ONKYO

MD-185X

MiniDisc Recorder
Instruction Manual

CONTENTS

Thank you for your purchase of the Onkyo MD-185X MD Recorder.

Please read this manual thoroughly before making connections and plugging in the unit.

Following the instructions in this manual will enable you to obtain optimum performance and maximum listening enjoyment from your new MD-185X.

Please retain this manual for future reference.

WARNING
"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

CAUTION
"TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL."

WARNING	AVIS
RISK OF ELECTRIC SHOCK DO NOT OPEN	RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

- The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
- The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Important safeguards

1. **Read Instructions** — All the safety and operating instructions should be read before the appliance is operated.

2. **Retain Instructions** — The safety and operating instructions should be retained for future reference.

3. **Heed Warnings** — All warnings on the appliance and in the operating instructions should be adhered to.

4. **Follow Instructions** — All operating and use instructions should be followed.

5. **Water and Moisture** — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.

6. **Carts and Stands** — The appliance should be used only with a cart or stand that is recommended by the manufacturer.

6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surface may cause the appliance and cart combination to overturn.

PORTABLE CART WARNING

S3125A

7. **Wall or Ceiling Mounting** — The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.

8. **Ventilation** – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or if placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings, there should be free space of at least 5 cm (2 in.) and open up behind the appliance.

9. **Heat** — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

10. **Power Sources** — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

11. **Polarization** — If the appliace is provided with a polarized plug having one blade wider than the other, please read the following information: The polarization of the plug is a safety feature. The polarized plug will only fit the outlet one way. If the plug does not fit fully into the outlet, try reversing it. If there is still trouble, the user should seek the services of a qualified electrician. Under no circumstances should the user attempt to defeat the polarization of the plug.

12. **Power-Cord Protection** — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the cords at plugs, convenience receptacles, and the point where they exit from the appliance.

13. **Cleaning** — The appliance should be cleaned only as recommended by the manufacturer.

14. **Nonuse Periods** — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

15. **Object and Liquid Entry** — Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

16. **Damage Requiring Service** — The appliance should be serviced by qualified service personnel when:

    A. The power-supply cord or the plug has been damaged; or

    B. Objects have fallen, or liquid has been spilled into the appliance; or

    C. The appliance has been exposed to rain; or

    D. The appliance does not appear to operate normally or exhibits a marked change in performance; or

    E. The appliance has been dropped, or the enclosure damaged.

17. **Servicing** — The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Precautions

1. **Warranty Claim**
   You can find the serial number on the rear panel.
   In case of warranty claim, please report this number.

2. **Recording Copyright**
   Recording of copyrighted material for other than personal use is illegal without permission of the copyright holder.

3. **Power**
   WARNING
   BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.
   The voltage of the available power supply differs according to country or region. Be sure that the power supply voltage of the area where this unit will be used meets the required voltage (e.g., AC230V 50Hz or AC120V 60Hz) written on the rear panel.

4. **Do not touch this unit with wet hands**
   Do not handle this unit or power cord when your hands are wet or damp. If water or any other liquid enters the case, take this unit to an authorized service center for inspection.

5. **Location of this unit**
   - Place this unit in a well-ventilated location.
     Take special care to provide plenty of ventilation on all sides of this unit especially when it is placed in an audio rack. If ventilation is blocked, this unit may overheat and malfunction.
   - Do not expose this unit to direct sunlight or heating units as this unit's internal temperature may rise and shorten the life of the pickup.
   - Avoid damp and dusty places and places directly affected by vibrations from the speakers. In particular, avoid placing the unit on or above one of the speakers.
   - Be sure this unit is placed in a horizontal position. Never place it on its side or on a slanted surface as it may malfunction.
   - Do not place near tuners or TV sets.
     If placed next to a TV or tuner, it may cause reception interference resulting in some noise in the TV or tuner output.

6. **Care**
   From time to time you should wipe off the front and rear panels and the cabinet with a soft cloth. For heavier dirt, dampen a soft cloth in a weak solution of mild detergent and water, wring it out, and wipe away the dirt. Following this, dry immediately with a clean cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since these may damage the finish or remove the panel lettering.

7. **Points to remember**
   - If this unit is brought from a cold environment to a warm one or is in a cold room that is quickly heated, condensation may form on the pickup, preventing proper operation. In this case, remove the disc and leave the power ON for about one hour to remove the condensation.
   - When transporting this unit, be careful not to bump it.

Declaration of Conformity

We, ONKYO EUROPE
ELECTRONICS GmbH
INDUSTRIESTRASSE 20
82110 GERMERING,
GERMANY

$C\epsilon$

declare in own responsibility, that the ONKYO product described in this instruction manual is in compliance with the corresponding technical standards such as EN55013, EN55020, EN61000-3-2, -3-3 and EN60065

GERMERING, GERMANY

K. Otsu

K.OTSU

ONKYO EUROPE ELECTRONICS GmbH

US and foreign patents licensed from Dolby Laboratories Licensing Corporation.

ATTENTION FOR BRITISH MODEL

Replacement and mounting of an AC plug on the power supply cord of this unit should be performed only by qualified service personnel.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

IMPORTANT

A 5 amp fuse is fitted in this plug. Should the fuse need to be replaced, please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark or the BSI mark on the body of the fuse.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME, THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If in any doubt, please consult a qualifed electrician.

Special cautions for MD recorder

This unit contains a semiconductor laser system and is classified as a "CLASS 1 LASER PRODUCT". So, to use this model properly, read this Owner's Manual carefully. In case of any trouble, please contact the store where you purchased the unit. To prevent being exposed to the laser beam, do not try to open the enclosure.

DANGER:
INVISIBLE LASER RADIATION WHEN OPEN AND INTER-LOCK FAILED OR DEFEATED. AVOID DIRECT EXPO-SURE TO BEAM.

CAUTION:
THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

FOR EUROPEAN MODEL

> **"CLASS 1 LASER PRODUCT"**

This label on the rear panel states that:
1. This unit is a CLASS 1 LASER PRODUCT and employs a laser inside the cabinet.
2. To prevent the laser from being exposed, do not remove the cover. Refer servicing to qualified personnel.

FOR CANADIAN MODEL:
(POUR LE MODELE CANADIEN)

• THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSION FROM DIGITAL APPARATUS SET OUT IN THE RADIO INTERFERENCE REGULATIONS OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.
• L'INTERFERENCE, RADIO ELECTRIQUE GENEREE PAR CET APPAREIL NUMERIQUE DE TYPE B NE DEPASSE PAS LES LIMITES ENONCEES DANS LE REGLEMENT SUR LES PERTURBATIONS RADIO ELECTRIQUES, SECTION APPAREIL NUMERIQUE, DU MINISTERE DES COMMUNICATIONS.

• For models having a power cord with a polarized plug.
CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

• Sur les modèles dont la fiche est polarisée.
ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

FOR U.S.A. MODEL:

1. The laser is covered by a housing which prevents exposure during operation or maintenance. However, this product is classified as a Laser Product by CDRH (Center for Devices and Radiological Health) which is a department of the Food and Drug Administration. According to their regulations 21 CFR section 1002.30, all manufactures who sell Laser Products must maintain records of written communications between the manufacturer, dealers and customers concerning radiation safety. If you have any complaints about instructions or explanations affecting the use of this product, please feel free to write to the address on the back page of this manual. When you write us, please include the model number and serial number of your Mini Disc recorder.
2. In compliance with Federal Regulations, the certification, identification and the period of manufacture are indicated on the rear panel.
3. FCC INFORMATION FOR USER
CAUTION:
Changes or modifications not expressly approved by the manufacturer for compliance could void the user's authority to operate the equipment.
NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference with not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Features

