**SONY** 

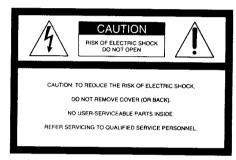
3-798-320-22(1)

# Personal MiniDisc System

**Operating Instructions** 

# Warning

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





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



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

# **CAUTION**

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

### For customers in Canada

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

# Information

# For customers in United States

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

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

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

# Owner's Record

The model and serial number are located at the rear of the Personal MiniDisc System. Record the serial number in the space provided below. Refer to these numbers whenever you call your Sony dealer regarding this product.

Model No. PMC-M2

Serial No.

# **Table of contents**

# **Basic Operations**

- 4 Playing a CD
- **6** Recording a CD on an MD
- 8 Playing an MD
- **10** Listening to the radio

# The CD Player

- 12 Using the display
- 3 Locating a specific track (Direct/Search Play)
- 4 Playing tracks repeatedly (Repeat Play)
- 5 Playing tracks in random order (Shuffle Play)
- 6 Creating your own program (Program Play)

# The MD Player-Recording

- 8 Recording from CDs in the desired order
- **O** Recording from a radio
- Recording through a microphone/ Using as a PA system

# The MD Player-Playback

- 4 Using the display
- Locating a specific track (Direct/Search Play)
- 6 Playing tracks repeatedly (Repeat Play)
- 7 Playing tracks in random order (Shuffle Play)
- 8 Creating your own program (Program Play)

# The MD Player-Editing

Erasing recordings (Erase Function)

- 32 Dividing recorded tracks (Divide Function)
- 34 Combining recorded tracks (Combine Function)
- Moving recorded tracks (Move Function)
- 37 Labeling recordings (Title Function)

### **The Radio**

- 40 Presetting radio stations
- 41 Playing preset radio stations

### The Timer

- 42 Setting the clock
- 43 Waking up to music
- 45 Timer-recording radio programs
- 47 Falling asleep to music

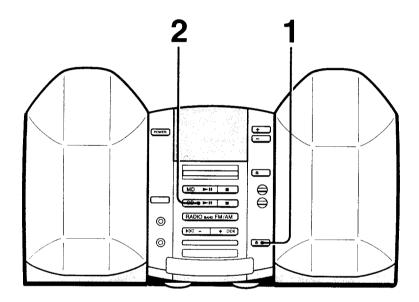
# **Setting Up**

- 48 Hooking up the system
- 50 Adjusting the sound
- 51 Connecting optional components

# **Additional Information**

- **52** Precautions
- 53 System limitations of the MD
- 55 Getting to know the MD
- **56** Troubleshooting
- 59 Error messages
- 60 Specifications
- 61 Index

# **Playing a CD**

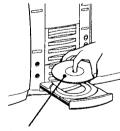


For hookup instructions, see pages 48-49.

CD OPEN/CLOSE

Press CD OPEN/CLOSE  $\triangle$  and place the disc on the disc tray.

The power automatically turns on (direct power-on).



With the label side up

2

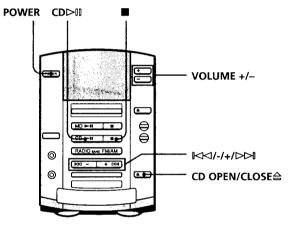
Press CD ►¶ .

The disc tray closes and the player plays all the tracks once.

Track number Playing time



# Use these buttons for additional operations



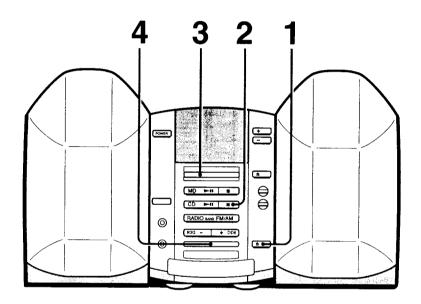
То	Press
Adjust the volume	VOLUME +/-
Stop playback	
Pause playback	CD>II  Press again to resume play after pause.
Go to the next track	<b>▷▷i</b> /+
Go back to the previous track	M4/-
Remove the CD	CD OPEN/CLOSE≙
Turn on/off the player	POWER

# Tips

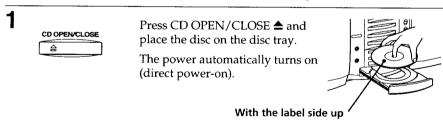
- Next time you want to listen to a CD, just press CD⊳Ⅱ . The player turns on automatically and starts playing the CD.
- To locate the beginning of a track, you can also use the jog dial on the remote instead of ►✓/ ▶▶ Press JOG ON/ OFF to light up the jog indicator, then turn the jog dial.
- You can play an MD following the CD playback.
  - 1 Insert the MD after step 1 (page 8).
- 2 Press RELAY on the remote repeatedly until "CD-MD RELAY CONTINUE" appears in the display.
- 3 Press CD⊳III. After the CD finishes playing, the MD starts playing automatically.

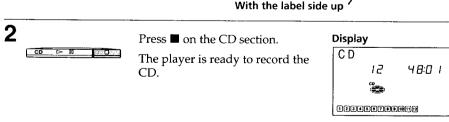


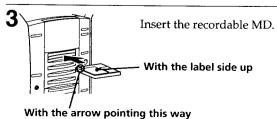
# **Recording a CD on an MD**



For hookup instructions, see pages 48-49.

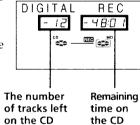






Press  $CD \rightarrow MD$  DIGITAL REC to start recording.

If the MD has any previous recording, recording will be made from the last recorded portion.



Basic Operations

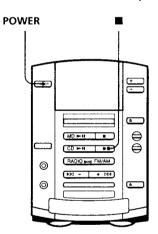
### Note

Do not move the player or pull out the power cord while "TOC EDIT" is flashing in the display, because the player updates the Table of Contents (TOC) during this time.

### Tips

- Adusting the volume or the audio emphasis will not affect the recording level.
- To record over previous recordings, see page 30.
- The track numbers are automatically marked when you record using the CD → MD DIGITAL REC button. These markers let you quickly locate the tracks later.

# Use these buttons for additional operations



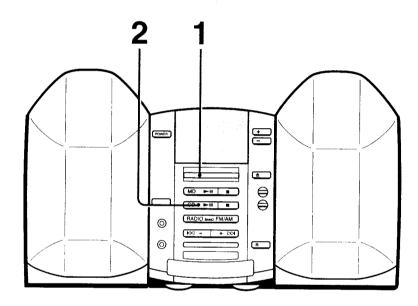
То	Press
Stop recording	
Turn on/off the player	POWER

# If "CD>MD OK?" alternates with time display

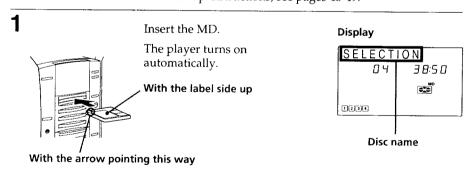
There is not enough space on the MD to record new data.

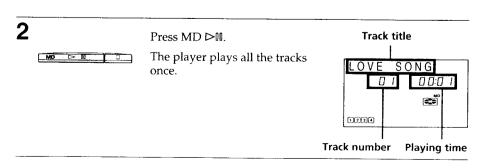
Press  $\blacksquare$  on the CD section and replace the MD with a recordable one. Or, press CD  $\rightarrow$  MD DIGITAL REC again to record the CD.

# **Playing an MD**



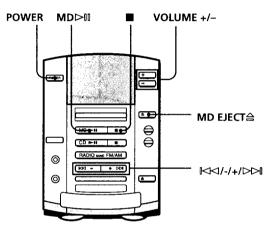
For hookup instructions, see pages 48-49.





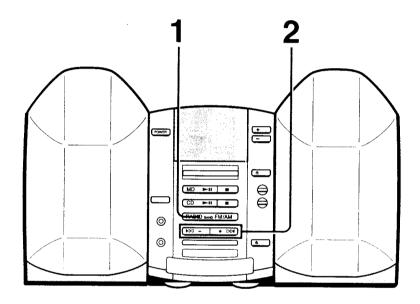
- Next time you want to listen to an MD, just press MD►W. The player turns on automatically and starts playing the MD.
- To locate the beginning of a track, you can also use the jog dial on the remote instead of ►✓/ DDI. Press JOG ON/ OFF to light up the jog indicator, then turn the jog dial.
- You can play a CD following the MD playback.
- 1 Insert the CD after step 1.
- 2 Press RELAY on the remote repeatedly until "MD-CD RELAY CONTINUE" appears in the display.
- 3 Press MD⊳W. After the MD finishes playing, the CD starts playing automatically.

