

MiniDisc Deck

Operating Instructions _____ **GB**

Mode d'emploi _____ **FR**

Manual de instrucciones _____ **ES**

Manual de instruções _____ **PT**



MDS-JB930

WARNING

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

This appliance is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.



The following caution label is located inside the unit.



AR46

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.

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

The instructions in this manual are for the MDS-JB930 MiniDisc Deck.

Conventions

- Controls in these instructions are those on the deck; these may, however, be substituted by controls on the supplied remote that are similarly named, or, when different, appear in the instructions within parentheses.

Example: Turn AMS clockwise (or press ►► repeatedly).

- The following icons are used in this manual:



Indicates a procedure that requires use of the remote.



Indicates hints and tips for making the task easier.

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GB

Getting Started

This chapter provides information on the supplied accessories, things you should keep in mind while hooking up the system, and how to connect various audio components to the MD deck. Be sure to read this chapter thoroughly before you actually connect anything to the deck.


Before You Start the Hookup

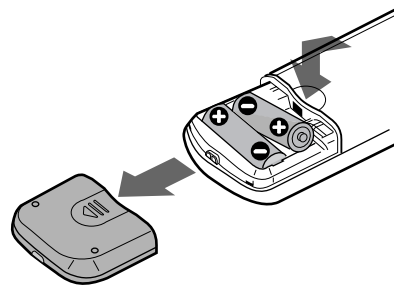
Checking the supplied accessories

This MD deck comes with the following items:

- Audio connecting cords (2)
- Optical cable (1)
- Remote commander (remote) RM-D33M (1)
- R6 (size-AA) batteries (2)

Inserting batteries into remote

Insert two R6 (size-AA) batteries with the + and – properly oriented to the markings into the battery compartment. When using the remote, point it at the remote sensor  on the deck.



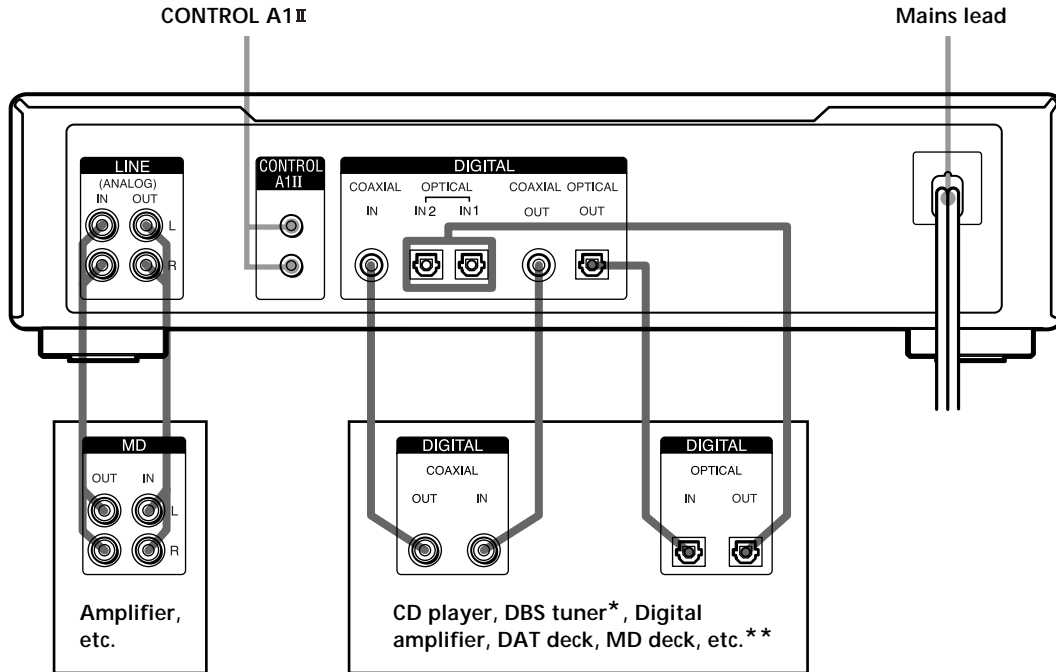
When to replace the batteries

Under normal conditions, the batteries should last for about six months. When the remote no longer operates the deck, replace both batteries with new ones.

Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not use a new battery with an old one.
- Do not expose the remote sensor to direct sunlight or lighting apparatus. 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 Audio Components



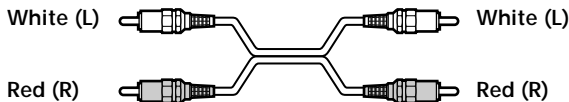
* Digital equipment with a DIGITAL OUT connector only

**Digital equipment with both DIGITAL IN and OUT connectors

Required cords

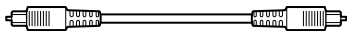
Audio connecting cords (2) (supplied)

When connecting an audio connecting cord, be sure to match the colour-coded pins to the appropriate jacks: white (left) to white and red (right) to red.

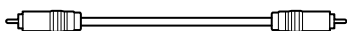


Optical cables (3) (only one supplied)

- When connecting an optical cable, take the caps off the connectors and insert the cable plugs straight in until they click into place.
- Do not bend or tie the optical cables.



Coaxial digital connecting cables (2) (not supplied)



Things you should keep in mind while hooking up the system

- Turn off the power to all components before making any connections.
- Do not connect any mains lead until all the connections are completed.
- Be sure the connections are firm to prevent hum and noise.

Jacks (connectors) for connecting audio components

Connect	To the
Amplifiers	LINE (ANALOG) IN/OUT jacks
CD players or DBS tuners	DIGITAL COAXIAL IN jack or DIGITAL OPTICAL IN* connector
Digital amplifiers, DAT decks, or another MD deck	DIGITAL COAXIAL IN/OUT jacks or DIGITAL OPTICAL IN*/OUT connectors

* There is no distinction of IN1 and IN2 connectors.

Hooking Up the Audio Components

Connecting the mains lead

Connect the mains lead of the deck to a wall outlet.

Note

If you use a timer, connect the mains lead to the outlet of the timer.

About the CONTROL A1II Control System

This MD deck is compatible with the CONTROL A1II Control System.

The CONTROL A1II Control System was designed to simplify the operation of audio systems composed of separate Sony components. CONTROL A1II connections provide a path for the transmission of control signals which enable automatic operation and control features usually associated with integrated systems.

Currently, CONTROL A1II connections between a Sony MD deck, CD player, amplifier (receiver), and cassette deck provide automatic function selection and synchro-recording.

In the future the CONTROL A1II connection will work as a multifunction bus allowing you to control various functions for each component.

Note

The CONTROL A1II Control System is designed to maintain upward compatibility as the Control System is upgraded to handle new functions. In this case, however, older components will not be compatible with the new functions.

CONTROL A1II and CONTROL A1 compatibility

The CONTROL A1 control system has been updated to the CONTROL A1II which is the standard system in the SONY 300 disc CD changer and other recent Sony components. Components with CONTROL A1 jacks are compatible with components with CONTROL A1II, and can be connected to each other. Basically, the majority of the functions available with the CONTROL A1 control system will be available with the CONTROL A1II control system.

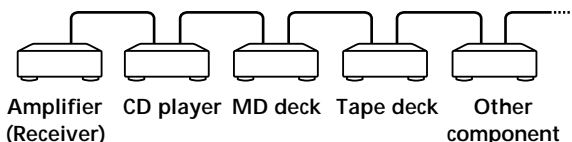
However, when making connections between components with CONTROL A1 jacks and components with CONTROL A1II jacks, the number of functions that can be controlled may be limited depending on the component. For detailed information, refer to the operating instructions supplied with the component(s).

Connecting the CONTROL A1II Control System

Connect monaural (2P) mini-plug cables in series to the CONTROL A1II jacks on the back of each component. You can connect up to ten CONTROL A1II compatible components in any order. However, you can connect only one of each type of component (i.e., 1 CD player, 1 MD deck, 1 tape deck and 1 receiver).

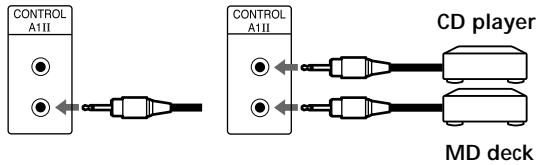
(You may be able to connect more than one CD player or MD deck, depending on the model. For detailed information, refer to the operating instructions supplied with the respective component.)

Example



In the CONTROL A1II control system, the control signals flow both ways, so there is no distinction of IN and OUT jacks. If a component has more than one CONTROL A1II jack, you can use either one, or connect different components to each jack.

Jacks and connection examples



On CONTROL A1 jacks and connections

It is possible to make connections between CONTROL A1 and CONTROL A1II jacks. For details regarding particular connections or setup options, refer to the operating instructions supplied with component(s).

About the connecting cable

Some CONTROL A1II compatible components are supplied with a connecting cable as an accessory. In this case, use the connecting cable for your connection. When using a commercially available cable, use a monaural (2P) mini-plug cable less than 2 meters long, with no resistance (like the Sony RK-G69HG).

Basic Functions of the CONTROL A1II Control System

Automatic function selection

When you connect CONTROL A1II compatible Sony components using control A1II cables (not supplied), the function selector on the amplifier (or receiver) automatically switches to the correct input when you press the play button on one of the connected components.

(If you press \triangleright (play button) on the MD deck while the CD is playing, the function selector on the amplifier switches from CD to MD.)

Notes

- This function only works when the components are connected to the amplifier (or receiver) inputs according to the names on the function buttons. Certain receivers allow you to switch the names of the function buttons. In this case, refer to the operating instructions supplied with the receiver.
- When recording, do not play any components other than the recording source. It will cause the automatic function selection to operate.

Synchro-recording

This function lets you perform synchro-recording between the MD deck and selected source component.

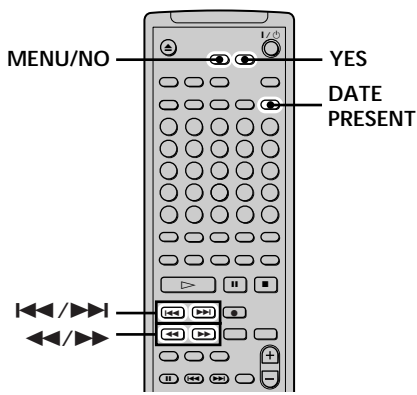
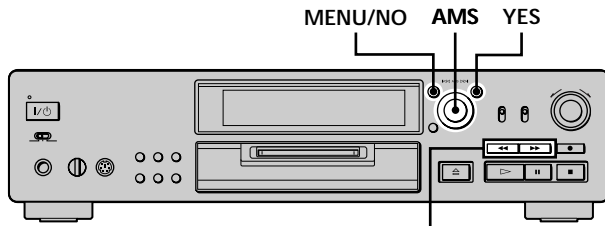
- 1 Set the source selector on the amplifier (or receiver) to the source component.
- 2 Set the source component to pause mode (make sure both the \triangleright and \mathbf{II} indicators light together).
- 3 Set the deck to recording pause mode.
- 4 Press \mathbf{II} on the deck.
The source component is released from the pause mode, and recording begins shortly thereafter. When the playback ends from the source component, recording stops.

Notes

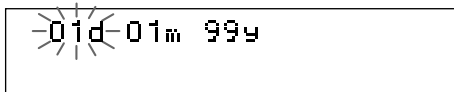
- Do not set more than one component to the pause mode.
- This MD deck is equipped with a special synchronized recording function that uses the CONTROL A1II Control System (see "Making a CD Synchro-recording from a Sony CD player connected with a control A1II cable (not supplied)" on page 25).

Setting the Clock

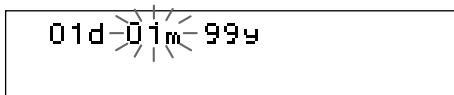
Once you set the MD deck's internal clock, the MD deck will automatically record the date and time of all recordings. When playing a track, you can display the date and time the track was recorded (see page 16).



- 1 While the deck is stopped, press MENU/NO twice. "Setup Menu" appears in the display.
- 2 Turn AMS (or press **◀◀/▶▶** repeatedly) until "Clock Set ?" appears, then press AMS. The day indication starts flashing.



- 3 Turn AMS (or press **◀◀/▶▶** repeatedly) to enter the current day, then press AMS. The day indication stops flashing, and the month indication starts flashing.



- 4 Repeat step 3 to enter the month, year, hour, and minute.



When you enter the minute, the set date and time appear again followed by "Complete!!", and the clock settings are completed.

Changing the clock setting(s)

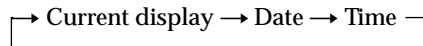
- 1 Do steps 1 and 2 above.
- 2 Press AMS or **◀◀/▶▶** repeatedly until the setting you want to change flashes.
- 3 Turn AMS (or press **◀◀/▶▶** repeatedly) to change the setting, then press AMS.
- 4 To complete the setting, press AMS or **◀◀/▶▶** repeatedly until the minute indication flashes, then press AMS or YES.

Displaying the current date and time

You can display the current date and time any time while the power is on.

Press DATE PRESENT.

Each press of the button changes the display as follows:



💡 For precise date and time stamping of recordings
Reset the time at least once a week.

Note

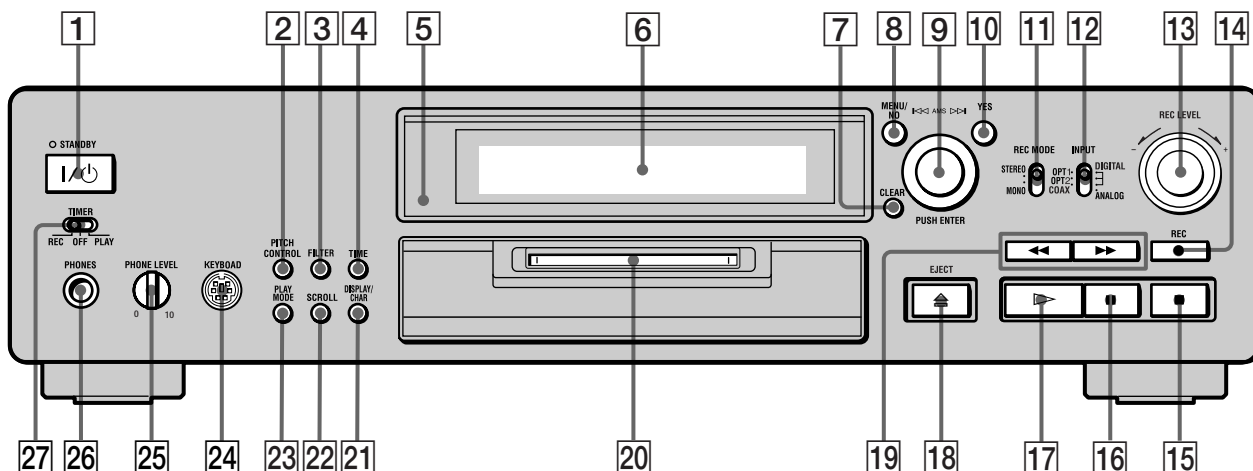
If the mains lead is disconnected for a long time, the memorized clock settings will disappear and "Initialize" will flash in the display the next time you plug in and turn on the deck. If this happens, reset the clock.

