while the timer is activated.
- You cannot undo the S.F Edit Function even if you use the Undo Function.

Tuner

Presetting radio stations

You can preset up to 20 FM stations and 10 AM stations. You can then tune in any of those stations simply by selecting the corresponding preset number.

Automatic tuning preset

You can automatically tune in all of the stations that can be received in your area and then store the radio frequency of the desired stations.

- 1 Press TUNER BAND repeatedly to select "FM" or "AM".
- 2 Press TUNING MODE repeatedly until "AUTO" appears in the display.

3 Press **◄** or **▶**.

The frequency changes as the system scans for a station. Scanning stops automatically when a station is tuned in. At that time, "TUNED" and "STEREO" (for stereo program only) appear.

If "TUNED" does not appear and the scanning does not stop

Set the frequency of the desired radio station as described in steps 2 and 3 of "Manual tuning preset" (page 36).

4 Press MENU/NO.

5 Press + or – repeatedly until "Memory?" appears, then press ENTER/YES.

The preset number flashes. Perform steps 6 and 7 while the preset number flashes.

6 Press + or – repeatedly to select the desired preset number.

7 Press ENTER/YES.

8 Repeat steps 1 through 7 to preset other stations.

Тір

Press TUNING MODE to stop scanning.

Manual tuning preset

You can manually tune in and store the radio frequency of the desired stations.

- 1 Press TUNER BAND repeatedly to select "FM" or "AM".
- 2 Press TUNING MODE repeatedly until "AUTO" and "PRESET" disappear from the display.
- 3 Press ◄< or ►► repeatedly to tune in the desired station.
- 4 Press MENU/NO.
- 5 Press + or repeatedly until "Memory?" appears, then press ENTER/YES.

The preset number flashes. Perform steps 6 and 7 while the preset number flashes.

- 6 Press + or repeatedly to select the desired preset number.
- 7 Press ENTER/YES.
- 8 Repeat steps 1 through 7 to preset other stations.

Other Operations

То	Do this
Tune in a station with a weak signal	Follow the procedure described in "Manual tuning preset" (page 36).
Set another station to the existing preset number	After step 5, press + or – repeatedly to select the preset number you want to store the station.

To change the AM tuning interval (except for European model)

The AM tuning interval is factory-preset to 9 kHz (or 10 kHz for some areas). To change the AM tuning interval, tune in any AM station first, then turn off the system. While holding $\triangleright \triangleright I$, press I/\bigcirc on the unit. When you change the interval, all the AM preset stations are erased. To reset the interval, tune in any AM station first, then turn off the system. While holding FM MODE, press I/\bigcirc on the unit.

Note

You cannot change the AM tuning interval in the Power Saving Mode.

Tips

- The preset stations are retained for about a day even if you disconnect the mains lead or if a power failure occurs.
- You can label the preset stations (page 38).
- To improve the reception, adjust the supplied aerials or connect an external aerial.

Listening to the radio

You can listen to a radio station either by selecting a preset station, or by manually tuning in the station.

Listening to a preset station

- Preset Tuning

Preset radio stations in the tuner's memory first (see "Presetting radio stations" on page 36).

- 1 Press TUNER BAND repeatedly to select "FM" or "AM".
- 2 Press TUNING MODE repeatedly until "PRESET" appears in the display.
- **3** Press + or repeatedly to select the desired preset station.

To select the desired preset number using the number buttons

Press number buttons instead of performing step 3. To enter preset number 10 or higher, press >10 followed by the number button for the one's digit. To enter 0, press 10/0.

Listening to non-preset radio station

- Manual Tuning

- 1 Press TUNER BAND repeatedly to select "FM" or "AM".
- 2 Press TUNING MODE repeatedly until "AUTO" and "PRESET" disappear from the display.
- **3** Press + or repeatedly to tune in the desired station.

Tips

- To improve broadcast reception, adjust the supplied aerials, or connect a commercially available external aerial.
- When an FM stereo program has static noise, press FM MODE repeatedly until "MONO" appears. There will be no stereo effect, but the reception will improve.
- Press TUNING MODE repeatedly until "AUTO" appears in step 2 above, then press + or –. The frequency indication changes and scanning stops when the system tunes in a station (Automatic Tuning).
- To record the radio programs, use manual recording (pages 17 and 41).

Labeling the preset stations

- Station Name

You can label each preset station with up to 12 characters (Station Name).

1 Tune in the station you want to label (see "Listening to the radio" on page 37).

2 Press NAME EDIT/SELECT.

The cursor starts flashing.



Cursor

3 Perform steps 3 to 6 of "Labeling an MD/group/track" (page 25).

To cancel labeling

Press MENU/NO.

To erase the station name

- 1 Tune in the preset station you want to erase the station name.
- 2 Press NAME EDIT/SELECT.
- 3 Press CLEAR repeatedly to erase the name.
- 4 Press ENTER/YES.

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. RDS is available only on FM stations.*

Note

RDS may not work properly if the station you are tuned in is not transmitting the RDS signal properly or if the signal 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 cyclically as follows:

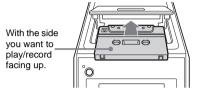
Station name* \rightarrow Frequency \rightarrow Clock display \rightarrow BASS level \rightarrow TREBLE level

* If the RDS broadcast is not properly received, the station name may not appear in the display.

Tape – Play

Loading a tape

- Press
 PUSH OPEN/CLOSE.
- 2 Load a recorded/recordable tape into the cassette holder.



Playing a tape

You can use TYPE I (normal) tape.

- **1** Press FUNCTION repeatedly to switch the function to TAPE.
- 2 Press DIRECTION on the unit repeatedly to select "→" to play one side of a tape, "→" to play both sides, or "(→"* to play both sides repeatedly.
 - * The tape deck stops automatically after repeating the sequence five times.

3 Press TAPE ◄►.

Press TAPE $\triangleleft \triangleright$ again to play the reverse side.

Other operations

То	Do this
Stop play	Press
Pause	Press II TAPE on the unit. Press again to resume play.
Fast-forward or rewind	Press I or I .
Remove a tape	Press 📥 PUSH OPEN/CLOSE.

Tape – Recording

Recording your favorite CD/MD tracks on a tape

— CD/MD-TAPE Synchro Recording

You can record a whole CD or MD on a tape. You can use TYPE I (normal) tape.

Use buttons on the unit for the operation.

- 1 Load a recordable tape.
- 2 Load a CD or MD you want to record.

3 Press SYNCHRO MODE repeatedly until "CD→TAPE SYNC" or "MD→TAPE SYNC" appears.

4 Press ENTER/START.

"Press START" flashes. The tape deck stands by for recording and the CD player or MD deck pauses for play.

5 Press DIRECTION repeatedly until appears to record on one side or ⇒) to record on both sides.

6 Press TAPE ◄► repeatedly to select recording side.

If you select both sides recording or front side recording, press TAPE $\triangleleft \triangleright$ to light up the \triangleright indicator. If you record on the reverse side, press TAPE $\triangleleft \triangleright$ again to light up the \triangleleft indicator.

7 Press ENTER/START while "Press START" flashes.

Recording starts.

When the recording is completed, the CD player or MD deck, and the tape deck stop automatically.

To stop recording

Press .

