SONY.

MiniDisc Deck

Operating Instructions _____ **EN**

Mode d'emploi _____ **F**

MDS-JE520
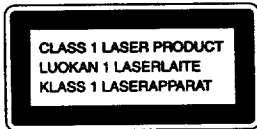
WARNING

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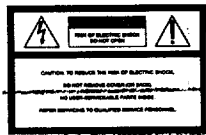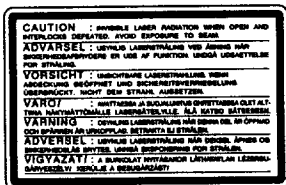
This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

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

CAUTION

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

Owner's Record

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

Model No. MDS-JE520
Serial No. _____

INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

CAUTION

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

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
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.
• The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
• 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.
• AC power cord must be changed only at the qualified service shop.

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.

TABLE OF CONTENTS

EN

Unpacking

Check that you received the following items:
• Audio connecting cords (2)
• Optical cable (1)
• Remote commander (remote) RM-D15M (1)
• Sony R6 (size-AA) batteries (2)

Inserting batteries into the remote

You can control the deck using the supplied remote.
Insert two R6 (size-AA) batteries by matching the +
and – on the batteries. When using the remote, point it
at the remote sensor ■ on the deck.
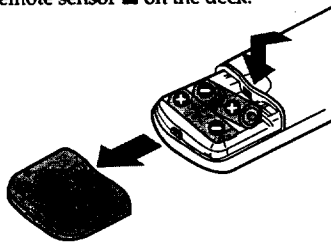
💡 **When to replace batteries**
With normal use, the batteries should last for about six
months. When the remote no longer operates the deck,
replace all the batteries with new ones.

Notes
• Do not leave the remote near an extremely hot or humid
place.
• Do not drop any foreign object into the remote casing,
particularly when replacing the batteries.
• Do not expose the remote sensor to direct sunlight or
lighting apparatuses. Doing so may cause a malfunction.
• If you don't use the remote for an extended period of time,
remove the batteries to avoid possible damage from
battery leakage and corrosion.

Hooking Up the System

Overview

This section describes how to hook up the MD deck to
an amplifier or other components such as a CD player
or DAT deck. Be sure to turn off the power of each
component before connection.

to a wall outlet
(or to a timer during timer
recording or playback)

REC OUT | TAPE IN

You can connect two digital components at a time.

Amplifier

DIGITAL OUT

CD player

DIGITAL OUT | DIGITAL IN

CD player, DAT deck, or MD deck, etc.

➡: Signal flow
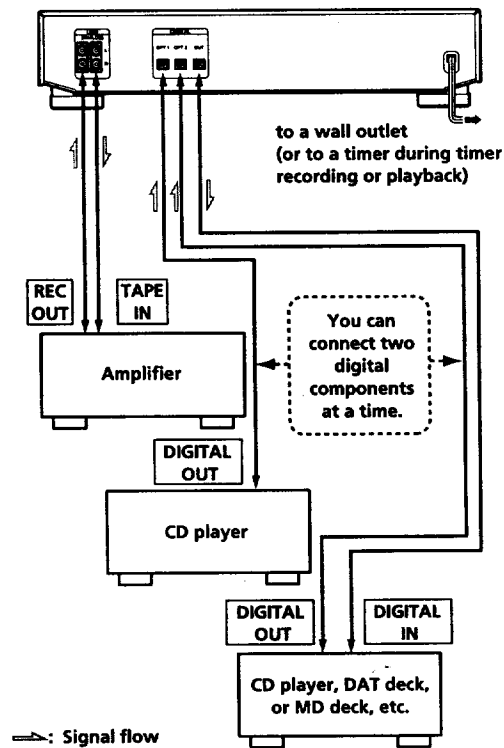
What cords will I need?
• Audio connecting cords (supplied) (2)

White (L)   White (L)

Red (R)   Red (R)
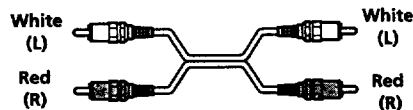
• Optical cables (only one supplied) (3)

Hookups

Connecting the deck to an amplifier

Connect the amplifier to the LINE (ANALOG) IN/ OUT jacks using the audio connecting cords (supplied), making sure to match the color-coded cords to the appropriate jacks on the components: red (right) to red and white (left) to white. Be sure to make connections firmly to prevent hum and noise.

MD deck   **Amplifier**

⇒: **Signal flow**

Connecting the deck to a digital component such as a CD player, DAT deck, digital amplifier, or another MD deck

Connect the component through the DIGITAL OPT 1/ OPT 2 or DIGITAL OUT connectors with two or three optical cables (only one supplied).
Take the caps off the connectors and then insert the plugs parallelly until they click into place.
Be sure not to bend or tie together the optical cables.
If the optical cables are not connected properly, "Din Unlock" and "C71" may alternate in the display.
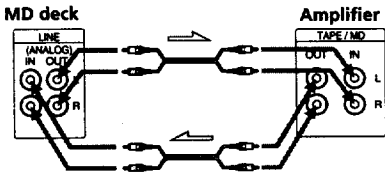
MD deck   **Digital component**
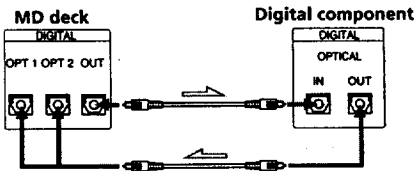
**To the DIGITAL OPT 1
or OPT 2 connector**

⇒: **Signal flow**

💡 **Automatic conversion of digital sampling rates during recording**
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
If "Din Unlock" alternates with "C71", 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 the INPUT switch set at ANALOG.

Connecting the AC power cord

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

Recording on an MD
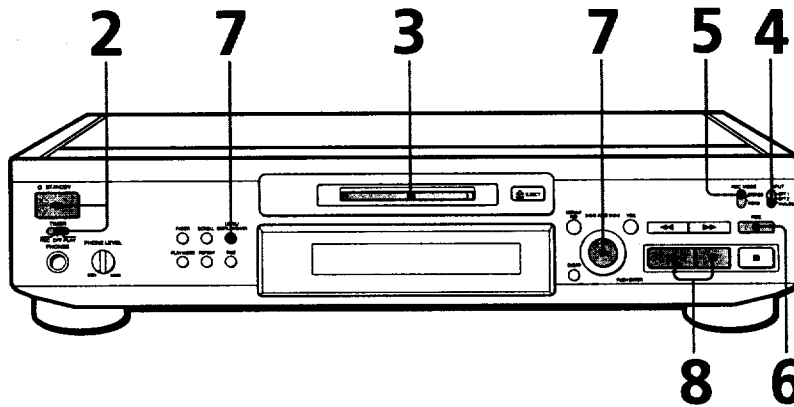
1 Turn on the amplifier and play the program source you want to record.

2 Press I/☉.
The STANDBY indicator turns off.

3 Insert a recordable MD.
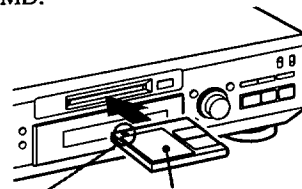
With the label side up

With the arrow pointing this way

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 OPT 1	OPT 1
DIGITAL OPT 2	OPT 2
LINE (ANALOG) IN	ANALOG

Monitor audio during recording

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

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.

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

7 Press LEVEL/DISPLAY/CHAR to change the display, then turn AMS to adjust the recording level.
For details, see pages 12 and 13. If you want to know the recording time or remaining time , press LEVEL/DISPLAY/CHAR again.

8 Press ▷ or **II**.
Recording starts.

9 Start playing the program source.

When "TOC Writing" 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 the I/⏻ switch.

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 ≙ EJECT to take out the MD or change the deck to standby by pressing I/⏻. "TOC Writing" will flash in the display at this time.
After "TOC Writing" stops flashing and goes out, you can pull out the AC power cord.

To	Press
Stop recording	■
Pause recording*	**II**. Press the button again or press ▷ to resume recording.
Take out the MD	≙ EJECT after stopping

* 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.

Record-protect tab

Rear of the disc

Slide the tab in the direction of arrow
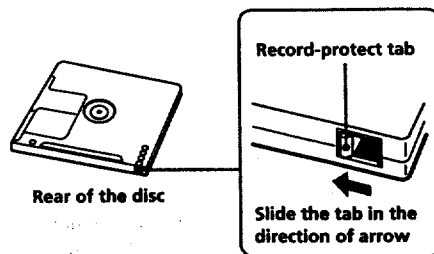
Playing an MD
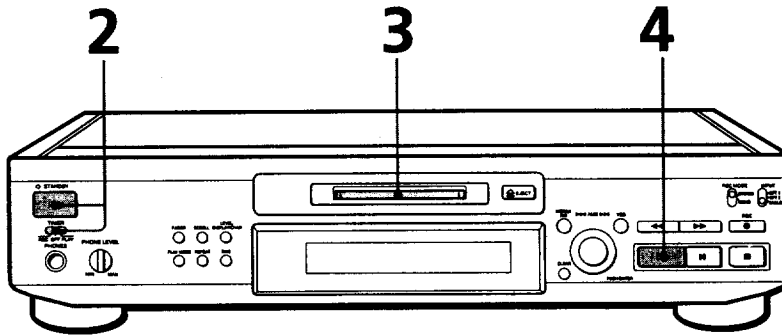
💡 **You can locate and play back a track while the deck is stopped**
1 Turn AMS (or press |◀◀ or ▶▶|) until the number of the track you want to play appears.
2 Press AMS or ▷.

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

💡 **You can adjust the analog signal level output to the LINE (ANALOG) OUT jacks**
1 While the deck is playing, press LEVEL/DISPLAY/ CHAR repeatedly until the line output adjustment display appears.
2 Turn AMS (or press LEVEL +/– on the remote) to adjust the output signal level.

Notes
• The output level for the PHONES jack is also changed.
• When you eject the MD or turn off the power by pressing the I/⏻ switch, the output level is reset to the initial setting (0.0dB).