■ **Built-in Sampling Rate Converter**

■ **2 Optical Digital Inputs**

■ **One-Touch CD-to-MD Synchro Recording**

■ **Disc/Track Titling**

■ **Extensive Editing Capabilities**

■ **AMCS-Automatic Music Control System**

■ **25-Track Programming**

■ **Dot Matrix Display**

■ **Random Play**

■ **ꓣ�l Compatible Full-Function Remote Control**

■ **Signal recording linked with various sources**

System connections

Supplied accessory

| Audio connection cable (2) | Optical cable (1) | ◲| cable (1) | Remote control (1) | Dry batteries UM-3 (2) |
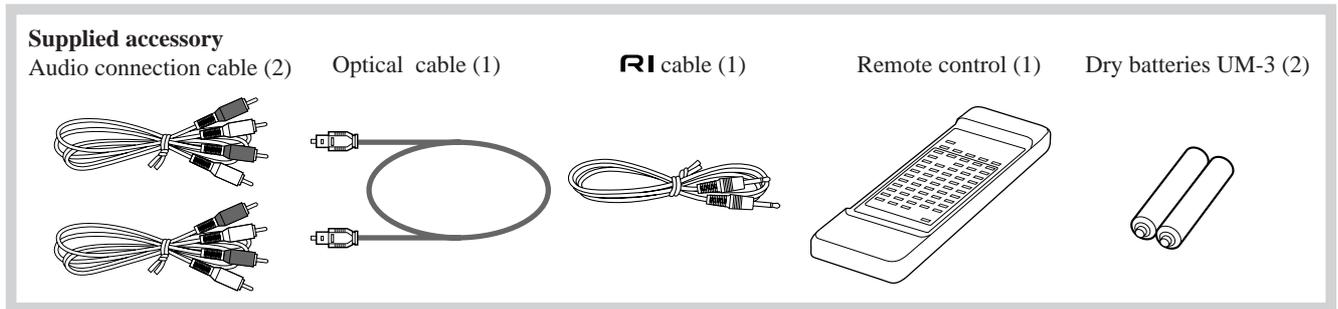
Connecting the Onkyo Separate Collection Series components (See the CR-185X/CHR-185X instruction manual for system connection.)

When the MD recorder is configured into a system with Onkyo Separate Collection series components (CR-185X/CHR-185X AND K-185X), the following additional features are provided:

■ **One-touch Play**

Pressing the PLAY button of the MD-185X automatically selects the "MD" input source on the CR-185X/CHR-185X before playing the MD.

■ **Remote control of the System Components**

You can control the operation of this MD recorder using the CR-185X's or CHR-185X's remote control.

■ **Timer Playback/Recording**

You can record the desired broadcasting programs or play your favorite MD at a specified time using the CR-185X/CHR-185X's built-in timer.

■ **CD-dubbing**

When the MD-185X is connected with the CR-185X/CHR-185X CD player, pressing the CD DUBBING button on the MD recorder immediately starts recording from the CD onto the MD.

■ **CD-synchro Recording**

When this function is enabled, you can immediately start recording to the MD by pressing the PLAY button on the CD player.

■ **CD-dubbing with track specified**

You can record only one track at a time being played from CD.

■ **MD-synchro Recording**

When this function is enabled, you can immediately start recording to the cassette tape by pressing the PLAY button on the MD recorder.
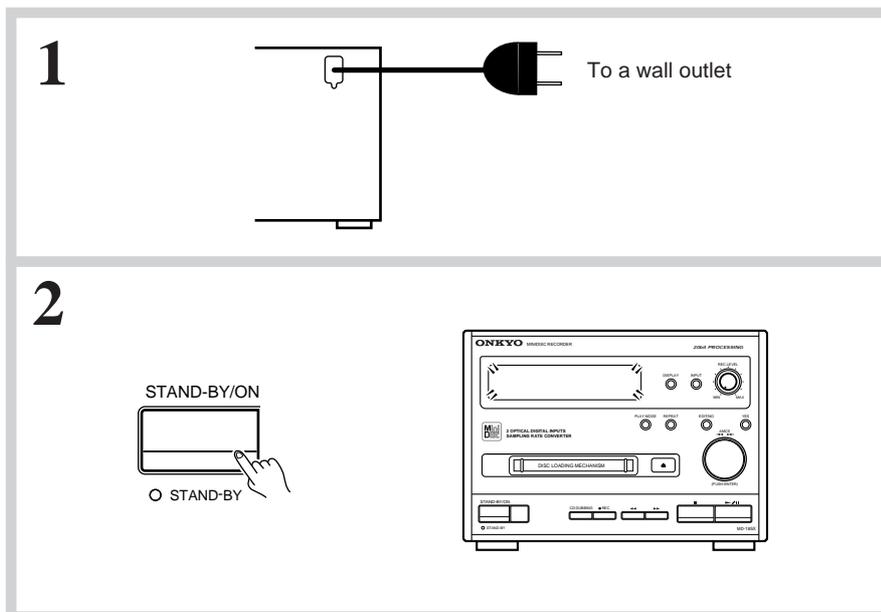
1

To a wall outlet

2

STAND-BY/ON

○ STAND-BY

Connecting the AC power cord and switching power on

1. Insert the AC power cord into a wall outlet.
2. Press the STAND-BY/ON button. The display will light.

Note:
To insert the AC power cord into an AC outlet on the rear panel of another components, use the UNSWITCHED outlet.

Connecting other components

- Do not plug in the AC power cord until all other connections have been made.
- On each pair of input or output jacks, the jack (marked R) corresponds to the right channel, and the jack (marked L) to the left channel. Refer to the amplifier's instruction manual for further information on connections.
- Do not place the MD recorder on the amplifier or receiver.
- Do not fold optical cables into a short length or wind them up into a coil with a small radius.
- Avoid bundling the audio connection cables with the power cord or speaker cables. Doing so may cause degraded sound reproduction.

① Connection with the Amplifier

Connect the MD-185X to the MD (or TAPE) jacks of your amplifier.

② Connection via the Digital Input Terminal (DIGITAL IN)

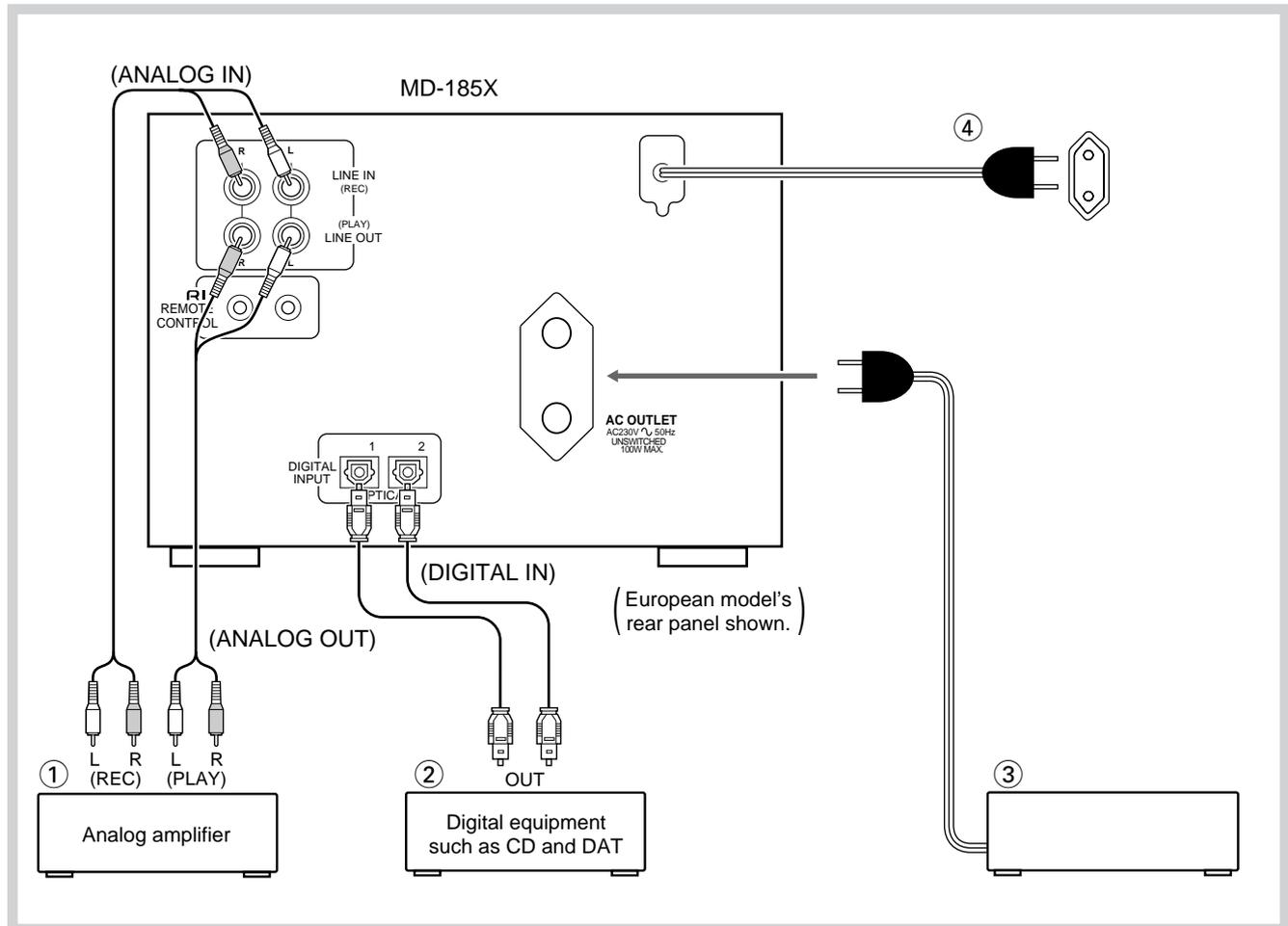You can perform digital recording on the MD-185X if a CD (Compact Disc) player or DAT (Digital Audio Tapedeck) equipped with a digital (OPTICAL) output terminal is available. For digital recording, you need to connect the equipment to either DIGITAL IN 1 or 2 terminal using the supplied optical cable. These terminals can also be used for connecting an amplifier which is equipped with a digital output terminal.