Recording on an MD and a tape at the same time

Insert a recordable MD, then select "DUAL SYNC" in step 3. Even if the MD or the tape ends part-way through the recording, the other continues recording.

To record CD or MD by specifying track order

You can record only your favorite CD or MD tracks using Program Play. Between steps 2 and 3, perform steps 1 to 5 of "Creating your own program" (page 8) or "Programming MD tracks" (page 12).

Note

Recording automatically stops if the tape becomes full during recording.

Тір

If you select both sides recording and the tape reaches the end of the front side part-way through a track, the entire track is recorded again from the beginning of the reverse side.

Recording on a tape manually

— Manual Recording

You can record just the portions you like from a CD or an MD on a tape. You can also record a radio program.

Use buttons on the unit for the operation.

- 1 Load a recordable tape.
- 2 Press FUNCTION repeatedly to select the desired source to record.
 - CD: To record from this system's CD player.
 - MD: To record from this system's MD deck.
 - TUNER: To record from this system's tuner.
 - OPTICAL IN: To record from the optional component connected to the DIGITAL OPTICAL IN jack.
 - ANALOG IN: To record from the optional component connected to the ANALOG IN jacks.

3 Press • TAPE.

The \blacktriangleright indicator lights up and the tape deck stands by for recording.

4 Press DIRECTION repeatedly until appears to record on one side or → (or (→) to record on both sides.

5 Press TAPE ◄► repeatedly to select recording side.

If you select both sides recording or front side recording, press TAPE $\triangleleft \triangleright$ to light up the \triangleright indicator. If you record on the reverse side, press TAPE $\triangleleft \triangleright$ again to light up the \triangleleft indicator.

6 Press II TAPE, then start playing the desired source to record.

Recording starts.

Other operations

То	Do this
Stop recording	Press .
Pause recording	Press II TAPE.

Sound Adjustment

Adjusting the sound

You can adjust the bass and treble to enjoy more powerful sound.

Generating a more dynamic sound (Dynamic Sound Generator)

Press DSG.

To cancel the DSG, press DSG again.

Adjusting the bass and treble

You can perform this operation only using the remote.

1 Press BASS/TRE repeatedly to select "BASS" or "TREBLE".

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

BASS \leftrightarrow TREBLE

2 Press I ← or ►►I repeatedly to adjust the level while "BASS" or "TREBLE" appears.

Falling asleep to music

— Sleep Timer

You can set the system to turn off after a certain time, so that you can fall asleep to music.

Press SLEEP.

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

SLEEP OFF \rightarrow AUTO* \rightarrow 90min \rightarrow 80min $\rightarrow \dots \rightarrow 10min$

* The system automatically turns off in 240 minutes or after the current CD, MD or tape finishes playing.

Other operations

То	Press
Check the remaining time**	SLEEP once.
Change the time to turn off	
Cancel the Sleep Timer Function	SLEEP repeatedly until "SLEEP OFF" appears.

** You cannot check the remaining time if you select "AUTO".

Note

Do not set to "AUTO" during Synchro Recording on an MD or a tape.

Тір

You can use the Sleep Timer, even if you have not set the clock.

Waking up to music

— Daily Timer

You can wake up to music at a preset time. Make sure you have set the clock (see "Setting the clock" on page 6).

You can perform this operation only using the remote.

1 Prepare the sound source you want to play.

- CD: Load a disc. To start from a specific track, make a program (see "Creating your own program" on page 8).
- MD: Load an MD. To start from a specific track, make a program (see "Programming MD tracks" on page 12).
- Tape: Load a tape (see "Playing a tape" on page 40).
- TUNER: Tune in the preset radio station (see "Listening to the radio" on page 37).

2 Press VOL + or – to adjust the volume.

3 Press CLOCK/TIMER SET.

- 4 Press I ← or ►►I repeatedly until "DAILY SET?" appears, then press ENTER/YES.
- 5 Set the time to start playing.

Press I or I repeatedly to set the hour, then press ENTER/YES.

The minute indication flashes.

Press \blacksquare or \blacksquare repeatedly to set the minute, then press ENTER/YES.

6 Set the time to stop playing following the same procedure as step 5.

7 Press I ← or ►►I repeatedly until the desired sound source appears.

Each time you press the button, the display changes cyclically as follows:

 \longrightarrow TUNER \leftrightarrow CD PLAY \leftarrow \rightarrow TAPE PLAY \leftrightarrow MD PLAY \leftarrow

8 Press ENTER/YES.

The start time, the stop time, the sound source and volume appear in turn, before the original display returns.

9 Press I/(!) to turn off the system.

Other operations

То	Do this
Check the settings/ activate the timer/	1 Press CLOCK/TIMER SELECT.
cancel the timer	2 Press ◀◀ or ►►I repeatedly until "TIMER SEL?" appears, then press ENTER/YES.
	3 Press I ← or ►►I repeatedly until "DAILY ON?" or "DAILY OFF?" appears, then press ENTER/ YES.
Change the setting	Start over from step 1. If you made a mistake, press ←CURSOR in step 5 to 7 to select the setting you want to change, then change the setting.
Cancel both Daily Timer and Timer Recording	 Press CLOCK/TIMER SELECT. Press I or ►►I repeatedly until "TIMER OFF?" appears, then press ENTER/YES.

Notes

- The Daily Timer setting or the Timer Recording setting overlaps with part or all of another timer setting.
- If you use the Daily Timer and the Sleep Timer at the same time, the Sleep Timer has priority.
- Do not operate the system from the time the system turns on until the play starts (about 30 seconds before the preset time).
- If the system is on about 30 seconds before the preset time, the Daily Timer will not be activated.
- You cannot use the optional component connected to ANALOG IN jacks or DIGITAL OPTICAL IN jack as the sound source for Daily Timer.
- When the Daily Timer is set to "OFF", "TIMER SEL?" does not appear. However, "TIMER SEL?" does appear when the Timer Recording is set to "ON".

Timer recording radio programs

To timer record, you must first preset the radio station (see "Presetting radio stations" on page 36) and set the clock (see "Setting the clock" on page 6).

You can perform this operation only using the remote.

- 1 Tune in the preset radio station (see "Listening to a preset station" on page 37).
- 2 Press CLOCK/TIMER SET.
- 3 Press I d or ►► I repeatedly until "REC SET?" appears, then press ENTER/YES.
- 4 Press I ← or ►►I repeatedly until "ONCE?", "DAILY?" or "WEEKLY?" appears.

If you select "ONCE?", the Timer Recording activates only once. If you select "DAILY?", the timer activates at the same time every day. If you select "WEEKLY?", the timer activates at the same time on the set day of every week.

5 Press ENTER/YES.

If you select "ONCE?" or "WEEKLY?", the day indication flashes. If you select "DAILY?", the hour indication flashes.

6 Press I ← or ►►I repeatedly to select the desired day.

If you select "DAILY?" in step 4, proceed to step 8.

7 Press ENTER/YES.

The hour indication flashes.

8 Set the time to start recording.

Press \blacksquare or \blacksquare repeatedly to set the hour, then press ENTER/YES.

The minute indication flashes.

Press \blacksquare or \blacksquare repeatedly to set the minute, then press ENTER/YES.

9 Set the time to stop recording following the same procedure as step 6 through 8.

- 10 Press I ← or ►►I repeatedly to select MD or tape, then press ENTER/YES.
- 11 When you record on an MD, press I◀◀ or ►►I repeatedly to select the recording mode (e.g., LP2, LP4), then press ENTER/YES.

