

**SONY.**

3-862-832-11(1)

# ***MiniDisc Deck***

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Operating Instructions

EN

Mode d'emploi

F



***MDS-S707***

## WARNING

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

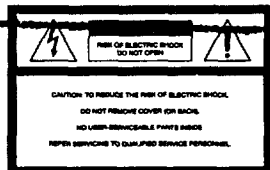
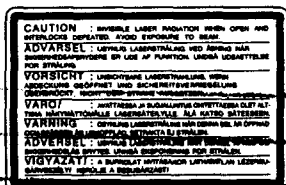
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

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

CLASS 1 LASER PRODUCT  
LUOKAN 1 LASERLAITE  
KLASS 1 LASERAPPARAT

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

The following caution label is located inside the unit.



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.

### INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

### CAUTION

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

### Owner's Record

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

Model No. MDS-S707

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

### 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.

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.

## Precautions

### On safety

- The use of optical instruments with this product will increase eye hazard.
- Should any solid object or liquid fall into the cabinet, unplug the deck and have it checked by qualified personnel before operating it any further.

### On power sources

- Before operating the deck, check that the operating voltage of the deck is identical with your local power supply. The operating voltage is indicated on the nameplate at the rear of the deck.
- If you are not going to use the deck for a long time, be sure to disconnect the deck from the wall outlet. To disconnect the AC power cord, grasp the plug itself; never pull the cord.
- The mains switch is located on the rear exterior.
- AC power cord must be changed only at the qualified service shop.

### On placement (only on models supplied with a MAIN POWER switch)

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet because the mains power switch (MAIN POWER) is located on the rear exterior.

### On operation

If the deck 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 deck. Should this occur, the deck may not operate properly. In this case, remove the MD and leave the deck turned on for about an hour until the moisture evaporates.

### On the MiniDisc cartridge

- Do not open the shutter to expose the MD.
- Do not place the cartridge where it will be subject to extremes of sunlight, temperature, moisture or dust.

### On cleaning

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

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

## Welcome!

Thank you for purchasing the Sony MiniDisc Deck. Before operating the deck, please read this manual thoroughly and retain it for future reference.

## About This Manual

### Conventions

- Controls in the instructions are those on the deck; these may, however, be substituted by controls on the remote that are similarly named or, when different, appear in the instructions within brackets.
- The following icons are used in this manual:



Indicates a procedure that requires use of the remote.



Indicates tips for making the task easier and hints.

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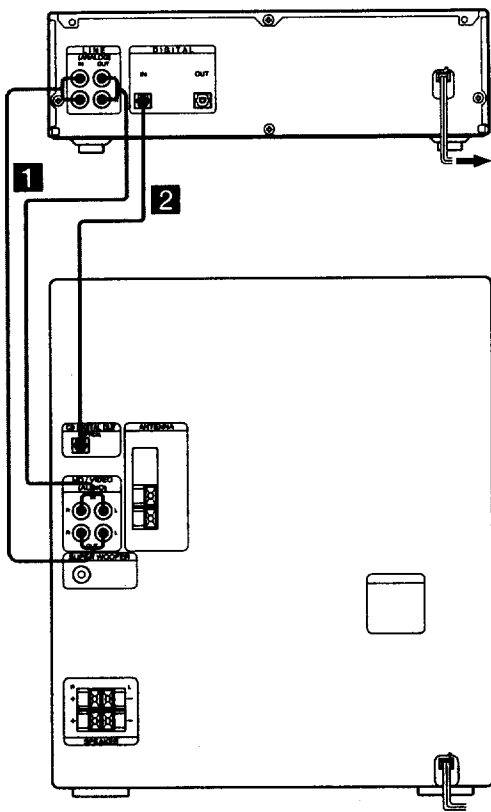
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## Hooking Up the System

Connect the supplied cords (1 and 2) as described below.



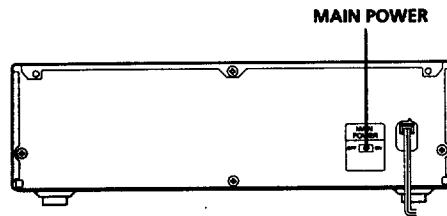
- 1** Connect the audio connecting cords.  
Make sure to match the color of the plugs and the connectors. Be sure to make connections firmly to prevent hum and noise.
- 2** Connect the optical cable.  
Take the caps off the connectors and then insert the plugs until they click into place.

## Connecting the AC power cord

Connect the AC power cord to a wall outlet or to the outlet of a timer.

## Turning on the unit (only on models supplied with a MAIN POWER switch)

Set MAIN POWER on the rear of the unit to ON. The unit is turned on in standby mode.

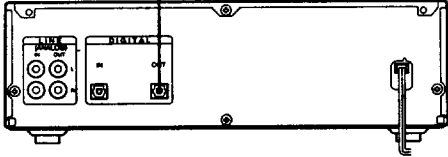


## Connecting Optional AV Components

You can connect a digital components (such as a DAT deck or another MD deck) for digital recording. Refer to the instructions of the component for details regarding its operation.

Connect the digital component using the optical cable. Take the caps off the connectors and then insert the plugs until they click into place.

To the DIGITAL IN connector of the component



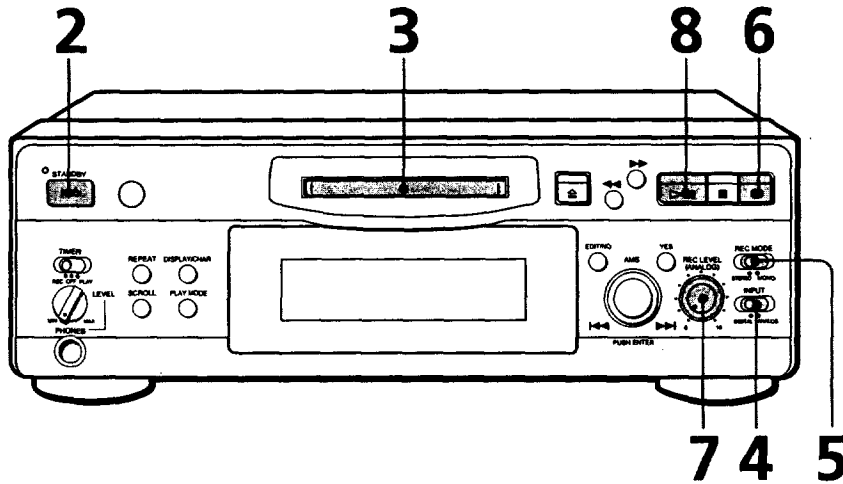
A built-in sampling rate converter automatically converts the sampling frequency of various digital sources to the 44.1 kHz sampling rate of your MD deck.

This allows you to record sources such as 32- and 48-kHz DAT or satellite broadcasts, as well as compact discs and other MDs.

### Note

When recording through the DIGITAL IN connector, you cannot adjust the recording level.

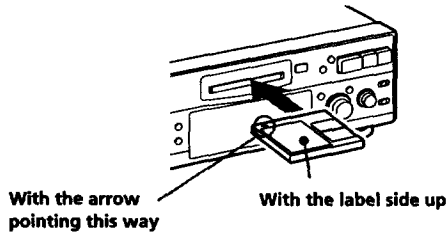
# Recording on an MD



**1** Turn on the Mini System and play the program source you want to record.

**2** Press I/O.  
The STANDBY indicator turns off.

**3** Insert a recordable MD.



If the MD has a recorded material on it, the deck will automatically start recording from the end of the last recorded track.

**4** Set INPUT to the corresponding input connector.

To record through	Set INPUT to
DIGITAL IN	DIGITAL
LINE (ANALOG) IN	ANALOG

**5** Set REC MODE to the mode you want to record in.

To record in	Set REC MODE*1 to
Stereo sound	STEREO
Monaural sound*2	MONO

\*1 If you switch REC MODE during recording or recording pause, recording stops.

\*2 In the monaural recording, you can record about two times longer than in the stereo recording.

**Monitor audio during recording**  
Even if you set REC MODE to MONO, the monitor signal does not become monaural.

**Note**

If "Din Unlock" or "Cannot Copy" appears in the display, recording through the digital connector is not possible.

In this case, record the program source through the LINE (ANALOG) IN jacks with INPUT set to ANALOG.

**When "TOC" flashes in the display**

The deck is currently updating the Table Of Contents (TOC). Do not move the deck or pull out the AC power cord. Changes to an MD made through recording are saved only when you update the TOC by ejecting the MD or changing the deck to standby by pressing I/⊕.

**6** Press ●.  
The deck becomes ready to record.

**7** When recording the analog input signal, adjust the recording level with REC LEVEL.  
The fourth dot is satisfactory for most purposes. For details, refer to "Adjusting the Recording Level" on page 11.

**8** Press ▷|| (or MD ▷).  
Recording starts.

**9** Start playing the program source.

**Do not disconnect the deck from the power source immediately after recording**

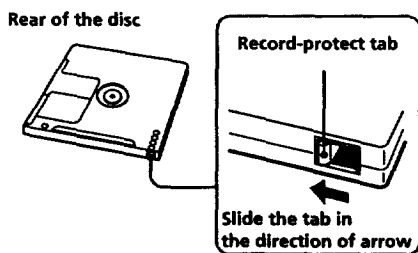
If you do, recorded material may not be saved to the MD. To save the material, after recording, press ⊞ to take out the MD or change the deck to standby by pressing I/⊕. "TOC" will flash in the display at this time. After "TOC" stops flashing and goes out, you can pull out the AC power cord.