# Use these buttons for additional operations



То	Press
Adjust the volume	VOLUME +/-
Stop playback	
Pause playback	MD⊳  Press again to resume play after pause.
Go to the next track	<b>▷▷1</b> /+
Go back to the previous track	M4/-
Remove the MD	MD EJECT≙
Turn on/off the player	POWER

# Listening to the radio



For hookup instructions, see pages 48-49.

RADIO MIO FIN/AM

Press RADIO BAND FM/AM until the band you want appears in the display.

The power automatically turns on (direct power-on).

Display

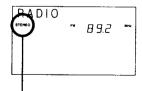


2

Hold down +/▷▷ until the frequency digits begin to change in the display.

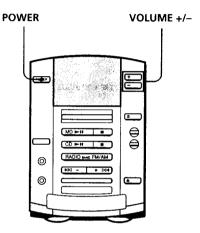
The player automatically scans the radio frequencies and stops when it finds a clear station.

If you can't tune in a station, press TUNING + on the remote repeatedly until the desired station appears.



Indicates an FM stereo broadcast.

# Use these buttons for additional operations



То	Press
Adjust the volume	VOLUME +/-
Turn on/off the radio	POWER

# To improve broadcast reception

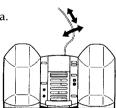
# For FM

Tips

• If the FM broadcast is noisy, press MONO/ STEREO on the remote until "MONO" appears

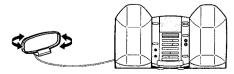
in the display and the radio will play in monaural.

 Next time you want to listen to the radio, just press RADIO BAND FM/AM. The player turns on automatically and starts playing the previous station. Extend and reorient the antenna.



### For AM

Set the AM loop antenna away from the system, and reorient the antenna.

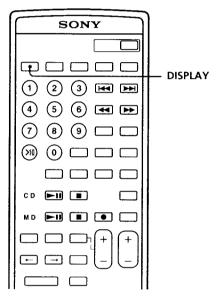


If you cannot improve the reception, connect an outdoor antenna (page 49).

# **Using the display**

You can use the display to find out the following information about the disc:

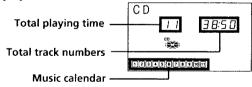
- Total number of tracks and playing time
- The remaining time or the number of tracks left



# Checking the total track numbers and playing time

Press DISPLAY in stop mode.

If the disc has more than 17 tracks, "16<" appears in the display.



# Checking the remaining time

Press DISPLAY while playing a disc.

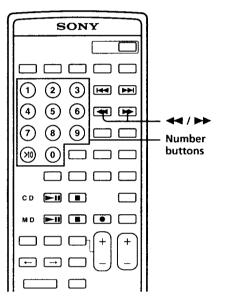
To display	Press DISPLAY	
Remaining time on the current track*	Once	
Remaining time on the disc and the number of tracks left	Twice	
Playing time and the current track number	Three times	

The track numbers in the music calendar disappear after they are played.

<sup>\*</sup> If the disc has more than 21 tracks, the remaining time appears as "--:--" in the display.

# Locating a specific track (Direct/Search Play)

You can quickly locate any track using the number buttons. You can also find a specific point in a track while playing a disc.



## Note

You cannot start playback if "REP PGM," "REP SHUF,"
"PGM," or "SHUF" is lit in the display. Turn off the indication by pressing ■ on the CD section.

### Tip

2 and 3.

When you locate a track numbered over 10, press > 10 first, then the corresponding number buttons. Example: To play track number 23, press >10 first, then

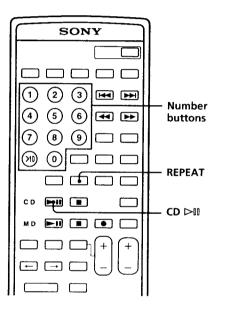
To locate	Press
a specific track directly	a number button of the track.
a point while listening to the sound	►► (forward) or ◀◀ (backward) while playing and hold down until you find the point.
a point while observing the display	►► (forward) or ◀◀ (backward) in pause and hold down until you find the point.

The CD Player

# **Playing tracks** repeatedly

(Repeat Play)

You can play tracks repeatedly in normal, shuffle or program play modes (see pages 15-17).



# Tip

You can repeat all the tracks or only the current track while playing back by pressing REPEAT repeatedly until "REP ALL" or "REP 1" appears in the display.

To repeat	Do this
a single track	1 Press REPEAT repeatedly until "REP 1" appears in the display.
	2 Press the number button.
all tracks	1 Press REPEAT repeatedly until "REP ALL" appears in the display.
	2 Press ►II on the CD section.
tracks in random order	1 Start shuffle play. (see page 15)
	2 Press REPEAT repeatedly until "SHUF REP" appears in the display.
programmed tracks	1 Start program play. (see page 16).
	2 Press REPEAT repeatedly until "REP PGM" appears in the display.

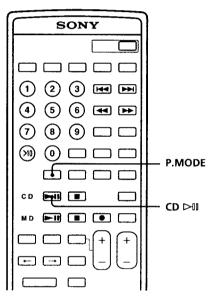
# To cancel Repeat Play

Press ■ on the CD section in stop mode.

# Playing tracks in random order

(Shuffle Play)

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



# Tips

- You cannot replay the previous track during shuffle play.
- You can play all the tracks on the CD and MD in random order.
  - 1 Insert the CD and MD.
  - 2 Press RELAY on the remote repeatedly until "MD-CD RELAY SHUFFLE" appeans in the display.
- 3 Press CD ⊳W.

- Press P.MODE repeatedly in stop mode until "SHUF" appears in the display.
- **2** Press ► on the CD section to start playback.

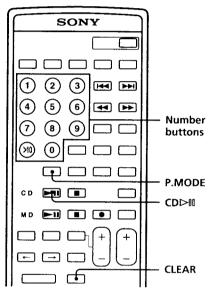
# To cancel Shuffle Play

Press ■ on the CD section and press P.MODE repeatedly until "SHUF" disappears from the display.

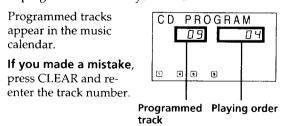
# **Creating your** own program

(Program Play)

You can program up to 20 tracks to play any order you want.



- Press P.MODE in stop mode until "PGM" appears in the display.
- **2** Press the number buttons for the tracks you want to program in the order you want.



**3** Press **>1** on the CD section to start program play.

# Tips

- You can play the same program again by pressing ▷••, since the program remains until you open the disc tray.
- To check the total time, press DISPLAY before playback. You cannot check the total time during playback. If you program more than 21 tracks, the total time appears as "--:--" in the display.

# **To cancel Program Play**

Press ■ on the CD section and press P.MODE repeatedly until "PGM" disappears from the display.

# To check the order of tracks before play

Press ENTER.

Every time you press the button, the track number appears in the programmed order.

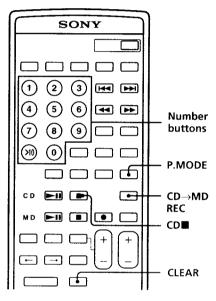
# To change the current program

Do the following before program play starts.

То	Do this
Erase the last track in the program	1 Press CLEAR. Each time you press CLEAR, the last track will be erased.
	2 Re-enter the track number.
Change the whole program completely	1 Press ■ on the CD section.
	2 Start from step 2 (page 16) again.

# Recording from CDs in the desired order

You can arrange the order of the CD tracks to be recorded. Also, you can change CDs if you want.



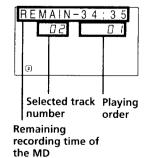
- **1** Insert a recordable MD.
- **2** Insert the first CD, and press on the CD section.
- **3** Press EDIT.

"CD PROGRAM" appears in the display.

**4** Press the number buttons to enter the tracks in the order you want to record.

The selected track number appears in the display.

To check the total time, press DISPLAY.



# If "CD>MD OK?" alternates with time display

There is not enough space to record the selected track on the MD. Press CLEAR to erase the current track, or go to the next step if you record the track.

Tip

If you made a mistake, press CLEAR and reenter the track number.

# Tip

The track numbers are automatically marked when you record using the CD → MD REC button. These markers let you quickly locate the tracks later.

**5** Press  $CD \rightarrow MD$  REC to start recording.

Recording will be made from the last recorded portion on the MD and the tracks will be recorded in the order you selected.