Location and Function of Parts

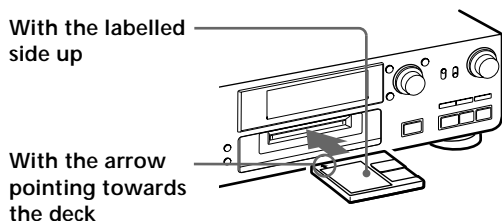
This chapter tells you about the location and function of the various buttons and controls on the front panel and the supplied remote. Further details are provided on the pages indicated in the parentheses. It also tells you about the information that appears in the display window.

Front Panel Parts Descriptions

- 1** I/⏻(power) switch (18, 26, 55, 57)
Press to turn on the deck. When you turn on the deck, the STANDBY indicator turns off. When you press the switch again, the deck turns off and the indicator lights up.
- 2** PITCH CONTROL button (16, 43, 44)
Press to set the MD playback speed (pitch). When you've set the pitch to a value other than "0" (factory setting), the button lights amber during play.
- 3** FILTER button (47)
Press to select the type of the digital filter.
- 4** TIME button (14-16, 20, 25)
Press to display the remaining time.
- 5** Remote sensor (4)
Point the remote towards this sensor (R) for remote operations.
- 6** Display window (8, 14-16, 20, 39, 43)
Shows various information.
- 7** CLEAR button (30, 31, 39)
Press to cancel the selection.
- 8** MENU/NO button (8, 21, 22, 30-42, 45, 49)
Press to display "Edit Menu" or "Setup Menu."
- 9** AMS control (8, 19, 21-23, 26, 27, 30-45, 49)
Turn to locate tracks, set the clock, select the input characters, or select a menu item and a setting value.
- 10** YES button (8, 21, 22, 30-42, 45, 49)
Press to carry out the selected operation.
- 11** REC MODE selector (18)
Use to set the REC MODE to STEREO or MONO.

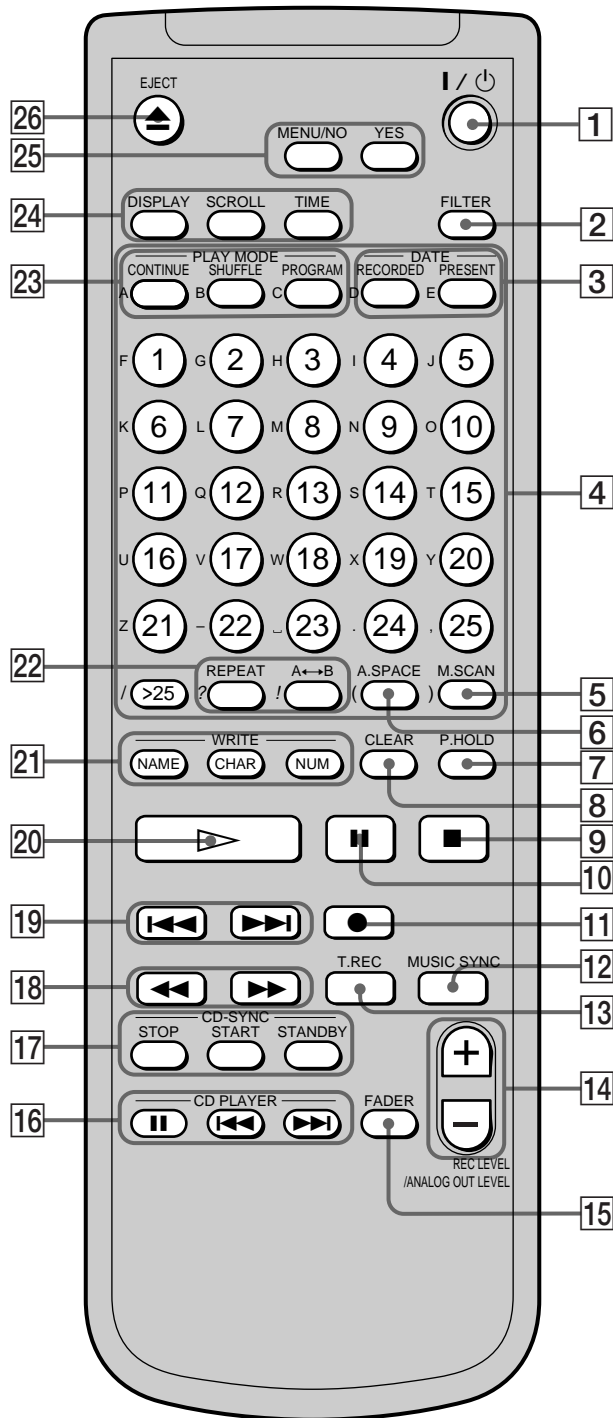


- 12** INPUT selector (18, 20, 21, 55)
Use to select the input jack (or connector) of the programme source to be recorded.
- 13** REC LEVEL control (20)
Turn to adjust the recording level.
- 14** REC ● button (19, 20, 22, 25, 42)
Press to record on the MD, monitor the input signal, or mark track numbers.
- 15** ■ button (19, 26, 46)
Press to stop play or recording, or cancel the selected operation.
- 16** || button (7, 19, 25, 26)
Press to pause play or recording. Press again to resume play or recording.
- 17** ▷ button (7, 19, 25-27, 29, 30, 46)
Press to start play.
- 18** EJECT ≡ button (19, 20, 26)
Press to eject the MD.
- 19** ◀▶/▶▶ buttons (8, 28, 30, 31, 33, 35, 36, 39)
Press to locate a portion within a track, change the contents of a programme, or change the input character.
- 20** MD insertion slot (18, 26)
Insert the MD as illustrated below.
- 21** DISPLAY/CHAR button (14, 15, 20, 30, 39)
 - Press when the deck is stopped to display disc information or the contents of a programme.
 - Press during recording to display information on the track being recorded.
 - Press during play to display information on the current track.
 - Press during recording pause to adjust the recording level.
 - Press while editing an MD to select the type of characters to be input.
- 22** SCROLL button (16)
Press to scroll the name of a track or MD.
- 23** PLAY MODE button (29, 30, 46)
Press to select Shuffle Play or Programme Play.
- 24** KEYBOARD jack (49)
Connect a keyboard to this jack.
- 25** PHONE LEVEL control (26)
Turn to adjust the volume of the headphones.
- 26** PHONES jack (26)
Connect headphones to this jack.
- 27** TIMER selector (46)
Use to set the timer for recording (REC) or playing (PLAY). Set to OFF to turn off the timer.












Remote Parts Descriptions

Location and Function of Parts



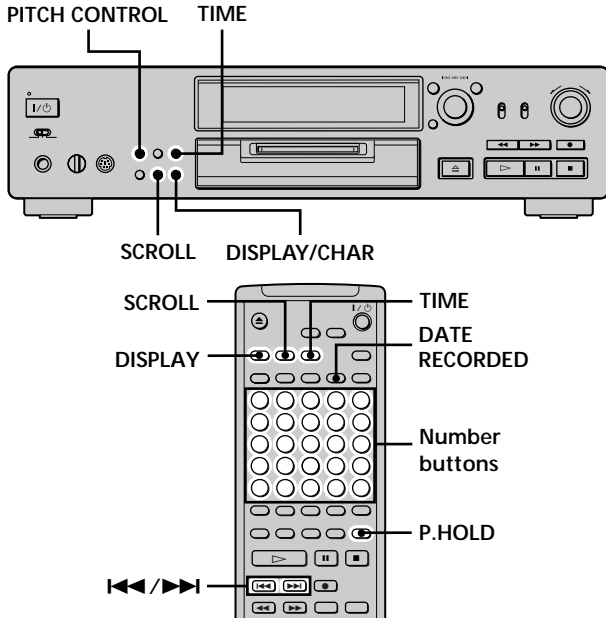
- 1** I/⏻(power) switch (18, 26, 55, 57)
Press to turn on the deck. When you turn on the deck, the STANDBY indicator on the deck turns off. When you press the switch again, the deck turns off and the indicator lights up.
- 2** FILTER button (47)
Press to select the type of the digital filter.
- 3** DATE PRESENT button (8)
Press to display the current date and time.
DATE RECORDED button (16)
Press to display the recording date and time.
- 4** Letter/number buttons (16, 27, 30, 40)
Press to input letters or numbers.
- 5** M.SCAN button (27)
Press to scan a track within a range of six to twenty seconds.
- 6** A.SPACE button (31, 32)
Press to insert a three-second blank space between tracks or to pause play after each track.
- 7** P.HOLD button (15)
Press to turn on or off the Peak Hold Function.
- 8** CLEAR button (30, 31, 40, 41)
Press to cancel the selection.
- 9** ■ button (19, 26, 46)
Press to stop play or recording, or cancel the selected operation.
- 10** || button (19, 26)
Press to pause play or recording. Press again to resume play or recording.
- 11** ● button (19, 20, 22, 42)
Press to record on the MD, monitor the input signal, or mark track numbers.
- 12** MUSIC SYNC button (24, 42)
Press to start Music Synchro-recording.

- 13 T.REC button (23)**
Press to start Time Machine Recording.
- 14 REC LEVEL/ANALOG OUT LEVEL +/- buttons (20, 26)**
Press to adjust the recording or analog output level.
- 15 FADER button (44, 45)**
Press to perform Fade-in Play/Recording or Fade-out Play/Recording.
- 16 CD PLAYER  button (25)**
Press to pause the CD play. Press again to resume CD play.
- CD PLAYER   buttons (25)**
Press to locate tracks on the CD.
- 17 CD-SYNC STOP button (25)**
Press to stop CD Synchro-recording.
- CD-SYNC START button (24, 25)**
Press to start CD Synchro-recording.
- CD-SYNC STANDBY button (24, 25)**
Press to enter standby for CD Synchro-recording.
- 18   buttons (8, 28-31, 35, 36, 40)**
Press to locate a portion within a track, change the contents of a programme, or shift the cursor to the right.
- 19   buttons (8, 16, 19, 21, 22, 26, 27, 30-32, 34-38, 40-42, 45, 49)**
Press to locate tracks or select a menu item and a setting value.
- 20  button (19, 26, 27, 29, 30, 46)**
Press to start play.
- 21 NAME button (40, 41)**
Press to add the name or change the name of a track or MD.
- CHAR button (40)**
Press to select the type of characters to be input.
- NUM button (40)**
Press to input numbers.
- 22 REPEAT button (28, 29)**
Press to play tracks repeatedly.
- A \leftrightarrow B button (29)**
Press to select Repeat A-B Play.
- 23 CONTINUE button (29, 30, 46)**
Press to resume normal play.
- SHUFFLE button (29, 46)**
Press to select Shuffle Play.
- PROGRAM button (30, 46)**
Press to select Programme Play.
- 24 DISPLAY button (14, 15, 20, 30)**
Press to select the information to be displayed in the window.
- SCROLL button (16)**
Press to scroll the name of a track or MD.
- TIME button (14-16, 20, 25)**
Press to display the remaining time.
- 25 MENU/NO button (8, 21, 22, 30-38, 40-42, 45, 49)**
Press to display "Edit Menu" or "Setup Menu."
- YES button (8, 21, 22, 30-38, 40-42, 45, 49)**
Press to carry out the selected operation.
- 26 EJECT  button (19, 20, 26)**
Press to eject the MD.

Using the Display

The display window shows information about the MD or track. This section describes the information that appears for each deck status.

Location and Function of Parts

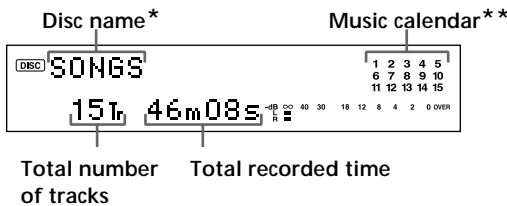


Note

The display format that you've selected in each of the deck statuses (play, recording, etc.) will appear whenever the deck enters that status and you press DISPLAY/CHAR (or DISPLAY) or TIME until you change the format to another (see the following sections for details). If you disconnect the mains lead, however, all the displays will revert to their default (i.e., the factory set display) the next time you turn on the deck.

When you insert an MD

The following display appears.



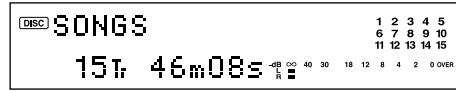
- * The track name appears instead of the disc name during play. When the MD or the track has no name, "No Name" appears.
- **A music calendar shows all the track numbers within a grid if the MD is a premastered disc, or without a grid if the MD is a recordable disc. If the total number of tracks exceeds 15, ► appears to the right of number 15 in the music calendar.

While the deck is stopped

Press DISPLAY/CHAR (or DISPLAY) repeatedly to change the display.

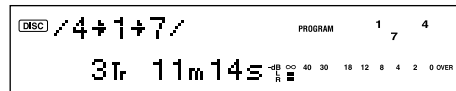
Each press of the button changes the display as follows:

Total number of tracks and total recorded time (default display)



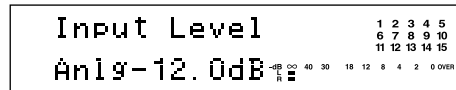
Press

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



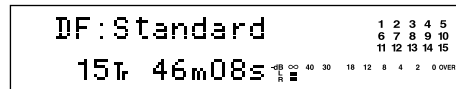
Press

Level of the input signal



Press

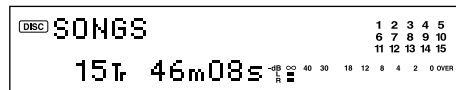
DF (digital filter) display



Press

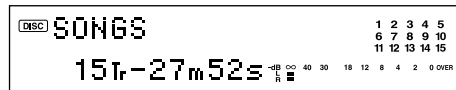
💡 You can check the remaining recordable time on the MD. Press TIME. Each press of the button changes the display as follows:

Total number of tracks and total recorded time (default display)



Press

Total number of tracks and remaining recordable time on the MD (recordable MDs only)*



Press

* Not shown for the premastered discs.

While the deck is recording

Press DISPLAY/CHAR (or DISPLAY) repeatedly to change the display.

Each press of the button changes the display as follows:

Track number and recorded time of the current track (default display)



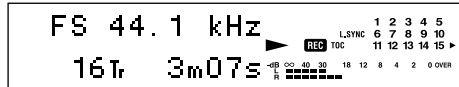
Press

Level of the input signal



Press

Sampling frequency indication*



* "FS -- kHz" appears while the analog signal is input.

Press

DF (digital filter) display



Press

You can check the remaining recordable time on the MD. Press TIME. Each press of the button changes the display as follows:

Track number and recorded time of the current track (default display)



Press

Track number and remaining recordable time on the MD



Press

The Peak Hold Function freezes the peak level meters at the highest level reached by the input signal

- 1 While the deck is stopped or playing, press MENU/NO twice. "Setup Menu" appears in the display.
- 2 Turn AMS until "P.Hold Off" (factory setting) appears, then press AMS or YES.
- 3 Turn AMS to select "P.Hold On," then press AMS or YES.
- 4 Press MENU/NO.

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

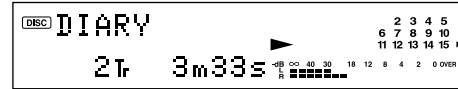
You can use the remote to turn the Peak Hold Function on or off. Press P.HOLD to display "P.Hold On" or "P.Hold Off."