1 Turn on the amplifier and set the source selector to the position for MD deck.

2 Press I/⏻.
The STANDBY indicator turns off.

3 Insert an MD.

With the arrow pointing this way   With the label side up
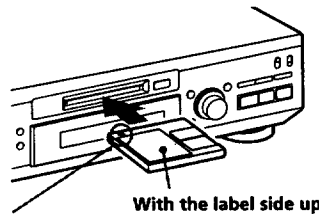
4 Press ▷.
The deck starts playing. Adjust the volume on the amplifier.

To	Do the following:
Stop playing	Press ■.
Pause playing	Press II. Press the button again or press ▷ to resume playing.
Go to the next track	Turn AMS clockwise (or press ▶▶| on the remote).
Go to the current track or the preceding track	Turn AMS counterclockwise (or press |◀◀ on the remote).
Take out the MD	Press ⏏ EJECT after stopping playing.

Notes on Recording

If "Protected" alternates with "C11" 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" alternates with "C71" in the display
- The digital program source is not connected as you set with the INPUT switch in Step 4 on page 6.
  To continue, connect the program source properly.
- The program source is not on.
  Turn on the program source.

Depending on the Setup Menu settings and source being recorded, track numbers are marked in following ways:
- When recording from a CD or MD with the INPUT switch set at a digital position (OPT 1 or OPT 2) and the source connected through the digital input (DIGITAL OPT 1 or OPT 2) connector:
  The deck automatically marks track numbers in the same sequence as the original. If, however, a track is repeated two or more times (e.g. by single-track repeat play) or two or more tracks with the same track number (e.g. from different MDs or CDs) are played, the track or tracks are recorded as part of a single, continuous track with a single track number. If the source is an MD, track numbers may not be marked for tracks of less than 4 seconds.
- When recording from some CD players and multi disc players connected through one of the digital input connectors with the INPUT switch set at the respective digital position:
  The deck may not automatically mark track numbers. In these cases, mark the track numbers after recording, using the deck's Divide Function (see "Dividing Recorded Tracks" on page 31).
- When recording from a source connected through the LINE (ANALOG) IN jacks with the INPUT switch set at ANALOG or when recording from a DAT or satellite broadcast connected through one of the digital input connectors with the INPUT switch set at the respective digital position and "T.Mark Off" selected in Setup Menu 02:
  The source will be recorded as a single track.
- Even while recording an analog source or a DAT or satellite broadcast, you can mark track numbers if "T.Mark LSyn" is selected in Setup Menu 02 (see "Marking Track Numbers While Recording" on page 13).

- When recording from DAT or satellite broadcasts with the INPUT switch set at the respective digital position, the deck automatically marks a track number whenever the sampling frequency of the input signal changes regardless of the Setup Menu 02 setting.

ϔ **You can mark track numbers during or after recording**
For details, see "Marking Track Numbers While Recording" (page 13) and "Dividing Recorded Tracks" (page 31).

When "TOC Writing" 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 the I/⏻ switch.

The MD deck uses the SCMS (Serial Copy Management System on page 41)
MDs recorded through digital input connector cannot be copied onto other MDs or DAT tapes through the digital output connector.

When the deck is recording or in recording pause, digital signals input through one of the digital input connectors are output to the DIGITAL OUT connector 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
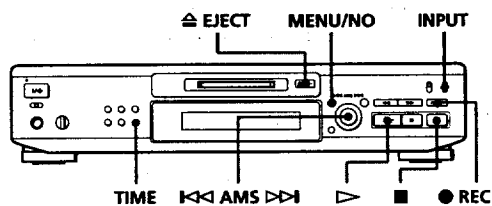
Checking the remaining recordable time on the MD

Press TIME.

- When you press the TIME button repeatedly while recording, the display alternates between the recording time of the current track and the remaining recordable time on the MD.
- When you press the TIME button repeatedly while the deck is stopped, the display alternates between total disc playing time and remaining recordable time on the MD (see page 19).

Monitoring the input signal (Input Monitor)

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

1 Press ⏏ EJECT to remove the MD.

2 Set INPUT according to the input signal you want to monitor.

When the INPUT switch is set at ANALOG
The analog signal input through the LINE (ANALOG) IN jacks is output to the DIGITAL OUT connector after A/D conversion, and then to the LINE (ANALOG) OUT jacks and the PHONES jack after D/A conversion.

When the INPUT switch is set at OPT 1 or OPT 2
After passing through the sampling rate converter, the digital signal input through the respective digital input connector is output to the DIGITAL OUT connector, and after D/A conversion to the LINE (ANALOG) OUT jacks and PHONES jack.

3 Press ● REC.
If the INPUT switch is set at ANALOG, "AD-DA" appears in the display.
If the INPUT switch is set at OPT 1 or OPT 2, "-DA" appears in the display.

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

There has been no sound input for about 30 seconds during recording. The 30 seconds of silence are replaced by a blank of about 3 seconds and the deck changes to recording pause.
If the deck continues pausing for about 10 minutes after the Auto Cut Function activated, recording stops automatically.
Note that this function does not activate even if there has been no sound input for about 30 seconds when the deck started recording from the blank portion.

💡 **You can turn off the Auto Cut Function**
For details, see "To turn off the Smart Space Function and Auto Cut Function" below. Note that when you turn off the Smart Space Function, the Auto Cut Function is turned off automatically.

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

There has been an extended silence of 4 to 30 seconds in length during recording. The silence is replaced with a blank of about 3 seconds and the deck continues recording. Note that new track numbers may not be marked for portions recorded while this function is activated. Also, the Smart Space Function does not activate even if there has been an extended silence of 4 to 30 seconds in length when the deck started recording from the blank portion.

To turn off the Smart Space Function and Auto Cut Function
1 While the deck is stopped, press MENU/NO twice to display "Setup Menu".
2 Turn AMS to select "Setup 05", then press AMS.
3 Turn AMS counterclockwise to select "S.Space Off", then press AMS.
4 Press MENU/NO.

To turn on the Smart Space Function and Auto Cut Function again
1 Do Steps 1 and 2 in "To turn off the Smart Space Function and Auto Cut Function" above.
2 Turn AMS clockwise to select "S.Space On", then press AMS.
3 Press MENU/NO.

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.
- 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 ▷ 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 ▷.
    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.

I◁◁ AMS ▷▷I

I◀◀ /▶▶I
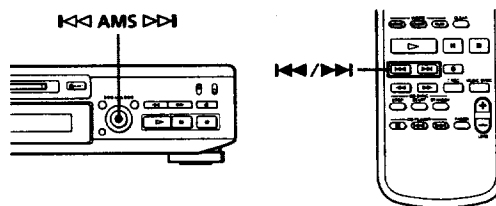
1 Do Steps 1 to 5 in "Recording on an MD" on page 6.

2 Turn AMS (or press I◀◀ or ▶▶I) 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.

ϔ **While "Tr" flashes in the display**
The deck is recording over an existing track, and stops flashing when it reaches the end of the recorded portion.

ϔ **To record from the middle of the track**
1 After Step 2 above, press ▷ to start playback.
2 Press II 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

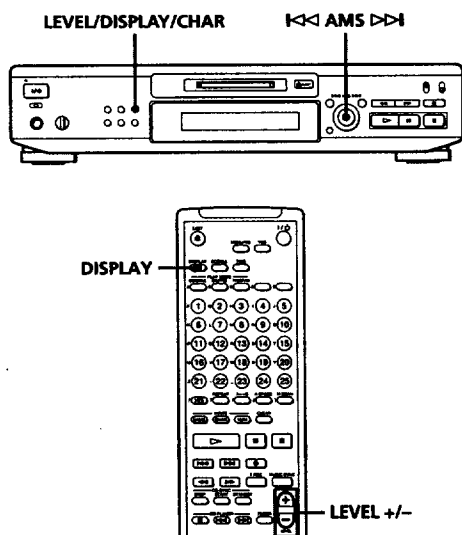You can adjust the recording level before starting recording.

LEVEL/DISPLAY/CHAR |◁◁ AMS ▷▷|

DISPLAY

LEVEL +/−

Adjusting the digital recording level

1 Do Steps 1 to 6 in "Recording on an MD" on pages 6 and 7.
Set INPUT to OPT 1 or OPT 2 in Step 4.

2 Play the portion of the program source with the strongest signal level.

3 Press LEVEL/DISPLAY/CHAR (or DISPLAY) repeatedly until the recording level adjustment display appears.

4 While monitoring the sound, turn AMS (or press LEVEL +/− repeatedly) 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.

```
⇒New Track⇐          1 2 3 4
//////|\\\\    ►·II■·
    4 Tr   0m00s ▮▮▮▮▮▮▮▮▮▮▮▮
```
OVER indication

The volume can only be increased up to +12.0 dB. Therefore, if the digital signal level of the program source is low, it may not be possible to set the recording level to maximum.

5 Stop playing the program source.

6 To start recording, do the procedure starting from Step 8 in "Recording on an MD" on page 7.

💡 **You can use Setup Menu 11 or 12 to adjust the digital recording level**
1 While recording or in recording pause, press MENU/NO twice to display "Setup Menu".
2 Turn AMS to select "Setup 11" or "Setup 12", then press AMS. The dB display flashes.
Select "Setup 11" with the INPUT switch set at OPT 1 and "Setup 12" with the INPUT switch set at OPT 2.
3 Turn AMS to adjust the recording level, then press AMS. The dB display changes from flashing to lighted steadily.
4 Press MENU/NO.

💡 **The Peak Hold Function freezes the level meter display at the highest level reached by the input signal**
1 While the deck is stopped, press MENU/NO twice to display "Setup Menu".
2 Turn AMS to select "Setup 06", then press AMS.
3 Turn AMS to select "P.Hold On", then press AMS.
4 Press MENU/NO.

To turn off the Peak Hold Function, select "P.Hold Off" in Step 3 above.