To	Press
Stop recording	■
Pause recording*	▷   (or MD   ). Press the button again to resume recording.
Take out the MD	⊞ after stopping recording

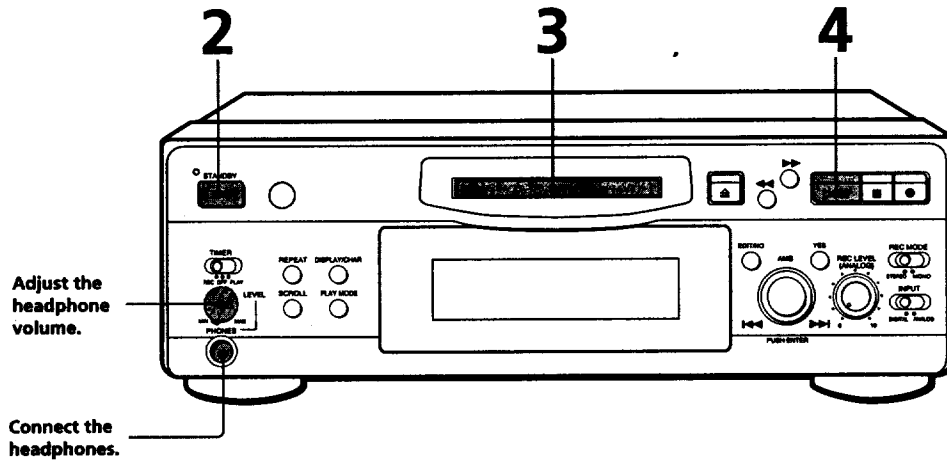
\* Whenever you pause recording, the track number increases by one. For example, if you paused recording while recording on track 4, the track number increases by one and recording continues on the new track when restarted.

**To protect an MD against accidental erasure**

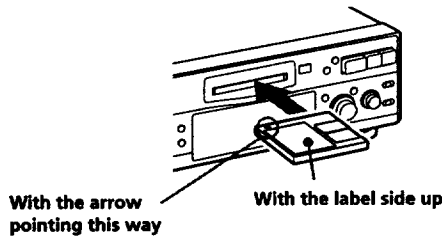
To make it impossible to record on an MD, slide the tab in the direction of arrow, opening the slot. To allow recording, close the slot.



# Playing an MD



- 1** Turn on the Mini System and set the source selector to the position for MD deck.
- 2** Press I/O. The STANDBY indicator turns off.
- 3** Insert an MD.



- 4** Press >|| (or MD >). The deck starts playing. Adjust the volume on the amplifier.

**💡** You can locate and play back a track while the deck is stopped

- 1** Turn AMS (or press MD <<< or MD >>>) until the number of the track you want to play appears.
- 2** Press AMS or >|| (or MD >).

**💡** To use headphones Connect them to PHONES jack. Use PHONES LEVEL to adjust the volume.

To	Do the following:
Stop playing	Press ■.
Pause playing	Press >   (or MD   ). Press the button again to resume playing.
Go to the next track	Turn AMS clockwise (or press MD >>> on the remote).
Go to the preceding track	Turn AMS counterclockwise (or press MD <<< on the remote).
Take out the MD	Press ⏏ after stopping playing.



## Notes on Recording

### If "Protected" appears in the display

The MD is record-protected. Close the slot to record on the disc (see "To protect an MD against accidental erasure" on page 7).

### If "Din Unlock" flashes in the display

- The digital program source is not connected as you set with INPUT in Step 4 on page 6.  
To continue, connect the program source properly.
- The program source is not on.  
Turn on the program source.

### When the source you record from is:

- **This system's CD player**
  - The digital signal from the CD is recorded as it is (digital recording)\*.
  - Track numbers are automatically marked as on the original CD.
- **This system's tuner and tape deck**
  - The analog signal is converted to a digital signal and recorded (analog recording)\*\*.
  - A track number is marked at the beginning of a recording, but when you turn on the Level Sync function (see page 12), track numbers are automatically marked in sync with the level of the input signal.

\* For details on the limitations for digital recording, see page 31.

\*\* This signal is converted because these systems do not use digital signals.

### Note on MD track numbers

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

\* TOC: Table Of Contents.

### When "TOC" flashes in the display

The deck is currently updating the Table Of Contents (TOC). Do not move the deck or pull out the AC power cord. Changes to an MD made through recording are saved only when you update the TOC by ejecting the MD or changing the deck to standby by pressing **1/6**.

### The MD deck uses the SCMS (Serial Copy Management System on page 34)

MDs recorded through digital input connector cannot be copied onto other MDs or DAT tapes through the digital output connector.

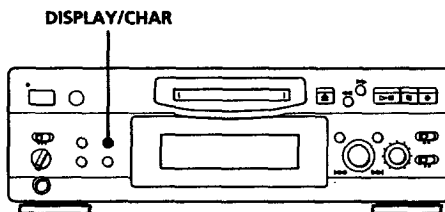
### When recording digital signals that have been emphasized (in the higher frequencies)

The signal is automatically de-emphasized (with attenuation proportional to the degree of emphasis) and the level of the de-emphasized signal is indicated on the peak level meters.

### When the deck is recording or in recording pause, digital signals input through DIGITAL IN are output to DIGITAL OUT with the same sampling rate.

To change the digital input signal to another sampling rate for output (without recording it to an MD), use Input Monitor Function (see page 10).

## Useful Tips for Recording



### Checking the remaining recordable time on the MD


- When you press DISPLAY/CHAR while recording, the remaining recordable time on the MD appears.
- When you press DISPLAY/CHAR repeatedly while the deck is stopped, the display changes as follows: total recorded time, remaining recordable time on the MD, disc name (see page 17).

(Continued)

## Recording on MDs

### Monitoring the input signal (Input Monitor)

Before starting recording, you can monitor the selected input signal through the deck's output connectors.

- 1 Press  to remove the MD.
- 2 Set INPUT according to the input signal you want to monitor.

#### When INPUT is at ANALOG


The analog signal input through LINE (ANALOG) IN is output to DIGITAL OUT after A/D conversion, and then to the LINE (ANALOG) OUT connectors and PHONES jack after D/A conversion.

#### When INPUT is at DIGITAL

The digital signal input through DIGITAL IN is output to DIGITAL OUT after passing through the sampling rate converter, and then to the LINE (ANALOG) OUT connectors and PHONES jack after D/A conversion.


#### Note

Even if you set REC MODE to MONO, the monitor signal does not become monaural.

- 3 Press .  
If INPUT is at ANALOG, "AD-DA" appears in the display.  
If INPUT is at DIGITAL, "-DA" appears in the display.

### If "Auto Cut" appears in the display (Auto Cut)

There has been no sound input for 30 seconds while INPUT is set to DIGITAL and the source is connected through DIGITAL IN. The 30 seconds of silence are replaced by a blank of about 3 seconds and the deck changes to recording pause.

-  **You can turn off the Auto Cut Function**  
For details, see "If "Smart Space" appears in the display".

### If "Smart Space" appears in the display (Smart Space)

There has been an extended silence of 4 to 30 seconds in length when INPUT is set to DIGITAL and the source is connected through DIGITAL IN.

The silence is replaced with a blank of about 3 seconds and the deck continues recording. Note that the tracks before and after this three-second space may be recorded as a single track with a single track number.

#### To turn off the Smart Space Function and Auto Cut Function

- 1 During recording pause, press EDIT/NO repeatedly until "S. Space ?" appears in the display.
- 2 Press YES.
- 3 Press EDIT/NO to display "S. Space OFF."

#### To turn on the Smart Space Function and Auto Cut Function again



- 1 During recording pause, press EDIT/NO repeatedly until "S. Space ?" appears in the display.
- 2 Press YES twice to display "S. Space ON".

#### Notes

- When you turn off the Smart Space Function, the Auto Cut Function is also turned off automatically.
- The Smart Space Function and Auto Cut Function are factory set to on.
- The Smart Space Function does not affect the order of the track numbers being recorded, even if the blank space occurs in the middle of a track.
- If you turn off the deck or disconnect the AC power cord, the deck will recall the last setting (on or off) of the Smart Space and Auto Cut Functions the next time you turn on the deck.




### Playing back tracks just recorded

Do this procedure to immediately play back tracks that have just been recorded.

Press  (or MD ) immediately after stopping recording.

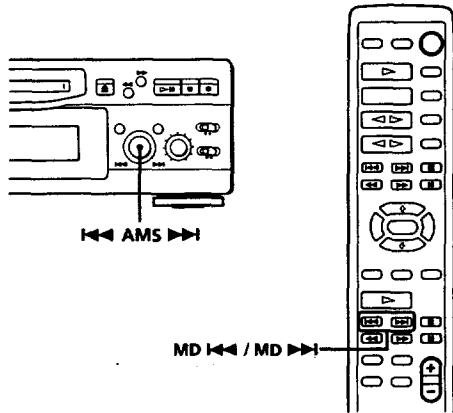
Playback starts from the first track of the material just recorded.