While the deck is playing

Press DISPLAY/CHAR (or DISPLAY) repeatedly to change the display.

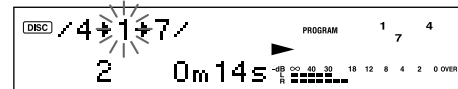
Each press of the button changes the display as follows:

Track number and elapsed time of the current track (default display)



Press

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



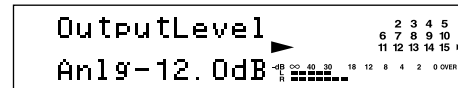
Press

Disc name and track name



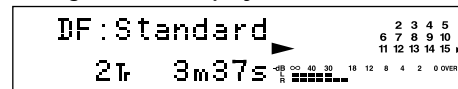
Press

Level of the output signal




Press

DF (digital filter) display



Press

Using the Display

 You can check the remaining time
Press TIME. Each press of the button changes the display as follows:

Track number and elapsed time of the current track (default display)



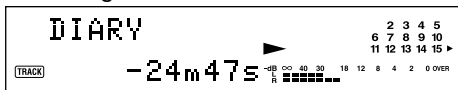
Press

Track number and remaining time of the current track




Press

Remaining time of all recorded tracks



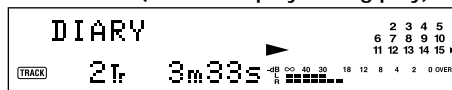
Press

 You can check the track name at any time while playing
Press SCROLL.
The track name appears and scrolls. While the track name is scrolling, press the button again to pause scrolling, and again to continue scrolling.

Checking the pitch control value

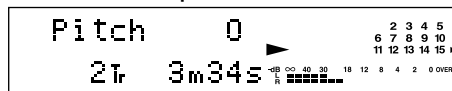
Press PITCH CONTROL repeatedly to change the display.
Each press of the button changes the display as follows:

Track number and elapsed time of the current track (default display during play)



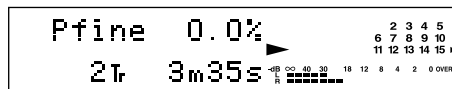
Press

Pitch value in steps*



Press

Fine control value*





Press

* If you want to change the pitch, see "Changing the Pitch" on pages 43 and 44.

Displaying the recorded date

When the internal clock has been set, the deck automatically records the recording date and time of all recordings. You can then check the recorded date and time of a track.

- 1 Press   or number buttons to locate the track you want to check.
- 2 Press DATE RECORDED.
"No Date" appears if the internal clock has not been set or the track was recorded on another MD deck without a date and time stamp function.

Recording on MDs

This chapter explains the various ways to record on an MD, as well as how to mark track numbers and perform synchro-recording with other components.

Notes on Recording

About indications which appear while recording

When “Protected” and “C11” alternate in the display

The record-protect slot is open and the MD is record-protected. To record on the MD, slide the tab to close the slot. For details, see “To prevent accidental erasure of the recorded material” on page 19.

When “Din Unlock” and “C71” alternate in the display

- The digital component selected with the INPUT selector is not connected correctly. Check the connection.
- The selected digital component is not turned on. Turn on the component.

When “Cannot Copy” appears in the display

The MD deck uses the Serial Copy Management System. MDs recorded through the digital input connector can't be copied on other MDs or DAT tapes through the digital output connector. For details, see “Guide to the Serial Copy Management System” on page 18.

When “TRACK” flashes in the display

The MD deck is recording over existing track(s) (see “Recording on an MD” on page 18). The indication stops flashing when the deck reaches the end of the recorded portion.

About indications which appear after recording

When “TOC” lights up in the display

Recording has finished but the TOC (Table of Contents) on the MD has not been updated to reflect the recording results. The recording will be lost if you disconnect the mains lead while the indication is on. The TOC will be updated only when you eject the MD or turn off the MD deck.

When “TOC Writing” flashes in the display

The deck is updating the TOC. Do not disconnect the mains lead or move the deck while the indication flashes.

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 the MD deck. This allows you to monitor and record sources such as 32- or 48-kHz DAT tape or satellite broadcasts, as well as the CDs and MDs.

Guide to the Serial Copy Management System

Digital audio components, such as CDs, MDs, and DATs make it easy to produce high-quality copies of music by processing music as a digital signal.

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

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

Examples are given as follows:

- You can make a copy of a commercially available digital sound programme (for example, a CD or MD), but you can't make a second copy from the first-generation copy.
- You can make a copy of a digital signal from a digitally recorded analog sound programme (for example, an analog record or a music cassette tape) or from a digital satellite broadcast programme, but you can't make a second copy from the first-generation copy.

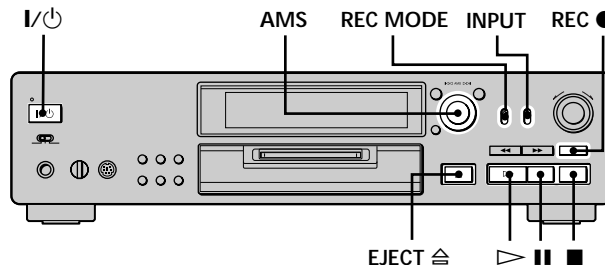
* A first-generation copy means the first recording of a digital audio source through the deck's digital input connector. For example, if you record from a CD player connected to the DIGITAL IN connector, that copy is a first-generation copy.

Note

The restrictions of the Serial Copy Management System don't apply when you make a recording through the analog-to-analog connections.

Recording on an MD

The operations for normal recording are explained below. If the MD has recorded material on it, the deck will automatically start recording from the end of the recorded portion.



- 1 Turn on the amplifier and programme source, and select the source on the amplifier.
- 2 Press I/⏻ to turn on the deck. The STANDBY indicator turns off.
- 3 Insert a recordable MD.
- 4 Set INPUT to the position that corresponds to the input jacks (connector) connected to the programme source.

If the source is connected to the	Set INPUT to
DIGITAL OPTICAL IN1 connector	OPT1
DIGITAL OPTICAL IN2 connector	OPT2
DIGITAL COAXIAL IN jack	COAX
LINE (ANALOG) IN jacks	ANALOG

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

To record in	Set REC MODE to
Stereo	STEREO
Monaural	MONO

Monaural mode allows you to record about twice as much material as stereo.

6 If necessary, locate the point on the MD to start recording from.

If you want to record on a new MD or start recording from the end of the recorded portion, go to step 7.

To record over from the beginning of an existing MD track

Turn AMS (or press ◀◀/▶▶ repeatedly) until the number of the track to be recorded over appears.

To record over from the middle of an MD track

Turn AMS (or press ◀◀/▶▶ repeatedly) until the number of the track to be recorded over appears, then press ▷ to start playback. Press || at the point you want to start recording from.

7 Press REC ●.

The deck changes to recording pause.

8 If necessary, adjust the recording level.

For details, see “Adjusting the Recording Level” on page 20.

9 Press ▷ or ||.

Recording starts.

10 Start playing the programme source.

Operations you may want to do during recording

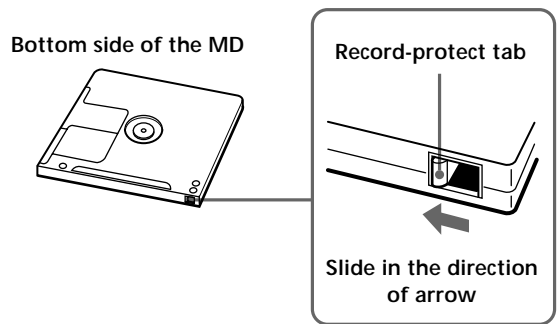
To	Press
Stop recording	■
Pause recording	
Resume recording after pausing	▷ or
Eject the MD	EJECT ≡ after stopping recording

When you pause recording

The track number increases by one. For example, if you paused recording while recording track 4, the track number will be 5 when you resume recording.

To prevent accidental erasure of the recorded material

To make it impossible to record on an MD, slide the record-protect tab in the direction of the arrow (see illustration below) to open the slot. To enable recording, close the slot.



To play the tracks you just recorded

Press ▷ immediately after stopping recording.

The deck starts to play 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 ▷.

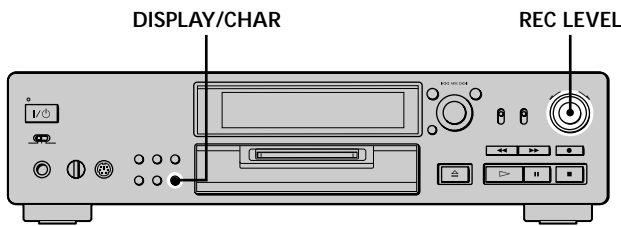
The deck starts to play from the first track of the MD.

Notes

- If you switch REC MODE during recording or recording pause, recording stops.
- Even if you set REC MODE to MONO, the monitor signal during recording does not become monaural.
- You can't record over existing material when Shuffle Play (page 29) or Programme Play (page 30) has been selected. "Impossible" appears in the display at this time.

Adjusting the Recording Level

You can adjust the recording level for both analog and digital recording.



- 1 Do steps 1 to 7 of "Recording on an MD" on pages 18 and 19.
- 2 Play the portion of the programme source with the strongest output.
- 3 Press DISPLAY/CHAR (or DISPLAY) repeatedly until the level of the input signal appears.
- 4 While monitoring the sound, turn REC LEVEL (or press REC LEVEL/ANALOG OUT LEVEL +/- repeatedly) to raise the recording level to its highest level without turning on the two rightmost indicators on the peak level meters.



Avoid turning on these indicators

- 5 Stop playing the programme source.
- 6 To start recording, continue from step 9 of "Recording on an MD" on page 19.

You can adjust the recording level without changing the display

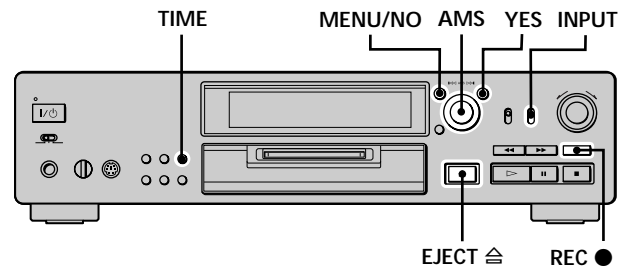
In this case, skip step 3 above.

While adjusting the recording level, the level of the input signal appears for about three seconds.

Note

The volume can only be increased up to +12.0 dB (for analog recording) or +18.0 dB (for digital recording). Therefore, if the output level of the connected component is low, it may not be possible to set the recording level to maximum.

Recording Tips



Checking the remaining recordable time on the MD

Press TIME repeatedly.

While the deck is	The following information appears
Stopped	Total recorded time ↔ Remaining recordable time on the MD
Recording	Recorded time of the current track ↔ Remaining recordable time on the MD

For details, see pages 14 and 15.

Monitoring the input signal (Input Monitor)

You can monitor the selected input signal even when you're not recording it.

- 1 Press EJECT to eject the MD.
- 2 Set INPUT to the position that corresponds to the jacks (connector) where the signal you want to monitor is being input.
- 3 Press REC .

When INPUT is set to ANALOG

The analog signal input from the LINE (ANALOG) IN jacks is output to the DIGITAL OUT connector after A/D conversion, and then to the LINE (ANALOG) OUT jacks after D/A conversion. "AD - DA" appears in the display during this time.

When INPUT is set to OPT1, OPT2 or COAX

The digital signal input from the DIGITAL IN connector is output to the DIGITAL OUT connector after passing through the sampling rate converter, and then to the LINE (ANALOG) OUT jacks and PHONES jack after D/A conversion. “- DA” appears in the display during this time.

Erasing blank portions automatically (Smart Space/Auto Cut)

The deck can be set to automatically erase any blanks that are produced when the signal is interrupted during recording. The function which activates (Smart Space or Auto Cut) depends on the length of the interruption, as described below.

Smart Space

If the signal is interrupted for less than 30 seconds, Smart Space replaces the blank portion with a blank space of about three seconds, then continues the recording. “Smart Space” appears in the display during this time.

Auto Cut

If the signal is interrupted for about 30 seconds, Auto Cut replaces the blank portion with a blank space of about three seconds, then pauses the recording. “Auto Cut” appears in the display during this time.

Do the procedure below to turn Smart Space and Auto Cut on or off.

- 1** While the deck is stopped, press MENU/NO twice. “Setup Menu” appears in the display.
- 2** Turn AMS (or press ◀▶ repeatedly) until “S.Space On” appears, then press AMS or YES.

- 3** Turn AMS (or press ◀▶ repeatedly) to select the setting, then press AMS or YES.

To	Select
Turn on Smart Space and Auto Cut	S.Space On (factory setting)
Turn off Smart Space and Auto Cut	S.Space Off

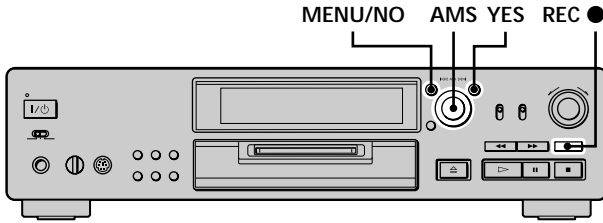
- 4** Press MENU/NO.

Notes

- If you start recording with no signal input, Smart Space and Auto Cut will not operate regardless of the setting.
- Smart Space does not affect the order of the track numbers being recorded, even if the blank space occurs in the middle of a track.
- Auto Cut is automatically turned on or off in tandem with Smart Space.
- If you turn off the deck or disconnect the mains lead, the deck will store the last setting (“S.Space On” or “S.Space Off”) and recall it the next time you turn on the deck.
- If the deck continues recording pause for about ten minutes after the Auto Cut activated, recording stops automatically.

Marking Track Numbers While Recording (Track Marking)

You can mark track numbers either manually or automatically while recording. By marking track numbers at specific points, you can quickly locate the points later or edit the MD easily.



Marking track numbers manually (Manual Track Marking)

Press REC ● at the point where you want to add a track number while recording.

Marking track numbers automatically (Automatic Track Marking)

When recording from a CD player or MD deck connected to the DIGITAL IN connector, the deck marks track numbers in the same sequence as the source. When recording from other sources connected to the DIGITAL IN connector or a source connected to the LINE (ANALOG) IN jacks, do the procedure below to mark track numbers automatically.

- 1 While the deck is stopped, press MENU/NO twice. "Setup Menu" appears in the display.
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) until "T.Mark Lsyn" appears, then press AMS or YES.

- 3 Turn AMS (or press ◀◀/▶▶ repeatedly) to select the setting, then press AMS or YES.

To	Select
Turn on Automatic Track Marking	T.Mark Lsyn (factory setting)
Turn off Automatic Track Marking	T.Mark Off

- 4 Press MENU/NO. The deck marks a track number whenever the input signal level drops to -50 dB (the trigger level for Automatic Track Marking) or below for at least 1.5 seconds.

To change the trigger level for Automatic Track Marking

Do the procedure below to change the signal level that triggers Automatic Track Marking.

- 1 While the deck is stopped, press MENU/NO twice. "Setup Menu" appears in the display.
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) until "LS(T)" appears, then press AMS or YES.
- 3 Turn AMS (or press ◀◀/▶▶ repeatedly) to select the level, then press AMS or YES. You can set the level at any value between -72 dB and 0 dB, in 2 dB steps.
- 4 Press MENU/NO.

