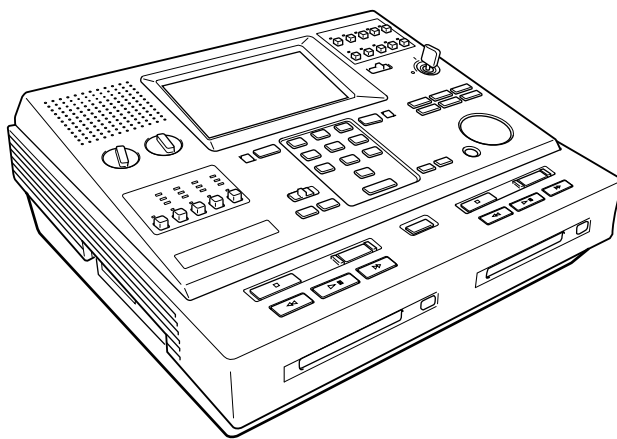


MD Confer-Corder

Operating Instructions



MDCC-2000

© 2001 Sony Corporation

Owner's Record

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

Model No. MDCC-2000 Serial No. _____

WARNING

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

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

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

Caution

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

The equipment should be connected to an easily accessible mains outlet socket. (So that it may be disconnected from the mains if required)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the use will be required to correct the interference at his own expense.

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

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.

Caution on lithium battery

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.

Dispose of used batteries according to the manufacturer's instructions.

Certain countries may regulate disposal of the battery used to power this product. Please consult with your local authority.

Table of Contents

Introduction

Features	3
Notes on MiniDiscs	3
Location and Function of Controls	4

Setting Up

Connection	7
Setting the Date and Time	8
Setting the Machine Information	10

Basic Operations

Recording	12
Playback	16
Switching the Display	21
Naming a Disc or Index Marks	22
Copying a disc from deck A to deck B	26
Erasing a disc	28

Advanced Operations

Public Address	30
Recording on an External Device	31
Transcribing	32

Additional Information

Precautions	36
Maintenance	36
Troubleshooting Guide	37
Error and Caution messages	38
Alarm System	40
Specifications	41
Index	42

Note on power supply

Recording might stop if the power is interrupted momentarily during recording. To prevent this, we recommend you install a UPS (Uninterruptible Power Supply). Contact your dealer for further details.

Features

The Sony MDCC-2000 is an extended-time recording device for courtrooms, conferences and other long meetings.

High Quality Digital Recording onto MiniDiscs
We have adopted MiniDiscs as the recording medium, in order to obtain the very latest digital recording quality. And MiniDiscs prevent accidental deletion by adding any new recordings onto the end.

Double Deck
The unit contains two decks to provide extended recording time. Before the disc in one deck comes to an end, the disc in the other deck automatically starts recording. By replacing one disc at a time, you can continue recording indefinitely.

Large LCD Display
You can check various data such as disc status, time and date on one display.

Search Function
Being a digital device, the MDCC-2000 lets you perform different kinds of searches, Index Search, Time Search and Point Search. Use the jog dial or number buttons to search quickly and precisely.

Eight Microphones Connect to the 4-Channel System
You can connect up to eight microphones, allowing you to record the whole of a meeting in a large conference hall, for example, on one machine. Each disc records four channels, each channel containing the mixed sound from two microphones.

Transcribe capability
By connecting the separately available foot control unit, you can operate your MDCC-2000 with your foot for transcribing. And auto backspace function with the REVERSE TIME control makes transcribing easy by enabling the reviewing of the last recorded words each time listening is resumed.



Public Address System
By connecting an amplifier and speakers to the MDCC-2000, you can make a public address of the sounds being recording through the microphone.

Security Lock
There is a key to lock the STANDBY switch of your MDCC-2000, to protect any confidential information on the discs inside.

Notes on MiniDiscs

Types of mini discs that can be used
We recommend that you use the supplied or separately purchased special MiniDisc (MDW74CC) to record using your MDCC-2000. We also recommend that you use only 74-minute discs. 80-minute discs cannot be used with the MDCC-2000.

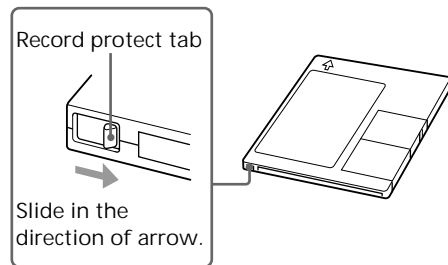
- You cannot use the MDCC-2000 to playback a disc recorded on a different device.

Recording time
The MDCC-2000 has two recording modes depending on the number of channels. The relationship between recording mode and recording time is shown below (when using a 74-minute MiniDisc).

Recording mode	Recording time*
4ch	Max 148 minutes (2 hours 28 minutes)
2ch	Max 296 minutes (4 hours 56 minutes)

*For details about recording time, see page 12.

To prevent accidental erasure of the recorded material
To protect an MD recording, slide the record-protect tab in the direction of the arrow (see illustration below) to open the slot. To enable re-recording, close the slot.

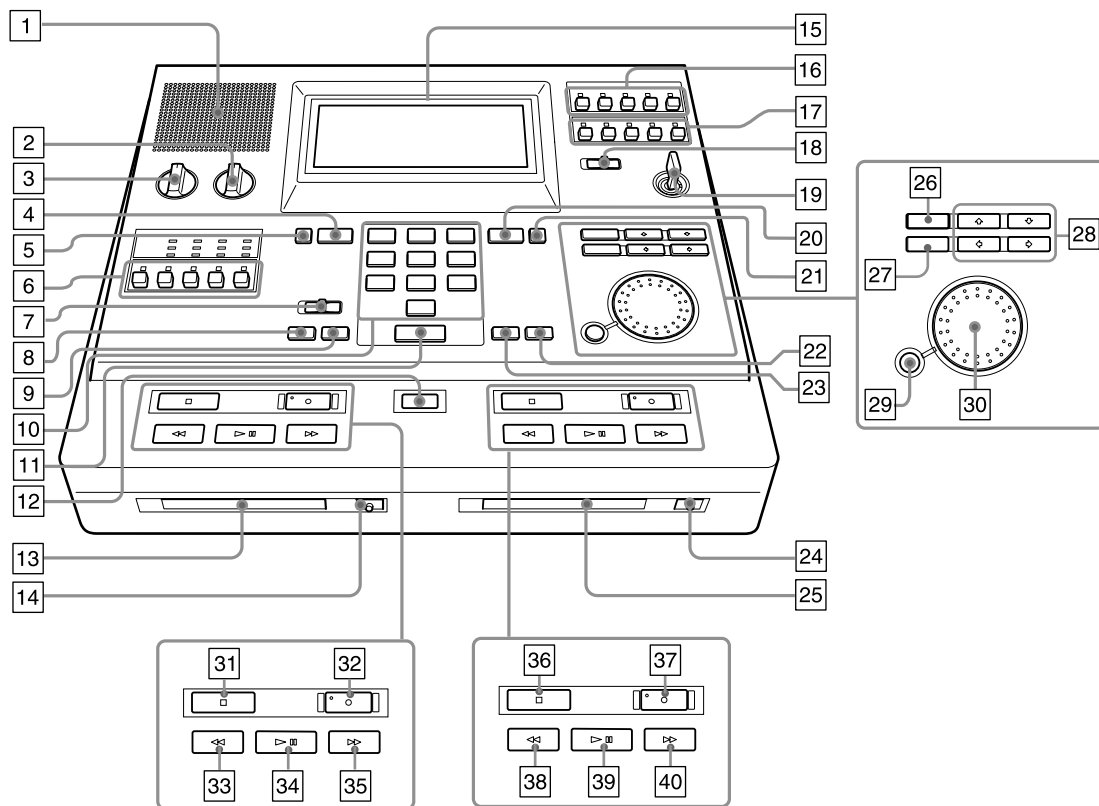


On digital recording
This recorder uses the Serial Copy Management System, which allows only first-generation digital copies to be made from premastered software. You can only make copies from a MD recorded on this unit by using the analog (line out) connections.

- On the MiniDisc cartridge
- When carrying or storing the MiniDisc, keep it in its case.
 - Do not break open the shutter.
 - Do not place the cartridge where it will be subject to light, extreme temperatures, moisture or dust.
 - Attach the supplied MD label in the designated space on the disc only. Stick it on firmly so that it does not peel off. Do not stick it on any other disc surface. If the label is not stuck on properly, you might not be able to eject the disc.
 - Wipe the disc cartridge with a dry cloth to remove dirt.

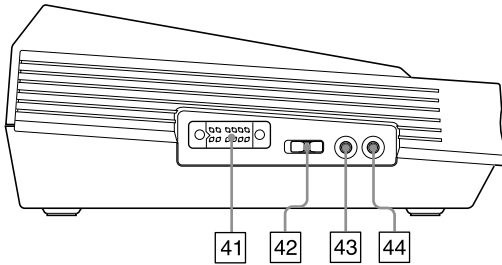
Location and Function of Controls

For details, refer to the pages indicated in ().



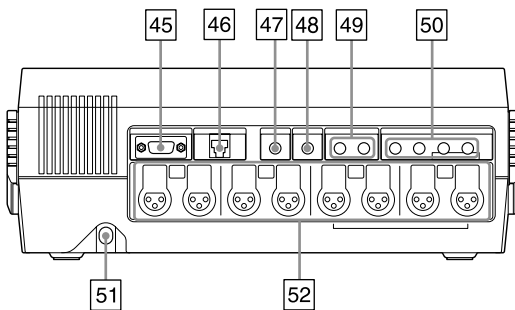
- | | |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 1 Built-in speaker | 20 DECK B button (17, 18) |
| 2 LCD CONTRAST control
Adjusts the contrast of the display. | 21 DISPLAY MODE B button (21) |
| 3 MONITOR VOL control | 22 POINT SEARCH-RESET button (deck B) (20) |
| 4 DECK A button (17, 18) | 23 POINT SEARCH-POINT button (deck B) (20) |
| 5 DISPLAY MODE A button (21) | 24 ▲ EJECT button (deck B) |
| 6 MONITOR select buttons (ALL/1/2/3/4) | 25 MD insertion slot (deck B) |
| 7 SEARCH selector (17, 18)
(INDEX SEARCH/TIME SEARCH) | 26 FUNCTION button |
| 8 POINT SEARCH-POINT button (deck A) (20) | 27 DELETE button |
| 9 POINT SEARCH-RESET button (deck A) (20) | 28 Arrow buttons |
| 10 Number buttons | 29 ENTER button |
| 11 SEARCH button (17, 18) | 30 Jog dial |
| 12 INDEX button (14) | 31 ■ STOP button (deck A) |
| 13 MD insertion slot (deck A) | 32 ● REC button (deck A) |
| 14 ▲ EJECT button (deck A) | 33 ◀◀ REW/BS button (deck A) |
| 15 LCD display | 34 ▶▶ PLAY/PAUSE button (deck A) |
| 16 LINE OUT 1 select buttons (ALL/1/2/3/4) (31) | 35 ▶▶ FF/FS button (deck A) |
| 17 LINE OUT 2 select buttons (ALL/1/2/3/4) (31) | 36 ■ STOP button (deck B) |
| 18 PA/ADA selector (OFF/ON [ADA/PA]) (30)
Switches the output to the PA/ADA jacks on or off. | 37 ● REC button (deck B) |
| 19 STANDBY switch | 38 ◀◀ REW/BS button (deck B) |
| | 39 ▶▶ PLAY/PAUSE button (deck B) |
| | 40 ▶▶ FF/FS button (deck B) |