#### To play from the first track of the MD after recording

- 1 Press  again after stopping recording.
- 2 Press  (or MD ).  
Playback starts from the first track of the MD.

## Recording Over Existing Tracks

Follow the procedure below to record over existing material just as you would on an analog cassette tape.



- 1 Do Steps 1 to 5 in "Recording on an MD" on page 6.
- 2 Turn AMS (or press MD <<< or MD >>>) until the number of the track to be recorded over appears.
- 3 To record from the start of the track, continue from Step 6 in "Recording on an MD" on page 7.

### While "TRACK" flashes in the display

The deck is recording over an existing track, and stops flashing when it reaches the end of the recorded portion.

### To record from the middle of the track

- 1 After Step 2 above, press >|| (or MD >>) to start playback.
- 2 Press >|| (or MD ||) where you want to start recording.
- 3 Continue from Step 6 in "Recording on an MD" on page 7.

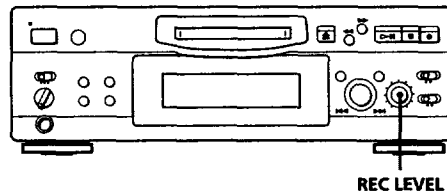
### Note

You cannot record from the middle of an existing track when the "PROGRAM" or "SHUFFLE" is on.

## Adjusting the Recording Level

When recording with INPUT at ANALOG and the signal input through LINE (ANALOG) IN jacks, use REC LEVEL to adjust the recording level before starting recording.

You cannot adjust the recording level during digital recording.



- 1 Do Steps 1 to 6 in "Recording on an MD" on pages 6 and 7.
- 2 Play the portion of the program source with the strongest signal level.
- 3 While monitoring the sound, turn REC LEVEL to adjust the recording level so that the peak level meters reach their highest point without turning on the OVER indication. Occasional lighting of "OVER" is acceptable.

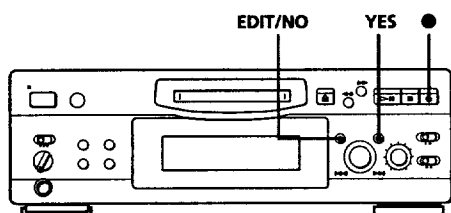


Without turning on the OVER indication

- 4 Stop playing the program source.
- 5 To start recording, do the procedure starting from Step 8 in "Recording on an MD" on page 7.

## Marking Track Numbers while Recording (Track Marking)

You can mark track numbers either manually or automatically. By marking track numbers at specific points, you can quickly locate the points later using the AMS Function or Editing Functions.



### Marking track numbers manually (Manual Track Marking)

You can mark track numbers at any time while recording on an MD.

Press ● at the place you want to add a track mark while recording.

### Marking track numbers automatically (Automatic Track Marking)

The deck adds track marks differently in the following cases:

- When recording from CDs or MDs with INPUT at DIGITAL and the source connected through DIGITAL IN:  
The deck marks track numbers automatically. When you record from a CD or MD, the track numbers are marked as they are found on the original.
- When recording with INPUT at ANALOG and the source connected through LINE (ANALOG) IN, or when recording from DAT or satellite broadcasts with INPUT at DIGITAL and the DAT or satellite broadcasts connected through DIGITAL IN:  
The deck marks a new track number whenever the signal level drops and rises to a certain point\* (Automatic Track Marking). If "LEVEL-SYNC" does not light up, set the LevelSync to ON as follows:

- 1 Press EDIT/NO to display "LevelSync ?" during recording or recording pause.
- 2 Press YES twice to display "LevelSync ON." "LEVEL-SYNC" appears in the display.

#### To cancel Automatic Track Marking

- 1 Press EDIT/NO during recording or recording pause. "LevelSync ?" appears in the display.
- 2 Press YES.
- 3 Press EDIT/NO. "LevelSyncOFF" appears in the display.

\* The signal level must remain low for 2 or more seconds before a new track number is marked.

#### 💡 When you want to mark track numbers after you've finished recording

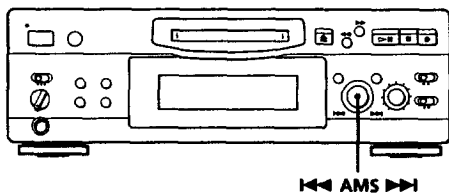
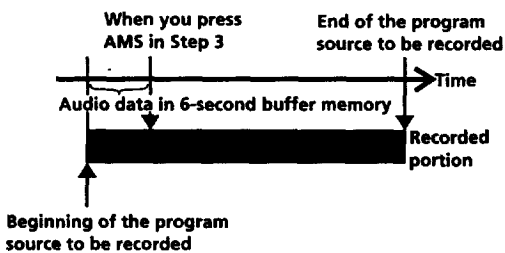
Use the Divide Function (see "Dividing Recorded Tracks" on page 25).

#### Note

If you turn off the deck or disconnect the AC power cord, the deck will recall the last setting (LevelSync on or off) of the Automatic Track Marking Function the next time you turn on the deck.

## 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 Function constantly stores 6 seconds of the most recent audio data in a buffer memory so that when you begin recording the program source, the recording actually begins with the 6 seconds of audio data stored in the buffer memory in advance, as shown in the illustration below:



- Press AMS to start Time Machine Recording. Recording of the program source starts with the 6 seconds of audio data stored in the buffer memory.

 **To stop Time Machine Recording**  
Press ■.

### Note

The deck starts storing audio data when the deck is in recording pause and you start playing the program source. With less than 6 seconds of playing of the program source and audio data stored in the buffer memory, Time Machine Recording starts with less than 6 seconds of audio data.

- Do Steps 1 to 6 in "Recording on an MD" on pages 6 and 7.  
The deck changes to recording pause.
- Start playing the program source you want to record.  
The most recent 6 seconds of audio data is stored in the buffer memory.

### Synchro-Recording a CD

You can easily dub CDs onto MDs using the CD synchro buttons on the remote. Track numbers are automatically marked as appear on the original regardless of whether "LevelSync ON" or "LevelSyncOFF" is selected.

You may have trouble operating both units if they are far from each other. If you do, place the Mini System close to this deck.

 **You can use the remote of the Mini System during synchro-recording**

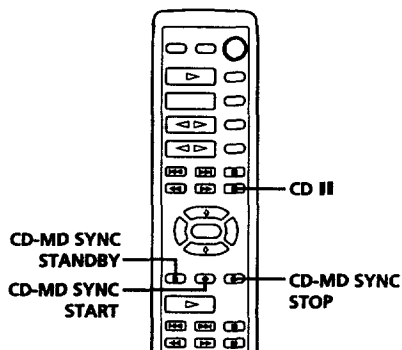
When you press CD ■, the CD stops and the deck pauses for recording.

When you press CD ■■, the CD pauses and the deck pauses for recording.

To restart synchro-recording, press CD ▷.

 **You can check the remaining recordable time on the MD**

Press DISPLAY (see page 17).



- 1 Set the function on the Mini System to CD.
- 2 Do Steps 2 to 5 in "Recording on an MD" on page 6 to prepare the deck for recording.
- 3 Insert a CD.
- 4 Select the playback mode (Shuffle Play, Program Play, etc.) on the Mini System.
- 5 Press CD-MD SYNC STANDBY.  
The CD pauses for playing and the deck pauses for recording.
- 6 Press CD-MD SYNC START.  
The deck starts recording and the CD starts playback.  
The track number and elapsed recording time of the track appear in the display.
- 7 Press CD-MD SYNC STOP to stop synchro-recording.

**To pause recording**

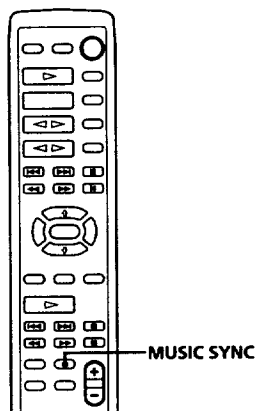
Press CD-MD SYNC STANDBY.

To restart recording, press CD-MD SYNC START.

A new track number is marked each time you pause recording.

## Synchro-Recording a Tape and Radio Program

By using the MUSIC SYNC button on the remote, you can automatically start recording in sync with the signal input from the program source through the LINE (ANALOG) IN jacks (Music Synchro-Recording). The method of marking track numbers differs, depending on the program source being recorded and how the deck is connected to the program source. (See "Notes on Recording" on page 9.)



- 1** Do Steps 1 to 5 in "Recording on an MD" on page 6.
- 2** Press MUSIC SYNC.  
The deck changes to recording pause.
- 3** Start playing the program source you want to record.  
The deck starts recording automatically.

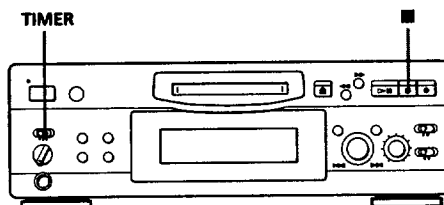
 **To stop Music Synchro-Recording**  
Press ■.