Note:
- If the DIGITAL IN 2 is used for connecting the amplifier, you cannot use the full capability of the MD-185X.

- If you attempt to perform digital recording using a digital input terminal which is not connected, "D.In Unlock" will appear.
- Terminal protection caps are attached to the DIGITAL IN terminals. Remove the cap for the terminal you wish to use when connecting the MD-185X to digital equipment. Replace the caps if you are not using the DIGITAL IN terminals.

③ AC outlet (UNSWITCHED)

The power cord of another component may be plugged into this outlet. Its maximum capacity is 100 watts.
The outlet type and capacity may vary according to the area where purchased.

④ Connecting the AC power cord and switching power on

1. **Insert the AC power cord into a wall outlet.**
2. **Press the STAND-BY/ON button.**
   The STAND-BY indicator will light.

Note:
To insert the AC power cord into an AC outlet on the rear panel of another components, use the UNSWITCHED outlet.

Control positions and names

If there is a protective film on the surface of the display, which is making it difficult to read the display, remove it.
For more information about a button or control, turn to the page number listed in square brackets [ ].
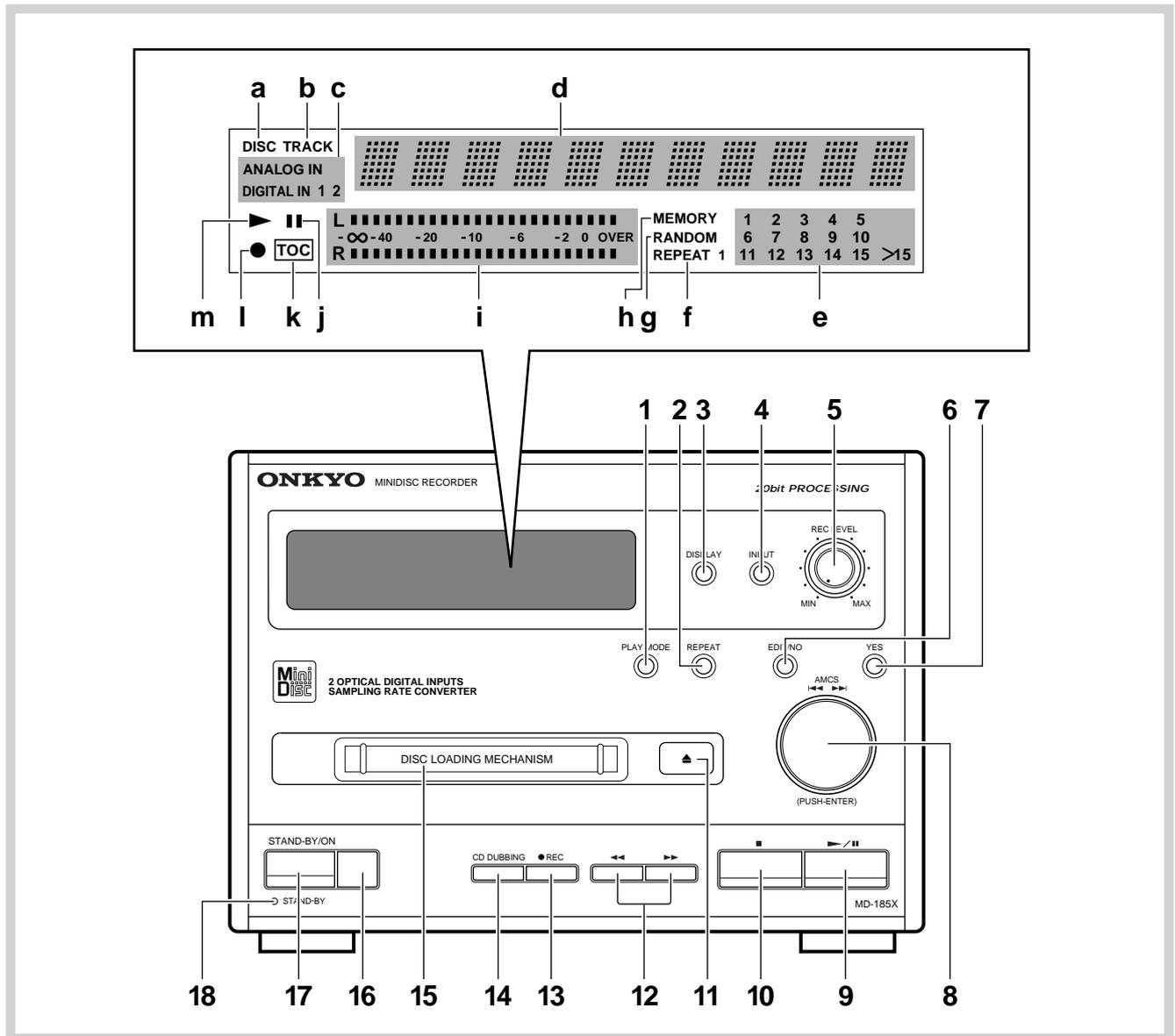
Front panel

1. **Play mode button (PLAY MODE)**
   [13, 15]
2. **Repeat button (REPEAT) [14]**
3. **Display button (DISPLAY) [11, 28]**
4. **Input button (INPUT) [16, 18-23]**
5. **Rec level control knob (REC LEVEL) [21]**
6. **Edit/No button (EDIT/NO) [22, 24-29]**
7. **Yes button (YES) [22, 24-29]**
8. **AMCS knob (I◄◄ AMCS ►►I)**
   [12, 15, 24-28]
9. **Play/Pause button (►/II) [10, 13, 15, 19, 21, 22]**
10. **Stop button (■) [10, 29]**
11. **Eject button (▲) [11]**
12. **FF/FR buttons (◄◄ , ►►) [11, 29]**

13. **REC button (●REC) [17, 18, 20]**

14. **CD dubbing button (CD DUBBING) [16, 17]**
15. **Disc slot**
16. **Remote sensor [9]**
17. **Stand-by/On button (STAND-BY/ ON) [6, 10, 18, 20]**
18. **Stand-by indicator (STAND-BY) [6, 10, 18, 20]**

Display

ⓐ **DISC indicator**
ⓑ **TRACK indicator**
ⓒ **Input setting indicator**
ⓓ **Time/Title display**
ⓔ **Track number display**
ⓕ **REPEAT indicator**
ⓖ **RANDOM indicator**
ⓗ **Memory indicator**