After the recording ends, "Next Program" alternates with "CD Change" in the display, and the disc tray opens.

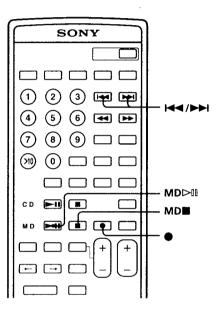
**6** Insert the next CD, and repeat steps 4 and 5.

# To stop recording

Press  $\blacksquare$  on the CD section. If the CD tray is open, it will close automatically.

# Recording from a radio

Track numbers are marked automatically when there is no sound input during recording for more than two seconds with good broadcast reception.



- 1 Insert a recordable MD.
- **2** Press ●.

The player is ready to start.

The remaining recording time of the MD alternates with "New" in the display.

- **3** Tune in the radio station you want to record.
- **4** Press ▷ II on the MD section to start recording. Recording will be made from the last recorded portion.

# To stop recording

Press ■ on the MD section.

# To pause recording

Press ►II on the MD section.

# Tip

Use the REC button instead of the ● button when you use the player.

# Note

Press EJECT → or POWER if "TOC EDIT" remains lit even after recording ends, otherwise the player will not update the Table of Contents (TOC). "TOC EDIT" starts

"TOC EDIT" starts flashing in the display, and the player updates the TOC. Do not move the player or pull out the power cord while "TOC EDIT" is flashing in the display.

# To record over the previous recording

You must select the position to start recording after step 1 on page 20.

- 1 Select the desired position as follows:
- To record over from the beginning of the recorded track, press on the MD section. Then press ◄
   I to select the desired track number.
- To record over from a specific position of the recorded track, play the MD and press MD ▷ at the desired position. The player enters pause mode.
- 2 Go to step 2 on page 20.
  "Overwrite" appears instead of "New" in the display.

You can record over the previous recording just as you would using a tape deck. The previous recording remains or is erased depending on the length of the newly recorded track.

# To mark track numbers while recording (Track Marking)

Press • when you want to add a track mark while recording.

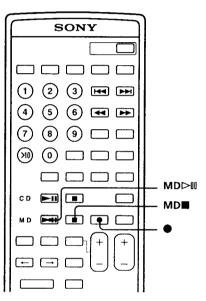
# Гiр

To mark track numbers after the recording ends, see "Dividing recorded tracks" on page 32.

# Recording through a microphone/Using as a PA system

You can record sound using a microphone (not supplied) or use the player as a public address (PA) system.

Track numbers are marked automatically when there is no sound input during recording for more than two seconds.



### Tips

- You can also mix and record sounds by playing a CD after step
   In this case, the CD is recorded in analog.
- Adjusting the volume or the audio emphasis will not affect the recording level.

### Notes

- Acoustic feedback (howling) tends to occur when you use a microphone with echo function.
- If acoustic feedback (howling) occurs, turn down the volume or move the microphone away from the speakers.

# Recording through a microphone

1 Plug the microphone into the MIX MIC jack and turn on the microphone if it has a power switch.



- **2** Turn on the power.
- **3** Insert a recordable MD, and press on the MD section.
- 4 Press ●.

The player is ready to start.

The remaining recording time of the MD alternates with "New" in the display.

Press ►II on the MD section to start recording. Recording will be made from the last recorded portion.

### Vote

Press EJECT♠ or POWER if "TOC EDIT" remains lit even after recording ends, otherwise the player will not update the Table of Contents (TOC).

"TOC EDIT" starts flashing in the display, and the player updates the TOC. Do not move the player or pull out the power cord while "TOC EDIT" is flashing in the display.

### Гір

You can enjoy singing a song or talking over the music by connecting a microphone and playing back a CD.

# To stop recording

Press ■ on the MD section.

### To pause recording

Press ►II on the MD section.

# To record over the previous recording

You must select the position to start recording after step 3 on page 22.

- 1 Select the desired position as follows:
- To record over from the beginning of the recorded track, press on the MD section. Then press ◄
   to select the desired track number.
- To record over from a specific position of the recorded track, play the MD and press MD ▷ 𝔄 at the desired position. The player enters pause mode.
- 2 Go to step 4 on page 22. "Overwrite" appears instead of "New" in the display.

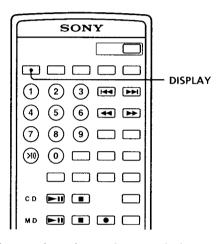
# Using as a PA system

- 1 Do steps 1 and 2 of "Recording through a microphone" on the previous page.
- **2** Press on the MD section.
- **3** Sing or speak into the microphone and adjust the volume.

# **Using the display**

You can check information about the disc using the display. The following information appears in the display:

- Total track numbers and playing time
- The remaining time or the date/time you recorded



## Tip

"MD" appears in the display if no disc name or track name is recorded on the MD.

# Checking the total track numbers and playing time

Press DISPLAY in stop mode.

If the disc has more than 17 tracks, "16<" appears in the display.



# Checking the remaining time or the date/time you recorded

Press DISPLAY while playing a disc.

The track numbers in the music calendar disappear after they are played.

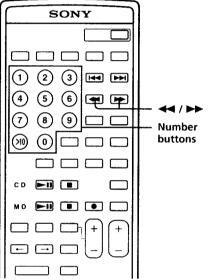
To display	Press DISPLAY
Remaining time on the current track	Once
Remaining time on the disc and the number of tracks left	Twice
The date/time you recorded*	Three times
Playing time and the current track number	Four times

\* The date/time you recorded is displayed for 10 seconds, then the playing time and the current track number appear. If no date or time is recorded on the MD, "--y-m-d" and "--:--" appear on the display. You cannot record the date or time with this recorder.

# The MD Player-Playback

# Locating a specific track (Direct/Search Play)

fou can quickly locate any track using he number buttons. You can also find a specific point in a track while playing a lisc.



# Vote

You cannot start playback if "REP PGM," "REP SHUF,"
"PGM," or "SHUF" is lit in the display. Turn off the indication by pressing on the MD section.

### ips

- · When you locate a track numbered over 10, press > 10 first, then the corresponding number buttons. Example:
- To play track number 23, press >10 first, then 2 and 3.
- To select a track numbered over 100, press >10 twice, then the corresponding number buttons for the remaining digits. Example:

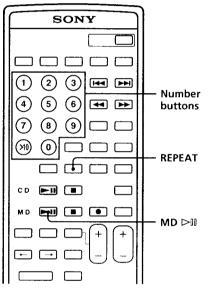
To select track number 138, press >10 twice, then 1, 3 and 8.

To locate	Press
a specific track directly	a number button of the track.
a point while listening to the sound	►► (forward) or ◀◀ (backward) while playing and hold down until you find the point.
a point while observing the display	▶▶ (forward) or ◀◀ (backward) in pause and hold down until you find the point.

# **Playing tracks** repeatedly

(Repeat Play)

You can play tracks repeatedly in normal, shuffle or program play modes (see pages 27 – 28).



# Tip

You can repeat all the tracks or only the current track while playing back by pressing REPEAT repeatedly until "REP ALL" or "REP 1" appears in the display.

To repeat	Do this
a single track	1 Press REPEAT repeatedly until "REP 1" appears in the display.
	2 Press the number button.
all tracks	1 Press REPEAT repeatedly until "REP ALL" appears in the display. 2 Press ⊳⊪ on the MD section.
tracks in random order	1 Start shuffle play. (see page 27) 2 Press REPEAT repeatedly until "SHUF REP" appears in the display.
programmed tracks	1 Start program play. (see page 28). 2 Press REPEAT repeatedly until "REP PGM" appears in the display.

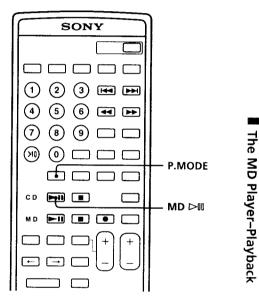
# To cancel Repeat Play

Press on the MD section in stop mode.

# Playing tracks in random order

(Shuffle Play)

You can play all the tracks on the MD in andom order.



- You cannot replay the previous track during shuffle play.
- You can play all the tracks on the CD and MD in random order.
- 1 Insert the CD and
- 2 Press RELAY on the remote repeatedly until "MD-CD RELAY SHUFFLE" appeans in the display.
- 3 Press MD ▷01.

- Press P.MODE repeatedly in stop mode until "SHUF" appears in the display.
- **2** Press ► II on the MD section to start playback.