Timer Recording settings appear, then the original display returns.

12 Load a recordable MD or tape.

If you use a partially recorded MD, recording starts after the recorded tracks. If you use a tape, perform steps 4 and 5 of "Recording on a tape manually" (page 41).

13 Press I/ \bigcirc to turn off the system.

Other operations

То	Do this
Check the settings/ activate the timer/ cancel the timer	 Press CLOCK/TIMER SELECT. Press I ◄ or ►►I repeatedly until "TIMER SEL?" appears, then press ENTER/YES
	 ENTER/TES. 3 Press I≪ or ►►I repeatedly until "REC ON?" or "REC OFF?" appears, then press ENTER/YES.
Change the setting	Start over from step 1. If you made a mistake, press ←CURSOR in step 5 to 7 to select the setting you want to change, then change the setting.
Cancel both Daily Timer and Timer Recording	 Press CLOCK/TIMER SELECT. Press I or ►►I repeatedly until "TIMER OFF?" appears, then press ENTER/YES.

Notes

- The Daily Timer setting or the Timer Recording setting overlaps with part or all of another timer setting.
- If you use the Timer Recording and the Sleep Timer at the same time, the Sleep Timer has priority.
- Do not operate the system from the time the system turns on until the recording starts (about 30 seconds before the preset time).
- If the system is on about 30 seconds before the preset time, the Timer Recording will not be activated.
- The volume is reduced to minimum during recording.
- When you record on an MD, if the Timer Recording is set with the Group Function on but no group is specified, the material is recorded into a new group.
- Note that if the Timer Recording is set at the same time as the Daily Timer sound source is set to tape, the Timer Recording sound may be recorded onto the tape.
- When the Timer Recording is set to "OFF", "TIMER SEL?" does not appear. However, "TIMER SEL?" does appear when the Daily Timer is set to "ON".

Tips

- When you record from the radio, the station name (or the frequency when the station is not labeled (page 38)) is recorded on an MD together with the start time and the stop time.
- When recording on both sides of a tape, start recording from the front side. If you start recording from the reverse side, the recording stops when the end of the reverse side is reached.

Display

Turning off the display

- Power Saving Mode

The clock display can be turned off to minimize the amount of power consumed during standby (Power Saving Mode).

Press DISPLAY repeatedly while the system is off until the clock display disappears.

To cancel Power Saving Mode

Press DISPLAY while the system is off. Each time you press the button, the display switches as follows:

Clock display* \leftrightarrow No display (Power Saving Mode)

* "----" appears if you have not set the clock.

Note

You cannot perform the following operations in Power Saving Mode.

- setting the clock

- changing the AM tuning interval (except for European models)

Tips

- 1/() indicator lights up even in the Power Saving Mode.
- The timer continues to operate in Power Saving Mode.

Viewing information about the disc in the display

You can check the playing time and remaining time of the current track or that of the disc. When a CD-TEXT disc is loaded, you can check the information stored on the disc, such as the titles. When the unit detects CD-TEXT discs, the "TEXT" indication appears in the display.

Checking the remaining time and titles (CD/MD)

Press DISPLAY during Normal Play.

Each time you press the button, the display changes cyclically as follows:

When playing a CD

Current track number and elapsed playing time \rightarrow Current track number and remaining time \rightarrow Remaining time of the current disc \rightarrow Track title^{*1} \rightarrow Clock display \rightarrow BASS level \rightarrow TREBLE level

When playing an MD

Current track number and elapsed playing time \rightarrow Current track number and remaining time \rightarrow Remaining time of the MD^{*2} \rightarrow Track title^{*3} \rightarrow Clock display \rightarrow BASS level \rightarrow TREBLE level

- *1 Nothing is displayed for discs without CD-TEXT information. When the disc contains more than 20 tracks, CD-TEXT is not displayed from track 21 on.
- ^{*2} When the Group Function is on, the remaining time of all tracks in the group is displayed.

*3 Only when the track is labeled.

Checking the total playing time and titles (CD/MD)

Press DISPLAY in stop mode.

Each time you press the button, the display changes cyclically as follows:

When a CD is in stop mode

Total number of tracks and the total playing time \rightarrow Disc title^{*4} \rightarrow Clock display \rightarrow BASS level \rightarrow TREBLE level

When an MD is in stop mode

Total number of tracks and the total playing time^{*5} \rightarrow Remaining recordable time (recordable MD only) \rightarrow Disc title^{*6} \rightarrow Clock display \rightarrow BASS level \rightarrow TREBLE level

- *4 Nothing is displayed for discs without CD-TEXT information. When the disc contains more than 20 tracks, CD-TEXT is not displayed from track 21 on.
- *5 When the Group Function is on, the total number of groups (when no group is selected) or the total number of tracks and the total playing time within the group (when a group is selected) are displayed. "---:--" appears when the total playing time of the MD exceeds 1,000 minutes.
- ^{*6} Only when the disc is labeled. When the Group Function is on, the group title is displayed.

Checking the station name (TUNER)

Press DISPLAY while listening to the radio.

Each time you press the button, the display changes cyclically as follows:

Station name^{*7} \rightarrow Preset number and frequency \rightarrow Clock display \rightarrow BASS level \rightarrow TREBLE level

^{*7} Only when the preset station is labeled.

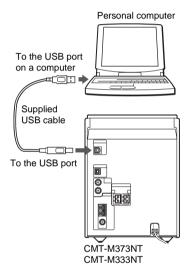
Tips

- You can check the current track title during playback. If you press SCROLL, a track title appears scrolling in the display.
- To label a disc, tracks, and groups, see "Labeling an MD/group/track" on page 25.
- To label the preset stations, see "Labeling the preset stations" on page 38.

Optional Personal Computer

Connecting a personal computer to the system

Use the supplied USB cable for the connection. You can listen to the audio recorded in the computer's hard disk or on a CD-ROM loaded on the CD-ROM drive through the systems speakers. And also you can operate the system from the connected personal computer installed the supplied software (M-crew or SonicStage for Sony Net MDs).



Notes

- Be sure to use the dedicated software (M-crew or SonicStage for Sony Net MDs) supplied with this system.
- When you connect the supplied USB cable to your computer, a driver installation may start automatically. If a "File required" dialog box or other dialog box appears, reinstall the device driver.
- Disconnecting the USB cable is recommended while it is not in use.
- Even if you adjust the volume on the computer side, the system volume cannot be adjusted.
- When you connect the system and your computer with USB cable, the computer's audio input device setting automatically switches to USB audio device. To return to the original setting, make the audio input device setting again with "Sounds and Multimedia" on the Control Panel of the computer.

Listening to the sound of a connected personal computer

The supplied M-crew software allows you to play back music data in your personal computer that has been registered to M-crew, tune in Internet radio stations, and perform other operations using the system remote (PC LIBRARY CONTROL). Music data in your personal computer is registered to M-crew by computer operations. Also, you cannot play back tracks on the computer's hard disk or through the CD-ROM drive using the system remote. To play these tracks, operate the computer. However, note that M-crew cannot play tracks through the computer's CD-ROM drive.

Be sure to check that the system and the computer are connected correctly before performing M-crew operations.