💡 Additional information on Automatic Track Marking

- When recording from a CD player or MD deck connected to the DIGITAL IN connector, the entire material may be recorded as a single track in the following cases:
 - When you consecutively record the same track two or more times using single-track repeat play.
 - When you consecutively record two or more tracks with the same track number but from different CDs or MDs.
 - When you record tracks from certain CD or multi-disc players.

Also, if the source is an MD, a track number may not be marked for tracks less than four seconds long.

- When recording from a component connected to the LINE (ANALOG) IN jacks with “T.Mark Off” selected or when recording from a DAT deck or DBS tuner connected to the DIGITAL IN connector, the entire material may be recorded as a single track.
- When recording from a DAT deck or DBS tuner connected to the DIGITAL IN connector, the deck will mark a track number whenever the sampling frequency of the input signal changes, regardless of the track marking parameter setting (“T.Mark Lsyn” or “T.Mark Off”).

💡 You can mark track numbers even after recording has finished

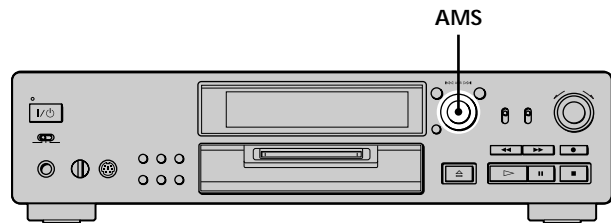
See “Dividing Tracks” on page 36.

Note

If you turn off the deck or disconnect the mains lead, the deck will store the last settings (“T.Mark Lsyn” or “T.Mark Off” and the trigger level) and recall them the next time you turn on the deck.

Starting Recording With Six Seconds of Prestored Audio Data (Time Machine Recording)

Whenever the deck is in recording pause, the deck’s buffer memory continuously stores the latest six seconds worth of audio data. When you press AMS (or T.REC), the recording then starts with the data in the buffer memory. Time Machine Recording thus allows you to avoid missing the beginning of material recorded live from an FM or satellite broadcast.



- 1 Do steps 1 to 7 of “Recording on an MD” on pages 18 and 19.

The deck changes to recording pause.

- 2 Start playing the programme source.

- 3 Press AMS (or T.REC) at the point where you want to start recording.

Recording starts with the six seconds of prestored data in the buffer memory, then continues recording via the buffer memory thereafter.

To stop Time Machine Recording

Press ■.

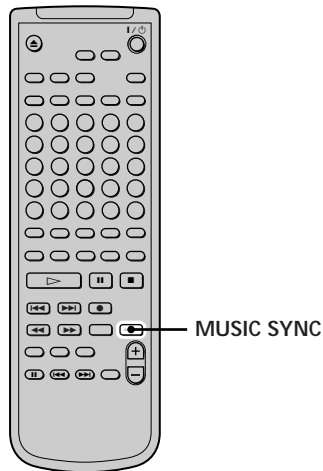
Note

The storage of data in the buffer memory starts from the moment the deck changes to recording pause. Thus, if you start recording less than six seconds after changing to recording pause, less than six seconds worth of data will be recorded from the buffer memory. The same is true if the programme source had been playing for less than six seconds at the time you start recording.

Synchro-recording With the Audio Component of Your Choice (Music Synchro-recording)



The Music Synchro-recording allows you to automatically synchronize recording on the MD deck with the playing of the selected programme source. The Track Marking function, however, will differ according to the programme source. For details, see “Marking Track Numbers While Recording” on page 22.



- 1 Do steps 1 to 6 of “Recording on an MD” on pages 18 and 19.
- 2 Press **MUSIC SYNC**.
The deck changes to recording pause.
- 3 Start playing the programme source.
Recording starts automatically.

To stop Music Synchro-recording

Press **■**.

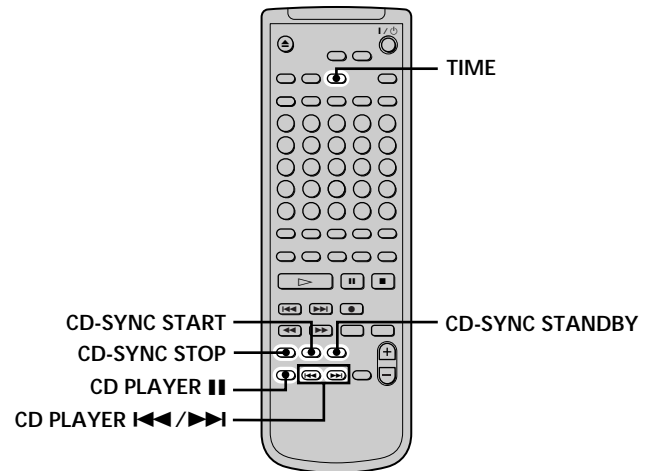
Note

During Music Synchro-recording, Smart Space and Auto Cut will operate regardless of their setting (“S.Space On” or “S.Space Off”).

Synchro-recording With a Sony CD Player

(CD Synchro-recording) 

When the deck is connected to a Sony CD player or Hi-Fi component system, you can easily copy the contents of CDs to the MD using the deck’s remote. As the same remote operates both the MD deck and the CD player or CD player section of the component system, make sure to place the MD deck and the CD player as close together as possible.




- 1 Turn on the amplifier and the CD player, and select CD on the amplifier.
- 2 Do steps 2 to 6 of “Recording on an MD” on pages 18 and 19.
- 3 Insert a CD into the CD player and select the playback mode (Shuffle Play, Programme Play, etc.) on the CD player.
- 4 Press **CD-SYNC STANDBY**.
The CD player changes to play standby and the MD deck changes to recording standby.
- 5 Press **CD-SYNC START**.
The deck starts recording and the CD player starts to play.
The track number and elapsed recording time of the track appear in the display.

If the CD player doesn’t start playing


Some CD players may not respond when you press **CD-SYNC START**. Press **II** on the CD player’s remote instead to start play on the CD player.

Operations you may want to do during CD Synchro-recording


To	Press
Stop recording	CD-SYNC STOP
Pause recording	CD-SYNC STANDBY or CD PLAYER
Locate the next track to be recorded during recording pause	CD PLAYER ◀◀/▶▶
Resume recording after pausing	CD-SYNC START or CD PLAYER
Check the remaining recordable time on the MD	TIME (page 15)

 You can use the remote of the CD player during CD Synchro-recording


Press	To change the deck to	And change the CD player to
▷	Recording	Play
■	Recording pause	Stop
 	Recording pause	Pause

 During CD Synchro-recording, track numbers are marked in the following ways:

- When the CD player is connected to the DIGITAL IN connector, track numbers are automatically marked as they appear on the CD.
- When the CD player is connected to the LINE (ANALOG) IN jacks, track numbers are automatically marked when “T.Mark Lsyn” has been selected (page 22).
- When you resume recording after recording pause, a new track number is automatically marked, regardless of the track marking parameter setting (“T.Mark Lsyn” or “T.Mark Off”).


 You can change CDs during CD Synchro-recording

- 1 Press **■** on the CD player’s remote.
- 2 Change the CD.
- 3 Press **▷** on the CD player’s remote. Recording resumes.

 You can also perform synchro-recording with a Sony video CD player

By reprogramming the MD’s remote, you can use the procedure above to perform synchro-recording with a Sony video CD player.

Press number button 2 while pressing down **I/⏏** on the MD deck’s remote. You can now operate the MD deck and the video CD player with the remote. To control the CD player again, press number button 2 while pressing down **I/⏏** on the MD deck’s remote.

 During CD Synchro-recording, the deck copies CD text information (CD text and disc memos) as it is to the MD (Disc Memo Copy function)

The Disc Memo Copy function operates when you make a CD Synchro-recording from a Sony CD player connected with a control A1**II** cable (not supplied) to the MD deck.

Notes

- When performing CD Synchro-recording with a CD player with a mode selector, be sure to set the selector to CD1.
- When you record tracks from certain CD or multi-disc players, the entire material may be recorded as a single track.
- The Disc Memo Copy function may not operate for extremely short CD tracks.
- Text information may not be copied for some CDs.

Making a CD Synchro-recording from a Sony CD player connected with a control A1**II** cable (not supplied)

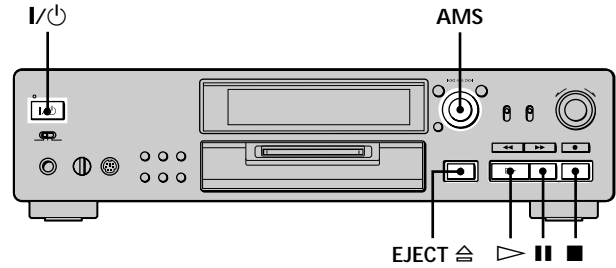
- 1 Do steps 1 to 3 of “Synchro-recording With a Sony CD Player” on page 24.
- 2 Set the CD player to playback pause mode.
- 3 Press REC **●** on the deck.
The MD deck changes to recording pause.
- 4 Press **▷** or **||** on the deck.
The deck starts recording and the CD player starts to play. When CD play finishes, recording stops.

Playing MDs

This chapter explains the various ways to play MDs.

Playing an MD

The operations for normal play are explained below.



- 1 Turn on the amplifier and select MD on the amplifier.
- 2 Press I/⏻ to turn on the deck.
The STANDBY indicator turns off.
- 3 Insert an MD.
- 4 If necessary, turn AMS clockwise (or press ►► repeatedly) to locate the track you want to start playing from.
If you want to play from the first track, go to step 5.
- 5 Press ►.
The deck starts to play.
- 6 Adjust the volume on the amplifier.

Operations you may want to do during play

To	Press or turn
Stop play	■
Pause play	
Resume play after pausing	▷ or
Locate a succeeding track	AMS clockwise (or press ►► repeatedly)
Locate the beginning of the current track or a preceding track	AMS counterclockwise (or press ◀◀ repeatedly)
Eject the MD	EJECT ◻ after stopping play
Adjust the analog output level* (between -20.0 dB and 0.0 dB) ◻	REC LEVEL/ANALOG OUT LEVEL +/- repeatedly

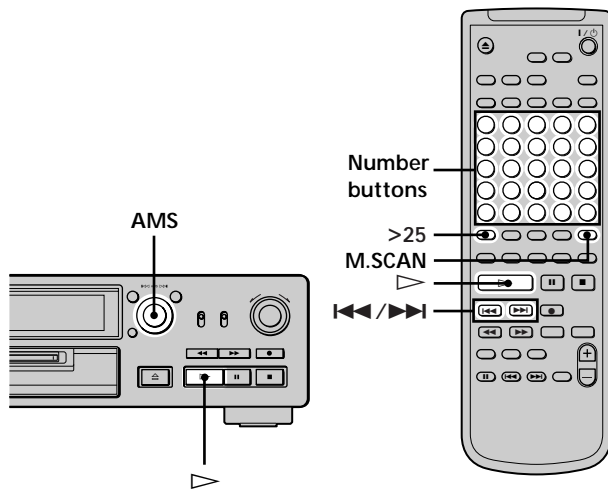
* When you eject the MD or turn off the deck, the output level is reset to the factory setting (0.0 dB).

🔊 To use headphones

Connect them to PHONES jack. Turn PHONE LEVEL (or press REC LEVEL/ANALOG OUT LEVEL +/- repeatedly) to adjust the volume.

Playing a Specific Track

While the deck is playing or stopped, use the procedure below to quickly play any track.



Locating a track with AMS*

To go to	Do the following:
The next or a succeeding track during play	Turn AMS clockwise (or press ►► repeatedly).
A preceding track during play	Turn AMS counterclockwise (or press ◀◀ repeatedly).
The beginning of the current track during play	Turn AMS counterclockwise (or press ◀◀ once).
A specific track while the deck is stopped	Turn AMS (or press ◀◀/►► repeatedly) until the track number you want to go to flashes in the display, then press AMS or ▷.
A specific track by scanning each track for six to twenty seconds (Music Scan)	Press M.SCAN to start scanning. When you find the track you want, press ▷ to start playing.

* Automatic Music Sensor

To locate the last track of the MD quickly
While the deck is stopped, turn AMS counterclockwise (or press ◀◀ once).

If you locate a track while the deck is stopped or paused
The deck will still be stopped or paused at the beginning of the located track.

- You can change the duration of Music Scan
- 1 While the deck is stopped, press MENU/NO twice. "Setup Menu" appears in the display.
 - 2 Turn AMS (or press ◀◀/►► repeatedly) until "M.Scan" appears, then press AMS or YES.
 - 3 Turn AMS (or press ◀◀/►► repeatedly) to select the duration, then press AMS or YES. You can set the duration within a range of six to twenty seconds, in one step.
 - 4 Press MENU/NO.

Playing a track by entering the track number

Press the number button(s) to enter the track number of the track you want to play.

To enter a track number over 25

- 1 Press >25.
- 2 Enter the corresponding digits.
To enter 0, press 10 instead.

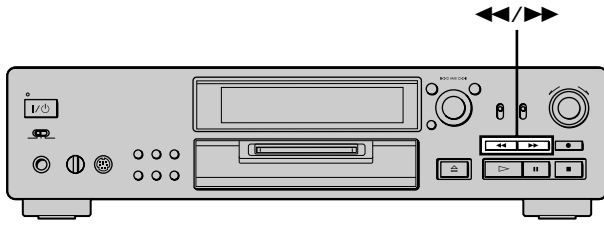
Examples:

- To play track number 30, press >25, then 3 and 10.
- To play track number 108, press >25 twice, then 1, 10, and 8.

If you enter a track number while the deck is stopped or paused
The deck will still be stopped or paused at the beginning of the track.

Locating a Particular Point in a Track

You can locate a particular point in a track during play or play pause.



Locating a point while monitoring the sound

Press down ◀▶ during play.

You will hear intermittent playback as the disc goes forward or in reverse. When you reach the point, release the button.

Notes

- If the disc reaches the end while you're pressing ▶▶, the deck stops.
- Tracks that are only a few seconds long may be too short for monitoring. For such tracks, play the MD at normal speed.

Locating a point by observing the time indication

Press down ◀▶ during play pause.

The elapsed playing time of the track appears in the display. When you reach the point, release the button. No sound is output during this time.

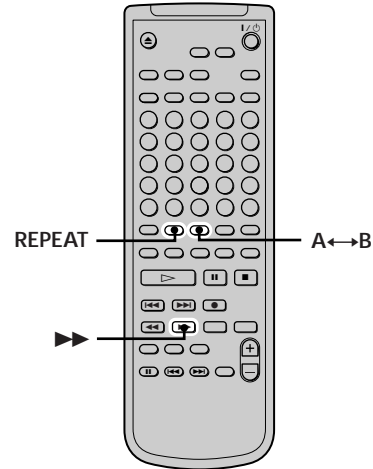
💡 When "- Over -" appears in the display

The disc has reached the end while you're pressing ▶▶. Turn AMS counterclockwise (or press ◀◀) or press ◀◀ to go back.

Playing Tracks Repeatedly



You can play an entire MD repeatedly. This function can be used with Shuffle Play to repeat all the tracks in random order (page 29), or with Programme Play to repeat all the tracks in the programme (page 30). You can also repeat a specific track or portion within a track.