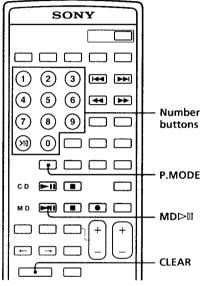
# To cancel Shuffle Play

Press ■ on the MD section and press P.MODE repeatedly until "SHUF" disappears from the display.

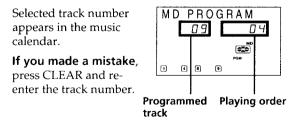
# **Creating your** own program

(Program Play)

You can program up to 20 tracks to play any order you want.



- **1** Press P.MODE in stop mode until "PGM" appears in the display.
- **2** Press the number buttons for the tracks you want to program in the order you want.



**3** Press **>1** on the MD section to start program play.

- You can play the same program again by pressing **II**, since the program remains until you remove the disc.
- To check the total time, press DISPLAY before playback. You cannot check the total time during playback.

# To cancel Program Play

Press ■ on the MD section and press P.MODE repeatedly until "PGM" disappears from the display.

# To check the order of tracks before play

Press ENTER.

Every time you press the button, the track number appears in the programmed order.

# To change the current program

Do the following before program play starts.

То	Do this
Erase the last track in the program	1 Press CLEAR. Each time you press CLEAR, the last track will be erased.
	2 Re-enter the track number.
Change the whole program	1 Press <b>a</b> on the CD section.
completely	2 Start from step 2 (page 28) again.

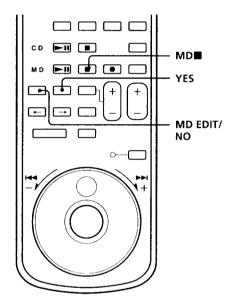
# **Erasing recordings**

# (Erase Function)

You can quickly erase the recorded sound or unnecessary portion recorded through a microphone. Unlike a tape deck, you don't have to record over the previous recordings.

Here are the three options to erase recordings:

- Erasing a single track
- Erasing all tracks
- Erasing a portion of a track



# Note

Make sure to check the track number before pressing YES, since you cannot recover the erased track.

# Tip

Use the corresponding buttons when you use the player.

Remote	Player
MD EDIT/NO	MD EDIT
YES	MD ⊳II

### Note

If "TRK PROTECT" alternates with "Erase OK!?" in the display, the track was recorded or edited on another MD player and is record-protected. If these indications appear, press YES to erase the track.

# Erasing a single track

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

- 1 Play the track you want to erase.
- **2** Press MD EDIT/NO repeatedly until "Track Erase" appears in the display. Then press YES.

"Erase OK?" appears in the display.

If you want to cancel the erase function at this time, press MD EDIT/NO, or press ■ on the MD section.

**3** Press YES to erase the track.

"Complete" appears for a few seconds, and the track you selected is erased.

Press EIECT≜ or POWER if "TOC EDIT" remains lit even after recording ends, otherwise the player will not update the Table of Contents (TOC).

"TOC EDIT" starts flashing in the display, and the player updates the TOC. Do not move the player or pull out the power cord while "TOC EDIT" is flashing in the display.

# Erasing all tracks on an MD

Erasing all tracks deletes the disc name, all recorded tracks and titles. Note that you cannot recover the data once erased.

**1** While the player is stopped, press MD EDIT/NO repeatedly until "Disc Erase" appears in the display. Then press YES.

"All Erase?" appears in the display.

If you want to cancel the erase function at this **point,** press MD EDIT/NO, or press ■ on the MD section.

2 Press YES.

"Complete" appears for a few seconds, and all recorded tracks and titles are erased.

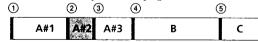
# Erasing a portion of a track

By using the Divide (see page 32), Erase (see page 30), and Combine (see page 34) Functions, you can erase specific portions of a track.

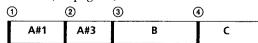
Example: Erasing a portion of track A.



1 Divide A into 3 parts (see page 32).



**2** Erase #2 (see page 30).

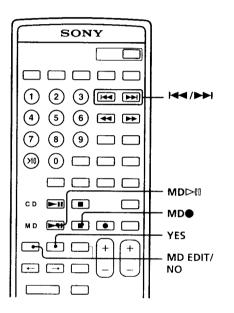


**3** Combine #1 and #3 (see page 34).

①		② ③	0)
	A (#1+#3)	В	С

# **Dividing recorded** tracks (Divide Function)

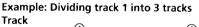
You can assign track numbers at places you want to access later. Use this function to mark track numbers on the tracks recorded from an analog source (when recorded in analog, one track has several parts), or to divide a track. The total number of tracks on the MD increases by one and all tracks following the divided tracks are renumbered.

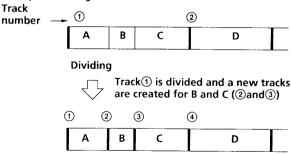


• Use the corresponding buttons when you use the player.

Remote	Player	
MD EDIT/NO	MD EDIT	
YES	MD ⊳0	

- To put the divided tracks together, see "Combining recorded tracks" on page 34.
- You can also divide tracks while recording. Press ● on the MD section at the desired point.





**1** While playing the MD, press ► II on the MD section at the point where you want to create a new track.

The player pauses.

**2** Press MD EDIT/NO repeatedly until "Divide" appears in the display. Then press YES.

"Rehearsal" alternates with "Position OK?" in the display. The player repeats the portion to be divided.

# lote

Press EJECT**≜** or POWER if "TOC EDIT" remains lit even after recording ends, otherwise the player will not update the Table of Contents (TOC).

"TOC EDIT" starts flashing in the display, and the player updates the TOC. Do not move the player or pull out the power cord while "TOC EDIT" is flashing in the display.

# To shift the point to be divided Press MD EDIT/NO.

While monitoring the sound, press ◄◄/▶▶ to shift the starting point to be divided. Each time you press ◄◄/▶►, the point shifts about 0.06 second. You can shift the point up to 8 seconds before and after. Press YES when you decide the

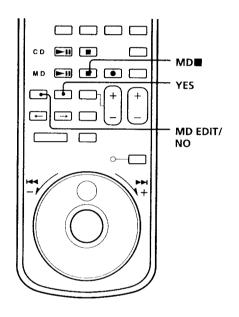
If you want to cancel the erase function at this **point,** press MD EDIT/NO, or press ■ on the MD section.

**3** Press YES when you find the point to be divided. After the track has been divided, "Complete" appears for a few seconds and the newly created track begins playing. The new track will have no track title even if the original track was labeled.

# Combining recorded tracks

# (Combine Function)

This function is useful for combining several tracks into a single one, or several independently recorded portions into a single track. When you combine two tracks, the total number of tracks decreases by one and all tracks following the combined tracks are renumbered.

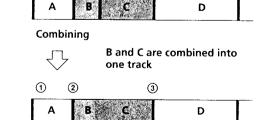


# Tips

Use the corresponding buttons when you use the player.

Remote	Player	
MD EDIT/NO	MD EDIT	
YES	MD ⊳00	

# Example: Combining B and C Track number — ① ② ③



4

- **1** Play back the track you want to combine. Example: To combine track 3 and track 4, play back track 4.
- **2** Press MD EDIT/NO repeatedly until "Combine" appears in the display. Then press YES.

"Rehearsal" alternates with "Track OK?" in the display. The portion where the two tracks will join (i.e., the end of the first track and the beginning of the second track) is repeated.

# The MD Player-Editing

# lotes

If "SORRY" appears in the display, the tracks cannot be combined. This sometimes happens when you've edited the same track many times. This is due to a technical limitation of the MD system (page 53) and is not a mechanical error. Press EJECT**≜** or POWER if "TOC EDIT" remains lit even after recording ends, otherwise the player will not update the Table of Contents (TOC).

"TOC EDIT" starts flashing in the display, and the player updates the TOC. Do not move the player or pull out the power cord while "TOC EDIT" is flashing in the display.

If the portion where the two tracks will join is not played back, press NO, and repeat from step 1 again.

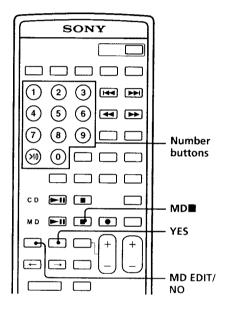
If you want to cancel the erase function at this point, press MD EDIT/NO, or press ■ on the MD section.

**3** When you find the portion, press YES.

After the tracks have been combined, "Complete" appears for a few seconds and the total number of tracks in the music calendar decreases by one. If both of the combined tracks have track titles, the title of the second track is erased.