Left side



- 41 CONTROL UNIT connector (32)
- 42 TRANSCRIBE selector (33)
- 43 REMOTE jack (15)
- 44 EAR jack (16)

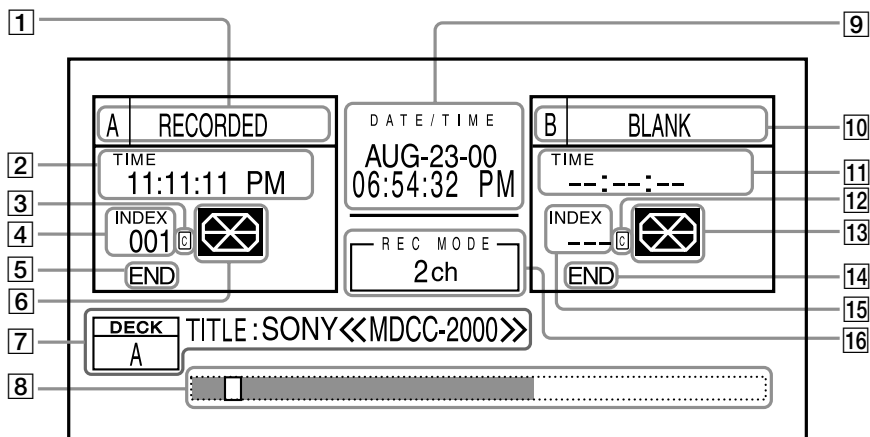
Rear



- 45 PC connector (RS-232C type)
- 46 DISPLAY connector
Used for connection of an external counter unit.
- 47 ADA jack
Allows the unit to be connected to a separately purchased amplifier system.
- 48 PA (public address) jack (30)
- 49 LINE OUT jacks
- 50 LINE IN jacks
- 51 DC IN 12V jack (7)
- 52 Microphone connectors (Canon XLR-3-31 type)

Location and Function of Controls (continued)

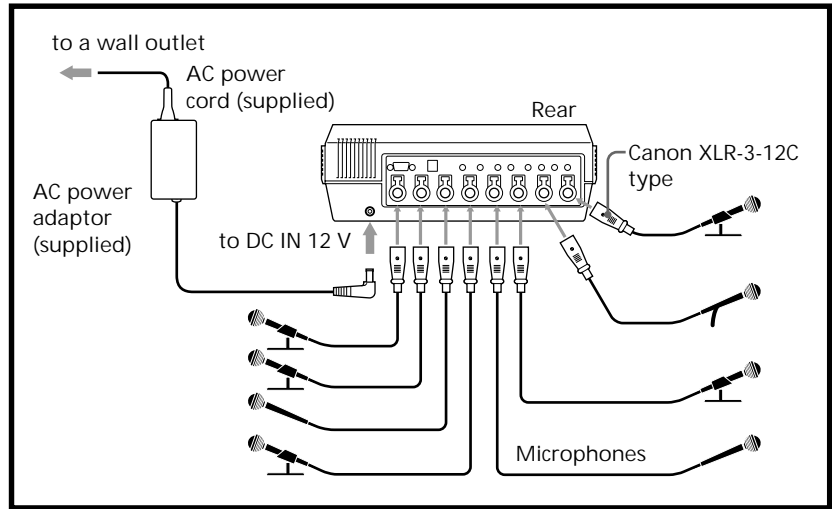
Display Window (Information screen)



- 1** A: display (deck A)
Indicates the disc inserted in deck A or the status of deck A as follows:
BLANK: a blank disc
NO DISC: no disc
PB ONLY: a commercially available recorded disc (for playback only)
PROTECTED: a protected disc (3)
RECORDED: a recorded disc
- 2** TIME display (deck A)
Indicates the recorded time at the current location for each index item. It blinks during time search. (18)
- 3** (copied) display (deck A)
Indicates that a disc digitally copied with the Copy function is inserted. (26)
- 4** INDEX counter (deck A)
Lights up when a disc is inserted.
Blinks during an index search. (17)
- 5** END display (deck A)
This shows the end of the disc.
- 6** Disc status display (deck A)
Indicates the status of the disc with pictures.
- 7** DECK A/DECK B display
Indicates various data by characters and various error messages. (38)
- 8** Disc position display
Indicates the current playback/recording location on the disc by a white box. Already recorded parts are indicated in black. The further it is to the right, the closer the disc is to the end. Depending on the condition of the disc, the black part might not reach the far right even if the disc is full.
- 9** DATE/TIME display
Indicates the current date and time.
- 10** B: display (deck B)
Indicates the same contents as deck A.
- 11** TIME display (deck B)
- 12** (copied) display (deck B)
- 13** Disc status display (deck B)
- 14** END display (deck B)
- 15** INDEX counter (deck B)
- 16** REC MODE display
Indicates the recording mode (2ch/4ch) currently selected.

Connection

Insert a lithium battery as a backup for the clock and connect the microphones and AC power adapter to the unit. Up to eight microphones can be connected. Insert the microphones firmly.



Notes on lithium battery

- Keep the lithium battery out of reach of children. Should the battery be swallowed, immediately consult a doctor.
- Wipe the battery with a dry cloth to assure good contact.
- Be sure to install the battery in the correct polarity position.
- Do not hold the battery with metallic tweezers, as doing so may cause a short-circuit.
- Do not break up the battery or throw it into a fire, which might cause it to explode. Carefully dispose of the used battery.

Note on the AC power adaptor

Use only the AC power adaptor supplied. Do not use any other AC power adaptor.



Polarity of the plug

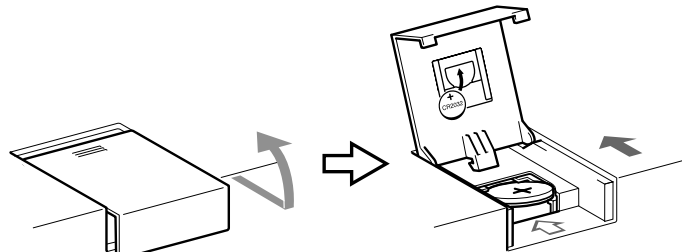
Note

When recording the input from an external device, connect it to the LINE IN (1-4 ch) jack.

Note

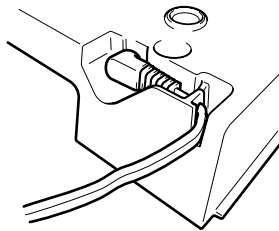
The battery life may shorten depending on the operation of the unit.

- 1 Insert the supplied CR2032 lithium battery into the lithium battery compartment in the bottom.



Insert the battery with correct polarity.

- 2 Plug in the supplied AC power adaptor to the DC IN 12V jack. Put the cord of the AC power adaptor in the groove on the bottom of the unit.



- 3 Connect the microphones.

- 4 Connect the AC power cord to the AC power adaptor firmly and plug in the AC power cord to a wall outlet.

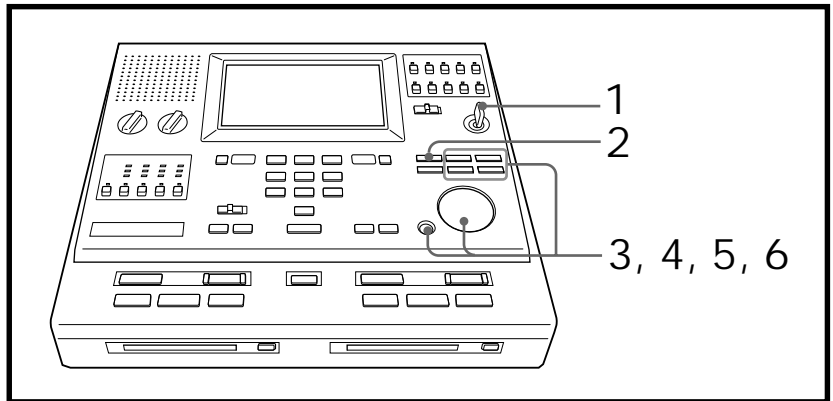
When to replace the battery

The lithium battery will last for about 1 year. If the clock loses or gains, replace the lithium battery with a new one.

Setting the Date and Time

To record the date and time etc. on MiniDiscs when you record, be sure to set the Date and Time.

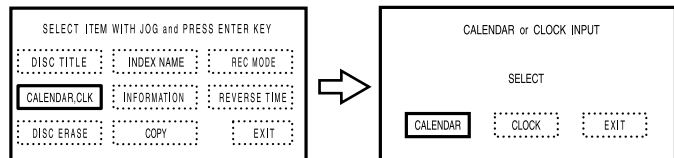
Setting the Date



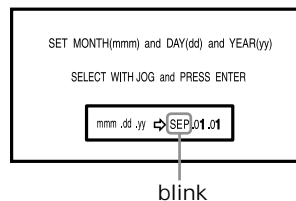
- 1 Insert the key and set it to ON.
You will see the initial screen in a few seconds.

- 2 Press FUNCTION.

- 3 Select CALENDAR,CLK using the jog dial or the arrow buttons, and press ENTER.
You will see the CALENDAR or CLOCK INPUT screen.



- 4 Select CALENDAR using the jog dial or the arrow buttons, and press ENTER.
You will see the SET MONTH (mmm) and DAY (dd) and YEAR (yy) screen with the name of a month blinking.

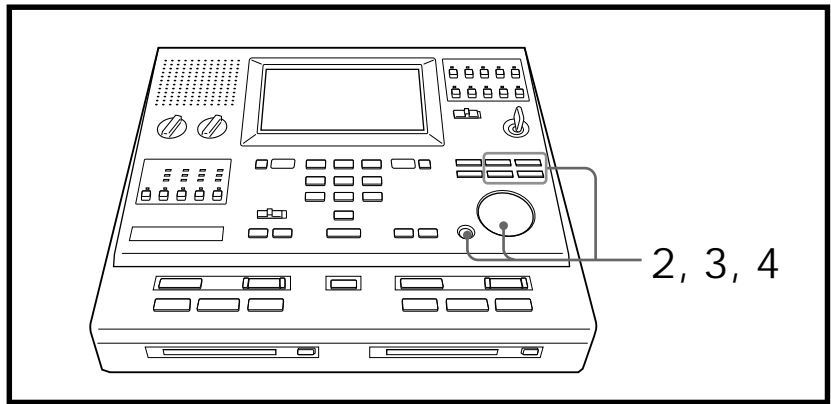


- 5 Set the month using the jog dial or \uparrow/\downarrow buttons, and press ENTER.
You will see "01" of the day blinking.

- 6 Set the day and the year in the same way as step 5.
When the year is set, the display will return to the information screen.

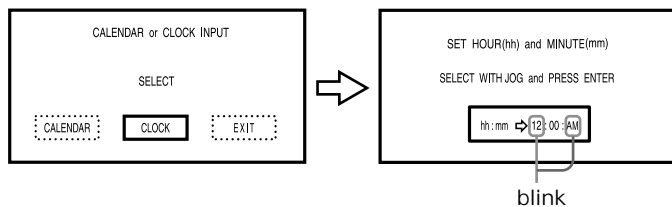
Note
You cannot use the \leftarrow/\rightarrow buttons when setting the month, day and year.

Setting the Time



- 1 Carry out steps 2 and 3 of "Setting the Date".
You will see the CALENDER or CLOCK INPUT screen.