Note

If you turn off the deck or disconnect the mains lead, the deck will store the last setting of the repeat play ("Repeat All" or "Repeat 1") and recall it the next time you turn on the deck.

Repeating all the tracks on the MD (Repeat All Play)

Press REPEAT repeatedly until "Repeat All" appears in the display.

When you play an MD, the deck repeats the tracks as follows:

When the play mode is	The deck repeats
Normal play (page 26)	All the tracks in sequence
Shuffle Play (page 29)	All the tracks in random order
Programme Play (page 30)	All the tracks in the programme in sequence

To stop Repeat All Play

Press ■.

To resume normal play

Press REPEAT repeatedly until "Repeat Off" appears in the display.

Repeating the current track (Repeat 1 Play)

While the track you want to repeat is being played, press REPEAT repeatedly until "Repeat 1" appears in the display.

Repeat 1 Play starts.

To stop Repeat 1 Play

Press ■.

To resume normal play

Press REPEAT repeatedly until "Repeat Off" appears in the display.

Repeating a specific portion within a track (Repeat A-B Play)

You can specify one portion within a track to be played repeatedly. Note that the portion that you specify must be within the boundaries of a single track.

1 While the deck is playing, press A↔B at the starting point (point A) of the portion to be played repeatedly.


"REPEAT A-" lights up and "B" flashes in the display.

2 Continue playing the track or press ►► to locate the ending point (point B), then press A↔B.

"REPEAT A-B" lights up and Repeat A-B Play starts.

To stop Repeat A-B Play and resume normal play

Press REPEAT or CLEAR.

 You can set a new starting point and ending point during Repeat A-B Play

You can change the current ending point to a new starting point, then specify a new ending point to repeat a portion right after the current portion.

1 During Repeat A-B Play, press A↔B.

The current ending point changes to the new starting point (point A).

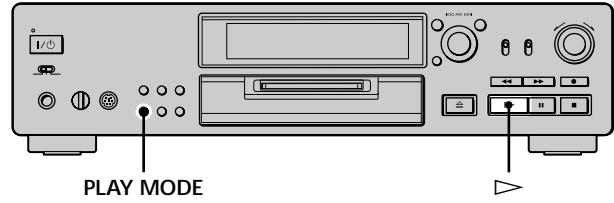
"REPEAT A-" lights up and "B" flashes in the display.

2 Locate the new ending point (point B) and press A↔B.

"REPEAT A-B" lights up and the deck starts to repeat the newly specified portion.

Playing Tracks in Random Order (Shuffle Play)


When you select Shuffle Play, the deck plays all the tracks on the MD in random order.



1 While the deck is stopped, press PLAY MODE repeatedly (or SHUFFLE once) until "SHUFFLE" lights up in the display.


2 Press ▷.

Shuffle Play starts.

 appears while the deck is "shuffling" the tracks.

To resume normal play

While the deck is stopped, press PLAY MODE repeatedly (or CONTINUE once) until "SHUFFLE" turns off.

 You can locate tracks during Shuffle Play

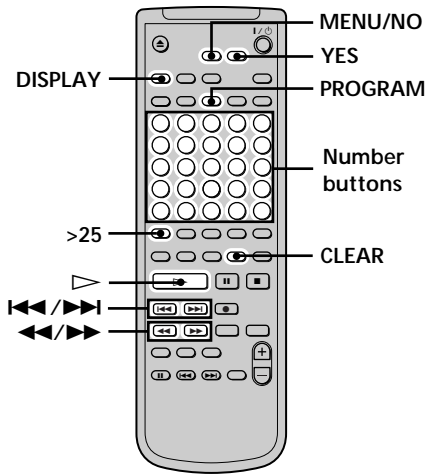
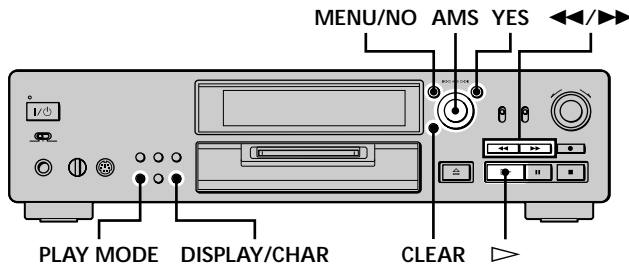
Turn AMS (or press ◀◀/▶▶ repeatedly).

- To locate the next track or a later track to be played, turn AMS clockwise (or press ▶▶ repeatedly).

- To locate the beginning of the current track, turn AMS counterclockwise (or press ◀◀). Note that you can't locate and play the tracks that have already been played once.

Creating Your Own Programme (Programme Play)

You can pick out the tracks that you like and specify the playback order in a programme containing up to 25 tracks.



Playing MDS

Programming the tracks

- 1 While the deck is stopped, press MENU/NO twice. "Setup Menu" appears in the display.
- 2 Turn AMS (or press **◀◀/▶▶** repeatedly) until "Program ?" appears, then press AMS or YES.
- 3 Turn AMS (or press **◀◀/▶▶** repeatedly) until the track number you want to add to the programme appears, then press AMS or **▶▶** (or use the number button(s) to enter the track directly).

If you entered the wrong track number

Press **◀◀/▶▶** repeatedly until the wrong track number flashes, then do step 3 above again or press CLEAR to erase the track number. If "0" flashes, press **◀◀**.

To enter a track number over 25 Use >25. For details, see page 27.

To check the total playing time of the programme Press DISPLAY/CHAR (or DISPLAY).

- 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 programme time appears in the display.
- 5 Press YES. "Complete!!" appears and the programme is completed.
- 6 Press PLAY MODE repeatedly (or PROGRAM once) until "PROGRAM" lights up in the display.
- 7 Press **▶▶**. Programme Play starts.

To stop Programme Play

Press **■**.

To resume normal play

Press PLAY MODE repeatedly (or CONTINUE once) until "PROGRAM" turns off.

The programme remains even after Programme Play ends or is stopped. Press **▶▶** to play the programme again.

Notes

- If you turn off the deck or disconnect the mains lead, the programme will be lost.
- The display shows " - - - m - - s " when the total playing time of the programme exceeds 199 minutes.
- "ProgramFull!" appears when you try to programme the 26th track.

Checking the contents of the programme

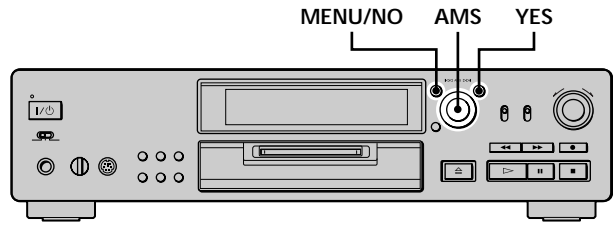
While the deck is stopped and "PROGRAM" lights up, press DISPLAY/CHAR (or DISPLAY) repeatedly. The first several tracks in the programme appear in the display. To see the rest of the programme, turn AMS (or press **◀◀/▶▶** repeatedly).

Changing the contents of the programme

While the deck is stopped and "PROGRAM" lights up, do steps 1 and 2 of "Programming the tracks" on page 30, followed by one of the procedures below:

To	Do the following:
Erase a track	Press ◀/▶ repeatedly until the number of the unwanted track flashes, then press CLEAR.
Erase all tracks	Press CLEAR repeatedly until all the track numbers disappear.
Add a track at the beginning of the programme	Press ◀ repeatedly until "0" flashes before the first track number, then do steps 3 to 5 of "Programming the tracks" on page 30.
Add a track in the middle of the programme	Press ◀/▶ repeatedly until the track number which will precede the new track flashes. Press AMS to display flashing "0," then do steps 3 to 5 of "Programming the tracks" on page 30.
Add a track to the end of the programme	Press ▶ repeatedly until "0" flashes after the last track number, then do steps 3 to 5 of "Programming the tracks" on page 30.
Replace a track	Press ◀/▶ repeatedly until the number of the track to be changed flashes, then do steps 3 to 5 of "Programming the tracks" on page 30.

Tips for Recording From MDs to Tape



Inserting blanks between tracks during play (Auto Space)

The MD deck can be set to automatically insert a three-second blank between tracks during play. This function is useful when you're recording from an MD to an analog tape since the three-second blank enables you to use the Multi-AMS function later to locate the beginning of tracks on the tape.

- 1 While the deck is stopped, press MENU/NO twice. "Setup Menu" appears in the display.
- 2 Turn AMS until "Auto Off" appears, then press AMS or YES.
- 3 Turn AMS to select the setting, then press AMS or YES.

To	Select
Turn on Auto Space	Auto Space
Turn off Auto Space	Auto Off (factory setting)

- 4 Press MENU/NO.

You can use the remote to turn Auto Space on or off While the deck is stopped, press A.SPACE repeatedly until "Auto Space" or "Auto Off" appears in the display.

Notes

- If you select "Auto Space" and record a selection containing multiple track numbers (for example, a medley or symphony), blank spaces will be created on the tape in between the various sections.
- If you turn off the deck or disconnect the mains lead, the deck will store the last setting ("Auto Space" or "Auto Off") and recall it the next time you turn on the deck.

Tips for Recording From MDs to Tape

Pausing after each track (Auto Pause)

You can set the MD deck so that it pauses after each track to give you time to locate the next track to be recorded.



- 1 While the deck is stopped, press MENU/NO twice. “Setup Menu” appears in the display.
- 2 Turn AMS until “Auto Off” appears, then press AMS or YES.
- 3 Turn AMS to select the setting, then press AMS or YES.

To	Select
Turn on Auto Pause	Auto Pause
Turn off Auto Pause	Auto Off (factory setting)

- 4 Press MENU/NO.

To resume play after pausing

Press ▷.

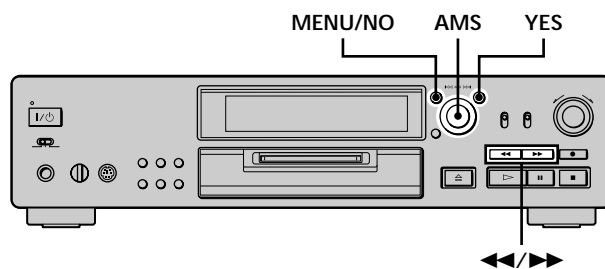
 You can use the remote to turn Auto Pause on or off 
While the deck is stopped, press A.SPACE repeatedly until “Auto Pause” or “Auto Off” appears in the display.

Note

If you turn off the deck or disconnect the mains lead, the deck will store the last setting (“Auto Pause” or “Auto Off”) and recall it the next time you turn on the deck.

Editing Recorded MDs

This chapter explains how to edit the tracks that have been recorded on an MD.



Brief descriptions of buttons and control used to edit MDs

The buttons and the control below are used to erase, divide, move, or combine tracks on the MD.

Note

The operation of these buttons and the control is different when naming a track or MD. For details, see “Naming a Track or MD” on page 38.

MENU/NO button: While the deck is stopped, playing, or paused, press to edit tracks. While editing, press to cancel editing.

AMS control: Turn to select an editing operation or track number, then press to enter your selection. You can also use the control to specify points in a track for erasure or track division.

YES button: Press this button instead of the AMS control to enter a selection.

◀▶ buttons: Press to specify the unit (minute, second, or frame) by which the MD is advanced when the AMS control is turned. You can also use these buttons to locate the end point of the portion to be erased.

For further details on the function of each button and control, see the sections on editing operations.

About indication which appears while editing

When “Protected” appears in the display

The record-protect slot is open. To edit the MD, slide the tab to close the slot. For details, see “To prevent accidental erasure of the recorded material” on page 19.

About indications which appear after editing

When “TOC” lights up in the display

Editing has finished but the TOC (Table of Contents) on the MD has not been updated to reflect the editing results. The editing will be lost if you disconnect the mains lead while the indication is on. The TOC will be updated only when you eject the MD or turn off the MD deck.

When “TOC Writing” flashes in the display

The deck is updating the TOC. Do not disconnect the mains lead or move the deck while the indication flashes.

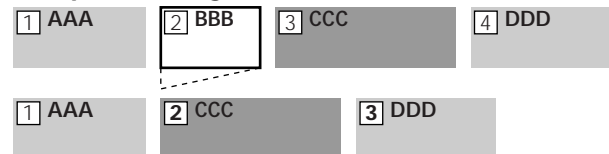
Erasing Tracks

You can erase a track or part of a track simply by specifying the number of the track or the portion within a track to be erased. You can also erase all the tracks on an MD at one time.

Erasing a track

Specify the number of the track you want to erase.

Example: Erasing the second track



When you erase a track, all the tracks after the one erased are automatically renumbered. For example, if you erase track number 2, the previous track number 3 becomes track number 2 and the previous track number 4 becomes track number 3, and so on.

- 1** While the deck is stopped, playing, or paused, press MENU/NO.
“Edit Menu” appears in the display .
- 2** Turn AMS (or press ◀▶ repeatedly) until “Track Erase ?” appears, then press AMS or YES.
The deck starts to play the track indicated by the number in the display .
- 3** Turn AMS (or press ◀▶ repeatedly) until the track number you want to erase appears.
- 4** Press AMS or YES.
“Complete!!” appears for a few seconds and the track is erased. The track following the erased track starts to play. If the erased track is the last one on the MD, the track preceding the erased track starts to play .

To cancel the operation

Press MENU/NO or ■.



If "Erase ????" appears in step 4 above

The track has been record-protected on another MD deck. If you still want to erase the track, press AMS or YES again while the indication appears.



To avoid confusion when erasing more than one track

Start erasing from the highest numbered track. This way you'll avoid renumbering the tracks that you plan to erase.



You can undo the erasure

For details, see "Undoing the Last Edit" on page 42.

Erasing all the tracks on an MD

Do the procedure below to erase all the tracks, track names, and disc name at once.

- 1 While the deck is stopped, playing, or paused, press MENU/NO.
"Edit Menu" appears in the display .
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) until "All Erase ?" appears, then press AMS or YES.
"All Erase??" appears in the display .
- 3 Press AMS or YES.
"Complete!!" appears for a few seconds and all the tracks, track names, and disc name are erased.

To cancel the operation

Press MENU/NO or ■.



You can undo the erasure

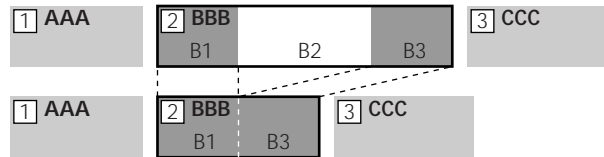
For details, see "Undoing the Last Edit" on page 42.

Erasing a portion of a track

You can easily erase a portion of a track by specifying the starting and ending points of the erasure.

This is useful for erasing the unnecessary portions of a track recorded from a satellite or FM broadcast.

Example: Erasing portion "B2" of the second track



- 1 While the deck is stopped, playing, or paused, press MENU/NO.
"Edit Menu" appears in the display .
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) until "A-B Erase ?" appears, then press AMS or YES.
- 3 Turn AMS (or press ◀◀/▶▶ repeatedly) until the number of the track containing the portion to be erased appears, then press AMS or YES.
"-Rehearsal-" and "Point A ok?" alternate in the display and the deck plays the first several seconds of the track repeatedly .
- 4 While monitoring the sound, turn AMS (or press ◀◀/▶▶ repeatedly) to locate the starting point of the portion to be erased (point A).
The time indication ("m (minute)," "s (second)," and "f (frame = 1/86 second)") of the current point is displayed and several seconds of the track from that point playback repeatedly .