### Notes

- You can also use this procedure for synchro-recording digital audio from other equipment connected to the DIGITAL IN connector.
- When Music Synchro-Recording, the Smart Space Function and the Auto Cut Function turn on automatically regardless of their setting (on or off) and type of input (digital or analog).

## Recording on an MD Using a Timer

By connecting a timer (not supplied) to the deck, you can start and stop recording operations at specified times. For further information on connecting the timer and setting the starting and ending times, refer to the instructions that came with the timer.



- 1** Do Steps 1 to 7 in "Recording on an MD" on pages 6 and 7.
- 2**
  - If you want to specify the time for the start of recording, press ■.
  - If you want to specify the time for the end of recording, do Steps 8 and 9 of "Recording on an MD" on page 7.
  - If you want to specify the time for both start and end of recording, press ■.
- 3** Set TIMER on the deck to REC.
- 4** Set the timer as required.
  - When you have set the time for the start of recording, the deck turns off. When the specified time arrives, the deck turns on and starts recording.
  - When you have set the time for the end of recording, recording continues. When the specified time arrives, the deck stops recording and turns off.
  - When you have set the time for both the start and end of recording, the deck turns off. When the starting time arrives, the deck turns on and starts recording. When the ending time arrives, the deck stops recording and turns off.

(Continued)

## Recording on MDs

- 5** After you have finished using the timer, set **TIMER** on the deck to **OFF**. Then place the deck in standby status by plugging the AC power cord of the deck into a wall outlet or set the timer to continuous operation.
- If **TIMER** is left at **REC**, the deck will automatically start recording the next time you turn the deck on.
  - If you do not change the deck to standby status for more than a month after timer recording has finished, the recorded contents may disappear.

**Make sure to change the deck to standby status within a month after timer recording is completed**

The TOC on the MD is updated and recorded contents are written to the MD when you turn the deck on. If the recorded contents have disappeared, "STANDBY" flashes when you turn the deck on.

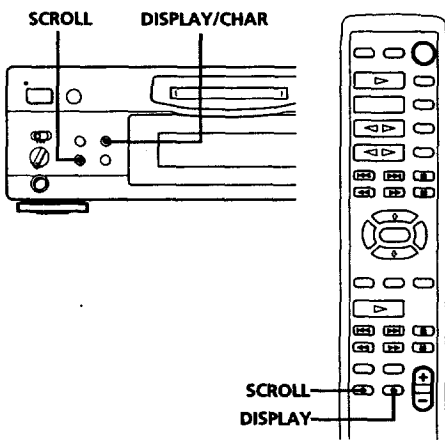
### Notes

- It may take about 30 seconds after the deck is turned on until recording starts. When recording at a specified time using the timer, be sure to take this time into account when setting the recording start time.
- During timer recording, new material is recorded from the end of the recorded portion on the MD.
- Material recorded during timer recording will be saved to the disc the next time you turn the deck on. "TOC" will flash in the display at that time. Do not move the deck or pull out the AC power cord while "TOC" is flashing.
- Timer recording will stop if the disc becomes full.

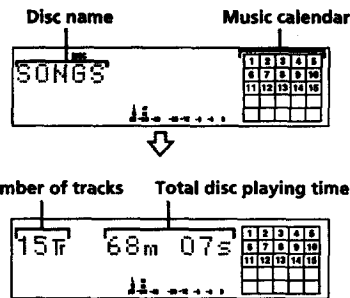


## Using the Display

You can use the display to check disc and track information such as the total track number, total playing time of the tracks, remaining recordable time of the disc and disc name.



When you insert an MD, the disc name, total number of tracks, and total disc playing time appear in the display as follows:



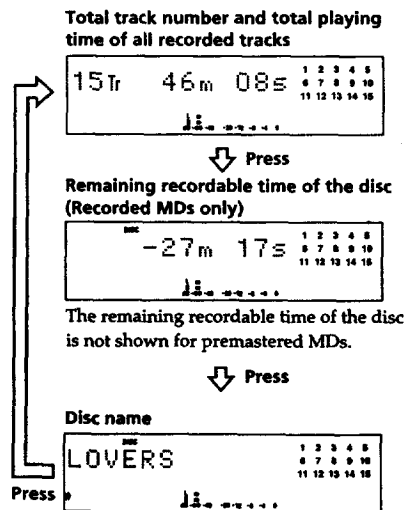
The disc name appears, followed by the total number of tracks (Tr) and total disc playing time. A music calendar showing all the track numbers appears within a grid if the MD is a premastered disc, or without a grid if the MD is a recordable disc. If the total track number exceeds 25, ► appears to the right of number 25 in the music calendar. To label a recordable disc and its tracks, see "Labeling Recordings" on page 28.

### Note

When you insert a new MD or turn off the deck and turn it on again, the last item displayed will reappear. If, however, you disconnect the AC power cord, the display will show the total track number and total playing time of all recorded tracks the next time you turn on the deck, no matter what the last display was.

## Checking the total track number, total disc playing time, remaining recordable time of the disc and the title of the disc

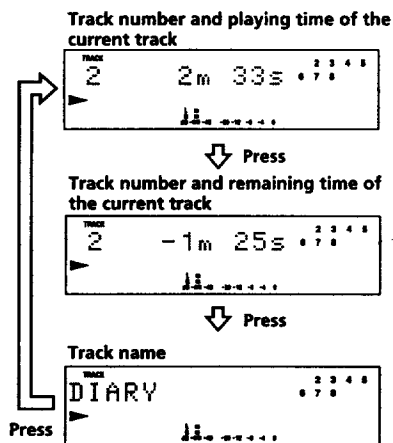
Each time you press DISPLAY/CHAR (or DISPLAY) while the deck is stopped, you can change the display as follows:



## Playing MDs

### Checking remaining time and the title of a track

Each time you press DISPLAY/CHAR (or DISPLAY) while playing an MD, you can change the display as shown below. The track numbers in the music calendar disappear after they are played.



If no title is recorded, "No Name" appears, followed by the elapsed playing time.

### 💡 You can check the track name at any time while playing an MD

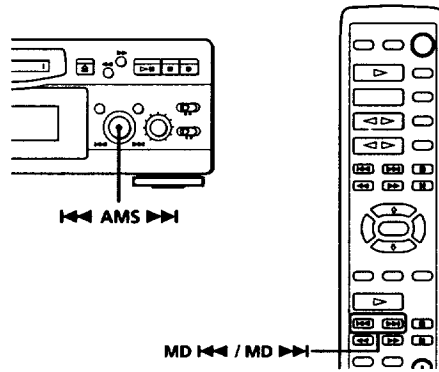
Press SCROLL.

Since the display shows up to 12 characters at a time, press SCROLL again to see the rest of the track title if the title has 13 characters or more.

Press SCROLL again to pause scrolling, and again to continue scrolling.

### Locating a Specific Track

You can quickly locate any track while playing a disc by using AMS (Automatic Music Sensor), MD ◀◀ and MD ▶▶.



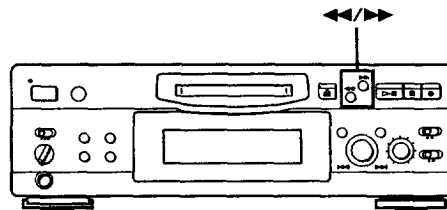
To locate	Do the following:
The next or succeeding tracks	During playback, turn AMS clockwise (or press MD ▶▶ repeatedly) until you find the track.
The current or preceding tracks	During playback, turn AMS counterclockwise (or press MD ◀◀ repeatedly) until you find the track.
A specific track by using AMS	<ol style="list-style-type: none"> <li>1 Turn AMS until the track number you want to locate appears while the deck is stopped. (The track number is flashing.)</li> <li>2 Press AMS or ▶▶.</li> </ol>

**To pause playing at the beginning of a track**  
 Turn AMS (or press MD **⏮** or MD **⏭**) after pausing playback.

**To go quickly to the beginning of the last track**  
 Turn AMS counterclockwise (or press MD **⏮**) while the display shows the total track number and total disc playing time, remaining recordable time of the disc, or disc name (see page 17).

## Locating a Particular Point in a Track

You can also use **⏮** and **⏭** to locate a particular point in a track during playback or playback pause.



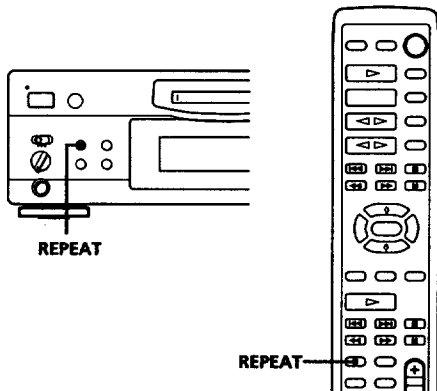
To locate a point	Press
While monitoring the sound	<b>⏭</b> (forward) or <b>⏮</b> (backward) and keep pressing until you find the point.
Quickly by observing the display during playback pause	<b>⏭</b> or <b>⏮</b> and keep pressing until you find the point. There is no sound output during this operation.