ⓘ **Peak level meter**
ⓙ **Pause indicator**
ⓚ **TOC indicator**
ⓛ **REC indicator**
ⓜ **Play indicator**

Control positions and names
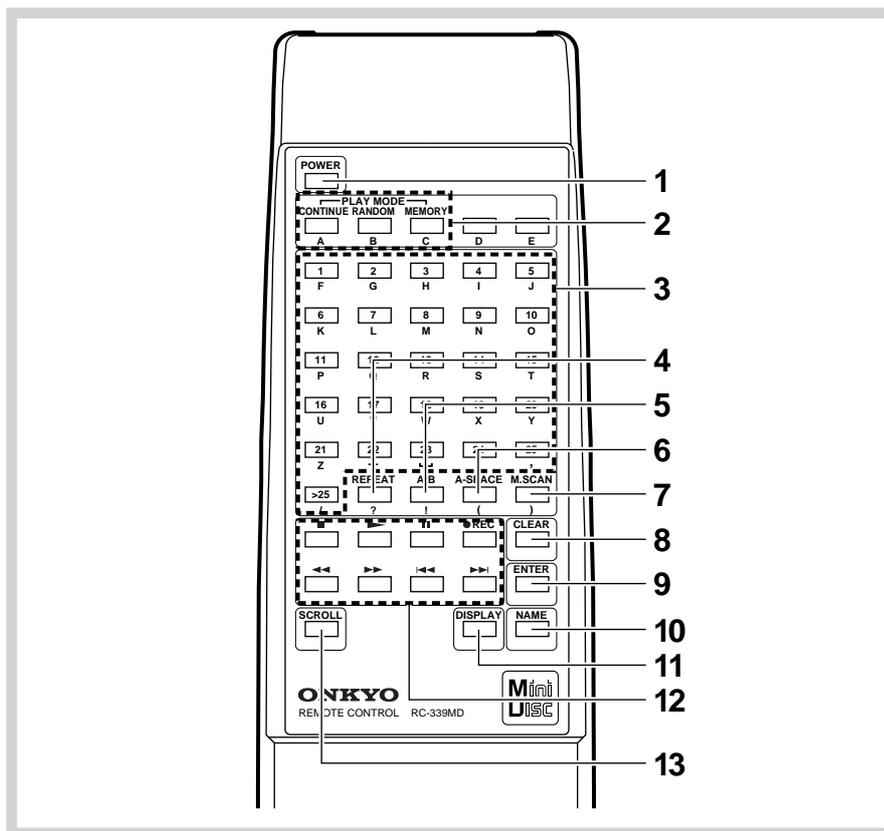
Remote control

You can use the following buttons to control your MD recorder.

1. **POWER button [10]**
2. **PLAY MODE buttons [13, 15]**
3. **Number buttons [12, 15, 28]**
4. **REPEAT button [14]**
5. **A-B REPEAT button [14]**
6. **A.SPACE button (Not used)**
7. **M.SCAN button [13]**
8. **CLEAR button [11, 29]**
9. **ENTER button [29]**
10. **NAME button [28, 29]**
11. **DISPLAY button [11, 28]**
12. **Operation buttons**
    - ■ : Stop button **[10]**
    - ▶ : Play button **[10]**
    - ❚❚ : Pause button **[10]**
    - ●REC : Rec button **[17, 18, 20]**
    - ◀◀ : Fast reverse button **[11, 29]**
    - ▶▶ : Fast Forward button **[11, 29]**
    - �ı◀◀ : Down button **[12, 29]**
    - ▶▶ı : Up button **[12, 29]**
13. **SCROLL button [11]**
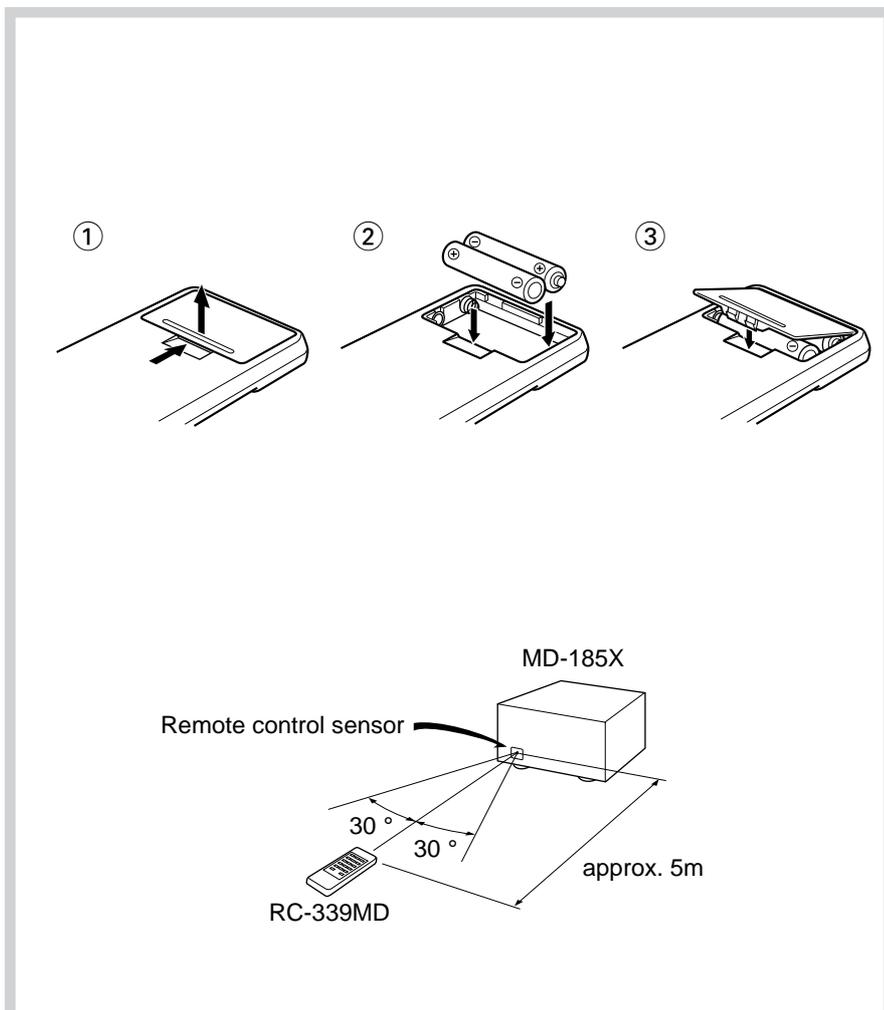
Inserting the remote control batteries

Remove the battery compartment cover by opening it as shown in the illustration. Load two R6 (UM-3) AA size batteries into the remote control with the plus (+) and minus (–) terminals positioned as indicated by the diagram inside the battery compartment and close the cover.

- Remove dead batteries immediately to avoid corrosion damage.
- To avoid potential corrosion damage, never mix old batteries with new ones.
- The manganese batteries supplied with this unit have a service life of approximately six months, depending on frequency of usage.
- This unit comes equipped with R6 (UM-3) AA manganese batteries, but we recommend that long-life alkaline batteries LR6 (AM-3) AA be used when replacing the batteries.

Using the remote control

The following information will help you get optimum use from the remote control.

- Place this unit away from direct bright light, which can prevent proper operation of the remote control.
- Make sure audio rack doors do not have coloured glass. If this unit is placed behind such a door, this may prevent proper remote control operation.
- Using other remote controls in the same room as this unit remote control may cause interference.

9

Playing an MD

RC-339MD

1

SCROLL

3

1 ■ **3**

---

1 Remote control

STAND-BY/ON

POWER

○ STAND-BY

DIGITAL IN 1

```
No  Disc
```

L ■■
- ∞ -40 - 20 - 10 - 6 - 2 0
R ■■

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

2

Insert an MD with its label side up
into the MD recorder in the direction
indicated by the arrow.