- 2 Select CLOCK using the jog dial or the arrow buttons, and press ENTER.
You will see the SET HOUR (hh) and MINUTE (mm) screen with the hours and AM/PM blinking.



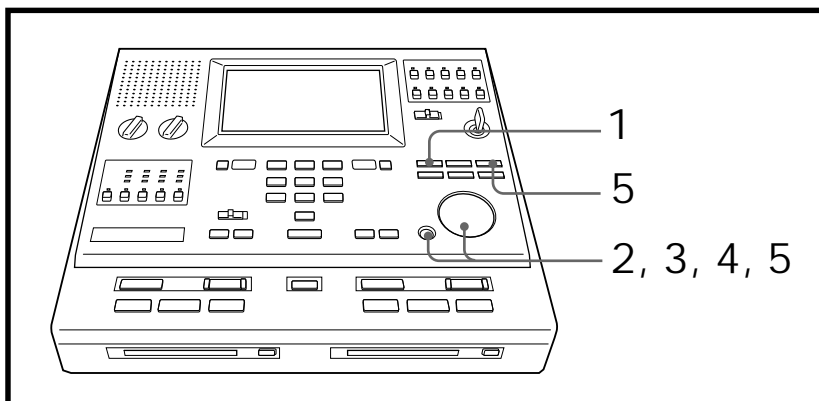
Note
You cannot use the ⇐/⇒ buttons when setting the hour and minute.

- 3 Set the hour using the jog dial or ↑/↓ buttons, and press ENTER.
You will see the minutes blinking.
- 4 Set the minutes in the same way as step 3.
The display will return to the information screen and the clock will start.

Setting the Machine Information

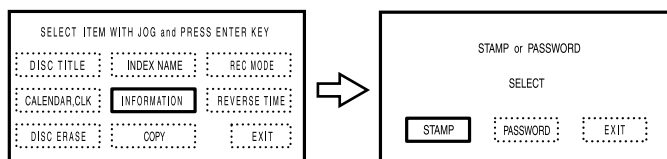
The stamp is one of the items that can be registered when recording, and refers to the title that appears after the disc title. You can use it to indicate the recording machine, for example, by entering the machine's serial number.

Setting the Stamp

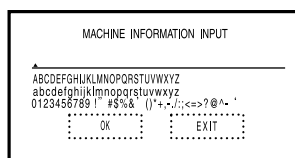


1 Press FUNCTION.

2 Select INFORMATION using the jog dial or the arrow buttons, and press ENTER.
You will see the STAMP or PASSWORD screen.



3 Select STAMP using the jog dial or the arrow buttons, and press ENTER.
You will see the MACHINE INFORMATION INPUT screen.



4 Select a letter or number using the jog dial or the arrow buttons, and press ENTER.
Repeat this step for each character you want to input.

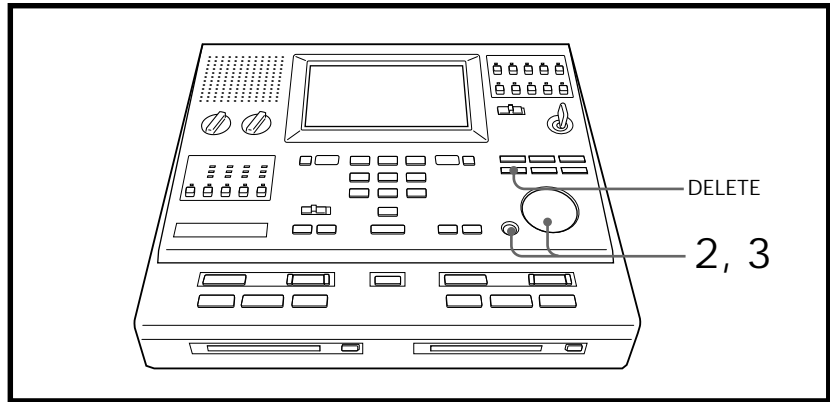
5 Select OK using the jog dial or the arrow buttons, and press ENTER.
The stamp is now set. When recording starts, you can see it on the display inside the brackets << >> after the disc title.

Note

You can create a stamp of up to 198 characters. However, the maximum number of characters might be less than 198 depending on the total number of characters of DISC TITLE and INDEX NAME (see page 22, 24).

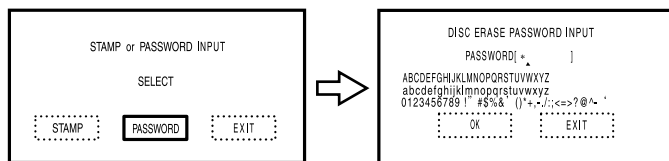
Setting the Password

Set a password that will be entered when you want to delete recordings from a disc. This password will prevent you from accidentally deleting.



- 1 Carry out steps 1 and 2 of "Setting the Stamp". You will see the STAMP or PASSWORD screen.

- 2 Select PASSWORD using the jog dial or the arrow buttons, and press ENTER. You will see the DISC ERASE PASSWORD INPUT screen.



Notes

- You can create a password of up to 8 characters.
- Pressing DELETE while setting the password will delete all the characters.

- 3 Select a letter or number using the jog dial or the arrow buttons, and press ENTER. Repeat this step for each character you want to input. Each letter and/or number of the password will be displayed as a "*".

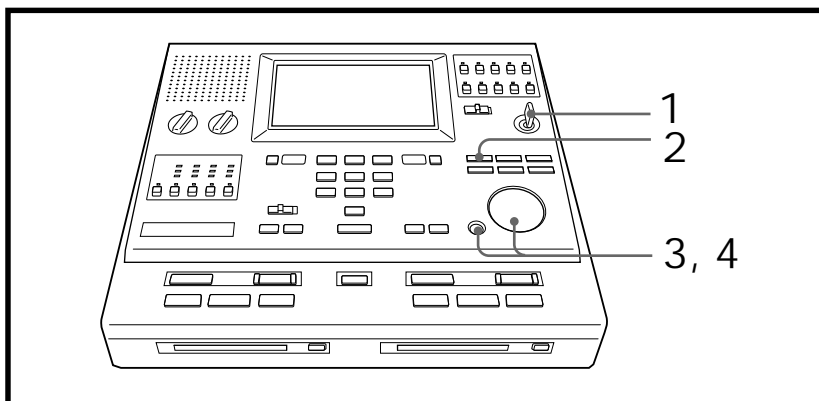
- 4 Select OK using the jog dial or the arrow buttons, and press ENTER. The password is now set.

Recording

Read Connection (page 7) carefully before recording. Select the recording mode before you record.

About recording time
 This device normally records onto the disc in minimum units of about 8 seconds in 2ch mode (or 4 seconds in 4ch mode). When recording is stopped, the entire 8 seconds (or 4 seconds) of the last unit of recording is always used even if the actual recording is shorter. Likewise, when recording is restarted after the stop, recording starts from the next space. This is to avoid accidental erasing of the previous track whenever a new recording is started. Therefore the maximum potential recording time actually decreases by up to 8 seconds (or 4 seconds) every time a recording is stopped. The condition of the disc can also prevent recording to the end of the maximum potential recording time.

Setting the Recording Mode

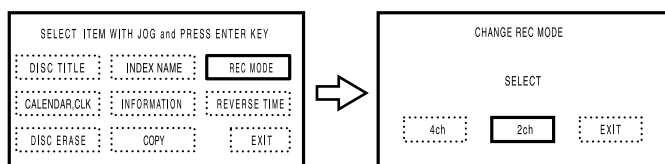


The relationship between the recording mode, recording time and channel number is shown below.

(When using a 74-minute disc)

Recording mode	Recording time	Maximum channel number
2ch	Max 296 minutes (4 hours 56 minutes)	2
4ch	Max 148 minutes (2 hours 28 minutes)	4

- 1 Insert the key and set it to ON.
You will see the initial screen in a few seconds.
- 2 Press FUNCTION.
- 3 Select REC MODE, and press ENTER.
You will see the CHANGE REC MODE screen.

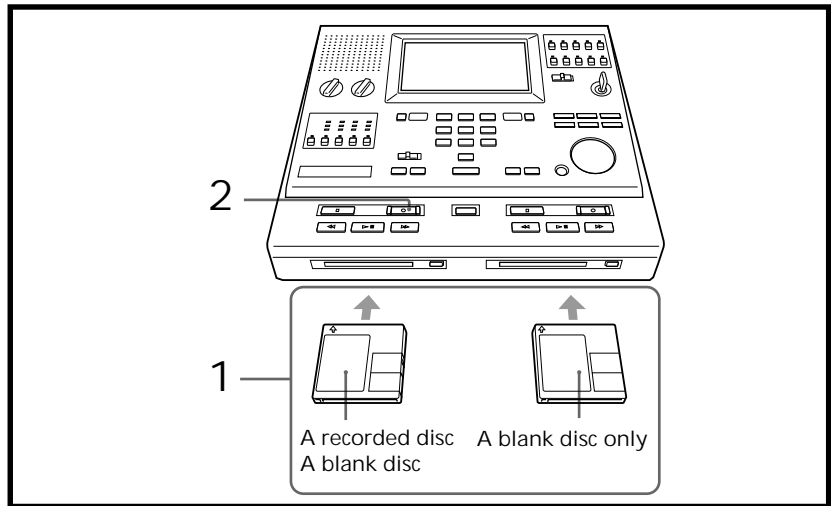


- 4 Select either 2ch or 4ch, and press ENTER.
The display will return to the information screen.
You will see the selected recording mode (2ch or 4ch).

Recording Continuously Using Both Decks – Continuous Recording

This unit can record continuously by using two decks, deck A and deck B, alternately.

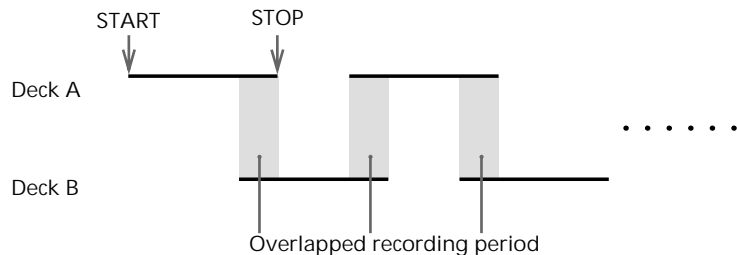
Check and make sure that the recording operation is not malfunctioning prior to recording important materials.



Notes

- On this unit the new recording starts after the previously recorded data. You cannot overwrite onto the previously recorded data.
- For continuous recording, always use blank discs except for the first one. You can only use a recorded disc when you insert the first disc to start continuous recording.
- When not continuous recording, insert a disc into either deck and start recording.
- When you start recording, a new index mark is created at the beginning. You can add up to 200 index marks (or less than 200 depending on the recording status of the disc). If a recorded disc has 200 index marks, the new recording cannot be carried out even if the disc has some unrecorded space left.

There is an overlap of a few seconds when the deck switch over, which means you can record indefinitely without any pause.



Here are the steps when carrying out continuous recording from deck A to deck B. You can also perform continuous recording successively from deck B to deck A.

- 1 Insert MiniDiscs into decks A and B.
Be sure to insert a blank disc into deck B. Recording will not begin if you put a previously recorded disc, commercially available pre-recorded disc or protected disc into deck B.
- 2 Press ●REC of deck A.
The lamp on the REC button lights up, and Deck A starts recording.

A few seconds before deck A finishes recording
Deck B starts recording automatically.
Once deck A has finished recording, the recorded disc inside is automatically ejected.