### Notes

- If the disc reaches the end while you are pressing **⏭** during playback pause, "OVER" appears in the display. Press **⏮** (or MD **⏮**) or turn AMS counterclockwise to go back.
- If the disc reaches the end while you are pressing **⏭** during sound monitoring, the deck stops.
- Tracks that are only a few seconds long may be too short to scan using the search function. For such tracks, it is better to play the MD at normal speed.

## Playing Tracks Repeatedly

You can play tracks repeatedly in any play mode.



Press REPEAT.

"REPEAT" appears in the display.

The deck repeats the tracks as follows:

When the MD is played in	The deck repeats
Normal play (page 8)	All the tracks
Shuffle Play (page 20)	All the tracks in random order
Program Play (page 21)	The same program

### To cancel repeat play

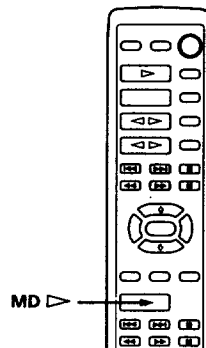
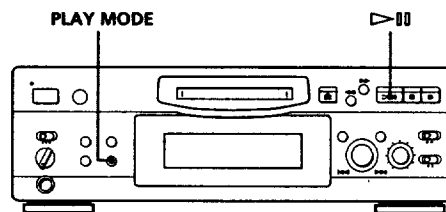
Press REPEAT several times until "REPEAT" disappears. The deck returns to the original playing mode.

### Repeating the current track

While the track you want to repeat is playing in normal play, press REPEAT several times until "REPEAT 1" appears in the display.

## Playing in Random Order (Shuffle Play)

You can have the deck "shuffle" tracks and play them in random order.



**1** Press PLAY MODE repeatedly until "SHUFFLE" appears in the display when the deck is stopped.

**2** Press  $\triangleright \parallel$  (or MD  $\triangleright$ ) to start Shuffle Play. "EJ" appears in the display while the deck is "shuffling" the tracks.

### To cancel Shuffle Play

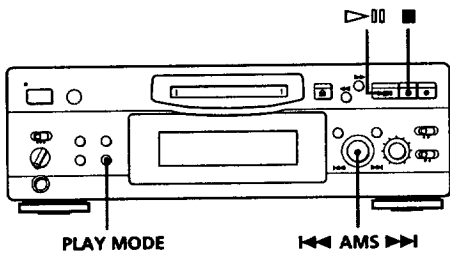
Press PLAY MODE repeatedly until "SHUFFLE" disappears when the deck is stopped.

### You can specify tracks during Shuffle Play

- To play the next track, turn AMS clockwise (or press MD  $\triangleright$ ).
- To play from the beginning of the current track again, turn AMS counterclockwise (or press MD  $\triangleleft$ ). You cannot use AMS (or MD  $\triangleleft$ ) to go to tracks that have already been played.

## Creating Your Own Program (Program Play)

You can specify the playback order of the tracks on an MD and create your own programs containing up to 25 tracks.



- 1 Press PLAY MODE repeatedly until "PROGRAM" appears in the display when the deck is stopped.
- 2 Turn AMS until the track number you want appears in the display.
- 3 Press AMS or PLAY MODE.
- 4 Repeat Step 2-3 to enter other tracks. Each time you enter a track, the total program time is added up and appears in the display.
- 5 Press ▷|| to start Program Play.

### To cancel Program Play

Press PLAY MODE repeatedly until "PROGRAM" disappears when the deck is stopped.

**💡 You can program the same track repeatedly**  
While the track number appears in the display, press AMS as many times as you want.

**💡 The program remains even after Program Play ends**  
When you press ▷||, you can play the same program again.

### Notes

- The program created by the Program Play Function is lost when you turn off the deck or disconnect the AC power cord. The program is, however, recalled during timer playback.
- The display shows "- m - s" instead of the total playing time when the total playing time of the program exceeds 160 minutes.

### Checking the track order

You can check the order of tracks in your program during playback or playback pause.

Turn AMS (or press MD ◀◀ or MD ▶▶) during playback or playback pause. The track numbers appear in the order they were programmed.

### Changing the track order

You can change the order of the tracks in your program before you start playing.

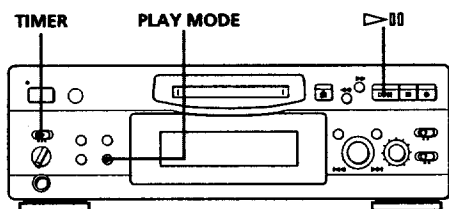
To	Do the following:
Add tracks to the end of the program	Do Steps 2 and 3 in "Creating Your Own Program."
Change the whole program completely	<ol style="list-style-type: none"> <li>1 Press ■ while the deck is stopped.</li> <li>2 Do Steps 2 and 3 in "Creating Your Own Program."</li> </ol>

### Playing an MD Using a Timer

By connecting a timer (not supplied) to the deck, you can start and stop playback operations at specified times. For further information on connecting the timer or setting the starting and ending times, refer to the instructions that came with the timer.

#### Note

You can select Program Play in Step 2. Note, however, that programs eventually fade away when the standby status is off, and therefore if you set the time too far in the future, the program may be gone when the specified time arrives. If this has occurred, the deck enters normal play mode at the specified time and the tracks play in consecutive order.



- 1 Do Steps 1 to 3 in "Playing an MD" on page 8.
- 2 Press PLAY MODE repeatedly to select the play mode you want.  
To play only specific tracks, create a program (see page 21).
- 3
  - If you want to specify the time for the start of playback, go to Step 4.
  - If you want to specify the time for the end of playback, press ▷|| to start playback, then go to Step 4.
  - If you want to specify the time for both start and end of playback, go to Step 4.
- 4 Set TIMER on the deck to PLAY.
- 5 Set the timer as required.
  - When you have set the time for the start of playback, the deck turns off. When the specified time arrives, the deck turns on and starts playing.
  - When you have set the time for the end of playback, playback continues. When the specified time arrives, the deck stops playing and turns off.
  - When you have set the time for both the start and end of playback, the deck turns off. When the starting time arrives, the deck turns on and starts playing. When the ending time arrives, the deck stops playing and turns off.
- 6 After you have finished using the timer, set TIMER on the deck to OFF.

### Notes on Editing

You can edit the recorded tracks after recording, using the following functions:

- Erase Function allows you to erase recorded tracks simply by specifying the corresponding track number.
- Divide Function allows you to divide tracks at specified points so that you can quickly locate those points afterwards, using the AMS function.
- Combine Function allows you to combine two consecutive tracks into one.
- Move Function allows you to change the order of tracks by moving a specific track to a track position you want.
- Title Function allows you to create titles for your recorded MDs and tracks.

#### If "Protected" appears in the display

The deck could not edit because the record-protect slot on the MD is open. Edit after closing the slot.

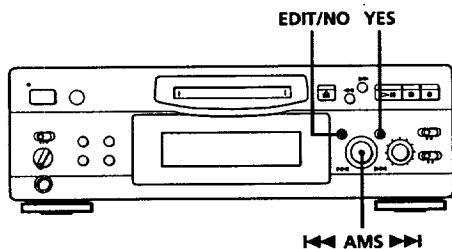
#### When "TOC" flashes in the display

Do not move the deck or pull out the AC power cord. After editing, "TOC" lights continuously until you eject the MD or turn off the power. "TOC" flashes while the deck is updating the TOC. When the deck finishes updating the TOC, "TOC" goes off.

### Erasing Recordings (Erase Function)

Do the procedures below to erase following:

- A single track
- All tracks
- Portions of a track (A-B Erase)



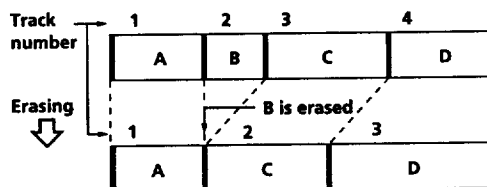
### Erasing a single track

You can erase a track simply by specifying the respective 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. Since erasing merely updates the TOC, there is no need to record over material.



To avoid confusion when erasing multiple tracks, you should proceed in order of high to low track number to prevent the renumbering of tracks that have not been erased yet.

#### Example: Erasing B



- 1 Turn AMS until the track number you want to erase appears in the display.
- 2 Press EDIT/NO repeatedly until "Erase ?" appears in the display. The track number you selected starts flashing in the music calendar.
- 3 Press YES. When the track selected in Step 1 has been erased, "Complete" appears for a few seconds and the total number of tracks in the music calendar decreases by one. If you erase a track during playback, the track following the deleted track begins playing afterwards.
- 4 Repeat Steps 1 to 3 to erase more tracks.

#### To cancel the Erase Function

Press EDIT/NO, ■, or turn AMS to change the track number.

#### Note

If "Erase!! ?" appears in the display, the track was recorded or edited on another MD deck and is record-protected. If this indication appears, press YES to erase the track.

### Erasing all tracks on an MD

Erasing a recordable MD deletes the disc name, all recorded tracks, and titles.

- 1 While the deck is stopped, press EDIT/NO repeatedly until "All Erase ?" appears in the display.
- 2 Press YES.  
All tracks in the music calendar start flashing.
- 3 Press YES again.  
When the disc name, all recorded tracks, and titles on the MD have been erased, "Complete" appears for a few seconds and the music calendar disappears.