To find a point quickly

Specify a unit (minute, second, or frame) by which the MD is advanced when you turn AMS (or press ◀◀/▶▶ repeatedly).

To do this, press ◀◀/▶▶ in step 4 repeatedly to select "m," "s," or "f." The selected unit flashes in the display.

Erasing Tracks

- 5 Repeat step 4 until you've located point A.
- 6 Press AMS or YES to enter point A.
"Point B set" appears and several seconds of the track from point A play back repeatedly.
- 7 Continue playing the track or press ►► to locate the ending point of the portion to be erased (point B), then press AMS or YES.
"A-B Ers" and "Point B ok?" alternate in the display and a few seconds of the track before point A and after point B play back repeatedly.
- 8 Repeat step 4 until you've located point B.
- 9 Press AMS or YES to enter point B.
"Complete!!" appears for a few seconds and the portion between point A and B is erased.

To cancel the operation

Press MENU/NO or ■.

💡 You can undo the erasure

For details, see "Undoing the Last Edit" on page 42.

Note

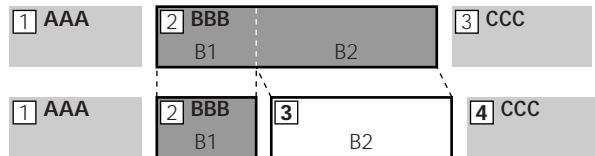
In the following cases, "Impossible" appears and you can't erase a portion of a track:

- The point B you entered comes before point A.
- After repeated editing of a track, it may become impossible to erase a portion of the track any further. This is a technical limitation of the MD system and is not a mechanical error.

Dividing Tracks

You can divide a recorded track at any point simply by adding a track mark at that point. This is especially useful when you want to divide recorded material which contains multiple tracks but only one track number (see page 23), or when you want to locate a certain point in the track.

Example: Dividing the second track



When you divide a track, the total number of tracks increases by one and all tracks following the divided track are automatically renumbered.

Dividing a track after selecting the track

- 1 While the deck is stopped, playing, or paused, press MENU/NO.
"Edit Menu" appears in the display.
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) until "Divide ?" appears, then press AMS or YES.
- 3 Turn AMS (or press ◀◀/▶▶ repeatedly) until the number of the track you want to divide appears, then press AMS or YES.
"-Rehearsal-" appears and the track starts to play.
- 4 While monitoring the sound, turn AMS (or press ◀◀/▶▶ repeatedly) to locate the dividing point. The time indication ("m," "s," and "f") of the current point is displayed and several seconds of the track from that point play back repeatedly.

To find a point quickly


Specify a unit (minute, second, or frame) by which the MD is advanced when you turn AMS (or press ◀◀/▶▶ repeatedly).


To do this, press ◀◀/▶▶ in step 4 repeatedly to select "m," "s," or "f." The selected unit flashes in the display.

- 5 Repeat step 4 until you've located the dividing point.
- 6 Press AMS or YES.
"Complete!!" appears for a few seconds and the track is divided. The deck starts to play the newly created track. Note that new track has no name.

To cancel the operation

Press MENU/NO or ■.

 You can undo the track division
For details, see "Undoing the Last Edit" on page 42.


 You can divide tracks while recording
For details, see "Marking Track Numbers While Recording" on page 22.


Dividing a track after selecting the dividing point

- 1 While the deck is playing, press AMS at the point you want to divide the track.
"- Divide -" and "-Rehearsal-" alternate in the display and the deck starts to play from the selected point.
- 2 If necessary, do step 4 of "Dividing a track after selecting the track" on page 36 to finely adjust the dividing point.
- 3 Press YES.
"Complete!!" appears for a few seconds and the track is divided. The deck starts to play the newly created track. Note that new track has no name.

To cancel the operation

Press MENU/NO or ■.

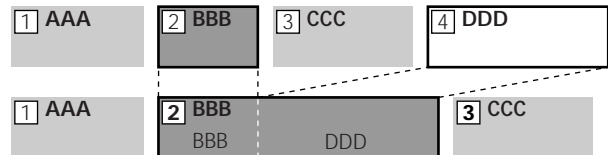
 You can undo the track division
For details, see "Undoing the Last Edit" on page 42.

 You can divide tracks while recording
For details, see "Marking Track Numbers While Recording" on page 22.

Combining Tracks

This function allows you to combine any two tracks into a single track. The two tracks need not to be consecutive nor chronological. You can combine several tracks 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 track are renumbered.

Example: Combining the second track and the fourth track




If both of the combined tracks have a track name, the name of the second track is erased.

- 1 While the deck is stopped, playing, or paused, press MENU/NO.
"Edit Menu" appears in the display.
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) until "Combine ?" appears, then press AMS or YES.
- 3 Turn AMS (or press ◀◀/▶▶ repeatedly) until the number of the first track of the two to be combined appears, then press AMS or YES.
The display for selecting a second track appears and the deck plays the portion where joining will occur (the end of the first track and the beginning of the track following it) repeatedly.
- 4 Turn AMS (or press ◀◀/▶▶ repeatedly) until the number of the second track of the two to be combined appears, then press AMS or YES.
"Complete!!" appears for a few seconds and the tracks are combined. The deck starts to play the combined track.

To cancel the operation

Press MENU/NO or ■.

 You can undo the combination
For details, see "Undoing the Last Edit" on page 42.

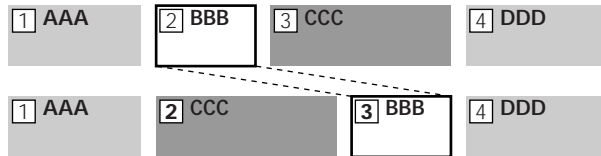
Note

If "Impossible" appears in the display, the tracks can't be combined because repeated editing has been done to the track(s). This is a technical limitation of the MD system and is not a mechanical error.

Moving Tracks

This function lets you change the order of any track.

Example: Moving the second track after the third track



After you move a track, the tracks are renumbered automatically.

- 1 While the deck is stopped, playing, or paused, press MENU/NO. "Edit Menu" appears in the display.
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) until "Move ?" appears, then press AMS or YES.
- 3 Turn AMS (or press ◀◀/▶▶ repeatedly) until the number of the track to be moved appears, then press AMS or YES.
- 4 Turn AMS (or press ◀◀/▶▶ repeatedly) until the new track position appears, then press AMS or YES. "Complete!!" appears for a few seconds and the track is moved. The deck starts to play the moved track.

To cancel the operation

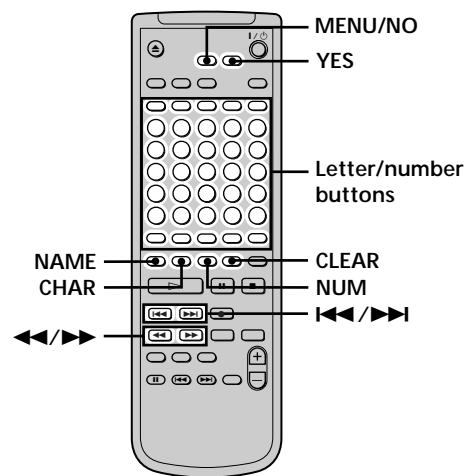
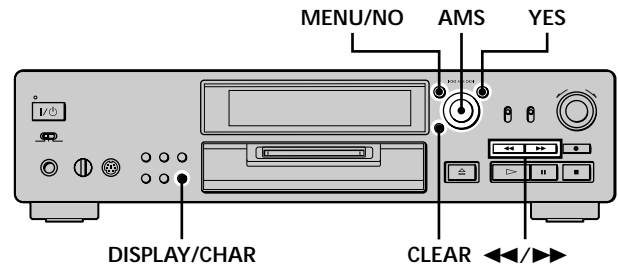
Press MENU/NO or ■.



You can undo the track move. For details, see "Undoing the Last Edit" on page 42.

Naming a Track or MD

You can enter a name for a recorded MD as well as for individual tracks. Names can consist of upper case and lower case letters, numbers, and symbols. A total number of 1,700 characters can be stored for all the names on the MD.



Note

If you name a track while it is being recorded, be sure to finish the naming operation before the track ends. If the track ends before you finish, the entered character data will be discarded and the track will remain unnamed. Also, you can't name tracks while the deck is recording over existing material.

Naming a track or MD using the controls on the deck

- 1 Press MENU/NO while the deck is in one of the operating statuses listed below, depending on what you want to name:

To name	Press while the deck is
A track or the MD	Stopped, playing, or paused
The track being recorded	Recording the track

“Edit Menu” appears in the display .

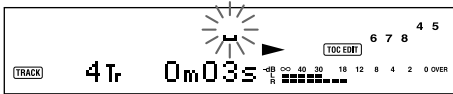
- 2 Turn AMS until “Name ?” appears, then press AMS or YES.

While the deck is recording, a flashing cursor appears in the display and you can enter a name for the track being recorded. In this case, go to step 5.

- 3 Turn AMS until “Nm In ?” appears, then press AMS or YES.

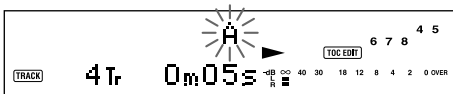
- 4 Turn AMS until the track number (when naming a track) or “Disc” (when naming the MD) flashes, then press AMS or YES.

A flashing cursor appears.



- 5 Press DISPLAY/CHAR repeatedly to select the character type.

To select	Press repeatedly until
Uppercase letters	“A” appears in the display
Lowercase letters	“a” appears in the display
Numbers	“0” appears in the display
Symbols	“!” appears in the display



To enter a space

Press ►► while the cursor is flashing.

- 6 Turn AMS to select the character.
The selected character flashes.



To change a selected character

Repeat steps 5 and 6.

- 7 Press AMS.

The selected character is entered and lights continuously . The cursor shifts to the right, flashes, and waits for the input of the next character .



- 8 Repeat steps 5 to 7 to enter the rest of the name.

To change a character

Press ◀/▶ repeatedly until the character to be changed flashes, then repeat steps 5 to 7.

To erase a character

Press ◀/▶ repeatedly until the character to be erased flashes, then press CLEAR.

- 9 Press YES.

The whole name appears in the display .

To cancel the operation

Press MENU/NO or ■.



You can undo the naming of a track or MD

For details, see “Undoing the Last Edit” on page 42.

Naming a Track or MD

Naming a track or MD using the remote

- 1 Press NAME while the deck is in one of the operating statuses listed below, depending on what you want to name:

To name	Press while the deck is
A track	Playing, paused, recording, or stopped with the track number displayed
The MD	Stopped with no track number displayed

A flashing cursor appears in the display .

- 2 Select the character type.

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 Enter a character.

If you've selected uppercase or lowercase letters

- 1 Press the corresponding letter/number button repeatedly until the character to be entered flashes.

Or, press the button once and press **◀◀/▶▶** repeatedly .

To select symbols, press **◀◀** repeatedly while "A" is flashing.

- 2 Press **▶▶**.

The flashing character is entered and lights continuously and the cursor shifts to the right.

If you've selected numbers

Press the corresponding number button.

The number is entered and the cursor shifts to the right.

- 4 Repeat steps 2 and 3 to enter the rest of the name.

To change a character

Press **◀◀/▶▶** repeatedly until the character to be changed flashes, press CLEAR to erase the character , then repeat steps 2 and 3.

- 5 Press NAME.

The whole name appears in the display .

To cancel the operation

Press MENU/NO or **■**.



You can undo the naming of a track or MD

For details, see "Undoing the Last Edit" on page 42.

Copying a track or disc name


You can copy an existing track or disc name and use it to name another track on the same disc or the disc itself.


- 1 While the deck is stopped, playing, or paused, press MENU/NO.
"Edit Menu" appears in the display .
- 2 Turn AMS (or press **◀◀/▶▶** repeatedly) until "Name ?" appears, then press AMS or YES.
- 3 Turn AMS (or press **◀◀/▶▶** repeatedly) until "Nm Copy ?" appears, then press AMS or YES.
- 4 Turn AMS (or press **◀◀/▶▶** repeatedly) until the number of the track (when copying the track name) or "Disc" (when copying the disc name) flashes, then press AMS or YES to copy the selected name.

When "No Name" appears in the display
The selected track or disc has no name.
- 5 Turn AMS (or press **◀◀/▶▶** repeatedly) until the number of the track (when naming a track) or "Disc" (when naming a disc) flashes, then press AMS or YES to enter the copied name.
"Complete!!" appears for a few seconds and the name is copied.

To cancel the operation

Press MENU/NO or **■**.

 When “Overwrite ??” appears in step 5 above
The track or the disc selected in step 5 already has a name. If you wish to replace the name, press AMS or YES again while the indication appears in the display.

 You can undo the copying of a track or disc name
For details, see “Undoing the Last Edit” on page 42.

Renaming a track or MD

- 1 Press NAME while the deck is in one of the operating statuses listed below, depending on what you want to rename:

To rename	Press while the deck is
A track	Playing, paused, recording, or stopped with the track number displayed
The MD	Stopped with no track number displayed

A track or disc name appears in the display.

- 2 Press down CLEAR until the selected name is erased completely.
- 3 Do steps 5 to 8 of “Naming a track or MD using the controls on the deck” on page 39 or steps 2 to 4 of “Naming a track or MD using the remote” on page 40.
- 4 Press NAME.

Erasing a track or disc name


Use this function to erase the name of a track or disc.

- 1 While the deck is stopped, playing, recording, or paused, press MENU/NO.
“Edit Menu” appears in the display.
- 2 Turn AMS (or press **◀◀/▶▶** repeatedly) until “Name ?” appears, then press AMS or YES.
- 3 Turn AMS (or press **◀◀/▶▶** repeatedly) until “Nm Erase ?” appears, then press AMS or YES.

- 4 Turn AMS (or press **◀◀/▶▶** repeatedly) until the number of the track (when erasing the track name) or “Disc” (when erasing the disc name) flashes, then press AMS or YES.
“Complete!!” appears for a few seconds and the name is erased.

To cancel the operation

Press MENU/NO or **■**.

 You can undo the erasing of a track or disc name
For details, see “Undoing the Last Edit” on page 42.


Erasing all the names on the MD


You can erase all the track names and the disc name on an MD in a single operation.

- 1 While the deck is stopped, playing, or paused, press MENU/NO.
“Edit Menu” appears in the display.
- 2 Turn AMS (or press **◀◀/▶▶** repeatedly) until “Name ?” appears, then press AMS or YES.
- 3 Turn AMS (or press **◀◀/▶▶** repeatedly) until “Nm AllErs ?” appears, then press AMS or YES.
“Nm AllErs??” appears in the display.
- 4 Press AMS or YES.
“Complete!!” appears for a few seconds and all the names on the MD are erased.

To cancel the operation

Press MENU/NO or **■**.

 You can undo the erasing of all the names on the MD
For details, see “Undoing the Last Edit” on page 42.

 You can erase all the recorded tracks and names on the MD
For details, see “Erasing all the tracks on an MD” on page 35.