The total number of tracks   The total playing time

DIGITAL IN 1

```
24Tr    36m42s
```

L ■■
- ∞ -40 - 20 - 10 - 6 - 2 0
R ■■

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

Current track number

---

3 Remote control   Playing track number

TRACK

DIGITAL IN 1

```
1      0m01s
```

►

L ■■■■■■■■
- ∞ -40 - 20 - 10 - 6 - 2 0
R ■■■■■■■■

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

PLAY indicator

Remote control

Remote control

Normal play

1. **Press the STAND-BY/ON button.**
   The STAND-BY indicator will go out.
2. **Insert an MD.**
   The MD recorder reads TOC (Table Of
   Contents) information on the MD to
   display the total number of tracks and
   total playing time.
   • When an MD recorded with a disc
   name (title) is inserted, the disc name is
   displayed. If the disc name is too long
   and you cannot view the entire name,
   press the SCROLL button on your
   remote control to shift the display.
3. **Press the ►/‖ button (or the ►**
   button on the remote control).
   The first track of the disc starts playing.

Stopping play

Press the ■ button (or the ■ button on
the remote control).

Stopping play temporarily

Press the ►/‖ button (or the ‖ button on
the remote control).
To resume play, press the ►/‖ button. (or the
► button on the remote controller).

RC-339MD

CLEAR
◄◄,►► DISPLAY
▲ ◄◄,►► DISPLAY SCROLL

Ejecting the MD

Press the ▲ button.
The MD comes out and "Eject" is shown on the display.

Changing the display mode

When the MD recorder is stopped...
Pressing the DISPLAY button changes the display in the following sequence:
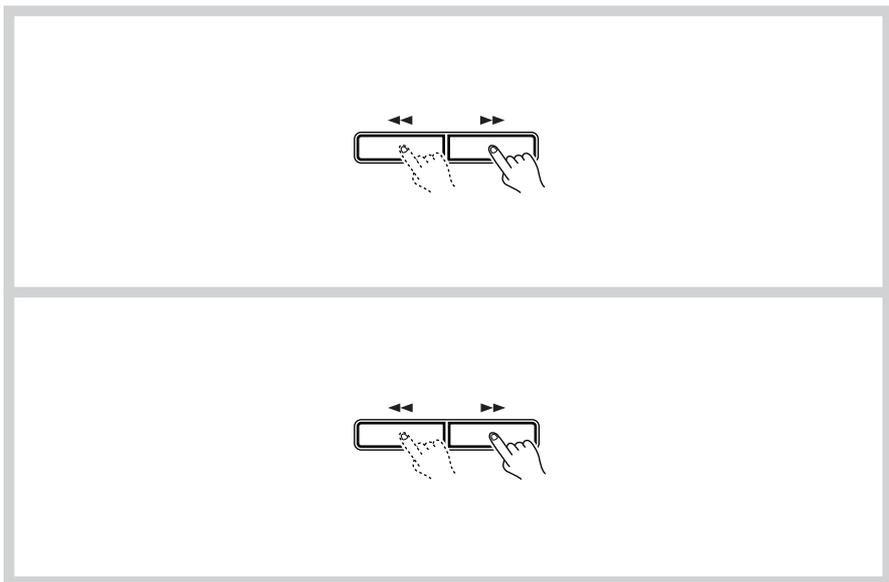Total number of tracks on the MD and its total playing time
↓
Time remaining for recording on the MD (Not displayed if it a premastered MD)
↓
Disc name ("No Name" when not set)

Note:
If the track name is too long to display...
You can scroll the track name by pressing the SCROLL button on the remote control.
Press the SCROLL button when the track name is scrolling to stop the scrolling of the track name; press the SCROLL button again to resume the scrolling of the track name.
To exit the display scroll mode, press the CLEAR button on the remote control.

If the DISPLAY button is pressed when the MD recorder is playing...

Remote control

Playing track number and elapsed time

DISPLAY DISPLAY

```
TRACK
        1            0m19s
DIGITAL IN 1
►    L■■■■■■■■■                    1  2  3  4  5
     -∞-40  -20  -10  -6  -2  0    6  7  8  9  10
     R■■■■■■■■                     11 12 13 14 15 >15
```

↓

Playing track number and remaining playing time

DISPLAY DISPLAY

```
TRACK
        1           -2m55s
DIGITAL IN 1
►    L■■■■■■■■■                    1  2  3  4  5
     -∞-40  -20  -10  -6  -2  0    6  7  8  9  10
     R■■■■■■■■                     11 12 13 14 15 >15
```

↓

Track name ("No Name" when not set)

DISPLAY DISPLAY

```
TRACK
        ONKYO
DIGITAL IN 1
►    L■■■■■■■■■                    1  2  3  4  5
     -∞-40  -20  -10  -6  -2  0    6  7  8  9  10
     R■■■■■■■■                     11 12 13 14 15 >15
```

Searching for a part to play (search play)

Searching for a part to play by sound (at play)
During play, hold down the ◄◄ or ►► button and release it when the part you want to hear is playing.

◄◄ ►►

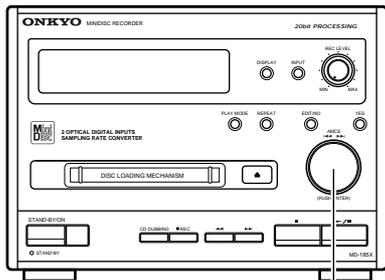**Searching for a part to play by using displayed time (at pause, high-speed search)**
When playing is temporarily stopped (paused), keep pressing the ◄◄ or ►► button and release it when the playing time of the part you want to hear is displayed.
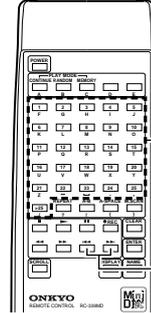Press the ►/❚❚ button (or the ► button on the remote control) to start playing from that part.
Note:
• "Over" in the display indicates that the end of the last track is reached.

◄◄ ►►

Playing an MD

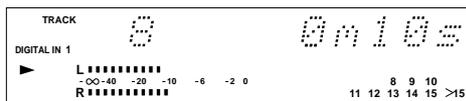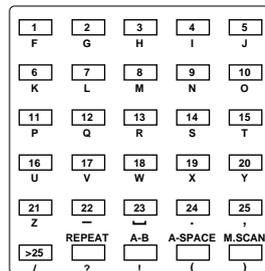ONKYO MINIDISC RECORDER 20bit PROCESSING

RC-339MD

I◄◄ AMCS ►►I

Number buttons

I◄◄ , ►►I

Remote control

1 F	2 G	3 H	4 I	5 J
6 K	7 L	8 M	9 N	10 O
11 P	12 Q	13 R	14 S	15 T
16 U	17 V	18 W	19 X	20 Y
21 Z	22 — REPEAT ?	23 ⌣ A-B !	24 . A-SPACE (	25 , M.SCAN)
>25 /				

TRACK
DIGITAL IN 1
► 8   0m10s
L ▮▮▮▮▮▮▮▮▮▮▮
-∞ -40 -20 -10 -6 -2 0   8 9 10
R ▮▮▮▮▮▮▮▮▮▮▮   11 12 13 14 15 >15

Selecting the track to play using the number buttons

Press the number button on the remote control to select the track you want to play.

Note:
To play a track numbered 26 or more...
Press the [>25] button first. Set a value for the 10th place and then the 1st place using the number buttons in this order. ("0" can be entered by pressing the [10] button.)
Ex.
To select the 30th track:
[>25] + [3] + [10]
To select the 100th track:
[>25] + [>25] + [1] + [10] + [10]

AMCS
I◄◄ ►►I

(PUSH-ENTER)

Remote control

I◄◄   ►►I

Changing the playing track using the AMCS

During play, you can change the track that is playing by turning the AMCS knob (or by pressing the I◄◄ and ►►I buttons on the remote control).

If the MD recorder is stopped, turn the AMCS knob to select the track number you wish to play, and press that knob (with the remote control, use the I◄◄ or ►►I button to select the track, then press the ► button.)

To play the next track or a later track...
Turn the AMCS knob clockwise (or press the ►►I button on the remote control several times) until the desired track is located.