Adjusting the analog recording level

1 Do Steps 1 to 6 in "Recording on an MD" on pages 6 and 7.
Set INPUT to ANALOG in Step 4.

2 Play the portion of the program source with the strongest signal level.

3 Press LEVEL/DISPLAY/CHAR (or DISPLAY) repeatedly until the recording level adjustment display appears.

4 While monitoring the sound, turn AMS (or press LEVEL +/– repeatedly) to adjust the recording level.
The volume can only be increased up to +12.0 dB. Therefore, if the output level of the connected component is low, it may not be possible to set the recording level to maximum.

5 Stop playing the program source.

6 To start recording, do the procedure starting from Step 8 in "Recording on an MD" on page 7.

💡 **You can use Setup Menu 10 to adjust the analog recording level**
1 While recording or in recording pause, press MENU/NO twice to display "Setup Menu".
2 Turn AMS to select "Setup 10", then press AMS.
3 Turn AMS to adjust the recording level, then press AMS.
4 Press MENU/NO.

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 use various Editing Functions.

MENU/NO   ● REC

I◁◁ AMS ▷▷I
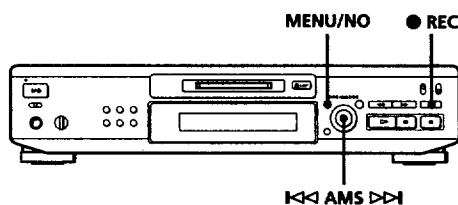
Marking track numbers manually (Manual Track Marking)

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

Press ● REC 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 the INPUT switch set at OPT 1 or OPT 2:
The deck marks track numbers automatically. However, the Automatic Track Marking Function does not activate when recording from some CD players and multi disc players.
• In all other cases:
If "T.Mark LSyn" is selected in Setup Menu 02, the deck marks a new track number whenever the signal drops to the specified level or below for about 1.5 seconds or longer, then rises to a specified level.

(Continued)

To select "T.Mark Off" or "T.Mark LSyn" in Setup
Menu 02, do the procedure below:

1 While the deck is stopped, press MENU/NO
twice to display "Setup Menu".

2 Turn AMS to select "Setup 02", then press AMS.

3 Turn AMS to select "T.Mark Off" or "T.Mark
LSyn", then press AMS.
"L.SYNC" lights up when you select "T.Mark
LSyn".

4 Press MENU/NO.

**Ö You can set the reference level that must pass
before a rise marks a new track number**
In Automatic Track Marking, the input signal must
remain at or below a given reference level for
1.5 seconds or longer before a rise above the reference
level will mark a new track number.
Do the following procedure to specify the reference
level. Note that "T.Mark LSyn" should be selected in
Setup Menu 02.
 1 While the deck is stopped, press MENU/NO twice to
display "Setup Menu".
 2 Turn AMS to select "Setup 03", then press AMS.
 3 Turn AMS to set the reference level.
 You can set the reference level at –72 dB to 0 dB in
 2 dB steps.
 4 After selecting the reference level, press AMS.
 **5** Press MENU/NO.

Note
If you turn off the deck or disconnect the AC power cord, the
deck will recall the last settings of the Automatic Track
Marking Function ("T.Mark LSyn" or "T.Mark Off") the next
time you turn on the deck.
However, the "T.Mark LSyn" Function does not activate
when recording in digital from CD or MD.

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 using this function, the recording
actually begins with the 6 seconds of audio data stored
in the buffer memory in advance as shown in the
illustration below.
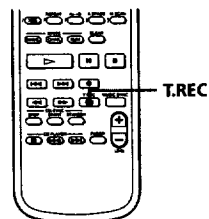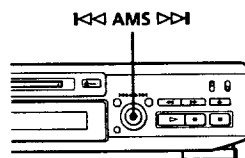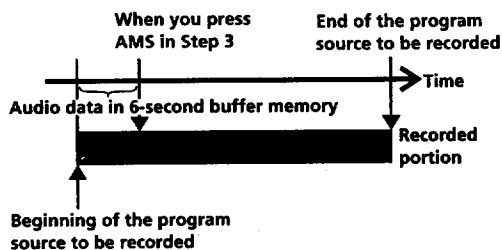
1 Do Steps 1 to 6 in "Recording on an MD" on
pages 6 and 7.
The deck changes to recording pause.

2 Start playing the program source you want to
record.
The most recent 6 seconds of audio data is stored
in the buffer memory.

3 Press AMS (or T.REC) 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.

Synchro-Recording With Audio Equipment of Your Choice (Music Synchro-Recording) [i]

By using the MUSIC SYNC button on the remote, you can automatically start recording in sync with the signal input from the program source.
The method of marking track numbers differs, depending on the program source being recorded and the setting of the Setup Menu 02 (see "Notes on Recording" on page 9).
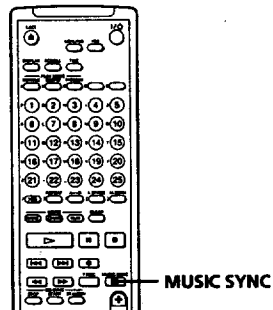
MUSIC SYNC

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
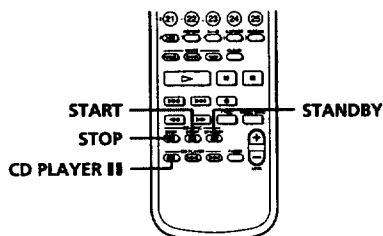Press ■.

Note
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).

Synchro-Recording With a Sony CD Player [i]

By connecting your deck to a Sony CD player or Hi-Fi Component System, you can easily dub CDs onto MDs using the CD synchro buttons on the remote. If your deck is connected to a Sony CD player by a digital input cable, track numbers are automatically marked as appear on the original even when "T.Mark Off" is selected in Setup Menu 02. If your deck is connected to a Sony CD player by audio connecting cords through the LINE (ANALOG) IN jacks, track numbers are automatically marked when you set Setup Menu 02 to "T.Mark LSyn" (see page 13).
As the same remote controls both the CD player and the deck, you may have trouble operating both units if they are far from each other. If you do, place the CD player close to this deck.

START — STANDBY
STOP
CD PLAYER II

1 Set the source selector on the amplifier 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 into the CD player.

4 Select the playback mode (Shuffle Play, Program Play, etc.) on the CD player.

5 Press STANDBY.
The CD player pauses for playing and the deck pauses for recording.

6 Press START.
The deck starts recording and the CD player starts playback.
The track number and elapsed recording time of the track appear in the display.

If the CD player does not start playing
Some CD player models may not respond when you press START on the remote of the deck. Press II on the remote of the CD player instead.

7 Press STOP to stop synchro-recording.

To pause recording
Press STANDBY or CD PLAYER II.
To restart recording, press START or CD PLAYER II.
A new track number is marked each time you pause recording.

Notes
• When the deck's remote controls the CD player with a mode selector, set the selector to CD1.
• The deck may not automatically mark track numbers when recording from some CD players and multi disc players.

ϙ̈ You can use the remote of the CD player during synchro-recording
When you press ■, the CD player stops and the deck pauses for recording.
When you press II, the CD player pauses and the deck pauses for recording.
To restart synchro-recording, press ▷.

ϙ̈ You can change CDs during synchro-recording
Do the following steps instead of Step 7 above.
1 Press ■ on the remote of the CD player.
The deck pauses for recording.
2 Change the CD.
3 Press ▷ on the remote of the CD player.
Synchro-recording restarts.

ϙ̈ You can also do synchro-recording with a Sony video CD player
Using the procedure for synchro-recording with a Sony CD player, you can do synchro-recording with a Sony video CD player also.
To select the video CD player, press button number 2 while pressing down the I/☉ button on the remote before starting the procedure.
To select the CD player again, press button number 1 while pressing down the I/☉ button.
The deck is factory set to a CD player for synchro-recording.

ϙ̈ You can check the remaining recordable time on the MD
Press TIME (see page 19).

Fading In and Out (Fader)

You can gradually increase the recording level at the beginning of a recording (fade-in recording) or gradually decrease the recording level at the end of a recording (fade-out recording).
This function is convenient when, for example, you don't want the track cut off abruptly when the disc reaches to its end.

FADER

FADER

Fade-in recording

During recording pause, press FADER at the position where you want to start fade-in recording.
◀ in "Fade ◀ 3.2s" flashes and the deck performs the fade-in recording until the counter reaches "0.0s".

Fade-out recording

During recording, press FADER at the position where you want to start fade-out recording.
▶ in "Fade ▶ 3.2s" flashes and the deck performs the fade-out recording until the counter reaches "0.0s".
The deck changes to recording pause when fade-out recording finishes.

`Ö` **You can set the duration of fade-in and fade-out recording independently**
  1 While the deck is stopped, press MENU/NO twice to display "Setup Menu".
  2 To set the duration of fade-in recording:
    Turn AMS to select "Setup 08", then press AMS.
    To set the duration of fade-out recording:
    Turn AMS to select "Setup 09", then press AMS.
  3 Turn AMS to set the duration.
    Both the fade-in and fade-out recording durations can be set in 0.1 second steps.
  4 After selecting the duration, press AMS.
  5 Press MENU/NO.

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.

TIMER   ■
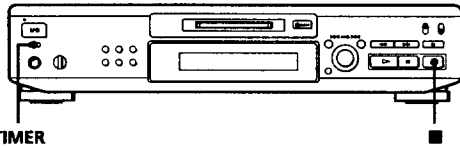
1 Do Steps 1 to 7 in "Recording on an MD" on pages 6 and 7.

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 in "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.

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 week after timer recording has finished, the recorded contents may disappear.

Make sure to change the deck to standby status within a week 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 Writing" will flash in the display at that time. Do not move the deck or pull out the AC power cord while "TOC Writing" 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.