To cancel the Erase Function  
Press EDIT/NO or ■.

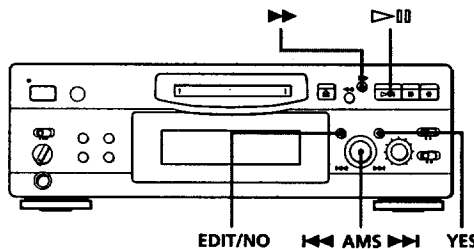
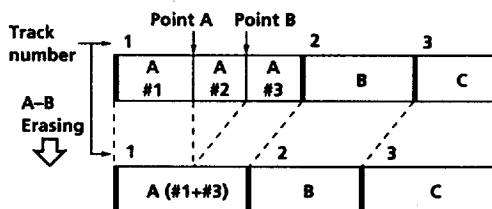


You can undo a track erasion  
See "Undoing the Last Edit" on page 30.

### Erasing a Portion of a Track (A-B Erase Function)

You can easily erase a portion of a track by specifying the starting and ending points of the portion. This function is useful for erasing unnecessary portions on an MD that you recorded from satellite or FM broadcasts.

Example: Erasing a portion of track A



- 1 While playing a disc, press ▷|| (or MD ||) at the starting point (point A) of the portion to be erased.
- 2 Press EDIT/NO repeatedly until "A-B Erase ?" appears in the display.
- 3 Press YES.  
"Rehearsal" alternates with "Point A ok?" in the display and the starting point A of the portion to be erased plays back repeatedly.
- 4 If point A is incorrect, press EDIT/NO. (If it is correct, go to Step 7.)
- 5 While monitoring the sound, turn AMS to find point A.  
"Rehearsal" alternates with "Point A ok?" in the display and point A is played back repeatedly. Point A can be moved within a maximum range of -128 to +127 steps of about 0.06 second each within a track.
- 6 If point A is still incorrect, repeat Step 5 until it is correct.



- 7 Press YES or AMS when point A is correct. After "Point B Set" appears for a few seconds, "▶" and "A-B" start flashing, and playback begins so that you can set point B.
- 8 Continue playing the track or press ▶▶ until you reach the ending point (point B) of the portion to be erased, then press YES. "Rehearsal" alternates with "Point B ok?" in the display, and the "spliced" portion of the track (after the portion from point A to B has been erased) plays back repeatedly, starting a few seconds before point A and ending a few seconds after point B.
- 9 If point B is incorrect, press EDIT/NO. (If it is correct go to Step 12.)
- 10 While monitoring the sound, turn AMS to find point B. "Rehearsal" alternates with "Point B ok?" in the display, and the "spliced" portion of the track (after the portion from point A to B has been erased) plays back repeatedly. Point B can be moved within a maximum range of -128 to +127 steps of about 0.06 second each within a track.
- 11 If point B is still incorrect, repeat Step 10 until it is correct.
- 12 Press YES or AMS when point B is correct. When the portion from point A to B has been erased, "Complete" appears for a few seconds.

**To cancel the A-B Erase Function**  
Press ■.

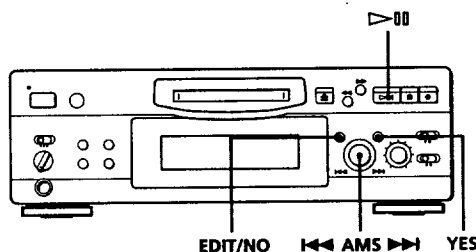
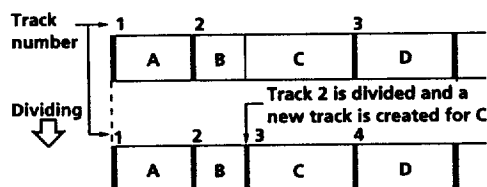
**Notes**

- If "Impossible" appears in the display, point B was specified before point A. Specify point B so that it comes after point A.
- If "Sorry" appears in the display, a portion of the track cannot be erased. This sometimes happens when you've edited the same track many times, and is due to a technical limitation of the MD system, not a mechanical error.

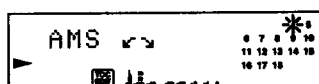
## Dividing Recorded Tracks (Divide Function)

With the Divide Function you can assign a track number at places that you want to randomly access afterwards. Use this function to add tracks to MDs recorded from an analog source (and therefore contain no track numbers), or to divide an existing track into multiple portions. When you divide a track, the total number of tracks on the MD increases by one and all tracks following the divided track are renumbered.

**Example: Dividing track 2 to create a new track for C**



- 1 While playing the MD, press ▶|| (or MD ||) at the point where you want to create a new track. The deck pauses playing.
- 2 Press EDIT/NO repeatedly until "Divide ?" appears in the display.
- 3 Press YES to divide the track. "Rehearsal" alternates with "Position ok?" in the display, the track to be divided starts flashing in the music calendar, and the starting portion of the new track begins playing repeatedly.
- 4 If the starting position is incorrect, press EDIT/NO. (If it is correct, go to Step 7.)



(Continued)

## Editing Recorded MDs

- 5 While monitoring the sound, turn AMS to find the starting position of the new track.  
The starting portion of the new track is played back repeatedly.  
"Rehearsal" alternates with "Position ok?" in the display.  
The starting position can be moved within a maximum range of -128 to +127 steps of about 0.06 second each within a track.
- 6 If the starting position is still incorrect, repeat Step 5 until it is correct.
- 7 Press YES or AMS when the position is correct.  
When 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.

**To cancel the Divide Function**  
Press ■.

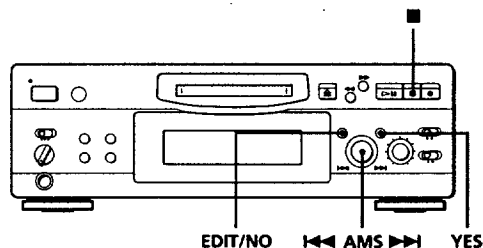
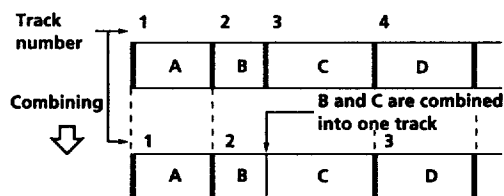
**You can undo a track division**  
Combine the tracks again (see "Combining Recorded Tracks" on this page) then redivide the tracks if necessary.

**You can divide a track while recording**  
Use the Track Marking Function (see page 12).

## Combining Recorded Tracks (Combine Function)

Use the Combine Function while the deck is stopped, playing or in pause to combine consecutive tracks on a recorded MD. This function is useful for combining several songs into a single medley, 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.

**Example: Combining B and C**



- 1 Turn AMS until the second track of the two to be combined appears.  
For example, when combining tracks 3 and 4, turn AMS until 4 appears.
- 2 Press EDIT/NO repeatedly until "Combine?" appears in the display.
- 3 Press YES.  
"Rehearsal" alternates with "Track ok?" in the display. The place where the two tracks will join (i.e., the end of the first track and the beginning of the second track) repeatedly plays back and the respective track number flashes in the music calendar.
- 4 If the track is the wrong one, press EDIT/NO or ■, then start from Step 1 again.

- 5 If the place is correct, press YES.  
When 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.

**To cancel the Combine Function**

Press EDIT/NO or ■.

**You can undo a track combination**

Divide the tracks again (see "Dividing Recorded Tracks" on page 25), then repeat the combine function with the correct tracks if necessary.

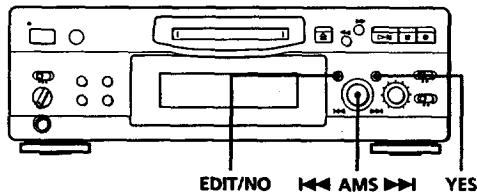
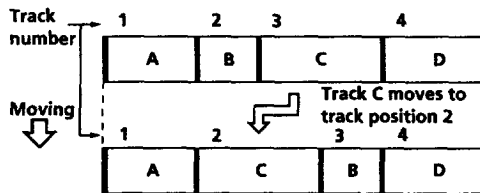
**Note**

If "Sorry" appears in the display, the tracks cannot be combined. This sometimes happens when you've edited the same track many times, and is due to a technical limitation of the MD system, not a mechanical error.

**Moving Recorded Tracks (Move Function)**

Use the Move Function to change the order of any track. After you move a track, the track numbers between the new and old track positions are automatically renumbered.

Example: Moving track C to track position 2



- 1 Turn AMS until the track number you want to move appears in the display.
- 2 Press EDIT/NO repeatedly until "Move ?" appears in the display.
- 3 Press YES.  
The track number to be moved and the new track position appears.



Track number to be moved      New track position

- 4 Turn AMS until the new track position appears.



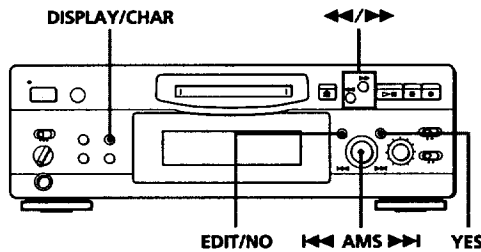
- 5 Press YES or AMS.  
After you have moved the track, "Complete" appears for a few seconds and the moved track begins playing back if the deck is in playback mode.