To start play again from the beginning of the track that is currently playing or to play the previous track or an earlier track...
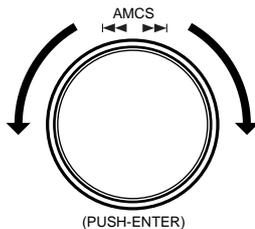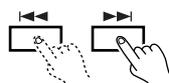Turn the AMCS knob counterclockwise (or press the I◄◄ button on the remote control several times) until the desired track is located.
In the Memory play mode (see page 15), turning the AMCS knob (or pressing the I◄◄ or ►►I button) selects the track in the stored sequence.

RC-339MD

CONTINUE — 1

M. SCAN

2

1

2
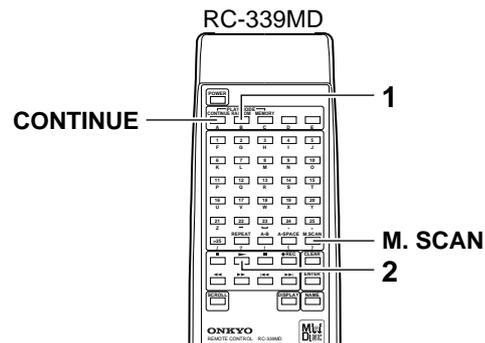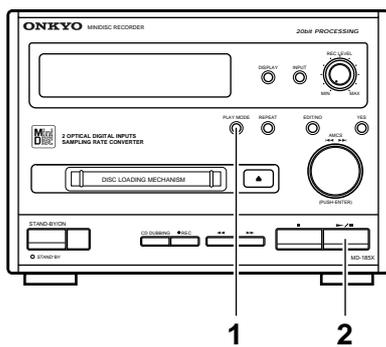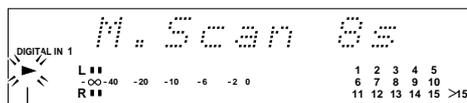
Music Scan

The following operation is possible using the remote control only.

Pressing the M.SCAN button plays the beginning (8 seconds) of each track on the disc in sequence whether the MD recorder is either playing or stopped.
The ▶ indicator flashes during music scan. You can press the ▶ button on the remote control when the beginning of a track is playing to start normal play from that track.

Remote control

M. SCAN

M.Scan 8s

DIGITAL IN 1

Flashes

1

Remote control

PLAY MODE   RANDOM   RANDOM

2

Remote control

▶/II   ▶

TRACK   *5*   *0m01s*

DIGITAL IN 1
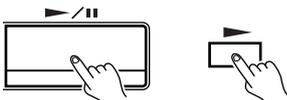
Playing tracks in a random order (random play)

1. **When the MD recorder is stopped, press the PLAY MODE button several times until "RANDOM" appears in the display.**
    The display changes as shown below each time you press the PLAY MODE button:
    Random play (RANDOM indicator lights)
    ↓
    Memory play (MEMORY indicator lights)
    ↓
    Normal play (No indicator is shown)

    To select the random mode with the remote control, press the RANDOM button.

2. **Press the ▶/II button (or the ▶ button on the remote control).**

To exit the random mode
When the MD recorder is stopped, press the PLAY MODE button several times until "RANDOM" disappears from the display. (Or, press the CONTINUE button on the remote control.)

13

Playing an MD

RC-339MD

A-B

REPEAT

REPEAT

Remote control

REPEAT

REPEAT

" **REPEAT** "

Remote control

REPEAT

REPEAT

" **REPEAT 1** "

REPEAT

REPEAT

Remote control

A-B

DIGITAL IN 1
► L▮▮▮▮▮▮▮▮▮▮
-∞ -40 -20 -10 -6 -2 0
R▮▮▮▮▮▮▮▮
Repeat A-
4 5
6 7 8 9 10
11 12 13 14 15 >15

A-B

DIGITAL IN 1
► L▮▮▮▮▮▮▮▮▮▮
-∞ -40 -20 -10 -6 -2 0
R▮▮▮▮▮▮▮▮
Repeat A-B
4 5
6 7 8 9 10
11 12 13 14 15 >15
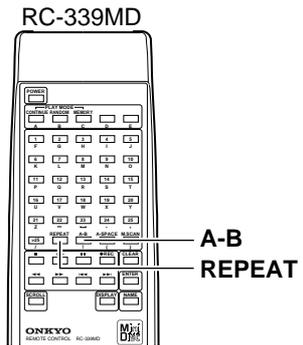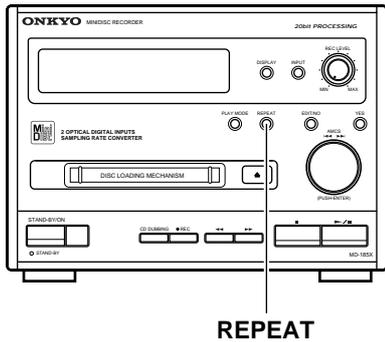
Playing track(s) or desired section repeatedly

To repeat the playing of all tracks of the disc, press the REPEAT button just once.
• **If the REPEAT button is pressed during Memory play...**
Only the programmed tracks will be played repeatedly in the programmed order.
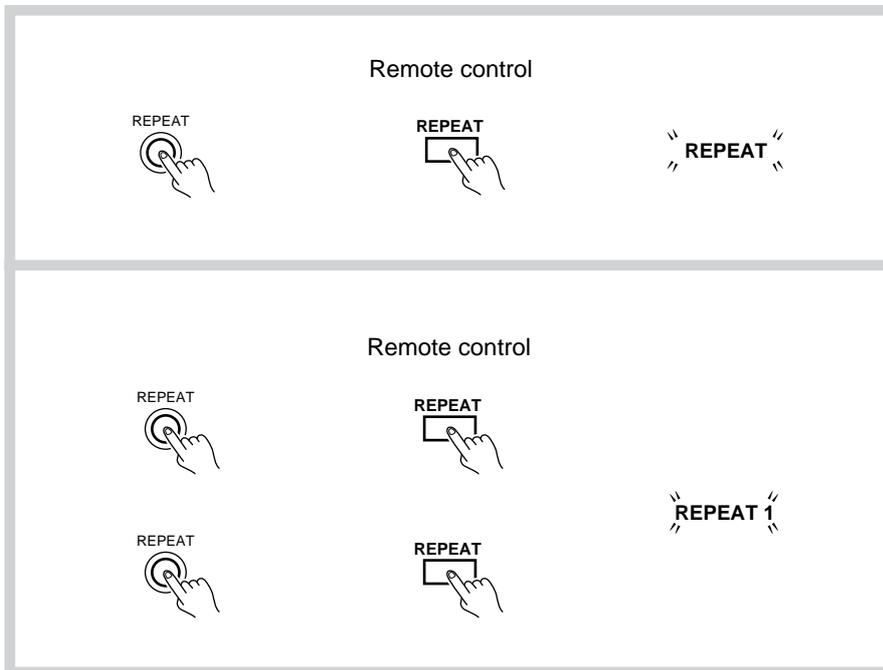• **If the REPEAT button is pressed during random play...**
The contents of the entire MD will be played again repeatedly with the playing order changed each time a random play begins.

To repeat the playing of the track currently playing, press the REPEAT button on the remote control twice.
Note:
In Memory Play or Random Play, you cannot repeat the currently playing track (REPEAT 1).