1 Start up the M-crew software installed from the supplied CD-ROM.

Refer to the supplied M-crew instruction manual for the M-crew installation, startup and setup methods.

- 2 Press FUNCTION repeatedly to switch the function to "PC".
- **3** Press NAME EDIT/SELECT to select the following modes.
 - PC: Select this mode to listen to music data using computer operations. PC mode is also used when playing back M-crew audio files.
 - MUSIC LIBRARY: Select this mode to listen to music data registered to M-crew. (This can be selected only when M-crew is active.)
 - WEB RADIO: Select this mode to listen to Internet radio programs. (This can be selected only when M-crew is active.)

Note

The mode selection is valid only when M-crew is active. When M-crew is not active, you can start up general music playback software and listen to music using computer operations, regardless of the mode.

4 Press ENTER/YES.

Music or radio playback starts in the mode selected in step 3.

Modes

 PC: Personal computer operations. In this mode you can listen to music with general music playback software such as Windows Media Player. "PC" appears in the system display.



• **MUSIC LIBRARY:** System remote operations. In this mode you can listen to music data (play list) registered to M-crew. When you press DISPLAY to switch to name display, the name of the track currently being played appears in the system display.

Track number Total playing time



• WEB RADIO: System remote operations. In this mode you can listen to Internet radio stations registered to M-crew. When you press DISPLAY to switch to name display, the name of the Internet radio station currently broadcasting appears in the system display.

Radio station number Total playing time



Note

In WEB RADIO mode, the Internet Explorer connection setup and Internet connection must be made beforehand. The system and M-crew do not have dial-up or other Internet connection and disconnect functions. These Internet connection and disconnect operations should be done on the computer side.

When using an Internet service with a contract where fees are based on connection time, be sure to remember to disconnect from the Internet after using WEB RADIO.

Remote operations in MUSIC LIBRARY and WEB RADIO modes

То	Do this
Stop playback	Press .
Pause playback	Press ENTER/YES again during playback. (This function may not work for some Internet radio stations depending on the transmission format.)
Select a track or an Internet radio station	Press I or ►►I.
Adjust the volume	Press VOL + or –.
Switch the display	Press DISPLAY.

Тір

You can also select the play list track number or radio station number using the number buttons instead of $\blacksquare \blacksquare \blacksquare$ or $\blacksquare \blacksquare$. To enter preset number 10 or higher, press >10 followed by the number button for the one's digit. To enter 0, press 10/0.

About the supplied M-crew

M-crew is software that allows you to operate the system from a computer installed with the software and connected to the system through a USB cable. The operations you can perform are CD, MD and tuner playback, recording and editing, etc.

For details on the installation and operation of M-crew, refer to the online help and the supplied M-crew instruction manual.

Note

Be sure to install the M-crew software to your computer before connecting the system to your computer. If you are reinstalling the software, be sure to disconnect the USB cable before starting the installation.

About the supplied SonicStage for Sony Net MDs

SonicStage for Sony Net MDs is a software application that utilizes Sony Corporation's copyright protection technology, "OpenMG." It allows users to store and play digital music content on the hard disk drive of a computer, and to transfer digital audio files from the hard drive to an MD (check out) for portable listening.

For details on the installation and basic operation of SonicStage for Sony Net MDs, refer to the supplied SonicStage instruction manual. For details on the advanced operation of SonicStage for Sony Net MDs, refer to the online help for SonicStage for Sony Net MDs.

Note

Be sure to install the SonicStage for Sony Net MDs software to your computer before connecting the system to your computer. If you are reinstalling the software, be sure to disconnect the USB cable before starting the installation.

Using SonicStage for Sony Net MDs

1 Press NET MD on the unit.

The Net MD function is activated and "Net MD" appears.



- 2 Start up and operate SonicStage for Sony Net MDs on the personal computer.
- **3** Quit SonicStage for Sony Net MDs after use.
- 4 Press NET MD on the unit to turn off the Net MD function.

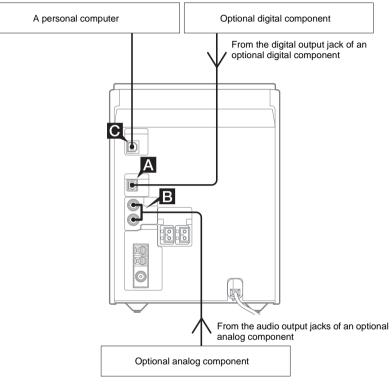
Notes

- While the Net MD function is on, you cannot change the sound source nor operate the system except for ejecting the MD with ▲ MD.
- You cannot use the Net MD function while the timer is on.
- When "Check USB" appears in the display, check the USB connection of the system and the personal computer.
- "CONNECT" appears in the display while you are checking-in/out tracks with SonicStage for Sony Net MDs. In this case, do not disconnect the supplied USB cable. For details on check-in/out, refer to the online help of SonicStage.
- While the Net MD function is on, the following functions are canceled or the settings are cleared:
 - Repeat Play, Shuffle Play, Program Play
 - Group function

Optional Components

Hooking up optional components

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



DIGITAL OPTICAL IN jack

Use a digital optical cord (square, not supplied) to connect an optional digital component (digital satellite receiver, etc.) to this jack. You can then listen to the sound from the component.

B ANALOG IN jacks

Use audio cords (not supplied) to connect an optional analog component (cassette deck, etc.) to these jacks. You can then listen to the sound from the component.

C USB port

Use the supplied USB cable to connect a personal computer.

Listening to audio from a connected component

Listening to a digital component such as a digital satellite receiver, etc.

- 1 Connect the digital optical cord. See "Hooking up optional components" on page 52.
- 2 Press FUNCTION repeatedly until "OPTICAL IN" appears. Start playing the connected component.

Listening to an analog component such as a cassette deck

- 1 Connect audio cords. See "Hooking up optional components" on page 52.
- 2 Press FUNCTION repeatedly until "ANALOG IN" appears. Start playing the connected component.

Recording with optional components and this system

Making a digital recording from a digital component

The Serial Copy Management System (page 64) may prevent you from making a digital recording of certain material. In this case, connect the component to ANALOG IN jacks and make an analog recording.

- 1 Connect the digital optical cord.
- 2 Start recording manually. See "Recording on an MD manually" (page 17) or "Recording on a tape manually" (page 41).

Note

When Smart Space/Auto Cut is set to on, the recording pauses if no sound continues for 30 seconds or more (page 20).

Tips

- You can activate Time Machine Recording (page 18).
- You can adjust the recording level when recording on an MD (page 21).

Making an analog recording from an analog component

- 1 Connect audio cords.
- 2 Start recording manually. See "Recording on an MD manually" (page 17) or "Recording on a tape manually" (page 41).

Тір

You can select the "PC" function when recording on a tape.

Troubleshooting

Problems and remedies

Should you encounter a problem with your system, do the following:

- Make sure the mains lead and speaker cords are correctly and firmly connected.
- 2 Find your problem in the troubleshooting checklist below and take the indicated corrective action.

If the problem persists after doing all of the above, consult your nearest Sony dealer.

General

"----" appears in the display.

 A power interruption has occurred. Set the clock (page 6) and timer settings (pages 43 and 44) again.

There is no sound.

- Press VOL +.
- Make sure the headphones are not connected.
- Check the speaker connections (page 5).
- High-Speed CD-MD Synchro Recording is underway.