To stop recording
Press ■STOP and ●REC simultaneously.

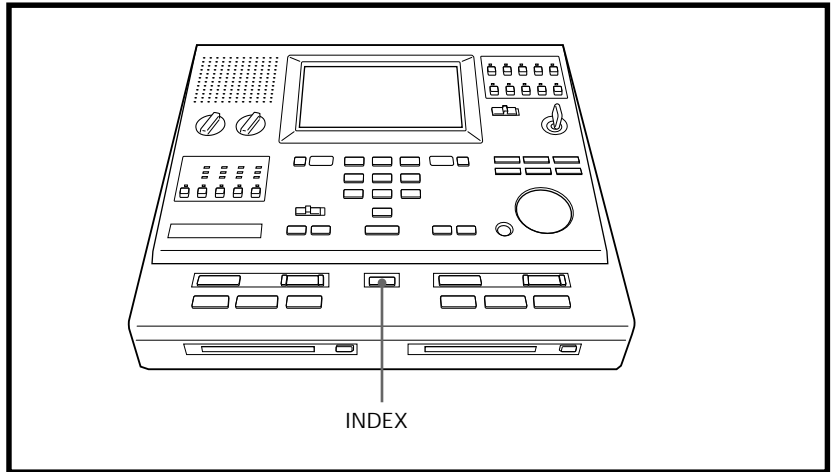
For continuous recording of three or more discs successively
Replace the MiniDisc in one deck with a blank disc while recording with the other deck. Endless recording can be done in this way.

Adding Index Marks

Index mark (track number) is automatically added when

- you start recording
- you restart recording after pausing

You can also add index marks manually at any location on the disc while recording. Adding index marks allows you to jump to those locations during playback or stop.



Notes

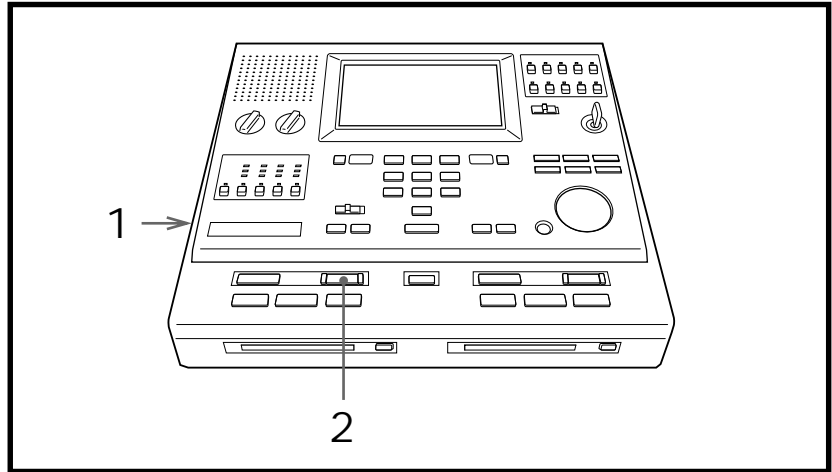
- You can add up to 200 index marks.
- You can only add index marks during recording.
- If the number of index marks has reached 200 (or less than 200 depending on the recording status of the disc) during recording, you cannot add more index marks. Recording will continue, however, until you press the stop button or the disc ends.
- The maximum number of index marks that can be added might be less than 200, depending on the condition of the disc.

To add an index mark

Press **INDEX** during recording at the location where you want to insert a index mark. The index counter will count upwards.

Using the Remote Control Unit (not supplied)

Connecting the separately purchased remote control unit allows you to operate your MDCC-2000 remotely. The remote operations you can perform are pausing during recording and restarting recording.



Notes

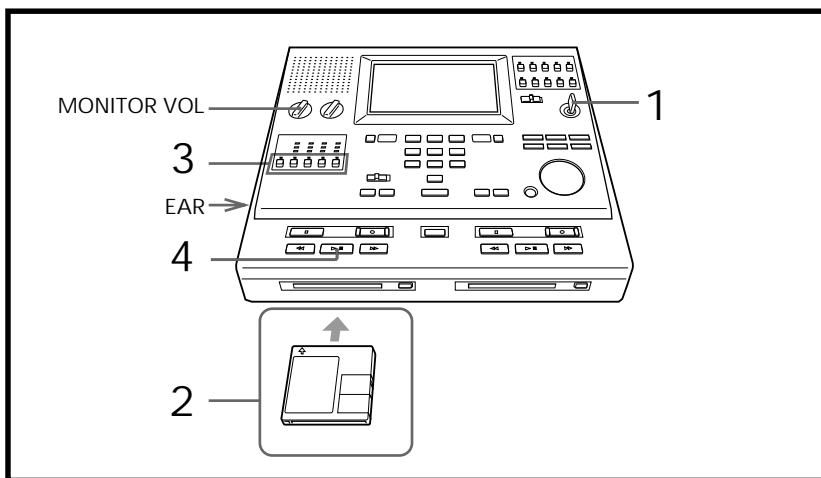
- The remote control unit can only be used during recording. It does not work when not recording.
- One index mark is added each time you restart recording after pausing.
- Once the number of index marks has reached 200 (or less than 200 depending on the recording status of the disc), the remote control unit does not work. The MDCC-2000 just continues to record.
- The REC indicator on the REC button flashes while recording is being paused.

- 1 Connect the remote control unit to the REMOTE jack on the left side of the MDCC-2000.
- 2 Press REC on the MDCC-2000 to start recording.
- 3 Pause and restart recording using the remote control unit.

Playback

You can play only the MiniDisc recorded on MDCC-2000. You can select only the channel you want to listen to and play it back.

Playing a Recorded Disc



Here are the steps when playing a disc with deck A. You can use deck B by following the same steps.

- 1 Insert the key and set it to ON.

- 2 Insert the recorded disc into deck A.

- 3 Select one channel you want to listen to. When a channel is selected, the indicator above the selected button will light up.

- 4 Press ►► PLAY/PAUSE. Playback will begin.

To pause playback

Press ►► PLAY/PAUSE during playback.

To restart playback, press ►► PLAY/PAUSE again.

To stop playback

Press ■ STOP.

To listen privately

Connect the earphone to the EAR jack. There will be no sound from the speakers, only from the earphone.

To adjust the volume

Adjust the volume using the MONITOR VOL control.

To go forward/backwards

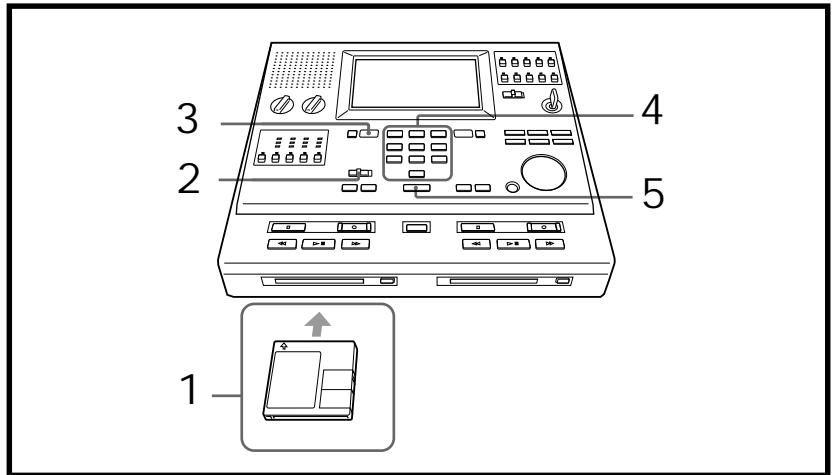
To:	During playback:	During stop:
go forward	press and hold ►►FF/FS	press ►►FF/FS
go backwards	press and hold ◀◀REW/BS	press ◀◀REW/BS

Notes

- Press the MONITOR select button firmly.
- You can select ALL to playback the mixed sounds of all the channels.
- When in 2ch mode, you cannot select 3ch or 4ch on the MONITOR select button and there is no sound output.

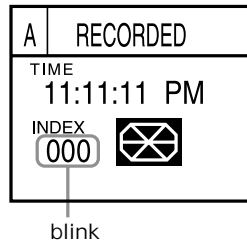
Searching by index mark (Index Search)

You can easily jump to the recorded area you want to hear by entering the index mark number that is memorized automatically or manually.



Here are the steps when playing a disc with deck A.
You can use deck B by following the same steps.

- 1 Insert the disc to be searched into deck A.
- 2 Set the SEARCH selector to INDEX SEARCH.
- 3 Press DECK A.
"000" will start to blink.



- 4 Enter the index number you are searching for.
Enter this number while "000" is blinking on the display.
- 5 Press SEARCH.
After searching for an index number entered during playback, the unit will continue to playback.
After searching for an index number entered during stopping, the unit will stop.

Tip

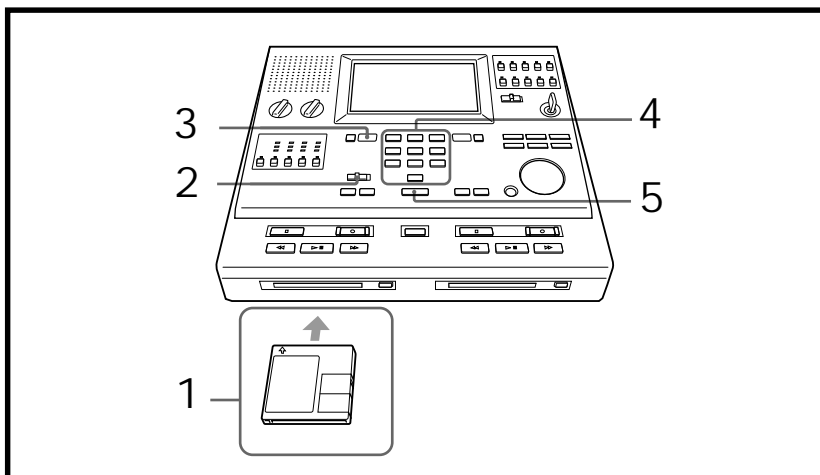
You can also enter the index number using the jog dial or the \uparrow/\downarrow buttons.

Notes

If you try to search for an index number that does not exist, the recorder searches for the final index number.

You can easily search for recorded parts you want to hear by entering the recording time that is memorized on the disc.

Searching by time (Time Search)

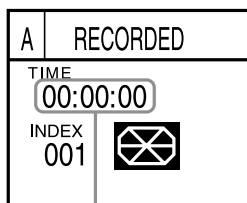


Here are the steps when playing a disc with deck A.
You can use deck B by following the same steps.

1 Insert the disc to be searched into deck A.

2 Set the SEARCH selector to TIME SEARCH.

3 Press DECK A.
“00:00:00” will start to blink.

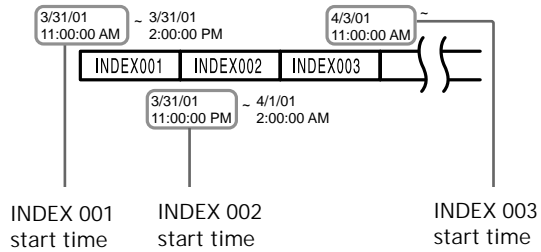


blink

4 Enter the time you are searching for.
Enter this time while “00:00:00” is blinking on the display.
eg. To enter the time “1:34:56”=, enter “0” “1” “3” “4” “5” “6” in that order.