Undoing the Last Edit

You can undo the last edit operation and restore the contents of the MD to the condition that existed before the operation. Note, however, that you can't undo an edit operation if you perform any of the following operations after the edit:

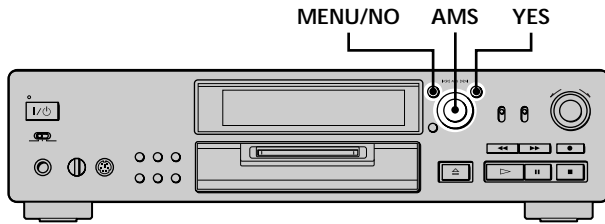
- Press REC ● on the deck.
- Press ●, MUSIC SYNC or CD-SYNC STANDBY on the remote.
- Turn off the deck or eject the MD.
- Disconnect the mains lead.

4 Press AMS or YES.

"Complete!!" appears for a few seconds and the MD is restored to the condition that existed before the edit operation.

To cancel the operation

Press MENU/NO or ■.



- 1 While the deck is stopped and no track number appears in the display, press MENU/NO. "Edit Menu" appears in the display.
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) until "Undo ?" appears. "Undo ?" doesn't appear if no editing has been done.
- 3 Press AMS or YES. One of the following messages appears depending on the last edit operation.

Last edit operation	Message
Erasing a track	
Erasing all the tracks on an MD	Erase Undo?
Erasing a portion of a track	
Dividing a track	Divide Undo?
Combining tracks	CombineUndo?
Moving a track	Move Undo?
Naming a track or MD	
Copying a track or disc name	
Renaming a track or MD	Name Undo?
Erasing a track or disc name	
Erasing all the names on the MD	

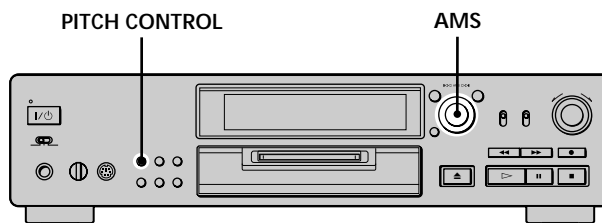
Other Functions

This chapter explains other useful functions that are available on the MD deck.

Changing the Pitch

(Pitch Control Function)

You can change the MD playback speed (pitch). The tone rises at higher pitches, and falls at lower pitches. When you've set the pitch to a value other than the factory setting, the PITCH CONTROL button lights amber during play.



Setting the pitch automatically in steps (Auto Step Control Function)

You can increase the pitch by up to 2 steps* or lower the pitch by up to 48 steps.

* One octave equals 12 steps.

- 1 While the deck is playing, press PITCH CONTROL repeatedly until "Pitch" appears in the display.
- 2 Turn AMS until the desired step value appears.

To recall the factory setting

Press CLEAR while setting the value.

Notes

- When you change the step value, the playback sound drops out momentarily.
- The step value returns to "0" (factory setting) when you turn off the deck or eject the MD.
- When a dot (.) appears to the right of the step value in the pitch display, this indicates that you have performed fine adjustment (see the next page) and the pitch value is between steps. (The step and fine control values are linked.)

Pitch -12.

Changing the Pitch (Pitch Control Function)

Finely controlling the pitch (Fine Control Function)

You can fine control the playback speed in 0.1% increments from -98.5% to +12.5%.

- 1 While the deck is playing, press PITCH CONTROL repeatedly until "Pfine" appears in the display.
- 2 Turn AMS until the desired value appears.

To recall the factory setting

Press CLEAR while setting the value.

 You can use Setup Menu to change the pitch

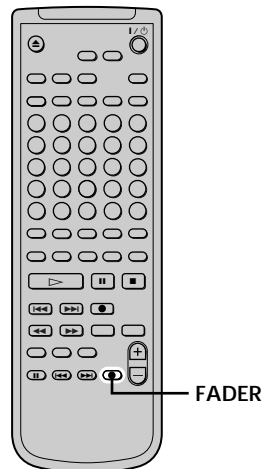
During play, select "Pitch" to set the pitch automatically in steps or "Pfine" to finely control the pitch.

Notes

- When you change the fine control value, the playback sound drops out momentarily.
- The fine control value reverts to "0.0%" (factory setting) when you turn off the deck or eject the MD.
- The step and fine control values are linked; changing one value also changes the other.

Fade In and Fade Out

You can use Fade-in Play to gradually increase the signal level to the LINE (ANALOG) OUT jacks and the PHONES jack at the start of playback. Fade-out Play gradually decreases the signal level at the end of playback. Fade-in Recording gradually increases the signal level at the start of recording. Fade-out Recording gradually decreases the signal level at the end of recording.



Note

The signal level output to the DIGITAL OUT connector does not change during Fade-in Play nor Fade-out Play.

Fade-in Play and Fade-in Recording


During play pause (for Fade-in Play) or recording pause (for Fade-in Recording), press FADER.

◀ flashes in the display and the deck performs Fade-in Play or Fade-in Recording for five seconds (factory setting) until the counter reaches "0.0s."

Fade-out Play and Fade-out Recording

During play (for Fade-out Play) or recording (for Fade-out Recording), press FADER.

▶ flashes in the display and the deck performs Fade-out Play or Fade-out Recording for five seconds (factory setting) until the counter reaches “0.0s,” then pauses.

 You can change the duration of Fade-in and Fade-out Play/Recording

- 1 While the deck is stopped, press MENU/NO twice. “Setup Menu” appears in the display.
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) to select the setting, then press AMS or YES.

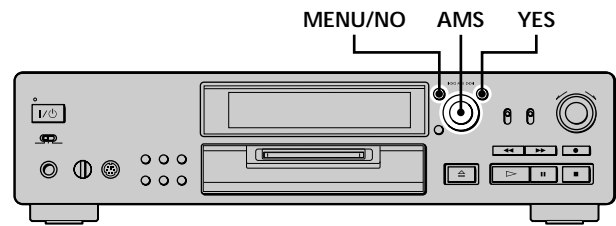
To change the duration of	Select
Fade-in Play/Recording	F.in
Fade-out Play/Recording	F.out

- 3 Turn AMS (or press ◀◀/▶▶ repeatedly) to select the duration, then press AMS or YES.
Both the Fade-in and Fade-out durations can be set in 0.1 second steps.
- 4 Press MENU/NO.

Falling Asleep to Music

(Sleep Timer)

You can set the deck so that it turns off automatically after specified minutes.



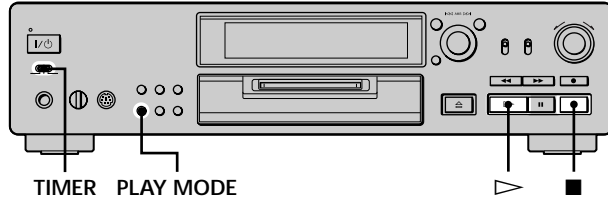
- 1 While the deck is stopped, press MENU/NO twice. “Setup Menu” appears in the display.
- 2 Turn AMS (or press ◀◀/▶▶ repeatedly) until “Sleep Off” appears in the display, then press AMS or YES.
- 3 Turn AMS (or press ◀◀/▶▶ repeatedly) to select the setting, then press AMS or YES.

To	Select
Turn on Sleep Timer	Sleep On
Turn off Sleep Timer	Sleep Off (factory setting)

- 4 Turn AMS (or press ◀◀/▶▶ repeatedly) until “Sleep 60min” appears in the display, then press AMS or YES.
- 5 Turn AMS (or press ◀◀/▶▶ repeatedly) to select the time to be turned off (“30min,” “60min” (factory setting), “90min,” or “120min”), then press AMS or YES.
- 6 Press MENU/NO.

Using a Timer

By connecting a timer (not supplied) to the deck, you can start and stop playback/recording 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.



Playing an MD using a timer

- 1 Do steps 1 to 3 of "Playing an MD" on page 26.
- 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 programme (see page 30).
To specify the time for the end of playback, press ▷ to start playing, then go to step 3.
- 3 Set **TIMER** on the deck to **PLAY**.
- 4 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.
- 5 After you have finished using the timer, set **TIMER** on the deck to **OFF**.

Recording on an MD using a timer

- 1 Do the following steps of "Recording on an MD" on pages 18 and 19 as requested.

To specify the time for	Do
The start of recording	Steps 1 to 7, then press ■
The end of recording	Steps 1 to 10
Both start and end of recording	Steps 1 to 7, then press ■

- 2 Set **TIMER** on the deck to **REC**.
- 3 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.
- 4 After you have finished using the timer, set **TIMER** on the deck to **OFF**. Then change the deck to standby status by plugging the mains lead 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 on the deck.
 - 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.

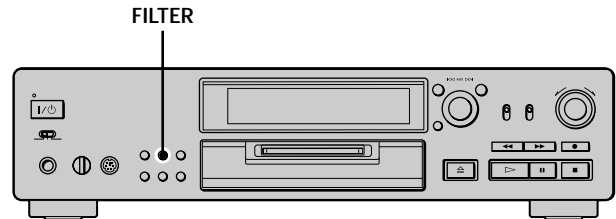
The TOC on the MD is updated and recorded contents are written to the MD when you turn on the deck. If the recorded contents have disappeared, "Initialize" flashes when you turn on the deck.

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 on the deck. "TOC Writing" will flash in the display at that time. Do not disconnect the mains lead or move the deck while the indication flashes.
- Timer recording will stop if the disc becomes full.

Playing With Different Tones (Digital Filter)

This deck is equipped with the V.C. (Variable Coefficient) filters to allow you to adjust the tone to match your audio system, listening environment, and the source being played. Note that the digital filters are effective only on the analog signals output from the LINE (ANALOG) OUT jacks and the PHONES jack.



- 1 Press FILTER.**
The currently selected filter appears in the display.
- 2 Press FILTER repeatedly to select the filter you want.**

Select	To produce
Standard (factory setting)	An expansive sound of wide range.
Spline	A sound that is clearly positioned and smooth.
Plain	A fresh and powerful sound.
Analog	A resonant and mellow sound.

The FILTER button lights green when a setting other than "Standard" is selected in DF (digital filter) display.

You can use the remote to select the filter

Press FILTER repeatedly until the filter you want appears in the display.

Playing With Different Tones (Digital Filter)

💡 What is a V.C. (Variable Coefficient) filter?

A variable coefficient filter changes the sound characteristics of a signal by applying specific frequency cut-off conditions. Such filters are provided on digital devices such as CD players and MD decks to remove aliasing noise.

Note

The change in sound characteristics caused by digital filters occur mainly in the inaudible range, not the audible range as in the case of an amplifier.

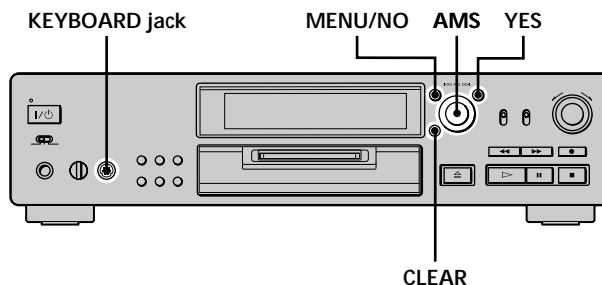
Operating the MD Deck Using a Keyboard

This chapter explains simple ways to name a track or MD using an optional keyboard, as well as how to operate the MD deck directly through the keyboard.

Setting the Keyboard

You can use any IBM-compatible keyboard* (not supplied) with a PS/2 interface. You can select a keyboard with either an English or Japanese keyboard layout. When you use a keyboard with a different layout, you need to assign characters to the keys. For details, see “Assigning Characters to Keyboard Keys” on page 52.

* Power consumption must be 120 mA or less.



Connecting a keyboard to the MD deck

Connect the keyboard connector to the **KEYBOARD** jack on the front panel of the deck.

You can connect or disconnect the keyboard at any time regardless of whether the deck is turned on or off.

Selecting keyboard type

The first time you connect a keyboard, you need to select the keyboard type.

- 1 While the deck is stopped, press **MENU/NO** twice. “Setup Menu” appears in the display.
- 2 Turn **AMS** (or press **◀◀/▶▶** repeatedly) until “Keyboard ?” appears, then press **AMS** or **YES**.
- 3 Turn **AMS** (or press **◀◀/▶▶** repeatedly) until “Type” appears, then press **AMS** or **YES**.
- 4 Turn **AMS** (or press **◀◀/▶▶** repeatedly) to select the setting, then press **AMS** or **YES**.

To use the keyboard with	Select
English keyboard layout	US (factory setting*)
Japanese keyboard layout	JP

* You can also recall the factory setting by pressing **CLEAR**.

- 5 Press **MENU/NO**.

Naming a Track or MD Using the Keyboard

If you use a keyboard, you can quickly enter or edit names. While editing a name, you can move the cursor in jumps or scroll the name.

Short cut to the naming procedure

- 1 Press [Num Lock] while the deck is in one of the operating statuses listed below, depending on what you want to name:

To name	Press while the deck is
A track	Playing, paused, recording, or stopped with the track number displayed
The MD	Stopped with no track number displayed


A flashing cursor appears in the display.

- 2 Enter a name.
Besides letter keys, you can also use the keys shown in the following table.
- 3 Press [Enter] or [Num Lock].
The whole name appears in the display.

Operations you may want to do while naming a track or MD

To	Press
Cancel the operation	[Esc]
Switch between uppercase and lowercase letters	[Caps Lock] or [Shift]*
Move the cursor	[←] or [→]
Jump the cursor to the top of the name	[Home]
Jump the cursor to the end of the name	[End]
Scroll the name	[Page Up] or [Page Down]
Erase the character at the cursor position	[Delete]
Erase the character preceding the cursor	[Back Space]

* If you have assigned characters to keys using [Shift] (see page 52), the characters you assigned have priority.

 You can undo the naming of a track or MD

- 1 Press [F11].
“Name Undo?” appears.
- 2 Press [Enter].
Press [Esc] to cancel the operation.

Using the Edit Menu

- 1 Press [Esc] while the deck is in one of the operating statuses listed below, depending on what you want to name:

To name	Press while the deck is
A track or the MD	Stopped, playing, or paused
The track being recorded	Recording the track

“Edit Menu” appears in the display.

- 2 Press [↑]/[↓] or [Tab]/[Shift]+[Tab] repeatedly until “Name ?” appears, then press [Enter].
While the deck is recording, a flashing cursor appears in the display and you can enter a name for the track being recorded. In this case, go to step 5.
- 3 Press [↑]/[↓] or [Tab]/[Shift]+[Tab] repeatedly until “Nm In ?” appears, then press [Enter].
- 4 Press [↑]/[↓] or [Tab]/[Shift]+[Tab] repeatedly until the track number (when naming a track) or “Disc” (when naming the MD) flashes, then press [Enter].
A flashing cursor appears.
- 5 Enter a name.
- 6 Press [Enter] or [Num Lock].
The whole name appears in the display.

Operating the Deck Through the Keyboard

You can operate the MD deck by using the keyboard keys. This allows you to edit MDs and control the deck without using buttons and controls on the deck and on the remote.

Operations using the keyboard

For details about each function, see “Front Panel Parts Descriptions” on pages 10 and 11 or “Remote Parts Descriptions” on pages 12 and 13.