To stop the repeat play...
Press the REPEAT button once or twice until the "REPEAT" indicator disappears.
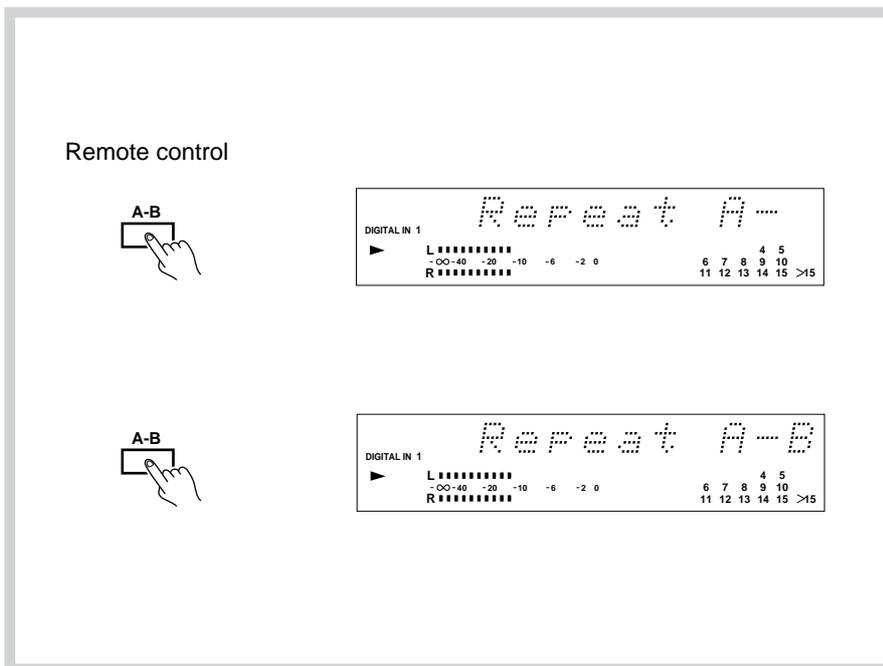
To repeat a desired section of a track...
1. While the track is playing, specify the beginning of the section you wish to repeat playing by pressing the A-B button on the remote control (Point A).
2. While the track is still playing, specify the end of the section by pressing the A-B button on the remote control (Point B) a second time.
Section A to B of the track will be repeated.

To stop A-B Repeat
• Press the A-B or REPEAT button when a section is in Repeat play. The A-B Repeat mode is canceled and Normal play starts from the beginning of the current track.
• Press the ■ button when a section is in Repeat play. The A-B Repeat mode is canceled and play of the current track stops.

Note:
A-B Repeat cannot be used when the unit is in Repeat (all-track or single-track), Memory, or Random play.

Using the program function (memory play)

- You can program up to 25 tracks.
- If the total playing time of the programmed tracks exceeds 256 minutes, "---m--s" will be displayed.

RC-339MD

CONTINUE — 1

2

3

1 2 3

1

Remote control

PLAY MODE

MEMORY

MEMORY

2

AMCS

(PUSH-ENTER)

AMCS

(PUSH-ENTER)

Remote control

1 F	2 G	3 H	4 I	5 J
6 K	7 L	8 M	9 N	10 O
11 P	12 Q	13 R	14 S	15 T
16 U	17 V	18 W	19 X	20 Y
21 Z	22 —	23 ⎵	24 .	25 ,
>25 /	REPEAT ?	A-B !	A-SPACE (	M.SCAN)

TRACK
0
DIGITAL IN 1
L �
- ∞ 40   -20   -10   -6   -2
R
MEMORY

Programmed track number

TRACK
4   Ster01
DIGITAL IN 1
L
- ∞ 40   -20   -10   -6   -2 0
R
MEMORY   4

Total playing time of programmed tracks

TRACK
4   5m10s
DIGITAL IN 1
L
- ∞ 40   -20   -10   -6   -2 0
R
MEMORY   4
Programmed track

3

Remote control

▶/❙❙

▶

Playing track number

TRACK
4   0m01s
DIGITAL IN 1
▶   L ▮▮▮▮▮▮▮▮▮▮▮
- ∞ 40   -20   -10   -6   -2 0
R ▮▮▮▮▮▮▮▮▮▮▮
MEMORY   4

PLAY indicator

1. **When the MD recorder is stopped, press the PLAY MODE button several times until "MEMORY" appears in the display,**
   To select the memory play mode with the remote control, press the MEMORY button.
2. **Using the AMCS knob, select the tracks in order you want to play.**
   Turn the AMCS knob until the track number you want to program is displayed (the playing time of the track is displayed). Then, press the AMCS knob to program the track.
   To play a track numbered 26 or more...
   Press the [>25] button first. Set a value for the 10th place and then the 1st place using the number buttons in this order. ("0" can be entered by pressing the [10] button.)
   Ex.
   To select the 30th track
   [>25] + [3] + [10]
   To select the 100th track
   [>25] + [>25] + [1] + [10] + [10]
3. **Press the ▶/❙❙ button (or the ▶ button on the remote control) to start Memory play.**
   When the playing of all programmed tracks is over, the MD recorder stops while retaining the programmed tracks in memory.

To exit the Memory play mode:
When the MD recorder is stopped, **press the PLAY MODE button** several times until "MEMORY" disappears from the display. (Or, press the CONTINUE button on the remote control.)

Clearing the last track stored:
Press the ■ or CLEAR button on the remote control.
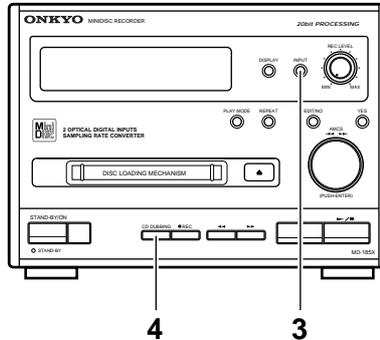The last track programmed in memory is cleared.

CD-dubbing (System operation)

- When your MD-185X is configured into a system with Onkyo Separate Collection series components (CR-185X/CHR-185X), recording from the CD onto the MD can be started by simply pressing the CD DUBBING button on the MD-185X.
- To perform CD dubbing, your CD player must be connected through an optical cable to the DIGITAL IN 1 terminal located on the rear panel of the MD recorder. (For details, see the section "System connections" of the CR-185X/CHR-185X Instruction Manual.)
- For the normal recording procedure, see "Recording from an analog source" on page 20 or "Recording from a digital source" on page 18.
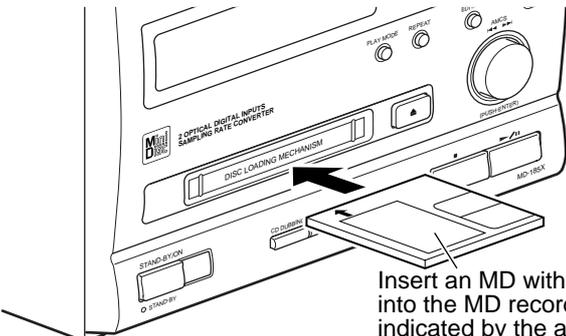
Note:
CD-dubbing is not available with the CR-185.

4   **3**

1

1. **Load the CD in the CD player.**
   See the CR-185X/CHR-185X CD player instruction manual for how to load CDs.

2

Insert an MD with its label side up into the MD recorder in the direction indicated by the arrow.

Number of tracks on MD   Total recorded time

`17Tr    31m46s`

2. **Load a recordable MD in the MD-185X.**
   To check the time remaining for recording...
   When the MD recorder is stopped, press the DISPLAY button. Each press of the DISPLAY button changes the display as follows:
   The number of tracks on MD and its total recorded time
   ↓
   Remaining recording time on MD
   ↓
   Disc name ("No Name" when not set)

3. **Press the INPUT button until "Digital In 1" appears on the display. The digital input source 1 is now selected.**
   Note:
   CD-dubbing is not possible when "Analog In" or "Digital In2" is shown on the display.

3

INPUT

`Digital In1`

4. **Press the CD DUBBING button on the MD-185X.**
   The MD-185X first enters the recording standby mode, then records from the 1st track the whole contents of the CD by starting the playing of the CD.
   It will stop recording as soon as the playing of the whole CD is complete.

4

CD DUBBING

`CD Dubbing`

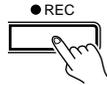**If the available recording time expires during recording...**
The entirety of the song being recorded will be automatically erased. (However, if it is the first song that is being recorded, whatever was recorded during the available time will remain on the disc.)

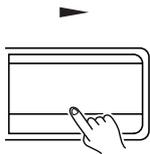**To stop the recording...**
Press the ■ button.