5 Press SEARCH.
After searching for the time entered during playback, the unit will continue to playback.
After searching for the time entered during stopping, the unit will stop.

If more than one result is obtained from a search
 When you perform a time search on a disc onto which an appended recording has been made, more than one result might be obtained.



In the above example, a search for a time 12:34:56 would find that time in INDEX 1, INDEX 2 and INDEX 3.

INDEX 001: March 31st, 2001 12:34:56 PM

INDEX 002: April 1st, 2001 12:34:56 AM

INDEX 003: April 3rd, 2001 12:34:56 PM

In this case, you will see the index numbers and index start times in the index order, as shown below.

SELECT INDEX				TOTAL SEARCH=003
(INDEX)	(DATE)	(START TIME)	(INDEX NAME)	
▶ 001.	MAR-31-01	11:00:00 AM	Sample-A	
002.	MAR-31-01	11:00:00 PM	Sample-B	
003.	APR-03-01	11:00:00 AM	Sample-C	

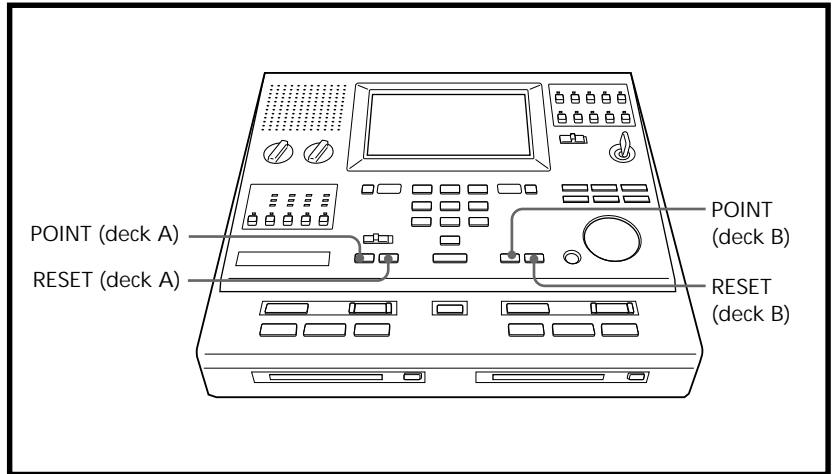
Note

If there are more than 6 index marks, use the jog dial or ↑/↓ buttons to scroll the screen.


Move the ▶ mark to the left of the index number to select the index number you want using the jog dial or ↑/↓ buttons, and press ENTER.

Searching by Marking a Specific Point (Point Search)

Point search is the function which allows you to mark a point in any location during playback or stop and then search for that location later. You can mark only one point on each of decks A and B.



Note

A "point search" is only possible when the  mark is on the Disc position display (see page 6).


Note

Pressing RESET or ejecting the disc by pressing EJECT clears the point marked at a location. The point mark cannot be cleared by switching to STANDBY.

To mark a point

Press POINT at the location you want to mark whether stopped or during playback.

MARKING POINT will light up for a few seconds.

A  mark appears at the current position on the Disc position display.

To search for a point

Press POINT whether stopped or during playback.

You will see **SEARCH MODE** light up.

When the search is complete;

- the unit will start to playback from the location searched if the search was made during stopping.
- the unit will continue to playback from the location searched if the search was made during playback.

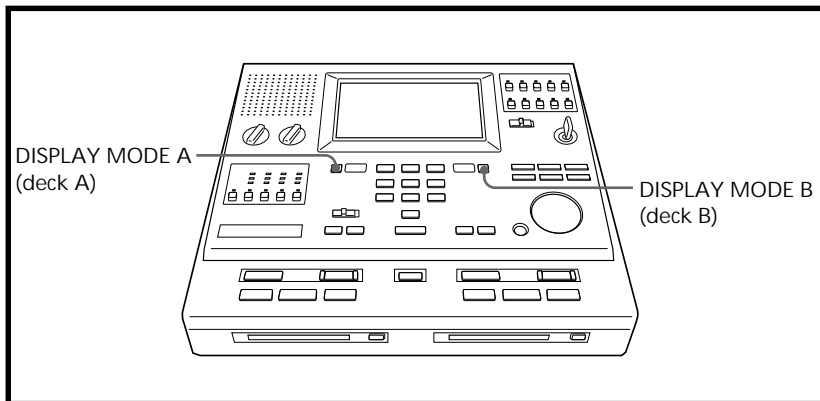
To cancel a point

Press RESET.

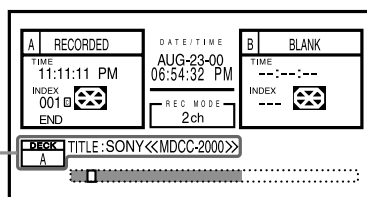
POINT MARK RESET will light up for a few seconds and the point will be canceled.

Switching the Display

You can see the various data entered on a disc by pressing the DISPLAY MODE button.



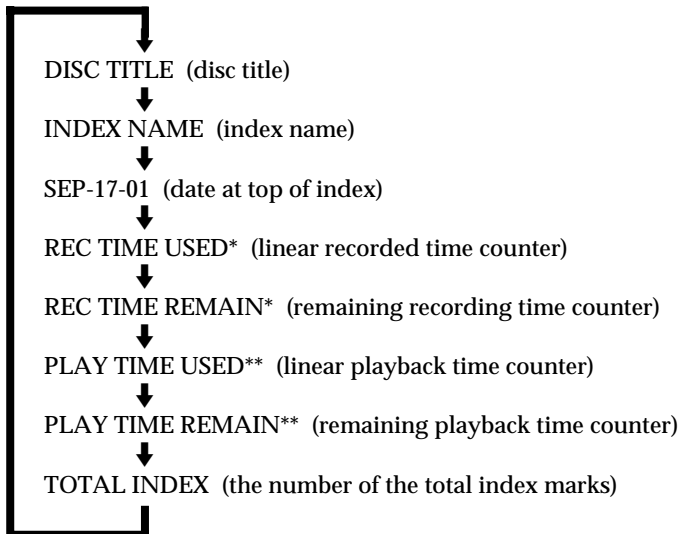
Depending on the disc status, the displayed item changes every time you press DISPLAY MODE as follows.



This display changes.

Notes

- You cannot switch the display in the following cases.
 - There is no disc inserted
 - A blank disc is inserted
 - An error message etc. is displayed
 In the case of the following messages, however, you can perform the operation below to remove the message and switch the display:
 - "CANNOT PAUSE REC!!"
 - Stop using the remote control to pause.
 - "CANNOT TRANSFER!!"
 - Keep the DISPLAY MODE button on the recording deck pressed down.
- When you press the DISPLAY MODE button on the other deck, the deck indicator blinks.



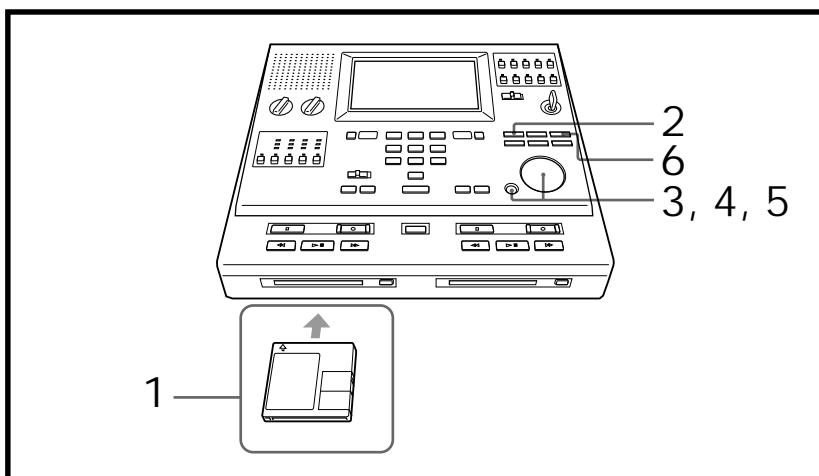
* Not displayed during playback.

** Not displayed during recording.

Naming a Disc or Index Marks

The disc title can be up to 203 characters. (This maximum number of characters may vary depending on the number of characters of the other index names and disc title memorized on that disc.) You can write a title onto a blank disc. However, this title will not appear on the display (see page 21).

Disc Title



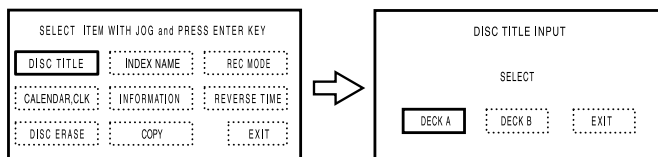
Here are the steps when using deck A.

You can use deck B by following the same steps.

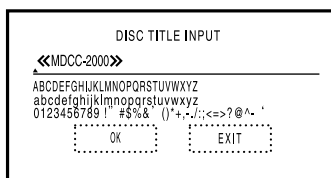
1 Insert the disc to be named into deck A.

2 Press FUNCTION.

3 Select DISC TITLE and press ENTER.
You will see the DISC TITLE INPUT screen.



4 Select DECK A and press ENTER.
The DISC TITLE INPUT screen will appear.



Note

To change the title, use ↑/↓ so that the ▲ mark above the bar on the DISC TITLE INPUT screen is blinking. Next, use ←/→ to move the ▲ mark below the character you want to change, press the DELETE button, and enter a new character.

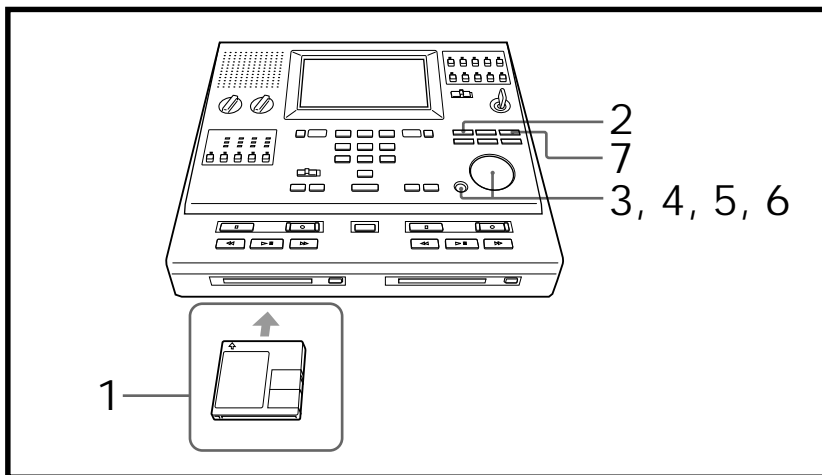
-
- 5 Select the first character you want to enter, and press ENTER.
Repeat this step for the remaining characters of the disc title.
-

- 6 Select OK and press ENTER.
You will see SYSTEM PREPARING light up for a few seconds, indicating that the title is being written onto the disc.
-

Naming a Disc or Index Marks (continued)

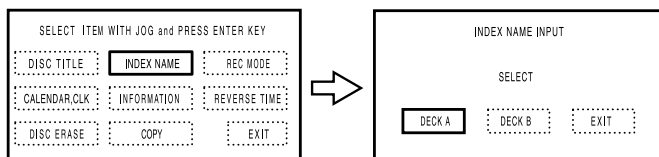
You can enter an index name of up to 203 characters. (This maximum number of characters may vary depending on the number of characters of the other index names and disc title memorized on that disc.)