**To cancel the Move Function**

Press EDIT/NO or ■.

## Labeling Recordings (Title Function)

You can create titles for your recorded MDs and tracks. Titles — which may consist of uppercase and lowercase letters, numbers and symbols for a maximum of about 1,700 characters per disc — appear in the display during MD operation.



Use the following procedure to label a track or an MD. You can label a track while it is playing, pausing or recording. If the track is playing or recording, be sure to finish labeling before the track ends. If the track ends before you've completed the labeling procedure, the characters already entered are not recorded and the track will remain unlabeled.

- 1 Press EDIT/NO repeatedly until "Name in ?" appears in the display, then do the following:

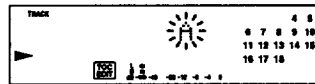
To label	Make sure that the deck is
A track	Playing, pausing, recording the track to be labeled, or stopped after locating the track to be labeled
An MD	Stopped with no track number appearing in the display

- 2 Press YES.  
A flashing cursor appears in the display.



- 3 Press DISPLAY/CHAR to select the character type as follows:

To select	Press DISPLAY/CHAR repeatedly until
Uppercase letters	"A" appears in the display
Lowercase letters	"a" appears in the display
Numbers	"0" appears in the display



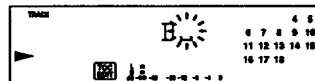
- 4 Turn AMS to select the character.



The selected character flashes. Letters, numbers, and symbols appear in sequential order as you turn AMS. You can use the following symbols in titles:  
! " # \$ % & ' ( ) + , - . / : ; < = > ? @ \_ `

You can press DISPLAY/CHAR to change the character type at any time during Step 4 (see Step 3).

- 5 Press AMS to enter the selected character. The cursor shifts rightward and waits for the input of the next character.



- 6 Repeat Steps 3 to 5 until you have entered the entire title.

**If you entered the wrong character**  
Press ◀ or ▶ until the character to be corrected starts flashing, and repeat Steps 3 to 5 to enter the correct character.

**To erase a character**  
Press ◀ or ▶ until the character to be erased starts flashing, then press EDIT/NO.

**To enter a space**  
Press AMS or ▶ while the cursor is flashing.

- 7** Press YES.  
This completes the labeling procedure and the title appears on the left side of the display.

**To cancel labeling**  
Press ■.

**Note**  
You cannot label a track or an MD while you are recording over an existing track.

### Changing an existing title

- 1** Press EDIT/NO repeatedly until "Name in?" appears in the display, then press YES and do the following:

To change	Make sure that the deck is
A track title	Playing, pausing the track whose title is to be changed, or stopped after locating the track whose title is to be changed
A disc name	Stopped with no track number appearing in the display


- 2** Keep pressing EDIT/NO until the current title is erased.
- 3** Enter the new title.  
Do Steps 3 to 6 of "Labeling Recordings" on page 28.
- 4** Press YES.


### Erasing all titles on a disc (Name Erase Function)

Use this function to erase all titles on an MD simultaneously.

- 1** Press EDIT/NO repeatedly while the deck is stopped until "All Erase ?" appears in the display.
- 2** Press EDIT/NO again.  
"Name Erase ?" appears in the display.
- 3** Press YES.  
All titles are erased.

**To cancel the Name Erase Function**  
Press ■.

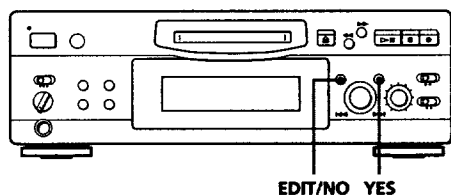
 **You can undo a name erasion**  
See "Undoing the Last Edit" on page 30.

 **You can erase all recorded tracks and titles**  
See "Erasing all tracks on an MD" on page 24.

## Undoing the Last Edit (Undo Function)

You can use the Undo Function to cancel the last edit and restore the contents of the MD to the condition that existed before editing was done. Note, however, that you cannot undo an edit if you do any of the following after the edit:

- Press the ● button on the front panel.
- Press the ● button, the MUSIC SYNC button, or the CD-MD SYNC STANDBY button on the remote.
- Update the TOC by turning off the power or ejecting the MD.
- Disconnect the AC power cord.



- 1 With the deck stopped and no track number appearing in the display, press EDIT/NO repeatedly until "Undo ?" appears in the display. "Undo ?" does not appear if no editing has been done.
- 2 Press YES. One of the following messages appears in the display, depending on the type of editing to be undone:

Editing done:	Message:
Erasing a single track	
Erasing all tracks on an MD	"Erase Undo ?"
Erasing a portion of a track	
Dividing a track	"Divide Undo ?"
Combining tracks	"Combine Undo ?"
Moving a track	"Move Undo ?"
Labeling a track or an MD	
Changing an existing title	"Name Undo ?"
Erasing all titles on an MD	

- 3 Press YES again. "Complete" appears for a few seconds and the contents of the MD are restored to the condition that existed before the edit.

**To cancel the Undo Function**  
Press EDIT/NO or ■.

## Additional Information

### Display Messages

The following table explains the various messages that appear in the display.

Message	Meaning
Blank Disc	A new (blank) or erased MD has been inserted.
Cannot Copy	An attempt was made to make a second copy from a digitally dubbed MD (see page 34).
Cannot EDIT	An attempt was made to edit the MD during Program or Shuffle Play.
Disc Error	The MD is scratched or missing a TOC. Erase all tracks on a new recordable MD before use (see "Erasing all tracks on an MD" on page 24).
Disc Full	The MD is full (see "System Limitations" on this page).
Impossible	An attempt was made to combine tracks while playing back the first track. An attempt was made to specify point B before point A for the "A-B Erase". Point B can only be specified so that it comes after point A.
Name Full	The titling capacity of the MD has reached its limit (about 1,700 characters).
NO DISC	There is no MD in the deck.
No Track	The inserted MD has a disc title but no tracks.
Protected	The inserted MD is record-protected.
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 to the deck or scratches on the MD, several recording attempts were made but with no success.
Sorry	An attempt was made to combine tracks that cannot be combined. An attempt was made to erase a portion of a track that cannot be erased.
STANDBY (flashing)	The contents recorded by timer have disappeared over time and are not be available for saving to disc, or Program Play could not be activated since the program has disappeared over time.

### System Limitations

The recording system in your MiniDisc deck is radically different from those used in cassette and DAT decks and is characterized by the 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, incrementing 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 in length are not counted and so erasing them may not lead to an increase in the recording time.

#### **Some tracks cannot be combined with others**

Track combination may become impossible when tracks are edited.

#### **The total recorded time and the remaining time on the MD may not total 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.

#### **Tracks created through editing may exhibit sound dropout during search operations.**

#### **Track numbers are not recorded correctly**

Incorrect assignment or recording of track numbers may result (1) when CD tracks are divided into several smaller tracks during digital recording, or (2) while recording certain CDs with the "LEVEL-SYNC" indication on (i.e., the automatic track marking function on).

(Continued)

## Additional Information

### "TOC Reading" appears for a long time

If the inserted recordable MD is brand new, "TOC Reading" appears in the display longer than for MDs that have been used.

### Limitations when recording over an existing track

- The correct remaining recording time may not be displayed.
- You may find it impossible to record over a track if that track has been recorded over several times already. If this happens, erase the track using the Erase Function (see page 23).
- The remaining recording time may be shortened out of proportion to the total recorded time.
- Recording over a track to eliminate noise is not recommended since this may shorten the duration of the track.
- You may find it impossible to label a track while recording over it.

The correct recorded/playing time may not be displayed during playback of monaural-format MDs.

## Troubleshooting

If you experience any of the following difficulties while using the deck, use this troubleshooting guide to help you remedy the problem. Should any problem persist, consult your nearest Sony dealer:

### The deck does not operate or operates poorly.

- ➔The MD may be damaged ("Disc Error" appears). Take the MD out and insert it again. If "Disc Error" remains, replace the MD.

### The deck does not play back.

- ➔Moisture has formed inside the deck. Take the MD out and leave the deck in a warm place for several hours until the moisture evaporates.
- ➔The deck is not on. Press **I/O** to turn the deck on.
- ➔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 deck grips it.
- ➔The MD may not be recorded (the music calendar does not appear). Replace the disc with one that has been recorded.

### The deck does not record.

- ➔The MD is record-protected ("Protected" appears). Close the record-protect slot (see page 7).
- ➔The deck is not connected properly to the program source. Make connections properly to the program source.
- ➔The recording level is not adjusted properly (in case of input through LINE (ANALOG) IN). Turn REC LEVEL to adjust the recording level properly (see page 11).
- ➔A premastered MD is inserted. Replace it with a recordable MD.
- ➔There is not enough time left on the MD. Replace it with another recordable MD with fewer recorded tracks, or erase unnecessary tracks.
- ➔There has been a power failure or the AC power cord has been disconnected during recording. Data recorded to that point may be lost. Repeat the recording procedure.

### The sound has a lot of static.

- ➔Strong magnetism from a television or a similar device is interfering with operations. Move the deck away from the source of strong magnetism.