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

- Place the speakers as symmetrically as possible.
- Connect the supplied speakers.

There is severe hum or noise.

- · Move the system away from the source of noise.
- · Connect the system to a different mains.
- Install a noise filter (commercially available) to the mains line.

The timer cannot be set.

• Set the clock again (page 6).

The timer does not function.

- Press CLOCK/TIMER SELECT to set the timer and light up "ODAILY" or "OREC" in the display (pages 43 and 44).
- Check the timer setting and set the correct time (pages 43 and 44).
- Cancel the Sleep Timer Function (page 42).

The remote does not function.

- Remove the obstacle.
- Move the remote closer to the system.
- Point the remote at the system's sensor.
- Replace the batteries (R6/size AA).
- · Locate the system away from the fluorescent light.

CD player

The disc tray does not close.

- Place the disc correctly in the center of the tray.

The disc does not eject.

- You cannot eject the disc during CD Synchro Recording. Press ■ to cancel the CD Synchro Recording, then press ▲ CD on the unit to eject the disc.
- · Consult your nearest Sony dealer.

Play does not start.

- Open the disc tray and check whether a disc is loaded.
- Wipe the disc clean (page 62).
- · Replace the disc.
- · Place the disc correctly in the center of the tray.
- Place the disc in the tray with the label side up.
- Remove the disc and wipe away the moisture on the disc, then leave the system turned on for a few hours until the moisture evaporates.
- Press CD ►Ⅱ to start play.

The sound skips.

- Wipe the disc clean (page 62).
- · Replace the disc.
- Try moving the system to a place without vibration (e.g., on top of a stable stand).
- Try moving the speakers away from the system, or placing them on separate stands. When you listen to a track with bass sounds at high volume, the speaker vibration may cause the sound to skip.

Play does not start from the first track.

 Press PLAY MODE repeatedly until both "PGM" and "SHUF" disappear to return to Normal Play.

MD deck

An MD cannot be inserted.

• Insert the MD with the label side up and the arrow pointing toward the deck.

The controls do not work.

- Replace the MD with a new one.
- Retry the operations after "TOC" or "STANDBY" turns off.
- If M-crew is active or present in the task tray at the bottom right of the screen, quit M-crew and then perform the operation.

Play does not start.

- · Replace the MD.
- Insert the MD and leave the system turned on for a few hours until the moisture evaporates.
- Press MD ►II to start play.
- Press GROUP until "GROUP" disappears to cancel the Group Function.

The sound skips.

- · Replace the MD.
- Try moving the system to a place without vibration (e.g., on top of a stable stand).
- Try moving the speakers away from the system, or placing them on separate stands. When you listen to a track with bass sounds at high volume, the speaker vibration may cause the sound to skip.
- Insert the disc and wait for 10 to 20 minutes with the system turned on.

Play does not start from the first track.

 Press PLAY MODE repeatedly until both "PGM" and "SHUF" disappear to return to Normal Play.

"OVER" appears.

• You have reached the end of the MD. Press and hold ◄ or press I◄ to return to the desired playing position.

"OVER" lights up during recording.

• Adjust the recording level lower (page 21).

Recording or editing was done, but the TOC is not updated.

 MD recording and editing contents are recorded to the MD when the MD is removed, so make sure you remove the MD after recording or editing (pages 15 and 23).

Recording is not possible.

- Remove the MD and slide the tab to close the slot (page 15).
- Connect the optional component properly (page 52).
- Press FUNCTION repeatedly to select the recording source correctly.
- Replace with a recordable MD.
- Replace the MD with a recordable MD, or use the Erase Function to erase unnecessary tracks (page 29).
- · Start recording again.

High-Speed CD-MD Synchro Recording is not possible and the MD deck automatically starts recording in normal CD-MD Synchro Recording.

- Replace the MD.
- Move the system to a stable place.

The sound from an MD you recorded is too low (or too high).

• Adjust the recording level (page 21).

Sound leaks when recording in LP4 stereo mode.

• Record in stereo or LP2 stereo mode. When recording the sound from a CD, tape or optional component with music or audio on only one channel in LP4 stereo mode, the sound may leak to the empty channel.

Track numbers are not marked on recorded MDs.

• You are recording sound with a lot of noise. Adjust so that track numbers are marked correctly.

Tuner

Severe hum or noise/stations cannot be received.

- Set the proper band and frequency (page 36).
- Connect the aerial properly (page 5).
- Find a place and an orientation that provide good reception, then set up the aerial again. If you cannot obtain good reception, we recommend you connect a commercially available external aerial.
- The supplied FM lead aerial receives signals along its entire length, so make sure you extend it fully.
- Locate the aerials as far away from the speaker cords as possible.
- Consult your nearest Sony dealer if the supplied AM aerial has come off the plastic stand.
- Try turning off surrounding electrical equipment.

A stereo FM program cannot be received in stereo.

• Press FM MODE until "STEREO" appears in the display.

Cyclical static noise is heard while recording on an MD.

Adjust the aerial orientation and position until the noise stops.

Tape deck

The tape does not record or play, or there is a decrease in sound level.

- The heads are dirty. Clean them (page 62).
- The record/playback heads are magnetised. Demagnetise them (page 62).

The tape does not erase completely.

• The record/playback heads are magnetised. Demagnetise them (page 62).

There is excessive wow or flutter, or the sound drops out.

• The capstans in the tape deck are dirty. Clean them using a cleaning cassette.

Noise increases or the high frequencies are erased.

• The record/playback heads are magnetised. Demagnetise them (page 62).

The tape does not record.

- · No cassette is loaded. Load a cassette.
- The tab has been removed from the cassette. Cover the broken tab with adhesive tape (page 62).
- · The tape has wound to the end.

Personal computer

The sound skips or the operation is unstable.

• Connect the system to the personal computer directly with the supplied USB cable. Do not connect the system to the computer through a USB hub.

The buttons are disabled.

· Press NET MD to turn off the Net MD function.

"Windows cannot locate the driver" appears.

· Install the device driver.

Optional components

There is no sound.

- Refer to General item "There is no sound." (page 54) and check the condition of the system.
- Connect the component properly (page 52) while checking:
 - if the cords are connected properly.
 - if the cord plugs are firmly inserted all the way.
- · Turn on the connected component.
- Refer to the operating instructions supplied with the connected component and start playing.
- Press FUNCTION repeatedly to select "OPTICAL IN" or "ANALOG IN" (page 53).

The sound is distorted.

- Set the volume of the connected component lower.
- Adjust the recording level lower.

There is no sound from the MD deck.

- Play the MD on an MD deck that supports MDLP mode (page 22).
- Record the MD again with the recording mode set to normal length stereo or monaural recording (page 15).

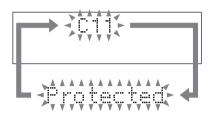
If the system still does not operate properly after performing the above measures, reset the system as follows:

- 1 Disconnect the mains lead.
- 2 Reconnect the mains lead.
- **3** Press I/O on the unit to turn on the system.
- 4 Press ■, ENTER/START and I/⁽¹⁾ on the unit at the same time.

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

Self-diagnosis display

This system has a Self-diagnosis display function to let you know if there is a system malfunction. The display shows a code made up of three or five letters and a message alternately to show you the problem. To solve the problem refer to the following list. If any problem persists, consult your nearest Sony dealer.