SCROLL   LEVEL/DISPLAY/CHAR

TIME

DISPLAY —   — SCROLL
        — TIME
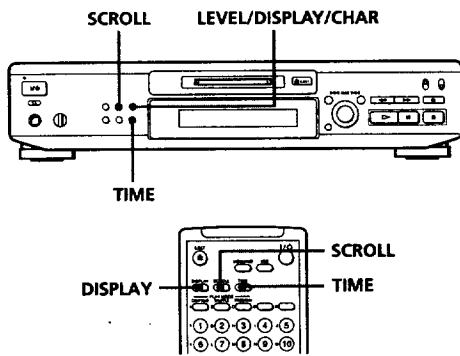
Checking the total track number, total disc playing time and remaining recordable time of the disc

Each time you press TIME while the deck is stopped, you can change the display as follows:

Total track number and total playing time of all recorded tracks

```
⊞SONGS              1 2 3 4 5
                    6 7 8 9 10
                    11 12
    12 Tr  39m06s 1ʒ·· ·· · · · ·—
```

Press ⬇

Remaining recordable time of the disc (Recorded MDs only)

```
⊞SONGS              1 2 3 4 5
                    6 7 8 9 10
                    11 12
    12 Tr -21m36s 1ʒ·· ·· · · · ·—
```

The remaining recordable time of the disc is not shown for premastered MDs.

Press ⌐

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

Disc name   Music calendar

```
⊞SONGS              ¦1 2 3 4 5¦
                     6 7 8 9 10
                     11 12
    12 Tr  39m06s 1ʒ·· ·· · · · ·—
```

Total number   Total disc
of tracks   playing time
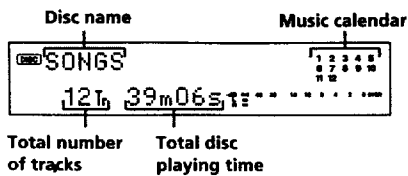
A music calendar shows all the track numbers within a grid if the MD is a premastered disc, or without a grid if the MD is a recordable disc.
If the total track number exceeds 15, ▶ appears to the right of number 15 in the music calendar.

Note
When you insert a new MD or turn off the deck and turn it on again, the last item displayed will reappear.

Checking the playing time, remaining time, and track number

Each time you press TIME while playing an MD, you can change the display as shown below. The track numbers in the music calendar disappear after they are played.
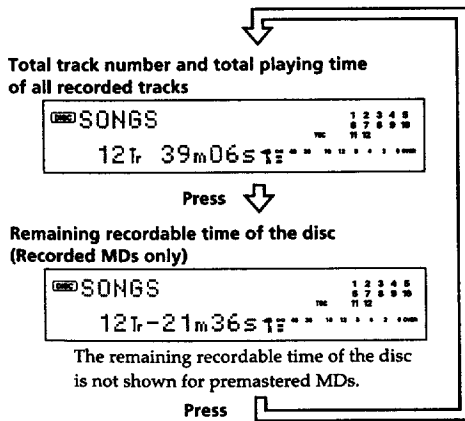
Track number and playing time of the current track

```
DIARY               2 3 4 5
                 ▶    ™
⊞    2 Tr   2m33s 1ₘₘₘ·· · · ·—
```

Press ⬇

Track number and remaining time of the current track

```
DIARY               2 3 4 5
                 ▶    ™
⊞    2 Tr  -1m25s 1ₘₘₘ·· · · ·—
```

Press ⬇

Remaining time of all recorded tracks

```
DIARY               2 3 4 5
                 ▶
⊞        -38m11s 1ₘₘₘ·· · · ·—
```

Press ⌐
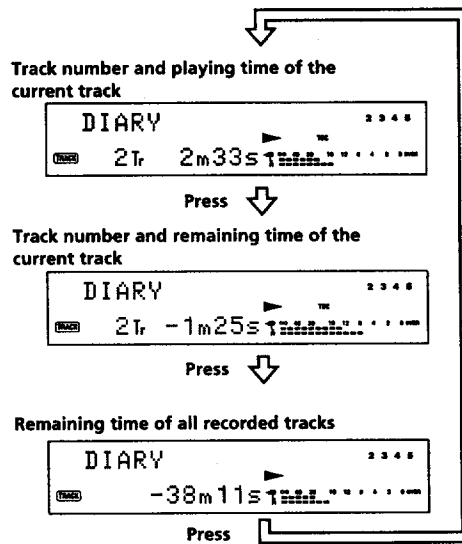
💡 The track name and disc name are displayed as follows:
The disc name appears whenever the deck is stopped, and the name of the current track appears when the track is playing. If no title is recorded, "No Name" appears instead of a title.
To label a recordable disc and its tracks, see "Labeling Recordings" on page 33.

(Continued)

ϙ̈ **You can scroll a title of more than 12 characters**
Press SCROLL.
Since the display shows up to 11 characters at a time, press SCROLL to see the rest of the title if the title has 12 characters or more.
Press SCROLL again to pause scrolling, and again to continue scrolling.

Changing the display

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

Normal display

```
囲SONGS          ━━   ',  *
     12ᴛ  39m06sᴛ:••  ••••••━
```

Press ⇩

The contents of a program (only when "PROGRAM" lights up)

```
囲/4+1+7/         ━━   ',  *
      3ᴛ  11m14sᴛ:••  ••••••━
```

Press ⇩

Title (Disc name and track name)

```
 ━ SONGS          ►━   ',  *
 囲DIARY          ᴛ:••  ••••••━
```

Press ⇩

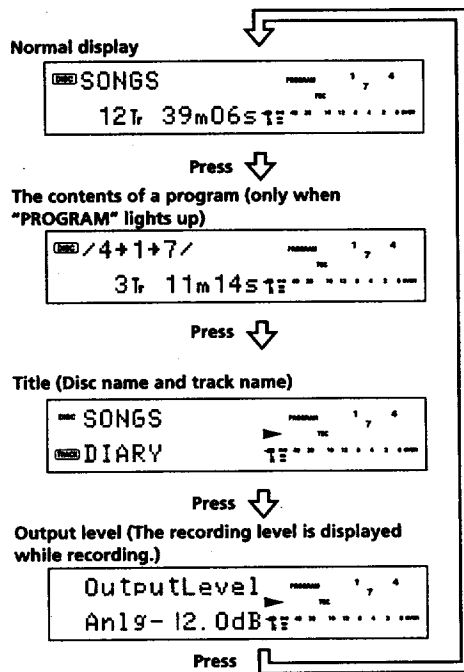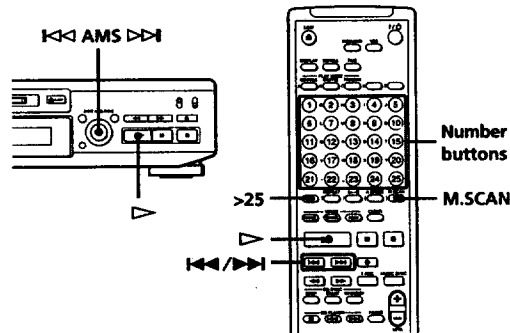Output level (The recording level is displayed while recording.)

```
   OutputLevel   ━   ',  *
                  ►
   Anl9- 12.0dBᴛ:••  ••••••━
```

Press ⌐└─

Locating a Specific Track

You can quickly locate any track while playing a disc by using the AMS (Automatic Music Sensor) control, I◄◄ and ►►I buttons, number buttons, or M.SCAN button on the remote.

I◄◄ AMS ►►I

>25

▷

I◄◄/►►I

Number buttons

M.SCAN

To locate	Do the following:
The next or succeeding tracks	During playback, turn AMS clockwise (or press ►►I repeatedly) until you find the track.
The current or preceding tracks	During playback, turn AMS counterclockwise (or press I◄◄ repeatedly) until you find the track.
A specific track directly ⊺	Press number buttons to enter the track number.
A specific track by using AMS	1 Turn AMS until the track number you want to locate appears while the deck is stopped. (The track number is flashing.) 2 Press AMS or ▷.
By scanning each track for 6 seconds (music scan) ⊺	1 Press M.SCAN before you start playing. 2 When you find the track you want, press ▷ to start playing.

ϙ̈ **When you directly locate a track with a number over 25 ⊺**
You must press >25 first, before entering the corresponding digits.
Press >25 once if it is a 2-digit track number, and twice if it is a 3-digit track number.
To enter "0", press button 10.
Examples: • To play track number 30
         Press >25 once, then 3 and 10.
       • To play track number 100
   Press >25 twice, then 1, 10 and 10.

ϙ̈ **You can extend the playing time during music scan**
1 While the deck is stopped, press MENU/NO twice to display "Setup Menu".
2 Turn AMS to select "Setup 07", then press AMS.
3 Turn AMS to select the playing time within a range of 6 to 20 seconds (in 1 second steps), then press AMS.
4 Press MENU/NO.

ϙ̈ **To pause playing at the beginning of a track**
Turn AMS (or press I◄◄ or ►►I) after pausing playback.

ϙ̈ **To go quickly to the beginning of the last track**
Turn AMS counterclockwise (or press I◄◄) while the display shows the total track number, total disc playing time or remaining recordable time of the disc (recordable disc only), or disc name (see page 19).

Locating a Particular Point in a Track

You can also use the ◄◄ and ►► buttons to locate a particular point in a track during playback or playback pause.

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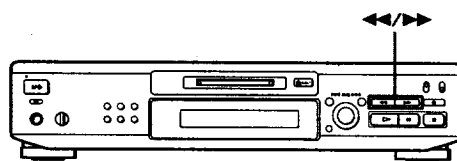
To locate a point	Press
While monitoring the sound	►► (forward) or ◄◄ (backward) and keep pressing until you find the point.
Quickly by observing the display during playback pause	►► or ◄◄ and keep pressing until you find the point. There is no sound output during this operation.

ϙ̈ **If "—Over—" appears while you are pressing ►► during playback pause**
The disc has reached to its end. Press ◄◄ (or I◄◄) or turn AMS counterclockwise to go back.
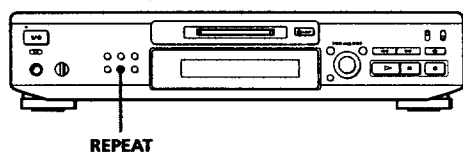
Notes
• If the disc reaches the end while you are pressing ►► during sound monitoring, the deck stops.
• Tracks that are only a few seconds long may be too short to scan using the search function. For such tracks, it is better to play the MD at normal speed.

Playing Tracks Repeatedly

You can play tracks repeatedly in any play mode.