Index Name

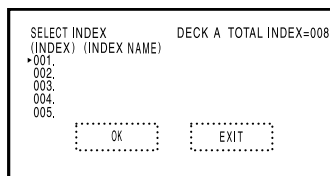


Here are the steps when using deck A.
You can use deck B by following the same steps.

- 1 Insert the disc on which you want to add an index name into deck A.
- 2 Press FUNCTION.
- 3 Select INDEX NAME and press ENTER.
You will see the INDEX NAME INPUT selection screen.



- 4 Select DECK A and press ENTER.
The index table will appear.



-
- 5 Move the ► mark to the left of the index number to be named, and press ENTER.
You will see the INDEX NAME INPUT screen.

INDEX NAME INPUT DECK A EDITING INDEX=008
ROOM -1
ABCDEF GHIJKL MNOPQRST UVWXYZ
abcde fghijk lmnopq rstuvw xyz
0123456789 ! # \$ % & () * + , ; : < > ? @ ^ _ ' .
OK EXIT

-
- 6 Select the first character of the index name and press ENTER.
Repeat this step for the remaining characters of the index name.

-
- 7 Select OK and press ENTER.
You will see SYSTEM PREPARING will light up in the display for a few seconds before the display returns to the index table screen.
-

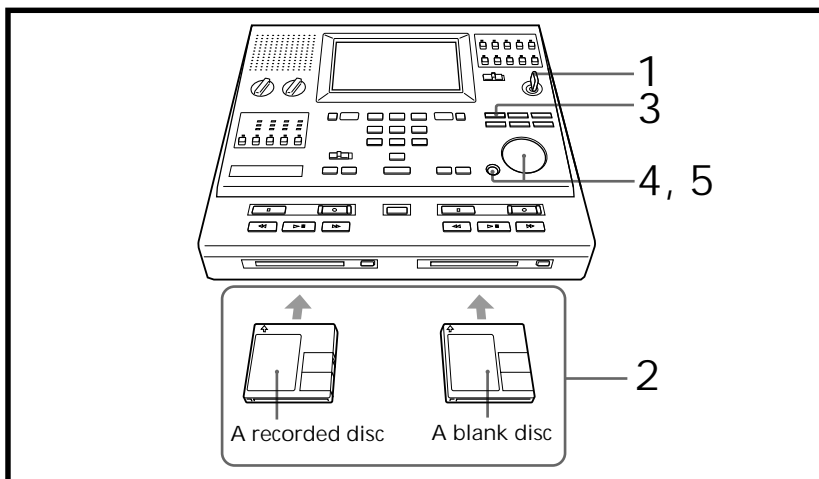
Note

To change the name, use ↑/↓ so that the ▲ mark above the bar on the INDEX NAME INPUT screen is blinking. Next, use ←/→ to move the ▲ mark below the character you want to change, press the DELETE button, and enter a new character.

Copying a disc from Deck A to Deck B

You can use the two decks to copy a recorded disc onto another disc. One whole disc is copied at a time.

Copying can only be carried out from deck A to deck B. You cannot copy from deck B to deck A.



Note

Always copy from a disc recorded on an MDCC-2000, and always copy onto a blank disc. The unit cannot carry out copying when any of the messages below is shown on the display.

Deck A:

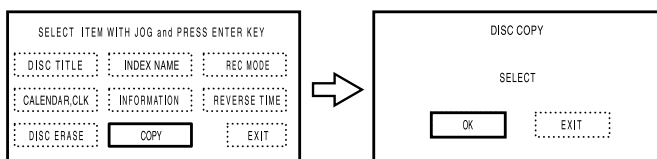
- NO DISC
- BLANK DISC
- NOT ORIGINAL
- DISC FORMAT PRBLM

Deck B:


- NO DISC
- PROTECTED DISC
- RECORDED DISC
- DIFF. RECORD LENGTH

See page 37 on the details of the messages.

- 1 Insert the key and set it to ON.
- 2 Insert the disc from which you will copy (a previously recorded disc) into deck A and the disc onto which you will copy (a blank disc) into deck B.
- 3 Press FUNCTION.
- 4 Select COPY and press ENTER. You will see the DISC COPY screen.



Notes


- You cannot hear the sound during copying.
- You cannot use the new copy (marked ) as an original from which to make a further new copy (See page 3, "On digital recording" for SCMS.).

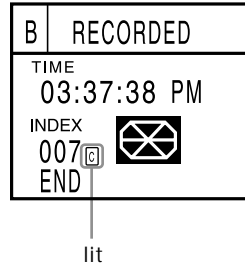
Notes

- Copying of a disc cannot be restarted once it has been interrupted.
- If copying is interrupted;
 - Copying is carried out up to the interrupted point.
 - Disc B is ejected at the interrupted point.

-
- 5 Select OK and press ENTER.
Copying will start.
-

When copying is complete, you will see ****COPY COMPLETED**** blinking on the display for a few seconds. The disc is ejected from deck B and the unit returns to stop status.

When you next insert the copied disc into the deck, a  mark will appear on the right of the index number of the copied disc.

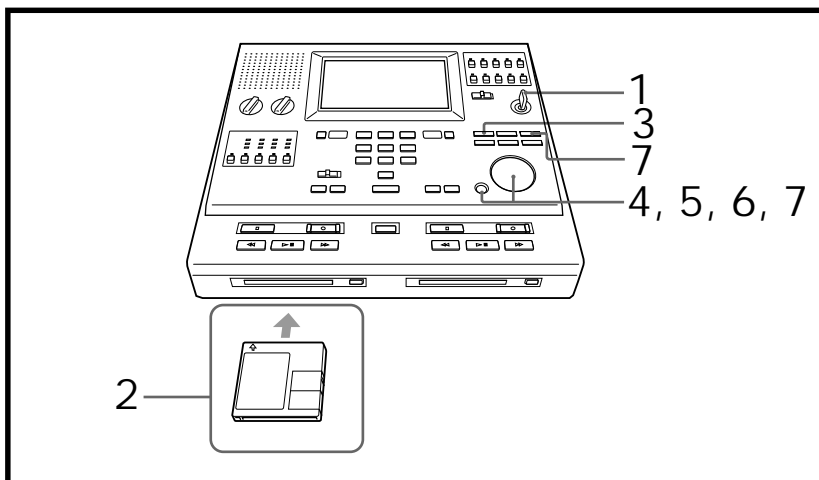


To interrupt copying

- 1 Press FUNCTION during disc copying.
You will see the DISC COPY STOP screen.
-
- 2 Select OK and press ENTER.
Copying will stop.
-

Erasing a Disc

You can erase the recorded contents of a disc. One whole disc is erased at a time.



Here are the steps when using deck A.

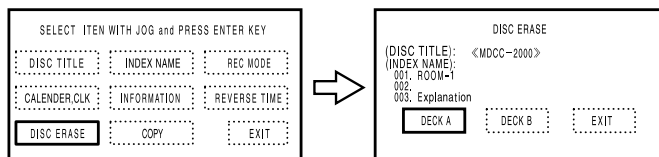
You can use deck B by following the same steps.

- 1 Insert the key and set it to ON.

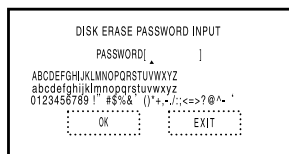
- 2 Insert the disc to be erased into deck A.

- 3 Press FUNCTION.

- 4 Select DISC ERASE and press ENTER.
You will see the DISC ERASE screen. If the disc title and index names have been entered, they will be displayed.



- 5 Select DECK A and press ENTER.
You will see the DISC ERASE PASSWORD INPUT screen.



Note

Up to 3 index names can be displayed on the DISC ERASE screen, even if more index names have been entered onto the disc.

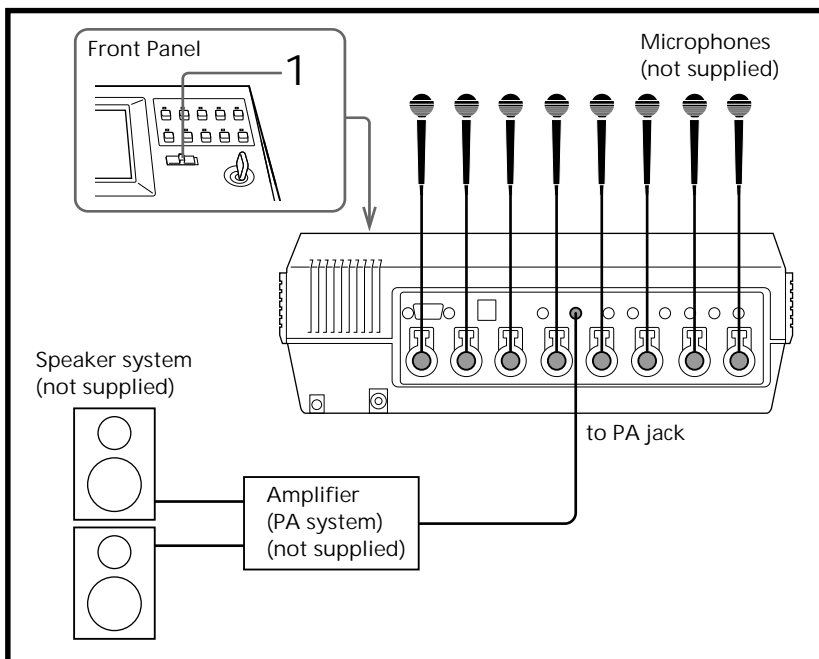
6 Select the first password character and press ENTER.
Repeat the operation for the other characters of the password. Each letter and/or number of the password will be displayed as a “*”.

7 Select OK and press ENTER.
“**TOC EDIT**” will blink to indicate that the disc is being erased.

When erasing is complete, you will see “**BLANK DISC <REMAIN
XX:XX:XX>**” on the display for about a few seconds before the unit returns to stop status.

Public Address

You can make a public address of the sound through the microphones or other external devices. If microphones and other devices are connected at the same time, sound will be mixed and output through the external speakers.



- 1 Set the PA/ADA selector to ON [ADA/PA].
- 2 Switch on the power of the PA system.
- 3 Public address while recording: See Recording (page 12) for operation.
Public address of playback: See Playback (page 16) for operation.

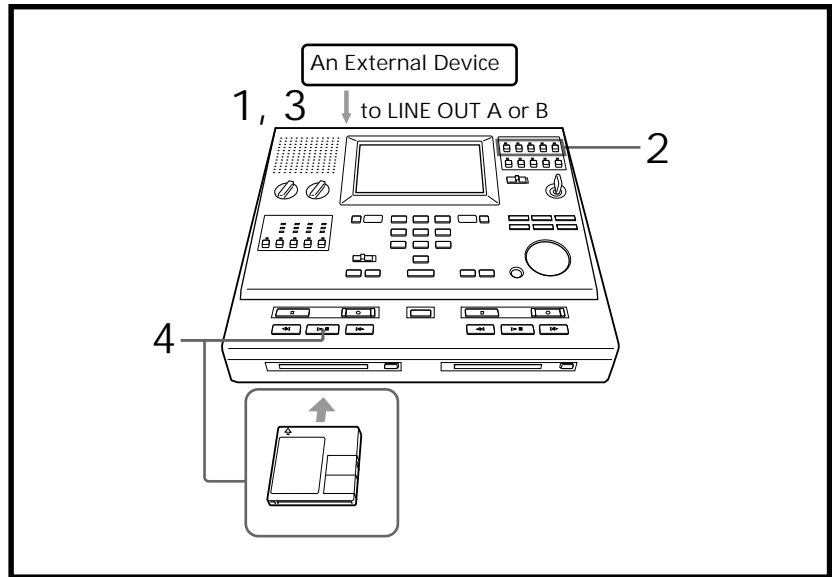
To adjust the volume and tone during public address
Use the volume and tone controls of the PA system.