# Moving recorded tracks (Move Function)

Use the Move function to change the order of any track. After you move a track, the track numbers are renumbered automatically.



# Tip

Use the corresponding buttons when you use the player.

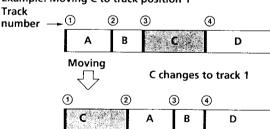
Remote	Player
MD EDIT/NO	MD EDIT
YES	MD ⊳00
Number button	s IM/-,
	$+/\triangleright\!\triangleright\!$

# Note

Press EJECT♠ or POWER if "TOC EDIT" remains lit even after recording ends, otherwise the player will not update the Table of Contents (TOC).

"TOC EDIT" starts flashing in the display, and the player updates the TOC. Do not move the player or pull out the power cord while "TOC EDIT" is flashing in the display.

## Example: Moving C to track position 1



- 1 Play back the track you want to move.
- **2** Press MD EDIT/NO repeatedly until "Track Move" appears in the display. Then press YES.
  - " $\rightarrow$  Track 001?" appears in the display.
- **3** Press one of the number buttons to select the new track position.

If you want to cancel the move function at this point, press MD EDIT/NO, or press ■ on the MD section.

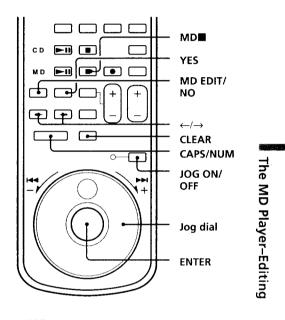
4 Press YES.

After you have moved the track, "Complete" appears for a few seconds.

## Labeling recordings

#### **Title Function)**

ou can create titles for your recorded ADs and tracks. Titles that you created ppear in the display during MD peration.



# Use the corresponding

buttons when you use the player.

emote	Player
1D EDIT/NO	MD EDIT
ES	MD ⊳II
og dial	M\/-,
	+/>>
-	CD ⊳II
<b>→</b>	on the
	CD section
LEAR	RADIO
	BAND
	FM/AM
NTER	$CD \rightarrow MD$
	DIGITAL
	REC

#### Labeling an MD

- Press MD EDIT/NO repeatedly until "Disc Name" appears in the display.
- **2** Press YES.

"JOG ON?" alternates with the disc name in the display if the disc has been labeled.

 ${f 3}$  Press JOG ON/OFF until the jog dial indicator lights up.

The indicator goes off automatically if you don't turn the jog dial for one minute. In this case, press JOG ON/OFF again.

continued

#### Labeling recordings (Title Function) (continued)

**4** Press CAPS/NUM repeatedly to select the type of characters.

Each time you press CAPS/NUM, the character changes as follows:

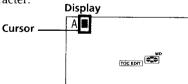
 $\begin{array}{l} \text{Upper case letters} \rightarrow \text{Lower case letters} \rightarrow \\ \text{Numbers} \rightarrow \text{Symbols} \end{array}$ 

You can use the following characters:

The type of characters	Characters (symbols)
Upper case letters	ABCDWXYZ',/;(space)
Lower case letters	abcdwxyz',/;(space)
Numbers	0123456789
Symbols	!"#\$%&()*+:<=>?@_`',/ ;(space)

- **5** Turn the jog dial to select the characters.
- 6 Press ENTER.

The cursor shifts rightward and waits for the input of the next character.



If you entered the wrong character, press  $\leftarrow/\rightarrow$  until the character to be corrected starts flashing, and repeat steps 5 and 6 to enter the correct character. Press CLEAR to erase all the characters.

**7** Repeat steps 4 through 6 to complete the entire title

If you want to cancel the title function at this point, press MD EDIT/NO, or press ■ on the MD section.

**8** Press YES.

The title has been labeled.

#### Note

Press EJECT♠ or POWER if "TOC EDIT" remains lit even after recording ends, otherwise the player will not update the Table of Contents (TOC).

"TOC EDIT" starts flashing in the display, and the player updates the TOC. Do not move the player or pull out the power cord while "TOC EDIT" is flashing in the display.

#### Labeling a track

- 1 Play back the track you want to label.
- **2** Press MD EDIT/NO repeatedly until "Track Name" appears in the display.
- **3** Press YES.

"JOG ON?" alternates with disc name in the display if the disc name has been labeled.

**4** Follow steps 3 through 8 on "Labeling an MD."

#### To change the existing title

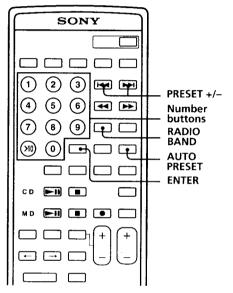
Do the steps above.

A new title replaces the existing one.

The MD Player-Editing

# Presetting radio stations

You can store radio stations into the player's memory. You can preset up to 24 radio stations, 12 for each band in any order



- 1 Press RADIO BAND until the band you want appears in the display.
- **2** Keep pressing AUTO PRESET until "AUTO PRESET" flashes in the display.

The preset stations are stored from preset number 1 in numerical order, from the lowest frequency.

When you are done presetting, the station of preset number 1 is tuned in automatically.

#### To preset radio stations manually

Use this function when stations with weak signal are skipped by automatic tuning or when you want to tune in a station to a desired preset number.

- **1** Press RADIO until the band you want appears in the display.
- **2** Press TUNING +/- to tune in a station you want.
- **3** Hold down the number button that you want to preset the new station on for 3 seconds.

The new station replaces the old one.

#### To erase preset radio stations

Hold down CLEAR for 3 seconds after you tuned in the station (page 41).

#### Note

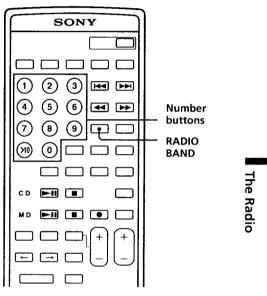
The preset radio stations are erased when you disconnect the AC power cord.

#### Tip

To select the preset number over 10, press >10 first, then the corresponding number buttons. You need to hold down the last number button for 3 seconds to enter the number. (Example: To select 12, press >10 and 1, then hold down 2 for 3 seconds.)

### **Playing preset** radio stations

Once you've preset the stations, use the number buttons to tune in your favorite tations.



∂ip

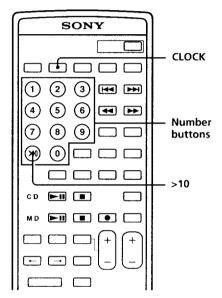
You can tune in a preset station with the player. Use PRESET +/- instead of the number buttons.

- **1** Press RADIO BAND to select the band.
- **2** Press the number buttons to tune in a stored station.

To tune in a preset station 11, press >10, and then press 1 and  $\hat{1}$ .

## **Setting the clock**

You need to set the clock to enjoy the timer-activated features of your system. "--: --" appears in the display until you set the clock.



Before you begin, connect the AC power cord, and insert the batteries in the remote (see page 49).

- **1** Hold down CLOCK until "--: --" flashes in the display.
- **2** Press >10 to select "AM" or "PM."
- **3** Set the current hour and minute by pressing number buttons.

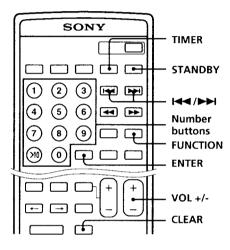
(Example: To select 8:30, press 8, and then press 3 and 0.)

4 Press CLOCK.

The clock starts from 00 seconds.

#### To display the time

Press CLOCK. To go back to the previous display, press CLOCK again.



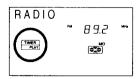
Before you begin, make sure that neither "TIMER PLAY" nor "TIMER REC" is lit in the display. To turn off the indications, press STANDBY.

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

To play	Do this
a CD	Insert a CD.
an MD	Insert an MD.
the radio	Tune in a station.
the component connected to LINE IN jacks	Turn on the power of the component or set the power to go on at the time you want.

**2** Press TIMER.

Do the following steps while checking the display.



- **3** Press ► or ► until "TIMER PLAY" appears in the display, and press ENTER.
- **4** Press FUNCTION repeatedly until the music source you want appears, and press ENTER. "CD," "MD," "RADIO," or "LINE" appears in the display.
- **5** Set the time you want to start playback.

continued

: 11

The Timer | 43

Γip Ii

If you made a mistake, press CLEAR. Each time you press CLEAR, the last setting will be erased. Re-enter the desired setting.