REPEAT

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 23)	All the tracks in random order
Program Play (page 23)	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, Shuffle, or Program Play, press REPEAT several times until "REPEAT 1" appears in the display.

Repeating a specific portion (A-B Repeat)

You can play a specific portion of a track repeatedly. This might be useful when you want to memorize lyrics. Note that you can only repeat a portion within the boundaries of a single track.
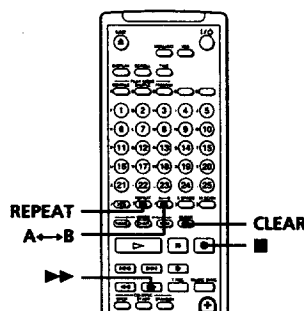
1   While playing a disc, press A←→B at the starting point (point A) of the portion to be played repeatedly.
"REPEAT A-" appears and "B" flashes in the display.

2   Continue playing the track or press ►► until you reach the ending point (point B), then press A←→B again.
"REPEAT A-B" lights continuously. The deck starts to play the specified portion repeatedly.

To cancel A-B Repeat
Press REPEAT, CLEAR or ■.

Setting new starting and ending points
You can repeat the portion immediately after the currently specified portion by changing the starting and ending points.
1 Press A←→B while "REPEAT A-B" appears.
The current ending point B becomes the new starting point A, "REPEAT A-" lights continuously, and "B" flashes in the display.
2 Continue playing the track or press ►► until you reach the new ending point (point B), then press A←→B again.
"REPEAT A-B" lights continuously and the deck starts playing repeatedly the newly specified portion.

Playing in Random Order (Shuffle Play)

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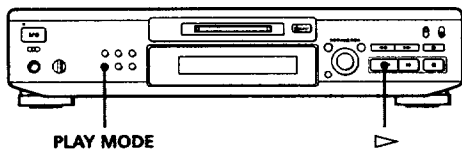
PLAY MODE   ▷

1 Press PLAY MODE repeatedly (or SHUFFLE once) until "SHUFFLE" appears in the display when the deck is stopped.

2 Press ▷ to start Shuffle Play.
"—Shuffle—" and "￡" appear in the display while the deck is "shuffling" the tracks.

To cancel Shuffle Play
Press PLAY MODE repeatedly (or CONTINUE once) when the deck is stopped until "SHUFFLE" disappears.

ʻQ̈ʼ **You can specify tracks during Shuffle Play**
- To play the next track, turn AMS clockwise (or press ▶▶).
- To play from the beginning of the current track again, turn AMS counterclockwise (or press ◀◀). You cannot use AMS (or ◀◀) 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.

LEVEL/DISPLAY/CHAR   MENU/NO   YES   ◀◀/▶▶

PLAY MODE   I◀◀ AMS ▶▶I   ▷

DISPLAY
>25

MENU/NO
YES
PROGRAM
Number buttons
CLEAR
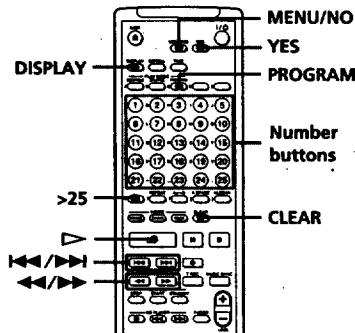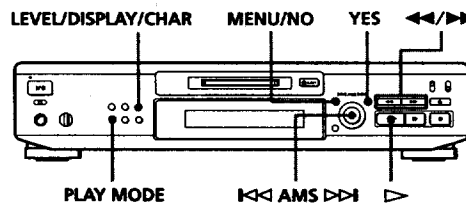
1 While the deck is stopped, press MENU/NO twice to display "Setup Menu".

2 Turn AMS (or press I◀◀ or ▶▶I) to display "Program ?", then press AMS.

3 Do either a) or b):
a) When using the controls on the deck
    1 Turn AMS until the track number you want appears in the display.
    2 Press AMS.

    If you enter the wrong track number
    Press ◀◀ or ▶▶ until the wrong track number flashes, turn AMS to set the correct track number, then press AMS.
    If "0" flashes, press ◀◀.

(Continued)

b) When using the remote

Press the number buttons to enter the tracks
you want to program in the order you want.
To program a track with a number over 25, use
the >25 button (see page 20).

If you enter the wrong track number

Press ◄◄ or ►► until the wrong track number
flashes, then enter the correct track number
with the number buttons.
If "0" flashes, press ◄◄.

4 Repeat Step 3 to enter other tracks.
The entered track is added to the location where
the "0" flashes.
Each time you enter a track, the total program time
is added up and appears in the display.

5 After finishing programming, press YES.
"Complete!!" appears and programming is
completed.

6 Press PLAY MODE repeatedly (or PROGRAM
once) until "PROGRAM" appears in the display.

7 Press ► to start Program Play.

To cancel Program Play

Press PLAY MODE repeatedly (or CONTINUE once)
when the deck is stopped until "PROGRAM"
disappears.

☼ **The program remains even after Program Play ends**
When you press ►, you can play the same program
again.

Notes
- The display shows "- -m - -s" instead of the total playing
  time when the total playing time of the program exceeds
  199 minutes.
- "ProgramFull" appears when you program over 25 tracks.
  Erase the unnecessary tracks to enter other tracks.

Checking the track order

While the deck is stopped and "PROGRAM" is on,
press LEVEL/DISPLAY/CHAR (or DISPLAY) several
times.
The track numbers appear in the order they were
programmed as follow:
"/3 ➡ 5 ➡ 8 ➡ 1 ➡ 2/"

To check the rest of the track order

Turn AMS.
You can scroll the display to check all the track
numbers you programmed.

Changing the track order

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

To		Do the following procedure after Steps 1 and 2 in "Creating Your Own Program":
Erase	a track	Press ◄◄ or ►► until the track number you want to erase flashes, then press CLEAR.
	the whole program	Keep pressing CLEAR until all programmed track numbers disappear.
Add a track	to the beginning of the program	1 Press ◄◄ until "0" flashes at the left of the first track. 2 Do Steps 3 to 5 on pages 23 and 24.
	in the middle of the program	1 Press ◄◄ or ►► until the track which precedes the track to be added flashes. 2 Press AMS so that "0" flashes, then do Steps 3 to 5 on pages 23 and 24.
	to the end of the program	1 Press ◄◄ until "0" flashes at the right of the last track. 2 Do Steps 3 to 5 on pages 23 and 24.
Change a track in the program		1 Press ◄◄ or ►► until the track number you want to change flashes. 2 Do Steps 3 to 5 on pages 23 and 24.

Useful Tips When Recording From MDs to Tape

MENU/NO

I◁◁ AMS ▷▷I
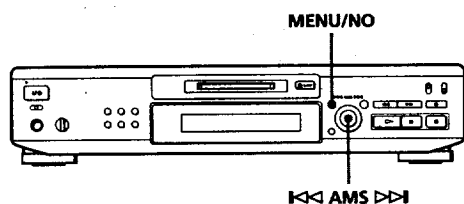
Inserting blank spaces while recording to tape (Auto Space)

The Auto Space Function inserts a 3-second blank space between each track while recording from MDs to tapes, allowing you to use the AMS function during later playback.

1 While the deck is stopped, press MENU/NO twice to display "Setup Menu".

2 Turn AMS to select "Setup 04", then press AMS.

3 Turn AMS to select "Auto Space", then press AMS.

4 Press MENU/NO.

💡 You can turn on the Auto Space Function using the remote [T]
While the deck is stopped, press A.SPACE repeatedly until "Auto Space" appears in the display.

To cancel Auto Space

Cancelling the function through menu operation on the deck
1 Do Steps 1 and 2 in "Inserting blank spaces while recording to tape" on this page.
2 Turn AMS to select "Auto Off", then press AMS.
3 Press MENU/NO.

Cancelling the function using the remote [T]
While the deck is stopped, press A.SPACE repeatedly until "Auto Off" appears.

Note
If the Auto Space Function is on while recording a selection containing multiple track numbers, (for example, a medley or symphony), blank spaces will be inserted within the selection whenever the track number changes.

Pausing after each track (Auto Pause)

When the Auto Pause Function is on, the deck pauses after playing each track. Auto Pause is convenient when recording single tracks or multiple, nonconsecutive tracks.

Select "Auto Pause" instead of "Auto Space" in Step 3 on "Inserting blank spaces while recording to tape" on this page.

💡 You can turn on the Auto Pause Function using the remote [T]
While the deck is stopped, press A.SPACE repeatedly until "Auto Pause" appears in the display.

To restart playback
Press ▷ or II.

To cancel Auto Pause

Cancelling the function through a menu operation on the deck
Do Steps 1 to 3 in "To cancel Auto Space" on this page.

Cancelling the function using the remote [T]
While the deck is stopped, press A.SPACE repeatedly until "Auto Off" appears.

Note
If you turn off the deck or disconnect the AC power cord, the deck will recall the last setting of the Auto Space and Auto Pause Functions the next time you turn on the deck.

Adjusting the analog signal level

You can adjust the level of an analog signal for output to an amplifier connected through the LINE (ANALOG) OUT jacks.

1 While the deck is stopped, press MENU/NO twice to display "Setup Menu".

2 Turn AMS to select "Setup 13", then press AMS.

3 Turn AMS to adjust the analog output level.

4 Press AMS.

5 Press MENU/NO.

To return to the initial setting (0.0dB)

1 Repeat step 1 to step 2, then press CLEAR.

2 Press MENU/NO.

Notes
• The analog signal level for output to the headphones connected through the PHONES jack is also changed.
• When you eject the MD or turn off the power by pressing the I/⏻ switch, the output level is reset to the initial setting (0.0dB).