To listen in another location while recording
You can use the public address function to listen to the sound through a microphone in a conference room, for example, in another location.

Public address of sound through a microphone
You can make a public address of the sound through a microphone using the PA system even when the disc has stopped.

Recording on an External Device

You can connect an external device such as a tape recorder and record the contents of a disc, or the input of a microphone or other equipment on it.



Here is how to record the contents of a mini disc in deck A onto an external device connected to the LINE OUT jack A. You can use deck B by following the same steps.

- 1 Connect the external device onto which you want to record to the LINE OUT jack A.
- 2 Press one of the LINE OUT A select buttons firmly to select the output channels to be output. The indicator above the selected button will light up.
- 3 Start recording on the external device.
- 4 Insert the previously recorded disc into deck A and press **▶|| PLAY/PAUSE**.

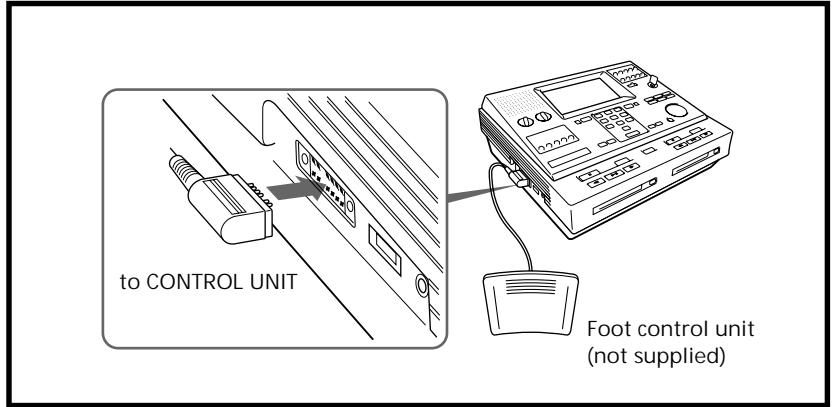
Note

When in 2ch mode, you cannot select 3ch or 4ch on the LINE OUT select buttons and there is no sound output.

Transcribing

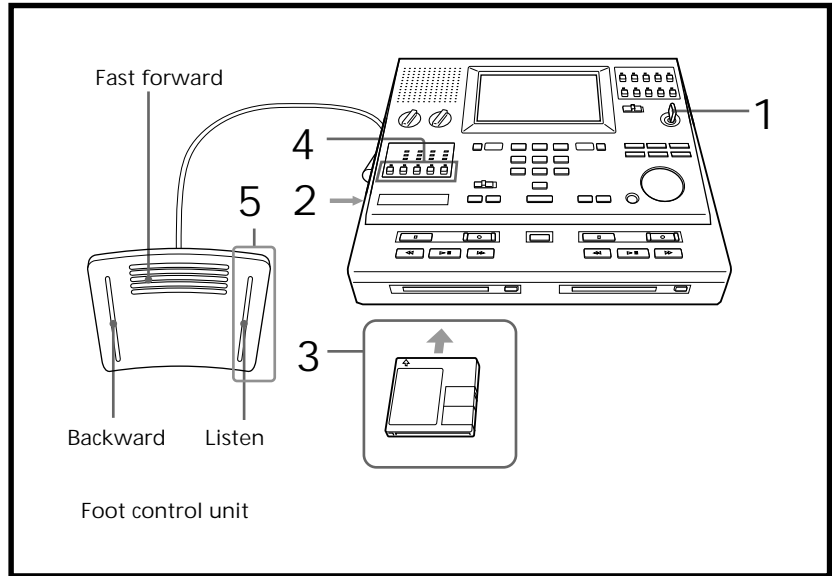
With the separately available foot control unit, you can easily transcribe using the auto backspace function.

Connecting the foot control unit (not supplied)



Operation

You can use the foot control unit to playback, backward or fast-forward easily. Keep your foot pressed down to perform each operation and take your foot off to stop operation.



Here are the steps when playing a disc with deck A.
You can use deck B by following the same steps.

- 1 Insert the key and set it to ON.
- 2 Slide TRANSCRIBE to A (deck A).
- 3 Insert the recorded disc into the deck A.
- 4 Select the playback channel using the MONITOR select button.
- 5 Step on the right side of the pedal of the foot control unit to listen continuously to the recorded sound.
You can keep listening as long as you keep the pedal pressed down.

Notes

- The foot control unit cannot be used during recording.
- When in 2ch mode, you cannot select 3ch or 4ch on the MONITOR select button and there is no sound output.

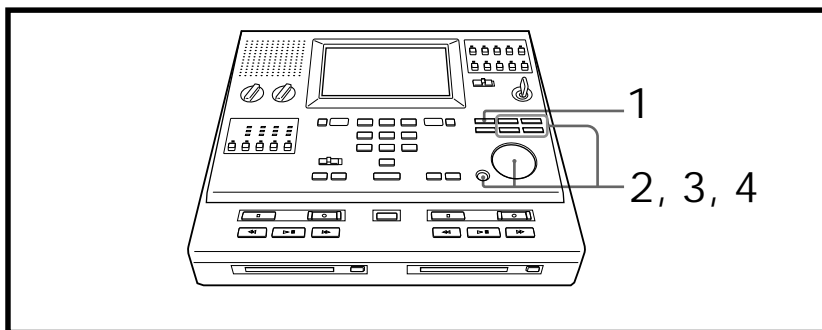
To stop the disc
Release the pedal.

To backward the disc
Step on the left side of the pedal and keep it pressed down.

To fast forward the disc
Step on the center top of the pedal and keep it pressed down.

Using the Auto Backspace function

If you use the foot control unit, you can use the auto backspace function. This function enables you to confirm the last few words each time you resume playback by re-starting playback from just before the point where you stopped.



Note

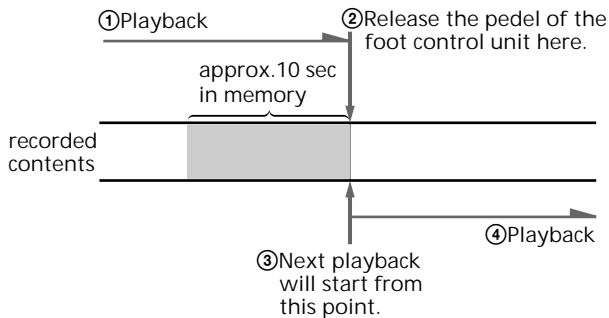
Even if the reverse time is set, the recorder might not backward by the set amount in the following cases because there is no time to save onto the memory.

- When you insert a disc and first start playback.
- When you playback after fast-forward or backward.
- When you playback after a search operation.
- When you playback immediately after REC.
- Immediately after exchanging decks.

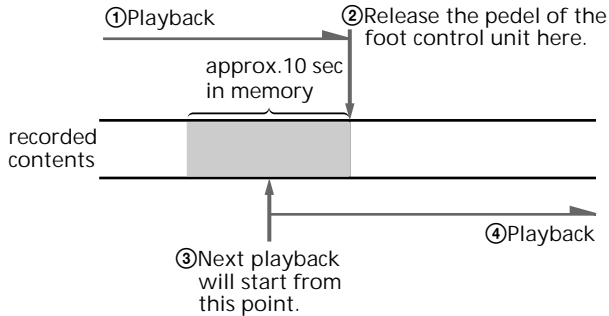
What is the Auto Backspace Function?

When you start playback, the unit stores recorded data in the memory (maximum of about 10 seconds) and plays it back. If you set the reverse time, you can stop playback by releasing the pedal once and then step on the pedal again (Listen) to backward by the set time in the memory and start playback again. The reverse time is factory-set to 0 seconds. You can set it within the range about 0 to 10 seconds.

Example 1: The reverse time is set to 0.0



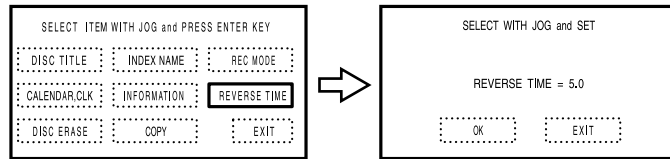
Example 2: The reverse time is set to 5.0



Setting the Reverse Time

1 Press FUNCTION.

2 Select REVERSE TIME and press ENTER.
You will see the SELECT WITH JOG and SET screen.



3 Set the reverse time using the jog dial or \uparrow/\downarrow buttons.
You can set a reverse time from 0.0 to 10.0 (about 0 to 10 seconds).

4 Select OK using the \leftarrow/\rightarrow buttons and press ENTER.
The reverse time is now set.

Precautions

On safety

- Heat may build up in the unit if it is used for an extended period of time. In this case, leave the unit turned off until it cools down.
- Should any solid object or liquid fall into the unit, unplug the unit and have it checked by qualified personnel before operating it any further.

On power sources

- Operate the unit only on 12 V DC.
- Use the AC power adaptor and the AC power cord supplied with this unit. Do not use any other AC power adaptor or AC power cord as it may cause malfunction.
- Unplug the AC power cord from the wall outlet when it will not be used of an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull it by the cord.
- The AC power adaptor which has been supplied becomes hot if it is connected to an AC outlet for a long period of time. But, this will not cause any trouble.

On placement

- Do not install the unit in a location near heat sources, such as radiators or airducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit near materials (curtains, draperies) that may block the ventilation holes.

If you have any question or problem concerning your unit that is not covered in this manual, please consult the Sony dealer from whom you purchased the unit.

Maintenance

Cleaning the cabinet

Clean the cabinet with a soft cloth slightly moistened with a mild detergent solution. Never use strong solvents, such as thinner or benzine, since they may damage the finish.

Troubleshooting Guide

Should any problem persist after you have made these checks, consult your nearest Sony dealer.

The clock gains/loses.

The wrong recording date is stamped.

- The clock is not set.
→Set the clock (page 8).
- The lithium battery for the clock is weak.
→Replace with a new battery and reset the time (page 9).

A deck does not start recording when the other deck reaches the pre-end of disc. In other words, the continuous recording cannot be performed.

- No disc is inserted.
- A recorded disc is inserted.
- A protect disc is inserted.

The recorder does not work or works poorly.

- Connect the AC power cord to a wall outlet.
- Set the STANDBY switch to ON.
- Audio sources may not be securely connected.
→Disconnect the audio sources once and connect them again (page 7).
- Moisture has condensed inside the recorder.
→Take the MD out and leave the recorder in a warm place for several hours until the moisture evaporates.
- You pressed a button during TOC READING.
→Wait until the Disc status display stops flashing and "TOC READING" disappears.
- The AC power adaptor/AC power cord was unplugged during recording or a power outage occurred.
- While operating, the recorder received a mechanical shock, too much static, abnormal power voltage caused by lightning, etc.
→Restart the operation as follows.
 - 1 Disconnect all the power sources.
 - 2 Leave the recorder for about 30 seconds.
 - 3 Connect the power source.
- The disc is damaged or does not contain proper recording or editing data.
→Reinsert the disc.
- Not pressing the button on the deck that you want to operate.
→Press the correct button.

No sound from the built-in speaker.