#### Waking up to music (continued)

#### Note

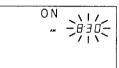
The setting will be cleared if you press an unrelated button such as ■ or ▷⑩ before you finish the setting. In this case, stant from step 1 again.

#### Tip

The preset settings remain until you reset them.

Press >10 to select "AM" or "PM."

Set the desired hour and minute by pressing number buttons and press ENTER.



(Example: To select 8:30, press 8, and then press 3 and 0.)

- **6** Set the time you want to stop playback (see step 5 above).
- **7** Press VOL +/- to set the volume, and press ENTER.
- **8** Press STANDBY.

The power goes off, and the player enters timer standby.

At the preset start time, the power will go on, the music will play, and ① indicator will light up. The power will go off again at the preset stop time, and the player will enter timer standby.

#### To check/change when the playback will start

Press TIMER, then press ENTER. Each time you press ENTER, a stored setting lights up. Change the setting if you need to when the setting lights up. When you are done checking, press TIMER again.

# To listen to the radio or do other operations after you set the timer

Press STANDBY until "TIMER PLAY" disappears from the display. After you finish listening to the radio or doing other operations, be sure to press STANDBY until "TIMER PLAY" appears in the display before the set time comes.

#### To cancel timer standby

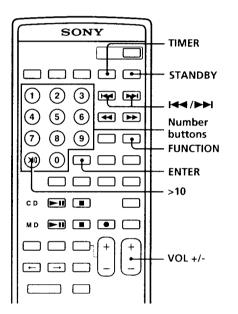
Press STANDBY until "TIMER PLAY" disappears from the display.

#### To stop play

Press POWER.

# **Timer-recording** radio programs

You can set the timer to record the radio program at a certain time. Make sure you have set the clock (see page 42).



The Time

Before you begin, make sure that neither "TIMER PLAY" nor "TIMER REC" is lit in the display. To turn off the indications, press STANDBY.

- **1** Tune in the radio station you want to record, and insert a recordable MD.
- **2** Press TIMER.

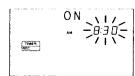
Do the following steps while checking the display.



- **3** Press ► or ► until "TIMER REC" appears in the display, and press ENTER.
- **4** Press FUNCTION repeatedly until "RADIO" appears in the display, and press ENTER.
- **5** Set the time you want to start recording.

Press >10 to select "AM" or "PM."

Set the desired hour and minute by pressing number buttons and press ENTER.



(Example: To select 8:30, press 8, and then press 3 and 0.)

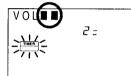
continued

#### Timer-recording radio programs (continued)

#### Tips

- If you made a mistake, press CLEAR. Each time you press CLEAR, the last setting will be erased. Re-enter the desired setting.
- If "MD REC TIME" appears in the display, there is not enough space on the MD for recording. Replace with a recordable MD. If you record the MD as it is, the player ejects the MD when the MD becomes full.
- The preset settings remain until you reset them

- **6** Set the time you want to stop recording (see step 5 on page 45).
- **7** Press VOL +/- to set the volume, and press ENTER.



**8** Press STANDBY.

The power goes off, and the player enters timer standby.

At the preset start time, the power will go on, the recording will start, and ① indicator will light up. The power will go off again at the preset stop time, and the player will enter timer standby.

#### To check/change when the recording will start

Press TIMER, then press ENTER. Each time you press ENTER, a stored setting lights up. Change the setting if you need to when the setting lights up. When you are done checking, press TIMER again.

# To listen to the radio or do other operations after the timer setting

Press STANDBY until "TIMER REC" disappears from the display. After you finish listening to the radio or doing other operations, tune in the radio station you want to record, then press STANDBY until "TIMER REC" appears in the display. Be sure to press STANDBY before the set time comes.

#### To cancel timer standby

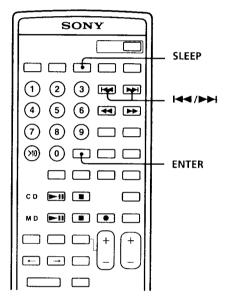
Press STANDBY until "TIMER REC" disappears from the display.

#### To stop recording

Press POWER.

### ialling asleep to nusic

ou can set the player to turn off itomatically so you can fall asleep hile listening to music. The power will ırn off after 10 to 120 minutes epending on the length of time you iose.



The player enters sleep mode one minute after pressing SLEEP, unless you select the time. To change the preset time, do from step 2 on this page again.

#### ps

The display window dims while the sleep timer is on.

You can fall asleep and wake up to music. First, set the wake up timer by following steps on page 43. Then, turn the power on and follow the steps on this page to set the sleep

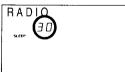
You can fall asleep and wake up to a different function: you can select CD, MD, RADIO or LINE. However, you cannot select different radio programs.

You can fall asleep and wake up to a different volume: For instance, fall asleep with low volume, and wake up with loud volume.

- **1** Play your favorite sound source (CD, MD or the radio).
- **2** Press SLEEP.

"SLEEP" appears in the display.

**3** Press **► ► ► ► ►** to select the time you want, then press ENTER.



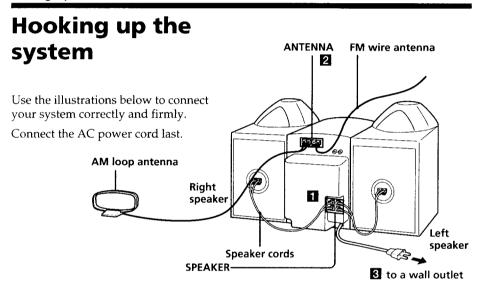
The player will automatically turn off after the preset time has passed.

#### To cancel the sleep function

Press SLEEP again. "SLEEP" disappears from the display.

#### To change the preset time

Do steps 2 and 3 again.



#### Note

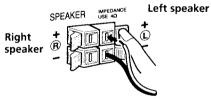
Keep the antennas away from the player, the speaker cords and other connecting cords.

#### Tips

- To improve FM reception, connect an outdoor FM antenna to the FM 75 Ω and ħ, using a 75-ohm coaxial cable (not supplied).
- To improve AM reception, connect a 6-to 15-meter (20- to 50-feet) insulated wire to the AM terminal and ground the  $\frac{1}{2}$  terminal.

#### 1 Hooking up the speakers

Connect the speaker cords to the main unit and to the speaker.



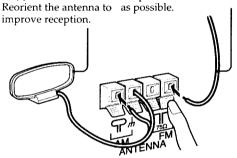
Connect the black wires to (-) minus and the red wires to (+) plus terminals; the right speaker wires to the R and the left speaker wires to the L terminals.

#### 2 Hooking up the antennas

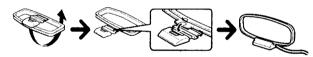
# AM loop antenna (supplied)

improve reception.

FM wire antenna (supplied) Keep the antenna as horizontal



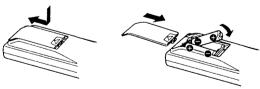
#### Setting up the loop antenna



#### 3 Connecting the power

Connect the AC power cord to the wall outlet after you have made all the above connections.

#### 4 Inserting batteries into the remote



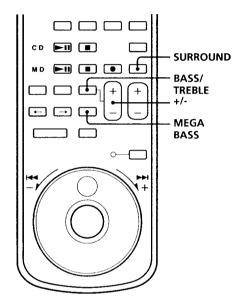
Insert two size AA (R6) batteries (supplied)

#### **Replacing batteries**

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

# Adjusting the sound

You can adjust the audio emphasis of the bass sound or the bass/treble sound you are listening to.



#### Reinforcing the bass sound

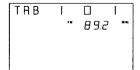
Press MEGA BASS to select the bass sound level.

You can select from "MEGA BASS 0" to "MEGA BASS 3."

# Display MEGA BASS 3 "B9.2"

#### Adjusting the bass/treble sound

- 1 Press BASS/TREBLE to select BASS or TRB (treble).
- 2 Press +/- to adjust the bass or treble from -8 to +8 dB.



#### Enjoying the surround sound

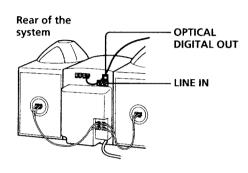
Press SURROUND.

"SURROUND" appears in the display.

#### Tip

Sound adjustments is more effective at lower volumes. When the volume is high, the sound adjustments may not be effective. 'ou can enjoy TV or VCR sound through nternal speakes by connecting a TV or 'CR to this player.