Fading In and Out (Fader)

You can gradually increase the playback level of the
signal output to the LINE (ANALOG) OUT jacks and
the PHONES jack at the beginning of a playback (fade-
in playback) or gradually decrease the playback level
at the end of a playback (fade-out playback).
This function is convenient when, for example, you
want to start or end playback in the middle of the
track.
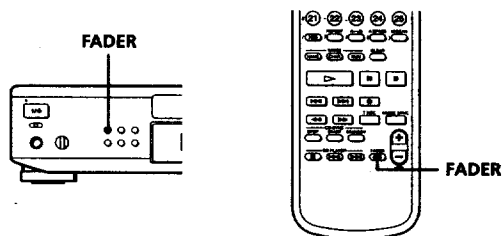
FADER

FADER

Fade-in playback

During playback pause, press FADER at the position
where you want fade-in playback to start.
◄ in "Fade ◄ 3.2s" flashes and the deck performs fade-
in playback until the counter reaches to "0.0s".

Fade-out playback

During playback, press FADER at the position where
you want fade-out playback to start.
► in "Fade ► 3.2s" flashes and the deck performs fade-
out playback until the counter reaches "0.0s".
The deck changes to playback pause when fade-out
playback finishes.

Note
The signal level output to the DIGITAL OUT connector does
not change.

You can set the duration of fade-in and fade-out
playback independently
Do Steps 1 to 5 in "You can set the duration of the fade-
in and fade-out recording independently" on page 17.

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.
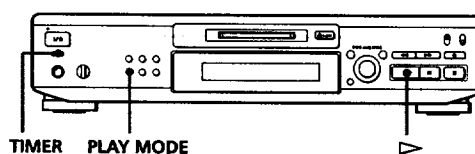
TIMER   PLAY MODE   ▷

1 Do Steps 1 to 3 in "Playing an MD" on page 8.

2 Press PLAY MODE repeatedly (or one of the
PLAY MODE buttons once) to select the play
mode you want.
To play only specific tracks, create a program (see
page 23).

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.

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.

Falling Asleep to Music

You can let the deck turn off at the specified time, so you can sleep to the music.
You can specify the time to be turned off by 30 minutes.

MENU/NO

I◁◁ AMS ▷▷I
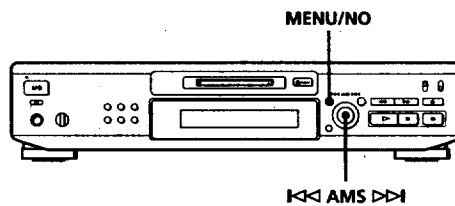
1 Press MENU/NO twice to display "Setup Menu".

2 Turn AMS to select "Setup 14", then press AMS.

3 Turn AMS to select the time.
   The minutes display changes as follows:
   30min ←→ 60min ←→ 90min ←→ 120min

4 Press AMS.

5 Turn AMS to select "Setup 15", then press AMS.

6 Turn AMS to select "Sleep On", then press AMS.
   "SLEEP" lights up in the display.

7 Press MENU/NO.

To change the time to turn off
Start over from Step 1 above.

To cancel the Sleep Timer Function
Select "Sleep Off" in Step 6 above, then press AMS.

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.
- A-B Erase Function allows you to specify a portion within a track to erase it.
- 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" alternates with "C11" 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" and "TOC Writing" flash 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" and "TOC Writing" flash 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
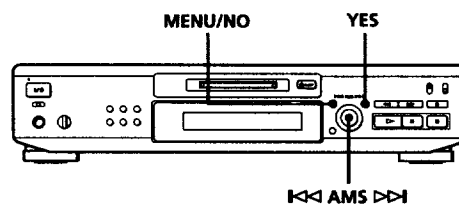
Erasing a single track

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
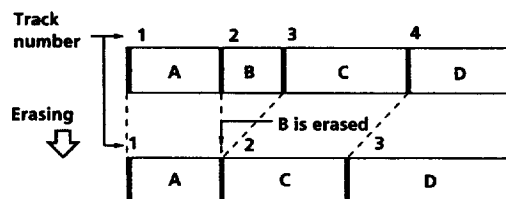
1. While the deck is stopped, playing, or pausing, press MENU/NO to display "Edit Menu".

2. Turn AMS until "Tr Erase ?" appears in the display.

3. Press AMS or YES.
   The display for erasing tracks appears and playback of the displayed track starts.

4. Turn AMS to select the track to be erased.

5 · Press AMS or YES.
When the track selected in Step 4 has been erased, "Complete!!" appears for a few seconds and the total number of tracks in the music calendar decreases by one. ·
The track following the erased track begins playing. (If you erase the last track, the track preceding the erased track starts playing.)

6 Repeat Steps 1 to 5 to erase more tracks.

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

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 AMS or 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, playing, or pausing, press MENU/NO to display "Edit Menu".

2 Turn AMS until "All Erase ?" appears in the display.

3 Press AMS or YES.
"All Erase??" appears in the display and all tracks in the music calendar start flashing.

4 Press AMS or YES.
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 MENU/NO or ■ to turn off the "All Erase ?" or "All Erase??" indication.

ᵠ You can undo the Erase Function
Use the Undo Function immediately after you erased the track (see page 37).

Erasing a Part of a Track (A-B Erase Function)

You can specify a portion within a track and erase the portion with ease. It is convenient when erasing unnecessary sections after recording satellite broadcast or FM broadcast.

Example: Erasing a part of track A
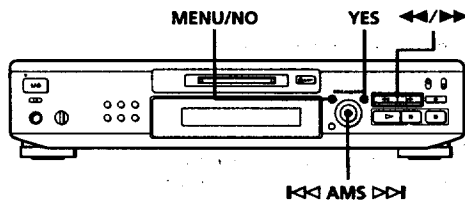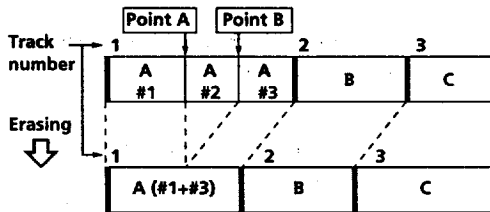
1 While the deck is stopped, playing, or pausing, press MENU/NO to display "Edit Menu".

2 Turn AMS until "A-B Erase ?" appears in the display.

3 Press AMS or YES.

4 Turn AMS to select the number of the track, then press AMS or YES.
"-Rehearsal-" and "Point A ok?" alternates in the display while the deck plays back the selected track from the beginning.

5 While monitoring the sound, turn AMS to find the starting point of the portion to be erased (point A).
You can select the unit by which the starting point is shifted. Press the ◄◄ or ►► button to select frame*, second, or minute.
For frame, the number of frames appears when you turn the AMS control; for second and minute, "s" or "m" flashes in the display.
* 1 frame is about 12 ms.

6 If the point A is still incorrect, repeat Step 5 until it is correct.

7 Press AMS or YES if the position is correct.
"Point B set" appears in the display and playback for setting the end point of the portion to be erased (point B) starts.

8 Continue playback (or press ◄◄ or ►►) until the deck reaches point B, then press AMS or YES.
"A-B Ers" and "Point B ok?" alternates in the display while the deck repeats a portion of a few seconds before point A and after point B successively.

9 Repeat Step 5 if point B is not correct.

10 Press AMS or YES when the position is correct.
"Complete!!" appears for a few seconds and the portion between point A and B is erased.

To cancel the A-B Erase Function
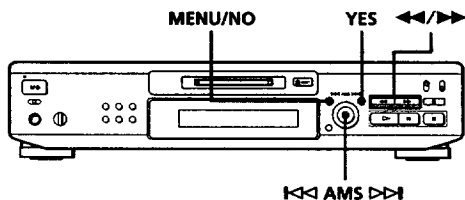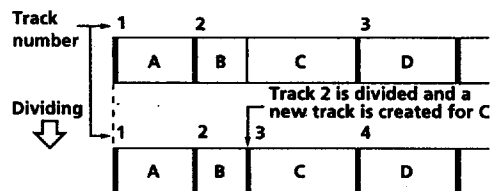Press MENU/NO or ■.

Note
If "Impossible" appears in the display, this means:
– You specified point B comes before point A.
  Point B should be specified after point A.
– The specified portion 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 mark 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 for locating positions in the middle of a track. 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

Dividing a track after selecting the track

1 While the deck is stopped, playing, or pausing, press MENU/NO to display "Edit Menu".

2 Turn AMS until "Divide ?" appears in the display, then press AMS or YES.

3 Turn AMS to select the track to be divided and press AMS or YES.
"-Rehearsal-" appears in the display and the deck plays back the selected track from the beginning.
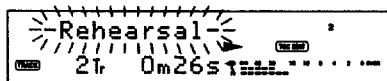
4 While monitoring the sound, turn AMS to find the point to divide the track.
You can select the unit by which the starting point is shifted. Press the ◄◄ or ►► button to select frame, second, or minute.
For frame, the number of frames appears when you turn the AMS control; for second and minute, "s" or "m" flashes in the display.

5 Press AMS or YES when the position is correct.
"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. The total number of tracks in the music calender increases by one.

To cancel the Divide Function
Press MENU/NO or ■.

ϔ **You can undo the Divide Function**
Use the Undo Function immediately after you divided the track (see page 37).

ϔ **You can divide a track while recording**
Use the Track Marking Function (see page 13).

Dividing a track after selecting the dividing point

1 While playing the MD, press AMS at the point where you want to create a new track.
"—Divide—" and "-Rehearsal-" alternate in the display and playback continues from the position you selected.

2 To make fine adjustment on the dividing position, do Step 4 in "Dividing a track after selecting the track" on this page.

3 Press YES.
"Complete!!" appears for a few seconds and the newly created track begins playing.

To cancel the Divide Function
Press AMS, MENU/NO or ■.

Combining Recorded Tracks (Combine Function)

Use the Combine Function to combine tracks on a recorded MD. The two tracks to be combined need not to be consecutive and the latter track to be combined can be the track which comes before the former one in the track number order. 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 D
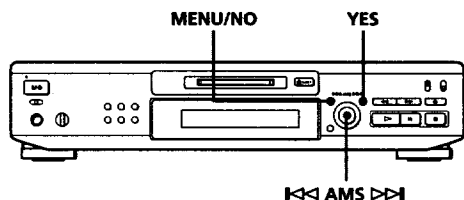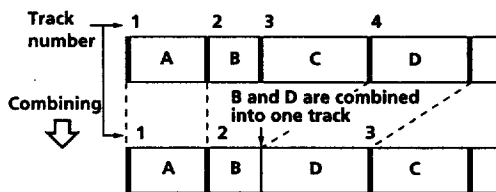
1   While the deck is stopped, playing, or pausing, press MENU/NO to display "Edit Menu".