C11/Protected

The MD is protected against erasure.

→Remove the MD and slide the tab to close the slot (page 15).

C12/Cannot Copy

You tried to record a CD with a format that the system does not support, such as a CD-ROM.

→Remove the disc and turn off the system once, then turn it on again.

C13/REC Error

Recording could not be performed properly.

→ Move the system to a stable place, and start recording over from the beginning.

The MD is dirty or scratched, or the MD does not meet the standards.

→Replace the MD and start recording over from the beginning.

C13/Read Error

The MD deck cannot read the disc information properly.

 \rightarrow Remove the MD once, then insert it again.

C14/TOC Error

The MD deck cannot read the disc information properly.

- →Replace the MD.
- →Erase all the recorded contents of the MD using the All Erase Function (page 29).

C41/Cannot Copy

The sound source is a copy of a commercially available music software or CD-R.

→The Serial Copy Management System prevents making a digital copy (page 64). In addition, you cannot copy from a CD-R.

C71/Check OPT-IN

No component is connected to the DIGITAL OPTICAL IN jack, or you tried to record from the digital component which is not connected correctly.

→Connect the optional digital component correctly to the DIGITAL OPTICAL IN jack using the digital optical cable (not supplied) (page 52).

The power of the connected component is not turned on.

→Check if the power of the connected digital component is on. Refer to the operating instructions supplied with the component.

The digital optical cable is disconnected, or the power of the connected component is turned off while recording the digital audio from the component connected to the DIGITAL OPTICAL IN jack.

→Connect the digital optical cable, or turn on the power of the connected component.

E0001/MEMORY NG

The component has internal problem.

→Consult your nearest Sony dealer.

E0101/LASER NG

There is a problem with the laser pickup.

→The laser pickup may be damaged. Consult your nearest Sony dealer.

E0201/LOADING NG

There is a problem with loading.

→Consult your nearest Sony dealer.

Messages

One of the following messages may appear or flash in the display during operation.

CD

Cannot Edit

You tried to label a CD-TEXT disc.

CD No Disc

There is no disc in the player.

Name Full

There are already 50 disc titles stored in the system.

OVER

You have reached the end of the disc while pressing ▶ during playback or pause.

Step Full!

You tried to program 26 or more tracks (steps).

MD

Assign None

All the tracks on an MD are registered into groups.

Auto Cut

The MD deck is pausing the recording because silence continued for 30 seconds or more during digital recording.

Blank Disc

The inserted recordable MD is new, or all tracks on the MD have been erased.

Cannot Edit

- · A pre-mastered MD is in the deck.
- · You tried to edit in Program or Shuffle Play mode.
- The track is recorded in MDLP mode.

Cannot REC

- · A pre-mastered MD is in the deck.
- The function is switched to MD or PC.

Cannot SYNC!

- There is no disc in the MD deck, or the MD is protected against erasure.
- · There is no time remaining on the MD.

Complete!

The editing operation of the MD is completed.

Disc Full!

There is no time remaining on the MD.

Eject

The MD deck is ejecting the MD.

Group Full!

An attempt was made to create a new group in excess of the maximum number of groups, or there are insufficient characters for updating the group management information.

Impossible

- You tried to make an impossible editing operation.
- You cannot perform Net MD operations during timer playback.
- You cannot combine or erase the tracks due to the system limitations of MDs.

Incomplete!

Adjustment of the recording level after recording or Fade-in and Fade-out procedures have failed since the system was either subject to vibration or there is a damaged or dirty disc in the tray.

Initialize

The power was off for a long time, so the system is initializing itself.

Name Full!

There is no more space to store track, disc or group titles.

No Change

While attempting to change the recording level after recording, you pressed ENTER/YES without actually changing the recording level, so no change was made.

No Disc

There is no disc in the MD deck.

OVER

You have reached the end of the MD while pressing ► during pause mode.

Push STOP!

You pressed an invalid button during playback.

—Rehearsal—

The MD is playing the specified point for confirmation during the A-B Erase Function and the Divide Function (pages 30 and 33).

Retry

A reading failure has occurred, and the system is trying to read the data again.

S.F Edit!

You attempted to perform another operation while in S.F Edit (changing the recording level after recording, Fade-in, Fade-out) mode.

S.F Edit NOW

You pressed I/\odot while in S.F Edit (changing the recording level after recording, Fade-in, Fade-out) mode.

Smart Space

The signal was input again after silence continued for 3 or more but less than 30 seconds during digital recording, and the silence was cut to 3 seconds.

Step Full!

You tried to program 26 or more tracks (steps).

TOC Reading

The MD deck is reading the TOC information of the MD.

TOC Writing

The MD deck is writing the information of recorded or edited contents.

Track End

You have reached the end of the track while adjusting the dividing point during the Divide Function.

Tr Protected

Tracks and other data that have been checked out on Net MD equipment are protected, so you cannot use some of the MD editing functions.

TAPE

Cannot SYNC!

There is no tape in the tape deck, or the tab has been removed from the cassette.

No Tab

You cannot record the tape because the tab has been removed from the cassette.

No Tape

There is no tape in the tape deck.

Timer

OFF TIME NG!

The Daily Timer start and end times are set to the same time.

OVERLAP!

The Daily Timer setting or the Timer Recording setting overlaps with part or all of another timer setting.

Optional personal computer

Buffer

The personal computer is preparing the amount of data needed for playback while using the WEB RADIO function.

Busy NOW!

You pressed NET MD during check in or check out. Wait until the operation is completed.

Cannot Found

- Check that the personal computer is correctly connected to the internet while using the WEB RADIO function.
- Check that the URL registered to the preset is input correctly.

Cannot Pause

- The MIDI file plays while using the MUSIC LIBRARY function. You cannot pause MIDI file playback.
- You are playing a broadcast station that cannot be paused while using the WEB RADIO function.

Cannot Play

Check that the music file is registered correctly to the MUSIC LIBRARY.

Check USB

The USB cable is not connected properly. Check the connection.

CONNECT

Check in and check out is underway. (If you attempt an invalid operation at this time, "CONNECT!" appears.)

Connecting

The personal computer is connecting to the broadcast station server.

Disconnect

- Check that the personal computer is correctly connected to the internet when using the WEB RADIO function.
- You were disconnected from the broadcast station server.

Net MD

The Net MD function is on. (If you attempt an invalid operation at this time, "Net MD!" appears.)

Additional Information

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 power cord (mains lead), pull it out by the plug. Never pull the cord itself.
- Should any solid object or liquid fall into the system, unplug the system and have it checked by qualified personnel before operating it any further.
- AC power cord (mains lead) must be changed only at the qualified service shop.

On placement

- If you raise the volume during use, the system fan turns on automatically to prevent heat build-up in the system. To ensure efficient heat radiation, leave sufficient space to the rear, and do not place anything on the top of the system.
- · Do not place the system in an inclined position.
- Do not place the system in locations where it is;
- Extremely hot or cold
- Dusty or dirty
- Very humid
- Subject to vibrations
- Subject to direct sunlight.
- Use caution when placing the unit or speakers on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

On heat buildup

- Although the system heats up during operation, this is not a malfunction.
- Place the system in a location with adequate ventilation to prevent heat build-up in the system.
- If you continuously use this system at a high volume, the cabinet temperature of the top, side and bottom rises considerably. To avoid burning yourself, do not touch the cabinet.
- To prevent a malfunction, do not cover the ventilation hole for the cooling fan.