Be sure to turn off the power of each omponent before making connections. Refer to the instructions of each omponent.



#### iotes

Connect the cables firmly to avoid any malfunction.

When "CD" appears in the display, the optical -digital output jack at the rear of the system remains lit even if in stop mode.

You cannot obtain optical-digital output from the radio and the component connected to LINE IN.

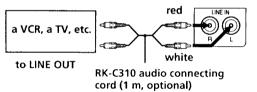
Use the correct connecting cable, that matches the shape of each jack. This system uses a rectangular optical jack. See the operation manual of the component to check the shape of jack.

#### ip

To display "LINE" using the player, press ■ on the CD section and ■ on the MD section simultaneously.

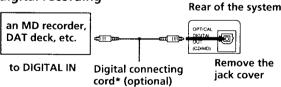
#### Connecting a VCR or a TV

Rear of the system



When you use the connected component, turn on the power, and press FUNCTION on the remote until "LINE" appears in the display.

# Connecting an MD recorder or DAT deck for digital recording



When you use the connected component, turn on the power, and start recording.

# To record the sound from the connected components

- 1 Insert the recordable MD.
- 2 Press FUNCTION on the remote until "LINE" appears in the display.
- 3 Press ●.

The player is ready to start.

- 4 Press ►II on the MD section to start recording.
- 5 Play the optional component connected to LINE IN.

Setting L

#### **Precautions**

#### On safety

- As the laser beam used in the CD and MD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the player, unplug the player, and have it checked by qualified personnel before operating it any further.

#### On power sources

- For AC operation, use the supplied AC power cord; do not use any other type.
- When the batteries are not to be used, remove them to avoid damage that can be caused by battery leakage or corrosion.
- The nameplate indicating operating voltage, power consumption, etc. is located at the rear.

#### On placement

- Do not leave the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the player to operate properly and prolong the life of its components.
- If the player is left in a car parked in the sun, be sure to choose a location in the car where the player will not be subjected to the direct rays of the sun.
- Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or spring-

wound watches away from the player to prevent possible damage from the magnet.

#### On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the CD and MD player section. Should this occur, the player will not operate properly. In this case, remove the CD or MD and wait about an hour for the moisture to evaporate.
- If the player has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a CD or MD.

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

#### **Notes on CDs**

 Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.



- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.

• After playing, store the CD in its case. f there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.

#### Ileaning the cabinet

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

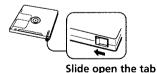
#### **lotes on MDs**

- Do not open the shutter to expose the MD. Close the shutter immediately if the shutter opens.
- Wipe the disc cartridge with a dry cloth to remove dirt.

#### 'rotecting a recorded MD

To record-protect an MD, slide open the ab at the side of the MD (so the tab is concealed).

n this position, the MD cannot be ecorded. To record on the MD, slide lose the tab.



# System limitations of the MD

The recording system in your MiniDisc recorder is radically different from those used in cassette and DAT decks and the system has limitations described below. Note, however, that these limitations are due to the inherent nature of the MD recording system itself and not to mechanical causes.

# "DISC FULL" lights up even before the MD has reached the maximum recording time (60 or 74 minutes)

When 255 tracks have been recorded on the MD, "DISC FULL" lights up 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" lights up before the maximum number of tracks is reached

Fluctuations in emphasis within tracks are sometimes interpreted as track intervals, increasing the track count and causing "DISC FULL" to light up.

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

Tracks under 12 seconds long are not counted, so erasing them may not increase the recording time.

# Some tracks cannot be combined with others

Track combination may become impossible when tracks are under 12 seconds long. continued

#### System limitations of the MD (continued)

# The total recorded time and the remaining time on the MD may not reach the maximum recording time (60 or 74 minutes)

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

#### The sound may dropout while fastforwarding or rewinding the edited tracks

Tracks created through editing may exhibit sound dropout during fast-forwarding or rewinding because high-speed playback takes time to search for the position on the disc when the tracks are scattered on the disc.

# Guide to the serial copy management system

Digital audio equipment such as CDs, MDs, DATs, etc., copy music easily with high quality, for these products process music as a digital signal. The Serial Copy Management System allows you to make only a single copy of a recorded digital source through digital-to-digital connections because music programs may be copyrighted.

This system is applied to this player.

#### You can make only a firstgeneration copy\* through a digital-to-digital connection.

That is:

- 1 You can make a copy of a digital sound program on the market such as CDs, MDs, etc., 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 on the market such as an analog record, music cassette tape, etc., or from digital satellite broadcasts, but you cannot make a second copy.

#### Note

No restrictions apply when a digital signal is recorded as an analog signal (that is, when a digital signal is recorded through analog-to-analog connection.)

 A first-generation copy is a digital recording of a digital signal made on digital audio equipment through a digitalto-digital connection.

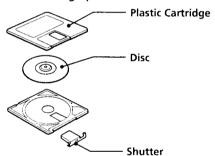
# Additional Information

# Getting to know the MD

#### Structure

The 2.5-inch MiniDisc (MD) is compact and easy to handle requiring less care as it is encased in a plastic cartridge that looks like a 3.5-inch diskette (see illustrations below).

#### Parts making up a MiniDisc



#### Disc variation

MDs come in two types: pre-mastered (pre-recorded) and recordable (blank). They cannot be recorded on or over like cassette tapes. To record, you must use a "recordable MD."

#### Pre-mastered MDs

Pre-mastered MDs are recorded and played like regular CDs. A laser beam focus on the pits on the surface of the MD and reflects the information back to the lens in the recorder. The recorder then decodes the signals and plays them back as music.



#### **Recordable MDs**

Recordable MDs, which use magneto-optical (MO) technology, can be recorded again and again. The laser inside the recorder applies heat to the MD, demagnetizing the magnetic layer of the MD. The recorder then applies a magnetic field to the layer. This magnetic field corresponds exactly to the audio signals generated by the connected source. (The north and south polarities equate to digital "1" and "0.") The demagnetized MD adopts the polarity of the magnetic field, resulting in a recorded MD.



#### **Features**

#### Long recording

The MD uses a new digital audio compression technology called Adaptive TRansform Acoustic Coding (ATRAC). To store more sound in less space, ATRAC extracts and encodes only those frequency components actually audible to the human ear.

#### **Quick random access**

Like CDs, MDs offer instantaneous random access to the beginning of any music track. Pre-mastered MDs are recorded with location addresses corresponding to each music track.

#### **Shock-resistant memory**

One major drawback of optical read systems is that they skip or mute the sound when subject to vibration. The MD system resolves this problem by using a buffer memory that stores audio data.

# **Troubleshooting**

	Symptom	Remedy
eral	There is no audio.	<ul> <li>Press POWER to turn the player on.</li> <li>Connect the AC power cord securely.</li> <li>Adjust the volume.</li> <li>Unplug the headphones when listening through speakers.</li> </ul>
General	The sound drops out.	Reduce the volume. The protecting mechanism works when loud sound is input.
	The picture of your TV becomes unstable.	Move the player away from the TV.
CD Player	The CD does not play/"NO DISC" lights in the display even when a CD is in place.	<ul> <li>Make sure that the disc tray is closed.</li> <li>Place the CD with the label surface up.</li> <li>Clean the CD.</li> <li>Take out the CD and leave the disc tray open for about an hour to dry moisture condensation.</li> <li>Make sure "CD" appears in the display.</li> </ul>
0	The sound drops out.	<ul> <li>Reduce the volume.</li> <li>Clean the CD, or replace it if the CD is badly damaged.</li> <li>Place the player in a location free from vibration.</li> </ul>
-	An incompletely inserted MD cannot be pulled out.	<ul> <li>The MD player's self-lock system has gripped the MD. Insert the MD completely, then press</li></ul>
	"DISC ERROR" lights in the display and the player does not operate.	• Take the MD out and insert it again. If "DISC ERROR" remains, replace the MD. Try erasing all tracks on the MD (see page 31).
MD Player	The MD does not play.	<ul> <li>Take out the MD and leave the player in a warm place for several hours until the moisture evaporates.</li> <li>The MD is inserted in the wrong direction. Slide the MD into the disc compartment with the label side up and the arrow pointing towards the opening until the player grips it.</li> <li>The MD may be blank (the music calendar does not appear). Replace the disc with one that has been recorded.</li> </ul>
	The MD does not record.	<ul> <li>The MD is record-protected ("PROTECTED" appears). Close the record-protect slot.</li> <li>The player is not connected properly to the sound source. Make connections properly to the sound source.</li> </ul>