2   Turn AMS until "Combine ?" appears in the display.

3   Press AMS or YES.

4   Turn AMS to select the first track of the two to be combined and press AMS or YES.
The display for selecting the second track appears and the deck repeats the portion where the two tracks will join (i.e., the end of the first track and the beginning of the succeeding track).

First track   Track number after combining
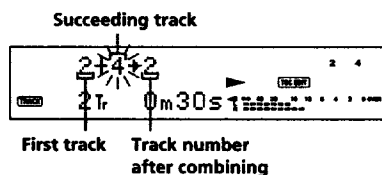
5   Turn AMS to select the second track of the two to be combined and press AMS or YES.
"Complete!!" appears for a few seconds and the total number of tracks in the music calendar decreases by one.
If both of the combined tracks have track titles, the title of the second track is erased.

To cancel the Combine Function
Press MENU/NO or ■.

💡 **You can undo the Combine Function**
Use the Undo Function immediately after you combined the tracks (see page 37).

Note
If "Impossible" 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**
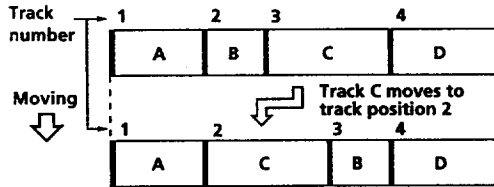
1 While the deck is stopped, playing, or pausing, press MENU/NO to display "Edit Menu".

2 Turn AMS until "Move ?" appears in the display.

3 Press AMS or YES.

4 Turn AMS to select the track to be moved and press AMS or YES.

5 Turn AMS until the new track position appears.
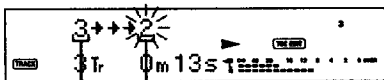
Track number to be moved   New track position

6 Press AMS or YES.
"Complete!!" appears for a few seconds and the moved track begins playing back.

To cancel the Move Function
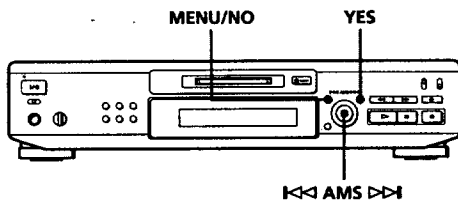Press MENU/NO or ■.

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. You can also use the remote to label a track or an MD (see "Labeling tracks and MDs with the remote" on page 35).
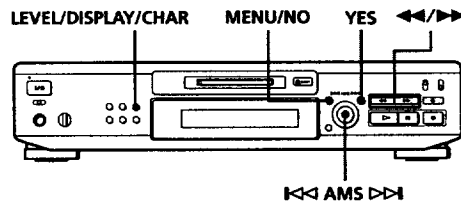
Use the following procedure to label a track or an MD. You can label a track while it is playing or recording. If the track is recording, be sure to finish labeling before the track ends. If the track ends before you've completed the labeling procedure, the characters already entered are not recorded and the track will remain unlabeled.

1 Press MENU/NO to display "Edit Menu".

2 Turn AMS until "Name ?" appears in the display and press AMS or YES.
Skip this step while recording.

3 Turn AMS until "Nm In ?" appears in the display, then press AMS or YES.

4 Turn AMS to select "Disc" to label an MD, or to specify the track to label.
While recording, go to Step 6.

5 Press AMS or YES.
A flashing cursor appears in the display.
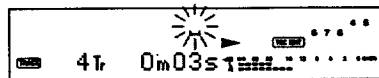
(Continued)

6 Press LEVEL/DISPLAY/CHAR to select the character type as follows:

To select	Press LEVEL/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 ⁵
      ⹂Ä⹀⸝ ►  ☒    ● ⁊ ●
 ☒  4 Tr   0m05s 1:●● ●● ● ● ● ●
```

7 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:

! " # $ % & ' ( ) * + , - . / : ; < = > ? @ _ `

```
       ⸜⸝⁄⸜      ●⁊●  ⁴ ⁵
      ⹂Д⹀⸝ ►  ☒    ● ⁊ ●
 ☒  4 Tr   0m07s 1:●● ●● ● ● ●
```

You can press LEVEL/DISPLAY/CHAR to change the character type at any time during Step 7 (see Step 6).

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

```
       ⸜⸝⁄⸜      ●⁊●  ⁴ ⁵
      Д⹀⸝ ►  ☒    ● ⁊ ●
 ☒  4 Tr   0m07s 1:●● ●● ● ● ● ●
```

9 Repeat Steps 7 and 8 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 7 and 8 to enter the correct character.

To erase a character
Press ◄◄ or ►► until the character to be erased starts flashing, then press CLEAR.

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

10 Press YES.
This completes the labeling procedure and the title appears in the display.

To cancel labeling
Press MENU/NO or ■.

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

Copying a track or disc title

You can copy a track or disc title to use it as a title of
another track or the disc title within a disc. Note that
you can do this operation by using the controls on the
deck only.

1 Press MENU/NO to display "Edit Menu".

2 Turn AMS until "Name ?" appears in the display
and press AMS or YES.

3 Turn AMS until "Nm Copy ?" appears in the
display.

4 Press AMS or YES.

5 Turn AMS to select "Disc" to copy the disc title, or
the track whose title you want to copy and press
AMS or YES.

   If "No Name" appears in the display
   The disc or the track has no name.

6 Turn AMS to select "Disc" for disc title or to
specify the track number to copy a title, and press
AMS or YES.
"Complete!!" appears for a few seconds to indicate
that the copying operation is completed.

   If "Overwrite?" appears in the display
   The disc or track you selected in Step 6 above has a
   title. If you continue the title copying, press AMS
   or YES.

To cancel title copying
Press MENU/NO or ■.

Labeling tracks and MDs with the remote
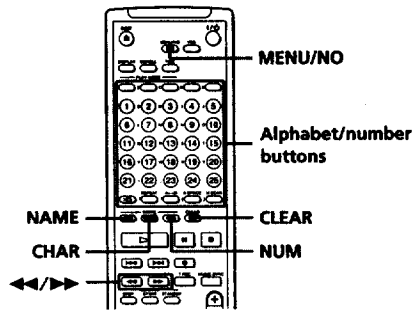
1 Press NAME repeatedly until a flashing cursor
appears in the display, then do the following:

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 Select the character type as follows:

To select	Press
Uppercase letters	CHAR repeatedly until "Selected AB" appears in the display
Lowercase letters	CHAR repeatedly until "Selected ab" appears in the display
Numbers	NUM repeatedly until "Selected 12" appears in the display

3 Press an alphabet/number button to enter a
character.
After you enter a character, the cursor shifts
rightward and waits for the input of the next
character.
You can change the character type at any time
during Step 3 (see Step 2).

(Continued)

4 Repeat Step 3 until you have entered the entire title.

If you entered the wrong character
Press ◄◄ or ►► until the character to be corrected starts flashing.
Press CLEAR to erase the incorrect character, then enter the correct one.

5 Press NAME again.
This completes the labeling procedure and the title appears in the display.

To cancel labeling
Press MENU/NO or ■.

Changing an existing title [i]

1 Press NAME, then 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 Hold down CLEAR until the current title is erased.

3 Enter the new title.
Do Steps 6 to 9 of "Labeling Recordings" on page 34, or Steps 2 to 4 of "Labeling tracks and MDs with the remote" on page 35 and this page.

4 Press NAME.

Erasing a title on a disc (Name Erase)

Use this function to erase a title on a disc.

1 While the deck is stopped, playing, or pausing, press MENU/NO to display "Edit Menu".

2 Turn AMS until "Name ?" appears in the display and press AMS or YES.

3 Turn AMS until "Nm Erase ?" appears in the display and press AMS or YES.

4 Turn AMS to select "Disc" to erase the disc title, or the track whose title you want to erase and press AMS or YES.
"Complete!!" appears for a few seconds and the title is erased.

To cancel Name Erase Function
Press MENU/NO or ■.

Erasing all titles on a disc (Name All Erase)

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

1 While the deck is stopped, playing, or pausing, press MENU/NO to display "Edit Menu".

2 Turn AMS until "Name ?" appears in the display and press AMS or YES.

3 Turn AMS until "Nm AllErs?" appears in the display and press AMS or YES.
"Nm AllErs??" appears in the display.

4 Press AMS or YES.
"Complete!!" appears for a few seconds and all titles are erased.

To cancel the Name All Erase Function
Press MENU/NO or ■.

ϔ **You can undo the Name All Erase Function**
See "Undoing the Last Edit" on page 37.

ϔ **You can erase all recorded tracks and titles**
See "Erasing all tracks on an MD" on page 29.

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

MENU/NO   YES

I◁◁ AMS ▷▷I

1 With the deck stopped and no track number appearing in the display, press MENU/NO to display "Edit Menu".

2 Turn AMS until "Undo ?" appears in the display. "Undo ?" does not appear if no editing has been done.

3 Press AMS or 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 part of a track	
Dividing a track	"DivideUndo?"
Combining tracks	"CombinUndo?"
Moving a track	"Move Undo?"
Labeling a track or an MD	
Changing an existing title	"Name Undo?"
Erasing all titles on an MD	
Copying a title	

4 Press AMS or 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 MENU/NO or ■.

Display Messages

The following table explains the various messages that appear in the display.
Also, the deck has a Self-Diagnosis Function (see page 45).

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 41).
Cannot Edit	An attempt was made to edit the MD during Program or Shuffle Play.
Disc Full	The MD is full (see "System Limitations" on this page).
Impossible	The deck cannot do the specified editing operation.
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.
Premastered	An attempt was made to record on the premastered MD.
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 when CD tracks are divided into several smaller tracks during digital recording. Also, when the Automatic Track Marking Function is activated during recording, track numbers may not marked as in the original depending on the program source.

"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 28).
- 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/🕛 to turn the deck on.
→ The MD is inserted in the wrong direction. Slide the MD into the disc slot with the label side up and the arrow pointing towards the opening.
→ 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" alternates with "C11" in the display).
Close the record-protect slot (see page 7).
→ The deck is not connected properly to the sound source. Make connections properly to the sound source.
→ The recording level is not adjusted properly. Adjust the recording level properly (see pages 12 and 13).
→ 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 deck does not work during synchro-recording.

→ The currently selected CD player type (CD player or video CD player) does not match the CD player being used. Reset the CD player type (see page 16).
If the CD player being used has a mode selector, set the selector to CD1.

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.

The three-digit display appears.

→ The Self-Diagnosis Function is on.
Check the table on page 45.

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 (λ = 780 nm) Emission duration: continuous
Laser output	Less than 44.6 μW*
	* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Laser diode properties	Material: GaAlAs
Revolutions (CLV)	400 rpm to 900 rpm
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 ±0.3 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 OPT 1	Square optical connector jack	Optical wave length: 660 nm	—	—
DIGITAL OPT 2	Square optical connector jack	Optical wave length: 660 nm	—	—

Outputs

	Jack type	Rated output	Load impedance
PHONES	Stereo phone jack	28 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	120 V AC, 60 Hz
Power consumption	18 W
Dimensions (approx.) (w/h/d) incl. projecting parts and controls	430 × 95 × 280 mm (17 × 3 ³/₄ × 11 ¹/₈ in)
Mass (approx.)	3.4 kg (7 lbs 8 oz)

Supplied accessories

See page 4.

Optional accessories

Recordable MDs MDW-60 (60 min), MDW-74 (74 min)

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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.
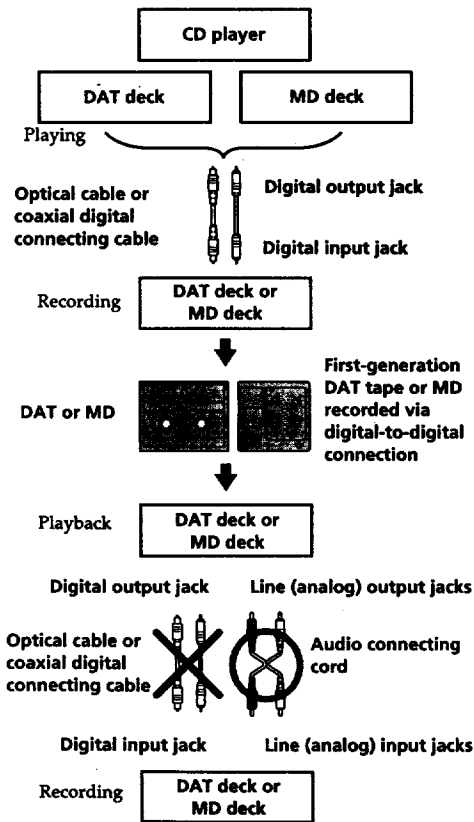
2 You can record the digital input signal of a digital satellite broadcast onto a DAT tape or recordable MD via the digital input jack on the DAT or MD deck which is capable of handling a sampling frequency of 32 kHz or 48 kHz. You can then record the contents of this recorded DAT tape or MD (first-generation) 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/CS tuners, second-generation digital copying may not be possible.
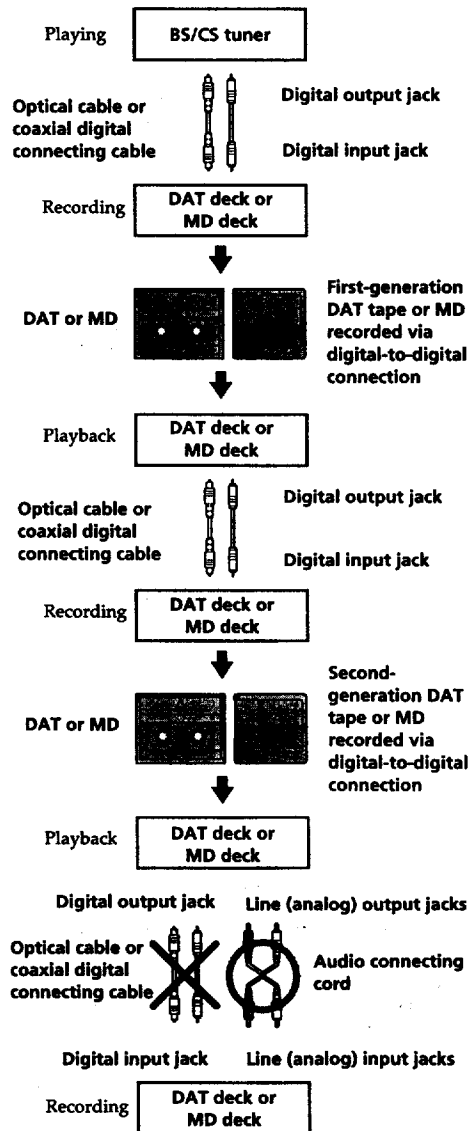
(Continued)

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.