As the keyboard substitutes for the following functions	Press
MENU/NO	[Esc]
AMS or ►►	[↑] or [Tab]
AMS or ◀◀	[↓] or [Shift]+[Tab]
▷/■ or YES	[Enter]*
REC ●	[Shift]+[Enter]
MUSIC SYNC	[Ctrl]+[Enter]
■	[Space]
◀◀	[←]
►►	[→]
PITCH CONTROL	[F1]
FILTER	[F2]
TIME	[F3]
PLAY MODE	[F5]
SCROLL	[F6]
DISPLAY/CHAR	[F7]
Selecting the track number over 10**	[F9]
FADER	[F10]
Undoing the last edit (see page 42)	[F11]
EJECT ≡	[F12]
REPEAT	[Print Screen]
A↔B	[Scroll Lock]
M.SCAN	[Pause]
CLEAR	[Delete]

* In Edit Menu and Setup Menu, [Enter] operates as YES button, in other cases as ▷/■ buttons.

**For example, press [F9], then [2] and [0] for track number 20, or press [F9] twice, then [1], [0], and [3] for track number 103.

To	Press
Play track number 1	[1]
Play track number 2	[2]
Play track number 3	[3]
Play track number 4	[4]
Play track number 5	[5]
Play track number 6	[6]
Play track number 7	[7]
Play track number 8	[8]
Play track number 9	[9]
Play track number 10	[0]

Operations using ten-keys

While a track is selected, you can edit the track directly with the following ten-keys. You can also start playing by entering the track number using ten-keys.

To	Press
Name the track or MD	[Num Lock] (see page 50)
Divide the track	[/]
Move the track	[*]
Erase the track	[-]
Combine tracks	[+]
Play track number 1	[1]
Play track number 2	[2]
Play track number 3	[3]
Play track number 4	[4]
Play track number 5	[5]
Play track number 6	[6]
Play track number 7	[7]
Play track number 8	[8]
Play track number 9	[9]
Play track number 10	[0]

Note

If you press [/], [*], [-], or [+] when no track is selected, “Cannot Edit” appears.

Assigning Characters to Keyboard Keys

Assigning a character

If your keyboard layout doesn't match the system settings, the display may show the wrong characters or no characters at all when you press the keys. In this case, you need to assign characters to the keys.

- 1** While the deck is stopped, press [Esc] twice. "Setup Menu" appears in the display.
- 2** Press [↑]/[↓] or [Tab]/[Shift]+[Tab] repeatedly until "Keyboard ?" appears, then press [Enter].
- 3** Press [↑]/[↓] or [Tab]/[Shift]+[Tab] repeatedly until "Assign ?" appears, then press [Enter].
- 4** Press [↑]/[↓] or [Tab]/[Shift]+[Tab] repeatedly until the character you want to assign appears. If the character has already been assigned, "User" appears. If it has not been assigned, "Default" appears.
- 5** Press [Enter]. "<Set Key>" flashes in the display.
- 6** Press the key to be assigned to on the keyboard. "Key Change" appears, and the selected character is assigned to the key.

If "Same Key" appears

The same character is already assigned to the key.

If "Remove old assign?" appears

A different character is already assigned to the key. Press [Enter] to clear the current assignment and assign the new character. Press [Esc] to cancel.

Notes

- You can assign a character with [Shift] only for symbol and number keys.
- You can't assign a character to the following keys: [Esc], [F1] – [F12], [Back Space], [Tab], [Caps Lock], [Enter], [Shift], [Ctrl], [Alt], [Windows], [Space], [Application], [Print Screen], [Scroll Lock], [Pause], [Insert], [Delete], [Home], [End], [Page Up], [Page Down], [Num Lock], [←], [→], [↑], [↓], and [/], [*], [-], [+], (of the ten-keys)
- "Key Change" doesn't appear in step 6 if you try to assign a character to one of the keys listed above or other keys for which input is not accepted.

Clearing key assignments

You can clear key assignments one at a time or all at once.

To clear a key assignment

- 1** Do steps 1 to 3 of "Assigning a character" on this page.
- 2** Press [↑]/[↓] or [Tab]/[Shift]+[Tab] repeatedly until the character you want to clear appears (only characters for which "User" is indicated), then press [Enter]. "<Set Key>" flashes in the display.
- 3** Press [Delete]. "Key Clear" appears and the key assignment is cleared.

To clear all key assignments

- 1** Do steps 1 to 3 of "Assigning a character" on this page.
- 2** Press [Ctrl], [Alt], and [Delete] simultaneously. "All Reset ?" appears in the display.
- 3** Press [Enter]. "Complete!!" appears, and all assignments are cleared.

To cancel the operation

Press [Esc].

Additional Information

This chapter provides additional information that will help you understand and maintain your MD deck system.

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 (mains lead), grasp the plug itself; never pull the cord.
- AC power cord (mains lead) must be changed only at the qualified service shop.

On condensation in the deck

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 several hours 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.

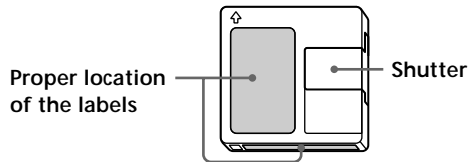
If you have any questions or problems concerning your deck, please consult your nearest Sony dealer.

Handling MDs

The MD is enclosed in a cartridge to protect the disc from debris or fingerprints and to make it easy to handle.

However, the presence of debris or a warped cartridge may inhibit the disc from operating properly. To assure that you can always listen to the highest quality music, follow the precautions below:

- Do not touch the internal disc directly. Forcing the shutter open may damage the internal disc.
- Be sure to stick the labels supplied with the MD to the appropriate positions. The shape of the labels may vary depending on the MD brand.



Where to keep the MDs

Do not place the cartridge where it may be exposed to direct sunlight or extremely high heat and humidity.

Regular maintenance

Wipe dust and debris from the surface of the cartridge with a dry cloth.

System Limitations

The recording system in your 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” appears in the display even before the MD has reached the maximum recording time

When 255 tracks have been recorded on the MD, “Disc Full” appears regardless of the total recorded time. More than 255 tracks can’t be recorded on the MD. To continue recording, erase unnecessary tracks or use another recordable MD.

“Disc Full” appears before the maximum number of tracks is reached

Fluctuations in emphasis within tracks are sometimes interpreted as track intervals, incrementing the track count and causing “Disc Full” to appear.

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.

The total recorded time and the remaining recordable time on the MD may not total the maximum recording time

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.

Limitations when recording over an existing track

- The correct remaining recordable 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 (see page 34).
- The remaining recordable 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 name a track while recording over an existing track.

Tracks created through editing may exhibit sound dropout as you’re searching for a point while monitoring the sound.

Some tracks can’t be combined with others

Tracks may not be combined if they have been edited.

Track numbers are not marked correctly

Incorrect assignment or marking of track numbers may result when CD tracks are divided into several smaller tracks during digital recording. Also, when the Automatic Track Marking is activated during recording, track numbers may not be marked as in the original, depending on the programme 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 already been used.

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

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 dirty or damaged. Replace the MD.

The deck does not play.

- ➔ 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 on the deck.
- ➔ The deck may not be connected to the amplifier correctly. Check the connection.
- ➔ The MD is inserted in the wrong direction. Slide the MD into the disc slot with the labelled side up and the arrow pointing towards the slot.
- ➔ The MD may not be recorded. Replace the disc with one that has been recorded.

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 deck does not record.

- ➔ The MD is record-protected. Slide the record-protect tab and close the slot.
- ➔ The deck is not connected properly to the programme source. Check the connection.
- ➔ Select the correct programme source using INPUT.
- ➔ The recording level is not adjusted properly. Adjust the recording level.
- ➔ 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 mains lead has been disconnected during recording. Data recorded to that point may be lost. Repeat the recording procedure.

The deck does not perform synchro-recording with a CD player or video CD player.

- ➔ The remote supplied with the MD deck is not set correctly. Reset the remote.

A message and a three-digit alphanumeric code alternate in the display.

- ➔ The Self-Diagnosis Function is on. See the table on page 59.

The keyboard does not operate.

- ➔ Disconnect the keyboard, then re-connect it.

Note

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

Specifications

System	MiniDisc digital audio system
Disc	MiniDisc
Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$) Emission duration: continuous
Laser output	Less than $44.6 \mu\text{W}^*$ * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Laser diode	Material: GaAlAs
Revolutions (CLV)	400 rpm to 900 rpm
Error correction	ACIRC (Advanced Cross Interleave Reed Solomon Code)
Sampling frequency	44.1 kHz
Coding	ATRAC (Adaptive TRansform Acoustic Coding)
Modulation system	EFM (Eight-to-Fourteen Modulation)
Number of channels	2 stereo channels
Frequency response	5 to 20,000 Hz $\pm 0.3 \text{ dB}$
Signal-to-noise ratio	Over 100 dB during playback
Wow and flutter	Below measurable limit

Inputs

LINE (ANALOG) IN	Jack type: phono Impedance: 47 kilohms Rated input: 500 mVrms Minimum input: 125 mVrms
DIGIT AL OPTICAL IN1	Connector type: square optical Impedance: 660 nm (optical wave length)
DIGIT AL OPTICAL IN2	Connector type: square optical Impedance: 660 nm (optical wave length)
DIGIT AL COAXIAL IN	Jack type: phono Impedance: 75 ohms Rated input: 0.5 Vp-p, $\pm 20\%$

Outputs

PHONES	Jack type: stereo phone Rated output: 28 mW Load impedance: 32 ohms
LINE (ANALOG) OUT	Jack type: phono Rated output: 2 Vrms (at 50 kilohms) Load impedance: over 10 kilohms
DIGIT AL OPTICAL OUT	Connector type: square optical Rated output: -18 dBm Load impedance: 660 nm (optical wave length)
DIGIT AL COAXIAL OUT	Jack type: phono Rated output: 0.5 Vp-p (at 75 ohms) Load impedance: 75 ohms

General

Power requirements	230 V AC, 50/60 Hz
Power consumption	18 W
Dimensions (approx.)	$430 \times 110 \times 287 \text{ mm}$ (w/h/d) incl. projecting parts and controls
Mass (approx.)	5.2 kg

Supplied accessories

See page 4.

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Design and specifications are subject to change without notice.

Display Messages

The following table explains the various messages that appear in the display. Messages are also displayed by the deck's Self-Diagnosis function (see page 59).

Message	Meaning
Auto Cut	The Auto Cut function is on (page 21).
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 (page 17).
Cannot Edit	An attempt was made to edit the MD during Programme or Shuffle Play. Or the MD is record-protected.
Disc Full	The MD is full (page 54).
Impossible	The deck cannot do the specified operation (pages 19 and 36).
Initialize (flashing)	The Setup Menu settings have been lost. Or the contents recorded by timer have disappeared over time and are not be available for saving to disc, or Programme Play could not be activated since the programme has disappeared over time. (The message flashes for about four seconds when you turn on the deck by pressing I/⏪.)
Name Full	The naming capacity of the MD has reached its limit (about 1,700 characters).
No Disc	There is no MD in the deck.
No Name	The track or disc has no name.
No Program!!	You tried to start Programme Play when no programme exists.
Premastered	An attempt was made to record on a premastered MD.
ProgramFull!	The programme contains the maximum number of tracks. You cannot add any more tracks.
REMOTE	The MD is being controlled by an external device connected to the deck.*
Smart Space	The Smart Space function is on (page 21).
TOC Reading	The deck is checking the TOC (Table Of Contents) on the MD.

* If "REMOTE" appears under other circumstances, turn off the deck, then turn it on again.

Edit Menu Table

The following table provides a quick guide to the various editing functions that you can perform using the Edit Menu.

To access the Edit Menu

Press MENU/NO to display "Edit Menu."

Note

The available menu items may vary according to the current status of the deck.

Menu item	Sub-item	Function	Reference page(s)
Name ?	Nm In ?	Names a track or an MD.	39
	Nm Erase ?	Erases a name.	41
	Nm AllErs ?	Erases all the names on an MD.	41
	Nm Copy ?	Copies a name to a track or an MD.	40
Tr Erase ?	—	Erases a track.	34
Move ?	—	Moves a track.	38
Combine ?	—	Combines tracks.	37
Divide ?	—	Divides a track.	36
A-B Erase ?	—	Erases a portion of a track.	35
All Erase ?	—	Erases all the tracks on an MD.	35
Undo ?	—	Undoes the last edit operation.	42
Setup ?	—	Enters Setup Menu (below) directly.	—

Setup Menu Table

The following table provides an overview of the various Setup Menu items, including their parameters, factory settings, and reference page(s) in the manual.

To access the Setup Menu

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

Menu item	Sub-item	Function	Parameters	Factory setting	Reference page(s)
Program ?	—	Creates a programme.	—	—	30
T.Mark	—	Turns Automatic Track Marking on or off.	Lsyn/Off	Lsyn	22
LS(T)	—	Changes the trigger level for Automatic Track Marking.	-72 to 0dB*	-50dB	22
Auto	—	Turns Auto Space and Auto Pause on or off.	Off/Space/Pause	Off	31, 32
S.Space	—	Turns Smart Space and Auto Cut on or off.	On/Off	On	21
P.Hold	—	Turns Peak Hold on or off.	On/Off	Off	15
M.Scan	—	Sets the duration of Music Scan.	6 to 20s	6s	27

* Adjustable in 2 dB steps.

Menu item	Sub-item	Function	Parameters	Factory setting	Reference page(s)
F.in	—	Sets the duration of Fade-in Play and Recording.	1.0 to 15.0s	5.0s	45
F.out	—	Sets the duration of Fade-out Play and Recording.	1.0 to 15.0s	5.0s	45
Pitch	—	Changes the playback speed by auto steps.	-48 to +2	0	43
Pfine	—	Fine controls the playback speed.	-98.5 to +12.5%	0.0%	44
Sleep	—	Sets the duration of Sleep Timer.	30/60/90/120min	60min	45
Sleep	—	Turns Sleep Timer on or off.	On/Off	Off	45
Keyboard ?	Type	Selects the type of the keyboard connected to the deck.	US/JP	US	49
	Assign ?	Assigns a character to the keyboard connected to the deck.	—	—	52
Clock Set ?	—	Sets the clock.	—	—	8

To recall a factory setting

Press CLEAR while selecting the parameter.

Self-Diagnosis Function

The deck's self-diagnosis function automatically checks the condition of the MD deck when an error occurs, then issues a three-digit code and an error message on the display. If the code and message alternate, find them in the following table and perform the indicated countermeasure. Should the problem persist, consult your nearest Sony dealer.

Three-digit code/Message	Cause/Remedy
C11/Protected	The inserted MD is record-protected. ➔ Take out the MD and close the record-protect slot (page 19).
C13/REC Error	The recording was not made properly. ➔ Set the deck in a stable surface, and repeat the recording procedure.
	The inserted MD is dirty (with smudges, fingerprints, etc.), scratched, or substandard in quality. ➔ Replace the disc and repeat the recording procedure.
C13/Read Error	The deck could not read the TOC on the MD properly. ➔ Take out the MD and insert it again.
C14/Toc Error	The deck could not read the TOC on the MD properly. ➔ Insert another disc. ➔ If possible, erase all the tracks on the MD (page 35).
C71/Din Unlock	The sporadic appearance of this message is caused by the digital signal being recorded. This will not affect the recording.
	While recording from a digital component connected through the DIGITAL IN connector, the digital connecting cable was unplugged or the digital component turned off. ➔ Connect the cable or turn the digital component back on.

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