On operation

- If the 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 or the MD deck. Should this occur, the system will not operate properly. Remove the CD or MD 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 system, please consult your nearest Sony dealer.

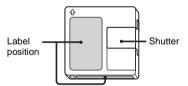
On the speaker system

This speaker system is not magnetically shielded and the picture on TV sets may become magnetically distorted. In such a case, turn off the power of the TV set once, and after 15 to 30 minutes turn it on again.

If there seems to be no improvement, locate the speaker system further away from the TV set. Also, be sure not to place objects in which magnets are attached or used near the speaker system, such as audio racks, TV stands, and toys. These may cause magnetic distortion to the picture due to their interaction with the system.

Notes on MDs

- Do not open the shutter to expose the MD. Close the shutter immediately if the shutter opens.
- Affix the label supplied with the disc only to the specified label indentation. Do not affix the label around the shutter or in other locations. Note that the shape of the indentation depends on the disc.



- Wipe the disc cartridge with a dry cloth to remove dirt.
- Do not expose the MD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight.

Notes on CDs

- Before playing, clean the disc with a cleaning cloth. Wipe the disc 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 disc to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight.
- When using discs that have glue or similar tacky substance on the label side of the disc or that used a special ink when the label was printed, there is a chance that the disc or label may become attached to parts inside this unit. When this occurs, it may not be possible to remove the disc, and may also cause this unit to malfunction. Be sure to check that the label side of the disc is not sticky before using.

The following types of disc should not be used:

- Rental or used discs with attached seals where the glue extends beyond the seal. The perimeter of the seal on the disc is tacky.
- Discs that have labels printed using a special ink that feels tacky when touched.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.

Note on CD-R/CD-RW playback

Discs recorded on CD-R/CD-RW drives may not be played back because of scratches, dirt, recording condition or the drive's characteristics. Besides, the disks, which are not yet finalized at the end of recording, cannot be played back.

Music discs encoded with copyright protection technologies

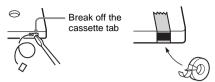
This product is designed to playback discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth slightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as thinner, benzene or alcohol.

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.

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 frequently. The tape may get entangled in the tape deck.

Cleaning the tape heads

Clean the tape heads after every 10 hours of use. Be sure to clean the tape heads before you start an important recording or after playing an old tape. Use a separately sold dry-type or wet-type cleaning cassette. For details, refer to the instructions of the cleaning cassette.

Demagnetising the tape heads

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

System limitations of MDs

The recording system in your MD deck has the limitations described below.

Note, however, that these limitations are due to the inherent nature of the MD recording system itself, not to mechanical causes.

"Disc Full!" appears before the MD has reached the maximum recording time

When 255 tracks have been recorded on the MD, "Disc Full!" appears regardless of the total recorded time. More than 255 tracks cannot be recorded on the MD. To continue recording, erase unnecessary tracks or use another recordable MD.

"Disc Full!" appears before the maximum number of tracks (255) is reached

Fluctuations in emphasis within tracks are sometimes interpreted as track intervals, increasing the track count and causing "Disc Full!" to appear.

"Group Full!" appears in the display

- When the Group Function is on, "Group Full!" may be displayed if editing is performed. This means there are insufficient characters for group management. Delete any unnecessary disc titles, group titles or other characters.
- Even when the Group Function is off, the group management information is updated automatically when Move, Divide and other editing operations are performed, so "Group Full!" may be displayed.

The remaining recording time does not increase even after erasing numerous short tracks

Tracks shorter than 12 seconds* are not counted, so erasing them may not increase the recording time.

* During Stereo recording.

In Monaural or LP2 stereo mode: about 24 seconds In LP4 stereo mode: about 48 seconds

"Impossible" appears when you use A-B Erase Function or Combine Function

This happens when you have edited the same track many times. This is due to a technical limitation of the MD system and is not a mechanical error.

The total recorded time and the remaining time on the MD do not add up to the maximum recording time

Recording is done in minimum units of 2 seconds* each, no matter how short the material. The recorded contents may be shorter than the maximum recording capacity. Disc space may also be reduced by scratches. * During Stereo recording.

In Monaural or LP2 stereo mode: about 4 seconds In LP4 stereo mode: about 8 seconds

The sound may drop-out while searching the edited tracks

Tracks created through editing may exhibit sound dropout during searching because high-speed playback requires time to search for the position on the disc when the tracks are not in order.

Track numbers cannot be marked

Even in the Level Synchro Recording, the track numbers may not be marked at the beginning of the track:

- if the input signal is below a certain fixed level for less than 2 seconds between tracks.
- if the input signal is below a certain fixed level for more than 2 seconds in the middle of the track.
- if you record a track that is 4 seconds or less*.
- * During Stereo, Monaural or LP2 stereo recording mode (In LP4 stereo recording mode: 8 seconds or less).

Extra tracks are created

When there is a long silence between CD tracks, an extra track may be created.

The number of tracks on the CD and the recorded MD is different

When there are short tracks on the CD, track numbers may not be marked for these tracks, and the number of tracks recorded on the MD may differ from that of the CD.

Guide to the Serial Copy Management System

Digital audio components, such as CDs, MDs, and DATs let you copy music easily with high quality by processing music as a digital signal.

To protect the copyrighted music programs, this system uses the Serial Copy Management System that allows you to make only a single copy of a digitally recorded source through digital-to-digital connections.

You can make only a first generation copy* through a digital-to-digital connection.

For example:

- 1 You can make a copy of a commercially available digital sound program (for example, a CD or MD), but you cannot make a second copy from the first-generation copy.
- 2 You can make a copy of a digital signal from a digitally recorded analog sound program (for example, an analog record or a music cassette tape) or from a digital satellite broadcast program, but you cannot make a second copy.
- * A first-generation copy means a digital recording of a digital signal made on digital audio equipment. For example, if you record from this system's CD player to the MD deck, you make a first-generation copy.

Specifications

Main Unit

Amplifier section

/ implimer oceateri	
Canadian model:	
Continuous RMS power of	utput (reference):
*	25 + 25 W
	(6 ohms at 1 kHz, 10%
	THD)
Total harmonic distortion	less than 0.09%
	(6 ohms at 1 kHz, 6 W)
European model:	
DIN power output (rated):	20 + 20 W
· · · ·	(6 ohms at 1 kHz, DIN)
Continuous RMS power of	utput (reference):
	25 + 25 W
	(6 ohms at 1 kHz, 10%
	THD)
Music power output (refer	ence):
· · ·	45 + 45 W
Other models:	
DIN power output:	20 + 20 W
	(6 ohms at 1 kHz, DIN)
Continuous RMS power of	utput (reference):
	25 + 25 W
	(6 ohms at 1 kHz, 10%
	THD)
Inputs	
ANALOG IN:	Sensitivity 250 mV,
	impedance 47 kilohms
DIGITAL OPTICAL IN (S	supported sampling
frequencies: 32 kHz, 44.1	kHz and 48 kHz)
Outputs	
PHONES (stereo minijack):
	accepts headphones with
	an impedance of 8 ohms or
	more
SPEAKER:	accepts impedance of 6 to
	16 ohms
CD player section	
Laser	Semiconductor laser
	(CD: λ=780 nm)
	Emission duration:
	continuous
Frequency response	2 Hz - 20 kHz