```
                    ┌─────────────────┐
                    │    Turntable    │
                    └─────────────────┘
        ┌─────────────────┐ ┌─────────────────┐
        │     Tuner       │ │    CD player    │
        └─────────────────┘ └─────────────────┘
        ┌─────────────────┐ ┌─────────────────┐
        │  Cassette deck  │ │    DAT deck     │
        └─────────────────┘ └─────────────────┘
        ┌─────────────────┐ ┌─────────────────┐
        │   Microphone    │ │    MD deck      │
        │   amplifier     │ │                 │
        └─────────────────┘ └─────────────────┘
```

Playing

Line (analog) output jacks

Audio connecting cord

Line (analog) input jacks

Recording — DAT deck or MD deck

DAT or MD — DAT tape or MD recorded via analog-to-digital connection

Playback — DAT deck or MD deck

Optical cable or coaxial digital connecting cable — Digital output jack

Digital input jack

Recording — DAT deck or MD deck

DAT or MD — First-generation DAT tape or MD recorded via digital-to-digital connection

Playback — DAT deck or MD deck

Digital output jack   Line (analog) output jacks

Optical cable or coaxial digital connecting cable   Audio connecting cord

Digital input jack   Line (analog) input jacks

Recording — DAT deck or MD deck

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Table of Setup Menus

You can make various settings on this deck by using Setup Menus. Operation related to each menu were explained in the previous sections. The table below outlines each menu, including the various parameters and initial settings.

To enter the Setup Menu

While the deck is stopped, press MENU/NO twice to display "Setup Menu",

or

press MENU/NO to display "Edit Menu" and turn AMS until "Setup ?" appears in the display, then press AMS.

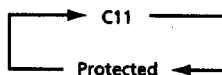| Menu number	Function	Parameters	Initial setting	See
01	Creates a program.	—	—	page 23
02	Sets the track marking function.	T.Mark Off, T.Mark LSyn	T.Mark LSyn	page 14
03	Sets the reference level of the input signal when "T.Mark LSyn" is selected in Setup Menu 02.	LS(T) –72 to –0dB	LS(T) –50dB	page 14
04	Turns the Auto Space and Auto Pause Functions on and off.	Auto Off, Auto Space, Auto Pause	Auto Off	page 25
05	Turns the Smart Space and Auto Cut Functions on and off.	S.Space Off, S.Space On	S.Space On	page 10
06	Turns the Peak Hold Function on and off for the peak level meters.	P.Hold On, P.Hold Off	P.Hold Off	page 12
07	Sets the playing time during music scan.	M.Scan 6 to 20s	M.Scan 6s	page 21
08	Sets the duration of fade-in recording and playback.	F.in 1.0 to 15.0s	F.in 5.0s	page 17
09	Sets the duration of fade-out recording and playback.	F.out 1.0 to 15.0s	F.out 5.0s	page 17
10	Adjusts the analog signal level input through the LINE (ANALOG) IN jacks.	Ain –∞ to +12.0dB	Ain 0.0dB	page 13
11	Adjusts the digital signal level input through the DIGITAL OPT 1 connector.	Opt1 –∞ to +12.0dB	Opt1 0.0dB	page 12
12	Adjusts the digital signal level input through the DIGITAL OPT 2 connector.	Opt2 –∞ to +12.0dB	Opt2 0.0dB	page 12
13	Adjusts the analog signal level output to the LINE (ANALOG) OUT and PHONES jacks.	Aout –20.0 to 0.0dB	Aout 0.0dB	page 25
14	Sets the duration of the Sleep Timer.	Sleep 30 to 120min	Sleep 60min	page 27
15	Turns the Sleep Timer Function on and off.	Sleep On, Sleep Off	Sleep Off	page 27

Self-Diagnosis Function

The deck has a self-diagnosis display. This function shows a three-digit display (a combination of a letter and figures) and the corresponding message alternately, so you can check the deck's condition.
If such a display appears, check the following table in order to resolve the problem.
Should any problem persist, consult your nearest Sony dealer.

Self-diagnosis display

```
    ┌──────► C11 ──────┐
    │                   │
    └───── Protected ◄──┘
```

Three-digit display/Message	Cause/Remedy
C11/Protected	The inserted MD is record-protected. ➡ Take out the MD, and close the record-protect tab (page 7).
C13/REC Error	The recording was not made properly. ➡ Set the deck in a stable place, and repeat the recording procedure.
	The inserted MD is dirty (with smudges, fingerprints, etc.), scratched, or not up to standards. ➡ Replace the disc, and repeat the recording procedure.
C13/Disc Error	The deck could not read the TOC of the MD properly. ➡ Take out the MD, and insert it again.
C14/Disc Error	The deck could not read the TOC of the MD properly. ➡ Insert another disc. ➡ If possible, erase all tracks on the MD using the All Erase Function on page 29.
C71/Din Unlock	A moment's lighting is due to the signals of the digital program being recorded. This does not affect the recorded material. While recording from a digital component connected through the digital input connector, the digital connecting cable was unplugged or the digital component turned off. ➡ Connect the cable or turn the digital component back on.