- Turn the MONITOR VOL control upwards.
- Press the MONITOR select button you want to listen to firmly.
- Unplug the earphone from the EAR jack.

No sound comes through the earphone.

- The earphone plug is not firmly connected.
→Plug in the plug of the earphone firmly.
- Volume is too low.
→Adjust the volume using MONITOR VOL.

An MD is not played from the first index mark.

- Disc playing stopped before it came to the last index mark.
→Eject the MiniDisc once, and restart playing after checking the index mark in the display.

Playback sound skips.

- The recorder is placed where it receives continuous vibration.
→Put the recorder on a stable place.
- Index marks are entered at very short intervals when recording.

Sound has a lot of static.

- Strong magnetism from a television or such device is interfering with operation.
→Move the recorder away from the source of strong magnetism.

Auto Backspace Function does not work.

- The reverse time is set to 0.0 (page 35).
- You use the Auto Backspace Function immediately after playback begins.
→If you do not wait a little after playback begins, the memory cannot save and you cannot backward (page 34).
- When you use the Auto Backspace Function too often in a short time, that is to say, you press the Listen pedal a number of times in a short time, you backward to the last 10 seconds stored in the memory.
→You cannot backward further than the last 10 seconds (page 34).

Alarm sounds or alarm indication appears on the display.

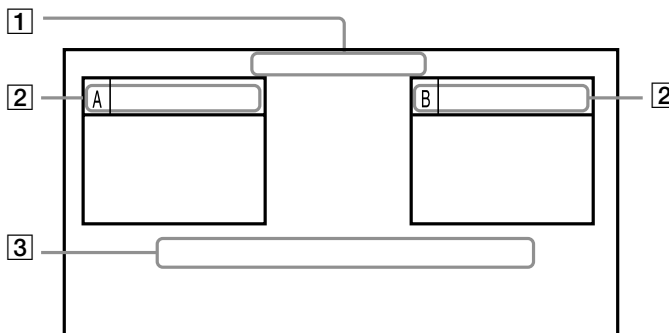
- See pages 38 to 40.

You cannot see the LCD display.

- Adjust the LCD CONTRAST control.

Error and Caution messages

The unit will inform you of various error messages and caution messages in the display window.



1 Power supply caution

Displayed	Situation
POWER SUPPLY (flashing)	The power supply is unstable. Reinforce the power supply with a UPS, etc. (See the UPS operating manual for details.)

2 A/B status display

Displayed	Situation
COMAND EROR CPU COM EROR LASER ERROR	There is a problem with the deck. Turn off the power for 30 seconds and then turn it on again. If the problem persists, contact your dealer.

3 DECK A/DECK B display

Displayed	Situation
ATTENTION!! (DECK A(B): PUT IN BLANK DISC)	Quickly insert a blank disc into deck A (B). If you do not, you might not be able to record.
CANNOT MARK!! (INDEX FULL)	The number of index marks has reached the maximum so you cannot enter any more.
CANNOT PAUSE REC!! (INDEX FULL)	The number of index marks has reached the maximum so you cannot pause recording.
CANNOT REC!!	You cannot record.
CANNOT REC!! (DISC A(B): FULL DISC)	Disc A (B) is full so you cannot record onto it anymore. (See page 12 for details of recording time.)
CANNOT REC!! (DISC A(B): PB ONLY)	This disc is for playback only so you cannot record onto it.
CANNOT REC!! (DISC A(B): PROTECTED)	This disc is protected so you cannot record.
CANNOT REC!! (DISC A(B): RECORDED)	This disc is recorded so you cannot record.
CANNOT REC!! (INDEX FULL)	The number of index marks has reached the maximum so you cannot record.
CANNOT TRANSFER!! (DECK A(B): NO DISC) ¹⁾	There is no disc inserted in deck A (B) so you cannot continue recording.
CANNOT TRANSFER!! (DISC A(B): PB ONLY) ¹⁾	The disc A (B) is for playback only so you cannot continue recording.
CANNOT TRANSFER!! (DISC A(B): PROTECTED) ¹⁾	The disc A (B) is protected so you cannot continue recording.
CANNOT TRANSFER!! (DISC A(B): RECORDED) ¹⁾	The disc A (B) is recorded so you cannot continue recording.

1) The message "CANNOT TRANSFER!!" blinks continuously when there are only a number of minutes of potential recording time remaining on the disc currently being recorded. (See Notes on page 21.)

3 DECK A/DECK B display (continued)

Displayed	Situation
COMMAND ERROR!! **CPU COMMUNICATION ERROR!!**	There is a problem with the deck. Turn off the power for 30 seconds and then turn it on again. If the problem persists, contact your dealer.
DISC ERROR!!	The disc contents cannot be read normally.
LASER ERROR!!	There is a problem with the deck. Turn off the power for 30 seconds and then turn it on again. If the problem persists, contact your dealer.
READ ERROR!! (EJECT DISC A)	An error occurred when reading the disc data. Eject disc A.
RECORDING ABORT!!	Recording will be interrupted.
SEARCH ERROR!!	The specified time cannot be found.
WRITE ERROR!! (EJECT DISC B)	An error occurred when writing data onto the disc. Eject disc B.

4 Other messages displayed in the screen during operation

Displayed	Situation
ATTENTION!! (DECK A(B): PUT IN BLANK DISC)	Quickly insert a blank disc into deck A (B). If you do not, you might not be able to record.
BLANK DISC	A blank disc is inserted.
CANNOT COPY!!	You cannot copy.
CANNOT INPUT MORE!!	You cannot enter more characters.
DIFF.RECORD LENGTH	The capacity of disc B is insufficient for the prerecorded time of disc A.
DISC FORMAT PRBLM	This is not a disc recorded with the MDCC-2000.
DISC IS FULL! STOP ENTERING DATA.	The disc is recorded to the end. Stop entering data immediately.
INPUT IS CANCELED AND EXIT	The input screen is closed without fixing the input characters.
NO DISC	There is no disc inserted in the recorder.
NOT ORIGINAL	This is a digitally copied disc and cannot be used to make another copy. (See page 3.)
INPUT IS VALID AND EXIT	The input characters are fixed and the input screen is closed. (Sometimes, depending on the conditions, the input characters are not recorded on the disc.)
OVERFLOW!!	You cannot enter characters.
PASSWORD INCORRECT!!	The password entered is incorrect.
PB ONLY DISC	This disc is for playback only.
PROTECTED DISC	This is a protected disc.
RECORDED DISC	This is a recorded disc.
RECORDING DECK WAS EXCHANGED BY SYSTEM!!	The recording deck was exchanged.

Alarm System

An alarm sounds and an indication appears on the display window in the following situations.

Alarm system	Situation	To release alarm system
When pressing the ●REC button → A continuous beep sounds while the ●REC button is pressed.	<ul style="list-style-type: none"> The disc cannot be recorded onto. Recording deck: There is no disc. Alternatively, the disc inserted is protected, commercially available pre-recorded disc or has too small a capacity. Continuous deck: The disc inserted is not blank. 	<ul style="list-style-type: none"> Insert a disc that can be recorded into the recording deck. Insert a blank disc into the continuous deck, or remove any disc from the continuous deck.
During recording → Long, intermittent beeps continue to sound.	<ul style="list-style-type: none"> The disc has nearly reached the end, but there is no recording enabled disc in the continuous deck. There is something wrong with the disc, but there is no recording enabled disc in the continuous deck. 	<ul style="list-style-type: none"> Insert a blank disc into the continuous deck immediately. Note Press ●REC or ■STOP button to stop the alarm sound.
During recording or copying → Short, intermittent beeps continue to sound.	<ul style="list-style-type: none"> Recording or copying was interrupted due to some error. 	<ul style="list-style-type: none"> Replace the disc and try to record or copy again. Note Press ●REC or ■STOP button to stop the alarm sound.
During recording, when recording finishes or when copying finishes → Three short beeps sound.	<ul style="list-style-type: none"> The disc was recorded to the end of the disc and was automatically ejected. Recording was interrupted by an error and the disc was automatically ejected. Copying ended and the disc was automatically ejected. 	<ul style="list-style-type: none"> Replace the disc and try to record again. Replace the continuous disc with a blank disc for the next continuous recording.
During pause → Two short beeps sound every 10 seconds.	<ul style="list-style-type: none"> Currently pausing. Note If you press the ●REC or ■STOP button of either deck during pause, the beeps will continue to sound once just after the unit has been paused but will stop repeating every 10 seconds. This alarm stop function will be cleared when you stop recording later.	

Specifications

Laser diode properties

Material: GaAlAs
Wavelength: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 μ W
(This output is the value measured at a distance of about 200 mm from the lens surface on the optical pick-up block with 7 mm aperture.)

Revolutions

400 rpm to 1800 rpm (CLV)

Error correction

Advanced Cross Interleave Reed Solomon Code (ACIRC)

Sampling frequency

44.1 kHz

Coding

ATRAC 3 (Adaptive TRansform Acoustic Coding 3)

Modulation system

EFM (Eight to Fourteen Modulation)

Number of channels

2 or 4 monaural channels

Frequency response

50–10,000 Hz

Speaker

Approx. 5.0 cm (2 inches) dia.

Power output

600 mW (at 10% distortion)

Input

MIC: Canon XLR-3-31 type 0.44 mV (-65 dB)
LINE IN 1-4: mini jack 0.49 V (-4 dB)

Output

EAR (minijack)
for 8–300 Ω earphones
LINE OUT 1,2 (minijack) 0.22 V (-11 dB) load impedance 47 k Ω
ADA (minijack) 0.22 V (-11 dB) load impedance 10 k Ω
PA (minijack) 0.22 V (-11 dB) load impedance 47 k Ω
PC (9 pin D-sub)
DISPLAY (modular)

Other connector

CONTROL UNIT connector
REMOTE jack

Power requirements

12 V DC
DC IN 12V jack accepts the supplied AC power adaptor for use on 120 V AC, 60 Hz

Dimensions

Approx. 320 x 280 x 118 mm (w/h/d)
(12⁵/₈ x 11¹/₈ x 4³/₄ inches)
including projecting parts and controls

Mass

Approx. 4.5 kg (9 lb 15 oz)

Accessories supplied

AC power adaptor (1)
AC power cord (1)
Sony CR2032 lithium battery (1)
Key (2)
MiniDisc (2)

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Design and specifications are subject to change without notice.

Optional accessories

Foot control unit FS-85
Dynamic microphone F-BM7
MiniDisc (10 included) 10MDW74CC

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed information about the optional accessories.

Index

A, B

ADA	4, 5
Alarm system	40
Auto Backspace function	34
Battery	7

C, D

Connection	7
Continuous Recording	13
Copying a disc	26
Date	8
Disc title	22
Display window	6, 21, 38

E, F, I

Erasing a disc	28
External device	31
Foot control unit	32
Index mark	14
Naming	24
Searching	17

L, M, N

Line out	31
Messages	6, 21, 26, 38
MiniDisc	3
Naming	
Disc	22
Index mark	24

P

PA	30
Playback	16
Point search	20
Power source	7, 36
Public Address	30

R

Recording mode	12
Recording time	3, 12
Remote control unit	15
Reverse time	34, 35

S

Searching	
Index mark	17
Point	20
Time	18
Serial Copy Management System	3
Setting	
Date	8
Machine Information	10
Password	11
Recording Mode	12
Stamp	10
Time	9
Stamp	10

T, U

Time	9
Time search	18
Transcribing	32
UPS	2