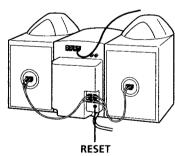
	Symptom	Remedy
MD Player		<ul> <li>A pre-mastered MD is inserted. Replace it with a recordable MD.</li> <li>There is not enough space left on the MD. Replace it with another recordable MD with enough space, or erase unnecessary tracks.</li> <li>There has been a power failure or the AC power cord has been disconnected. Data recorded to that point may be lost. Repeat the recording procedure.</li> </ul>
	A stereo program cannot be received in stereo.	<ul> <li>Press RADIO BAND FM/AM until "STEREO" appears in the display (see page 10).</li> </ul>
Radio	The audio is weak or has poor quality.	<ul> <li>The FM broadcast may be noisy (see page 11).</li> <li>Move the player away from the TV.</li> <li>If you are using the remote while listening to an AM radio, noise may be heard. This is unavoidable.</li> <li>Move the antenna away from the player.</li> </ul>
Timer	The timer does not operate.	<ul> <li>Make sure the time on the clock is correct.</li> <li>Check to see if the AC power had been cut off.</li> <li>Make sure "TIMER REC" or "TIMER PLAY" appears in the display.</li> <li>Make sure the MD has enough space. Replace it with another recordable MD with enough space, or erase unnecessary tracks.</li> <li>Check and change the preset start/stop time if both times are set to the same time.</li> </ul>
Remote	The remote does not function.	<ul> <li>Replace all the batteries in the remote with new ones if they are weak (see page 49).</li> <li>Make sure that you are pointing the remote at the remote sensor on the player.</li> <li>Remove any obstacles in the path of the remote and the player.</li> <li>Make sure the remote sensor is not exposed to strong light such as direct sunlight or fluorescent lamp light.</li> <li>Move closer to the player when using the remote.</li> </ul>

#### continued

#### **Troubleshooting** (continued)

	Symptom	Remedy
rophone	No sound.	<ul> <li>Adjust the volume.</li> <li>Turn the power of the microphone on.</li> <li>If you are using a microphone while recording a CD, there is no sound from microphone. This is normal.</li> </ul>
Σ	Howling sound occurs.	<ul> <li>Lower the volume.</li> <li>Move the microphone away from the speaker, or change the direction of microphone.</li> </ul>

Operation may become unstable depending on the power supply or other causes because this player employs a microcomputer to link each operation. If other troubles not described above occur, press the RESET button on the rear of the player with a pointed object. The player may return to normal. (In this case, clock set, timer or preset radio stations are reset to the factory setting. Set these items again if you need.) If the problem persists, please consult your nearest Sony dealer.



# **Error messages**

If the player cannot perform an operation, one of the following error messages may clash in the display window.

This message will flash	If
3LANK DISC	you try to play an MD with no recording on it.
DISC ERROR	the player cannot read the MD (it is scratched or dirty).
DISC FULL	there is no more space on the MD. More than 255 tracks cannot be recorded on the MD ("System limitations of the MD" page 53).
ERROR STOP	<ul><li> there is a malfunction while you are recording.</li><li> the recorder cannot read the recorded data on the MD.</li></ul>
MPOSSIBLE	an attempt was made to combine tracks while playing back the first track.
AD REC TIME	There is not enough space on the MD for timer recording.
NAME FULL	the labeling capacity of the MD has reached its limit (up to 1792 characters).
NO CD	you try to record with no CD in the player.
VO DISC	you try to play or record with no CD or MD in the player.
NO MD	you try to play or record with no MD in the player.
NO SOURCE	you try to record through a microphone that is disconnected.
NO TRACK	the inserted MD has a disc title but no tracks.
'B DISC	you try to record or edit on a pre-mastered MD (PB means playback).
'ROTECTED	you try to record or edit on an MD with the tab in the record-protect position.
RETRY	the first recording attempt failed due to a disturbance or scratch on the MD, and a second attempt is being made.
RETRY ERROR	due to vibrations affecting the recorder or scratches on the MD, several recording attempts were made but with no success.
ORRY	an attempt was made to combine tracks that cannot be combined.
TRK PROTECTE	you are trying to edit on a record-protected MD.

## **Specifications**

#### CD player section Compact disc digital audio system Number of channels Frequency response 20 - 20,000 Hz +1/-2 dB Wow and flutter Below measurable limit Radio section Frequency range FM 87.5 - 108 MHz AM 530 - 1,710 kHz FM: 75 ohm unbalanced AM: External antenna terminals MD player section Minidisc digital audio system MiniDisc Laser diode properties Material: GaAlAs Wave length: 780nm Emission duration: Continuous Laser output: Less than 44.6µW (This output is the value measured at a distance of about 200 mm from the objetive lens surface on the optical pick-up block with 7 mm aperture.) Recording/playback time Maximum 74 minutes (with MDW-74) Revolutions 400 rpm to 900 rpm (CLV) Error correction Advanced Cross Interleave Reed Solomon Code (ACIRC) Sampling frequency

```
Outputs
    Headphones jack (stereo minijack):
         For 32 ohms impedance headphones
    OPTICAL DIGITAL OUT (CD/MD) jack:
         Output level -17 dBm
         Wave length 660 nm
Maximum power output
    25 W + 25 W
Power requirements
    For personal minidisc system: 120 V AC, 60 Hz
    For remote commander:
    3 V DC, 2 R6 (size AA) batteries
Power consumption
    75W
Dimensions (incl.projecting parts)
    For personal minidisc system:
     approx. 180 × 253× 292 mm (w/h/d)
    (7 以×10×11 ½ inches)
    For speaker:
    approx. 175 × 309× 250 mm (w/h/d)
    (7 \times 12 \% \times 9 \% \text{ inches})
Mass
    For personal minidisc system:
     approx. 6.5 kg (14 lb. 5 oz)
     For speaker:
    approx. 3.7 kg (8 lb. 3 oz) (1 set)
Supplied accessories
     Remote commander (1)
     FM lead antenna (1)
     AM loop antenna (1)
Optional accessories
```

Sony DYNAMIC MICROPHONE series Sony MDR headphone series

U.S. and foreign patents licensed from Dolby Laboratories Licensing Corporation.

Design and specifications are subject to change without notice.

Coding

Modulation system

Number of channels 2 stereo channels Frequency response

Signal-to-noise ratio

Wow and flutter

20 - 20,000 Hz +1/-2 dB

Below measurable limit

Over 80 dB (during playback)

Speaker

Woofer: 10 cm (4 in.) dia., 4 ohms cone type (2) Tweeter: 5 cm (2 in.) dia., cone type (2) ats

Adaptive TRansform Acoustic Coding (ATRAC)

EFM (Eight-to-Fourteen Modulation)

MIX MIC (minijack): Sensitivity 1.38 mV LINE IN (phono jack): Sensitivity 436 mV

# **Additional Information**

## ndex

\djusting

bass 50 treble 50

volume 50 \TRAC 55 \UTO PRESET 40
3 Batteries 49
D player 12 Thecking playing tme a CD 12 an MD 24 Tleaning 52 Tlock 42 Tlombine function 34 Tonnection AC power cord 49 antenna 49 optional components 51 speaker 48 Treating your own rogram 16, 28
Direct play a CD 13 an MD 25 Display 12, 24 Divide function 32  F, F Editing 30
Errse function 30 Error message 59

Getting to know the MD 55
<b>H</b> Hookups. <i>See</i> Connection
I, J, K Improving broadcast reception 11
<b>L</b> Listening to the radio 10 Locating a specific track 13, 25
<b>M, N</b> MD player 18 MEGA BASS 50 Microphone 22 Move function 36
<b>O</b> Optical digital out 51
P, Q PA system 22 Play mode 14, 26 Playing a CD 4 an MD 8 preset radio stations 41 tracks repeatedly 14, 26 Power sources 49 Presetting radio stations
Presetting radio stations

Program Play a CD 16

an MD 28

Public address system. See PA system

playing 10, 41
presetting 40
Recording
a CD 6
on an MD 6
through a microphone 22
Relay play 5, 9
Repeat Play
a CD 14
an MD 26
S
Search play
a CD 13
an MD 25
Selecting tracks
a CD 5
an MD 9
Serial copy management
system 54
Setting up 48
Shuffle play
a CD 15
an MD 27
System limitations 53
Τ
Timer
playback 43, 47
recording 45
Title function 37
Froubleshooting 56
UVWXY7

R

Radio stations

Using as a PA system 22

the display 12, 24