MD deck section

System	Minidisc digital audio
	system
Laser	Semiconductor laser
	(λ=780 nm)
	Emission duration:
	continuous
Sampling frequency	44.1 kHz
Frequency response	5 Hz - 20 kHz

Tape deck section

Recording system Frequency response 4-track 2-channel stereo 60 – 10,000 Hz (±3 dB), using Sony TYPE I cassettes ±0.15% W. Peak (IEC) 0.1% W. RMS (NAB) ±0.2% W. Peak (DIN)

Tuner section

Wow and flutter

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range

North American model: Other models: Aerial Aerial terminals Intermediate frequency AM tuner section	87.5 – 108.0 MHz (100 kHz step) 87.5 – 108.0 MHz (50 kHz step) FM lead aerial 75 ohms unbalanced 10.7 MHz	Speaker Mass Amplifi Speaker Supplied
Tuning range Pan-American model:	530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,710 kHz (with the tuning interval set at 9 kHz)	
European model:	531 – 1,602 kHz (with the tuning interval set at 9 kHz)	Design a without
Other models: Aerial	530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,602 kHz (with the tuning interval set at 9 kHz) AM loop aerial, external aerial terminal	
Intermediate frequency	450 kHz	

Speaker

Speaker system	2-way, bass-reflex type
Speaker units	
Woofer:	10 cm dia., cone type
Tweeter:	2.5 cm dia., balanced dome
	type
Nominal impedance	6 ohms

General

Power requirements North American model: 120 V AC, 60 Hz European model: 230 V AC, 50/60 Hz Korean model: 220 V AC, 60 Hz Other models: 220-240 V AC, 50/60 Hz Power consumption 65 W European model: 0.3 W or less (in Power Saving mode) Other models: 65 W Dimensions (w/h/d) incl. projecting parts and controls Amplifier/Tuner/Tape/MD/CD section: Approx. $160 \times 217 \times 345$ mm Speakers: Approx. $140 \times 217 \times 247$ mm ier/Tuner/Tape/MD/CD section: Approx. 5.6 kg Approx. 2.3 kg net per rs: speaker d accessories Remote commander (1) R6 (size AA batteries) (2) FM wire aerial (1) AM loop aerial (1)

USB cable (1) Operating Instructions (1) M-crew/SonicStage for Net MD CD-ROM (1) Warranty (1)

Design and specifications are subject to change without notice.

List of button locations and reference pages

How to use this page

Use this page to find the location of buttons and other parts of the system that are mentioned in the text.

Illustration number ↓ PLAY MODE 15 (7, 11, 23) ↑ ↑ Name of button/part Reference page

Main unit

ALPHABETICAL ORDER

A – L

49, 53)

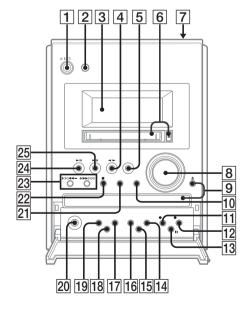
DIRECTION 18 (16, 40, 41)
Disc tray 9
DISPLAY 19 (9, 13, 39, 46, 47, 50)
Display window 3
ENTER/START 14 (15, 16, 40, 57)
FM MODE/REPEAT 17 (8, 12, 37, 38)
FUNCTION 21 (7, 8, 9, 11, 12, 13, 17, 18, 19, 20, 21, 25, 27, 28, 29, 31, 32, 33, 34, 40, 41,

M – Z

MD slot 6 NET MD 10 (51) PHONES jack 20 REC MODE 15 (15, 17, 18, 22) Remote sensor 2 SYNCHRO MODE 16 (15, 16, 40) TUNER BAND 5 (36, 37) TUNING +/- 23 (36, 37) TUNING MODE/PLAY MODE 18 (7, 8, 11, 12, 23, 34, 36, 37) VOLUME 8 (43, 50)



- I/\bigcirc (power) **1** (6, 15, 23, 37, 43, 57) TAPE $\triangleleft \triangleright$ (play) $\boxed{4}$ (40) ▲ MD (eject) 6 (11, 15, 23) ▲ PUSH OPEN/CLOSE (open/ close) 7 (16, 39) ▲ CD (eject) 9 (7) • MD (record) 11 (17) • TAPE (record) 12 (41) **TAPE** (pause) **13** (40, 41) ■ (stop) 22 (7, 11, 16, 40, 50, 57) ✓</>
 → (rewind/fast forward) 23 (7, 11, 36, 40) \mathbb{A}/\mathbb{A} (go back/go forward) 23 (7, 11, 19, 25, 37, 42, 43, 50)
- MD ► II (play pause) 24 (11, 17)
- CD ►II (play pause) 25 (7, 18)



Remote control

ALPHABETICAL ORDER

A – L

BASS/TRE 9 (42) CLEAR 4 (9, 10, 13, 25, 38) CLOCK/TIMER SELECT 27 (43, 44)CLOCK/TIMER SET 28 (6, 43, 44) DISPLAY 25 (9, 13, 39, 46, 47, 50) DSG 10 (42) ENTER/YES 18 (6, 8, 10, 12, 19, 21, 25, 27, 28, 29, 31, 32, 33, 34, 36, 38, 43, 44, 49) FM MODE 2 (37, 38) FUNCTION **13** (7, 8, 9, 11, 12, 13, 17, 18, 19, 20, 21, 25, 27, 28, 29, 31, 32, 33, 34, 40, 41, 49.53) GROUP **16** (13, 16, 17, 18, 23, 25, 27, 28)

GROUP SKIP 17 (13, 16, 17, 18, 25, 28)

M – Z

MENU/NO 26 (10, 19, 20, 21, 23, 26, 27, 28, 29, 31, 32, 33, 34, 36, 38) NAME EDIT/SELECT 15 (9, 25, 38, 49) Number buttons 19 (8, 9, 12, 25, 37) PLAY MODE 11 (7, 8, 11, 12, 23, 34) REPEAT 8 (8, 12) SCROLL 20 (10, 26, 47) SLEEP 29 (42) TUNER BAND 6 (36, 37) TUNING MODE 3 (36, 37) VOL +/- 22 (43, 50)

BUTTON DESCRIPTIONS

 $\begin{array}{c} I/ \bigcirc (\text{power}) \ \hline 1 \ (6, 15, 23, 43) \\ +/- \ \hline 5 \ (36, 37) \\ \hline \bigstar \ / \) \ \hline 5 \ (6, 7, 11, 19, 25, 42, 43, 50) \\ \text{CD} \ \blacksquare \ \hline 7 \ (7, 18) \\ \text{MD} \ \blacksquare \ \hline 1 \ \hline 2 \ (11, 17) \\ \checkmark \ / \) \ \hline 1 \ \hline 1 \ (11, 17) \\ \leftarrow CURSOR/CURSOR \rightarrow \ \hline 1 \ (6, 9, 25) \\ \text{TAPE} \ \blacksquare \ \hline 2 \ (40) \\ \text{MD} \ \textcircled \ 2 \ (17) \\ \blacksquare \ \hline 2 \ (7, 11, 16, 40, 50) \end{array}$