### Note

If the deck does not operate properly even after you've attempted the prescribed remedies, turn off the power, then reinsert the plug into the power outlet.



## Specifications

System	MiniDisc digital audio system
Disc	MiniDisc
Laser	Semiconductor laser ( $\lambda = 780 \text{ nm}$ ) Emission duration: continuous
Laser output	Less than $44.6 \mu\text{W}^*$ * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Laser diode properties	Material: GaAlAs
Revolutions (CLV)	400 r/m to 900 r/m
Error correction	Advanced Cross Interleave Reed Solomon Code (ACIRC)
Sampling frequency	44.1 kHz
Coding	Adaptive Transform Acoustic Coding (ATRAC)
Modulation system	EFM (Eight-to-Fourteen Modulation)
Number of channels	2 stereo channels
Frequency response	5 to 20,000 Hz $\pm 0.3 \text{ dB}$
Signal-to-noise ratio	Over 96 dB during playback
Wow and flutter	Below measurable limit

### Inputs

	Jack type	Input impedance	Rated input	Minimum input
LINE (ANALOG) IN	Phono jacks	47 kilohms	500 mVrms	125 mVrms
DIGITAL IN	Square optical connector jack	Optical wave length: 660 nm	—	—

### Outputs

	Jack type	Rated output	Load impedance
PHONES	Stereo minijack	10 mW	32 ohms
LINE (ANALOG) OUT	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms
DIGITAL OUT	Square optical connector jack	-18 dBm	Optical wave length: 660 nm

## General

### Power requirements

Where purchased	Power requirements
Continental Europe	220 – 230 V AC, 50/60 Hz
UK	220 – 230 V AC, 50/60 Hz
US and Canada	120 V AC, 60 Hz

### Power consumption

Where purchased	Power consumption
Continental Europe	20 W
UK	20 W
US and Canada	19 W

### Dimensions (approx.) (w/h/d) incl. projecting parts

280 x 90 x 285 mm  
(11 <sup>1</sup>/<sub>8</sub> x 3 <sup>5</sup>/<sub>8</sub> x 11 <sup>1</sup>/<sub>4</sub> in.)

Mass (approx.) 2.8kg (6 lbs 2 oz)

### Supplied accessories

Audio connecting cords (2)  
Optical cable (1)

### Optional accessories

Optical cable: POC-15A  
Recordable MDs: MDW-60 (60 min), MDW-74 (74 min)

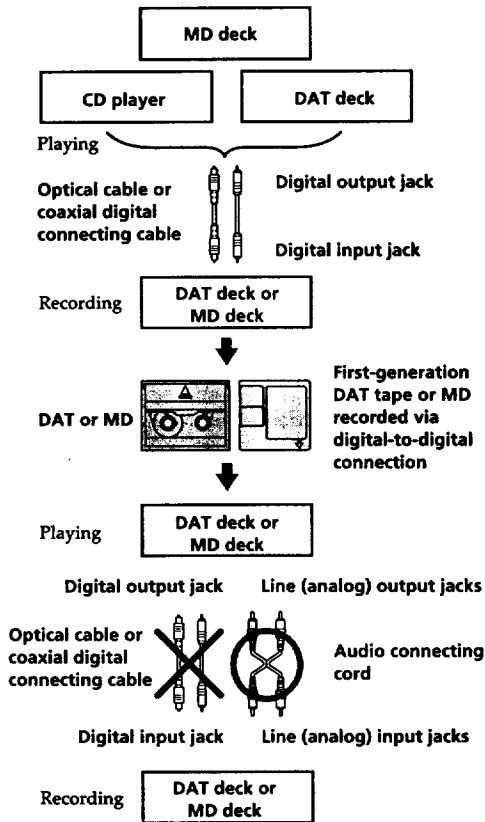
US and foreign patents licensed from Dolby Laboratories Licensing Corporation.

Design and specifications are subject to change without notice.

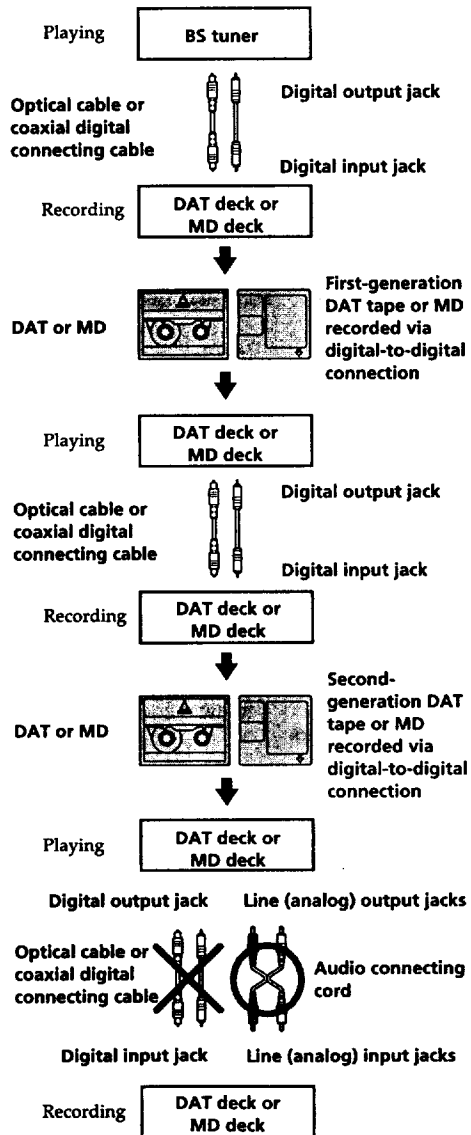
## Guide to the Serial Copy Management System

This MD deck uses the Serial Copy Management System, which allows only first-generation digital copies to be made of premastered software via the deck's digital input jack. An outline of this system appears below:

- 1 You can record from digital program sources (CDs, DATs or premastered MDs) onto a DAT tape or recordable MD via digital input jack on the DAT or MD deck. You cannot, however, record from this recorded DAT tape or MD onto another DAT tape or recordable MD via the digital input jack on the DAT or MD deck.

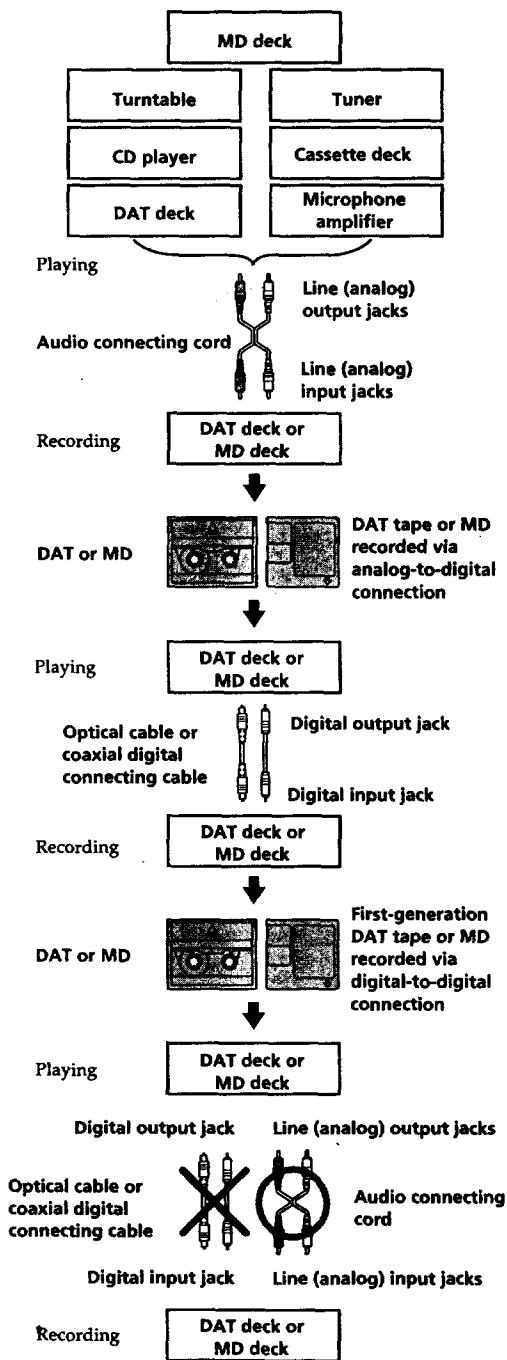


- 2 You can record the digital input signal of a digital satellite broadcast onto a DAT tape or recordable MD via the digital input jack on the DAT or MD deck which is capable of handling a sampling frequency of 32 kHz or 48 kHz. You can then record the contents of this recorded DAT tape or MD (first-generation) onto another DAT tape or recordable MD via digital input jack on the DAT or MD deck to create a second-generation digital copy. Subsequent recording from the second-generation copy onto another recordable DAT tape or MD is possible only through the analog input jack on the DAT or MD deck. Note, however, that on some BS tuners, second-generation digital copying may not be possible.



## Additional Information

- 3 You can record a DAT tape or MD recorded via the DAT or MD deck's analog input jack onto another DAT tape or MD via the DAT or MD deck's digital output jack. You cannot, however, make a second-generation DAT tape or MD copy via the DAT or MD deck's digital output jack.



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