Recording to an MD
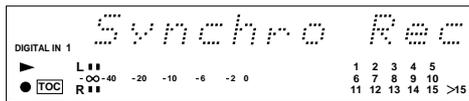
1

● REC

2

CR-185X/CHR-185X   **MD-185X**

▶

```
DIGITAL IN 1    Synchro Rec
▶           L ▮▮
          -∞ -40  -20  -10   -6  -2  0        1  2  3  4  5
● TOC   R ▮▮                                6  7  8  9 10
                                          11 12 13 14 15 >15
```

CD-synchro recording

When your MD recorder is configured into a system with ONKYO Separate Collection series components (CR-185X/CHR-185X), the operation of the MD recorder can be synchronized with that of the CD player.

1. **Set the MD recorder to the recording standby mode.**
    For how to set the MD recorder to the recording standby mode and the necessary preparatory steps, see "Analog recording" or "Digital recording"
    For digital CD-synchro recording
    Connect the CD player's (optical) digital output terminal to the MD-185X's DIGITAL IN 1 terminal.
2. **Start playing the CD.**
    The MD recorder starts recording as soon as the CD starts playing.
    If your cassette deck is also in the recording standby mode, it starts recording simultaneously.
    When playing of the CD completes, the MD recorder stops recording and enters the recording standby mode.

To stop CD-synchro recording...
Press the ■ button on the CD player. The MD recorder then enters the recording standby mode.
Note:
For analog recording, set the input selector of the CR-185X/CHR-185X to the CD position and keep it placed in that position during recording. Changing the input selector setting causes the MD recorder to stop and then enter the recording standby mode.

1   **CR-185X/CHR-185X**

▶
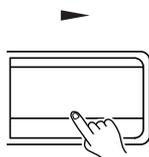
2

MD-185X

CD DUBBING

CD-dubbing with track specified

When this MD recorder is configured into a system with CR-185X/CHR-185X, only one track with CD playing or pausing can be recorded by one-touch operation.

1. **Play a CD.**
    Play your desired track.
2. **Press CD DUBBING button.**
    Playing returns to the head of the track being played and only this track will be recorded.

When the track reaches the end, next track will start and the MD recorder will stop.

Recording to an MD

Digital recording refers to recording where an optical digital cable is used for inputting signals from the recording source.
- When "Protected" is shown in the display, it indicates that the record-protect tab of the MD is open. Before starting the recording procedure, close the tab. (See page 23.)
- This MD recorder contains a digital input signal sampling frequency rate converter which converts the sampling frequency of digital input signals to 44.1 kHz before recording.
  This converter can handle the following sampling frequencies:
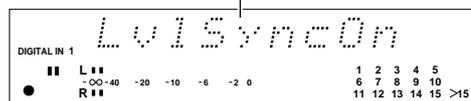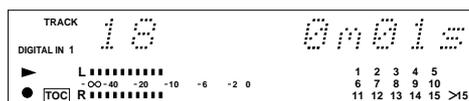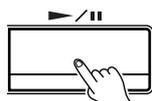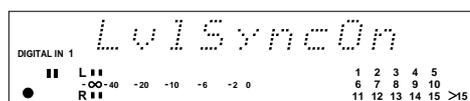 - 44.1 kHz (CD player, etc.)
  - 32 kHz (DAT, satellite broadcasting, etc.)
  - 48 kHz (DAT, satellite broadcasting, etc.)

1   4   3,5   6

1

STAND-BY/ON

○ STAND-BY

2

Insert an MD with its label side up into the MD recorder in the direction indicated by the arrow.

Number of tracks on MD   Total recorded time

DIGITAL IN 1   17Tr   31m46s

L ▪▪
-∞ -40   -20   -10   -6   -2   0
R ▪▪
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

3

INPUT

DIGITAL IN 1   Digital In1

L ▪▪
-∞ -40   -20   -10   -6   -2   0
R ▪▪
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

4

● REC

TRACK   18   0m00s

DIGITAL IN 1
▪▪ L ▪▪
-∞ -40   -20   -10   -6   -2   0
● R ▪▪
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

Recording from a digital source

1. **Press the STAND-BY/ON button.**
   The STAND-BY indicator will go out.
2. **Load a recordable MD.**
   To check the time remaining for recording...
   When the MD recorder is stopped, press the DISPLAY button. Each press of the DISPLAY button changes the display as follows:
   The number of tracks on MD and the total recorded time→ Remaining recording time on MD → Disc name ("No Name" when not set)
   - **To record by erasing all of the existing tracks on a prerecorded MD...**
   Erase all the tracks before you start recording(see page 24).
3. **Press the INPUT button until "Digital In1" or "Digital In2" appears on the display.**
   The digital input source 1 or 2 is now selected.
   Note:
   Make sure which of the digital input terminals the supplied optical cable is connected to. If you attempt to perform digital recording using a digital input terminal which is not connected, "D.In Unlock" will appear.
   Use the DIGITAL IN 1 digital input terminal if you connect the CR-185X or CHR-185X CD receiver to this MD recorder.
4. **Press the ● REC button.**
   The MD recorder is now in the recording standby mode.
   If "D. In Unlock" appears
   The digital input source is not connected properly. Check the connection for the digital input source.

5

LEVEL-SYNC indicator

INPUT

LvlSyncOn

DIGITAL IN 1

LEVEL-SYNC automatically updates a track at any rise of input level.

6

▶/❚❚

TRACK 1 8   0m01s

DIGITAL IN 1

Signal Wait function

LvlSyncOn

DIGITAL IN 1

INPUT

Signal Wait

DIGITAL IN 1

5. **With the unit in recording standby mode, press the INPUT button to display the current Level Sync status (LvlSyncOn or LvlSyncOff).**
You can change the Level Sync status by pressing the INPUT button again. With "LvlSyncOn", the track number will be recorded automatically for each track.

• If the Rec source is "CD" or "MD", track numbers are recorded automatically.
Note:
For automatic track number recording, the recording source must be able to transmit digital signals including those for identifying the beginning and end of each track. If your recording source does not have this capability, track numbers will not be recorded automatically. In this case, turn the Level Sync On.
Note:
To Manually Record a Track Number
While recording, press the ● REC button when you wish to mark a track number.
If you wish to mark two or more track numbers sequentially, provide a sufficient interval between each press of the ● REC button. Too short (about 4 seconds or less) an interval may lead to a failure in marking track numbers.

6. **Press the ▶/❚❚ button and then start playing the recording source immediately.**
The MD recorder will automatically stop when recordable time of the disc being recorded runs out.

To stop recording temporarily...
Press the ▶/❚❚ button (or the ❚❚ button on the remote controller). To resume recording, press the ▶/❚❚ button again (or press the ▶ button on the remote controller).

To stop recording...
Press the ■ button.

To eject the MD...
Press the ■ button and then the ▲ button.
Note:
If TOC is flashing when you press the ▲ button or the STAND-BY/ON button, it means the MD recorder is writing the recorded contents onto the MD. During this period, do not disconnect the power cord or apply strong vibrations to the MD recorder. Doing so may prevent normal recording onto the MD.
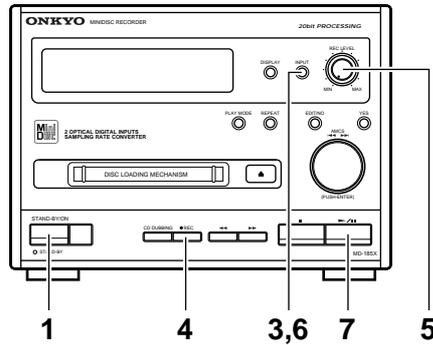
This function is enabled when "LvlSyncOn" is displayed (by pressing the INPUT button in the recording or recording standby mode). In this state, if the unit receives no signal from the recording source for 4 seconds, the unit enters the recording standby mode with "Signal Wait" displayed. If it receives a sound signal again within approx. 26 seconds, recording resumes. After 26 seconds, the unit enters the normal recording standby mode with this function disabled.
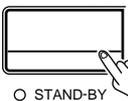
Recording to an MD

In analog recording, audio connection cables are used for inputting signals from the recording source.

- When "Protected" is shown in the display, it indicates that the record-protect tab of the MD is open. Before starting the recording procedure, close the tab. (See page 23.)
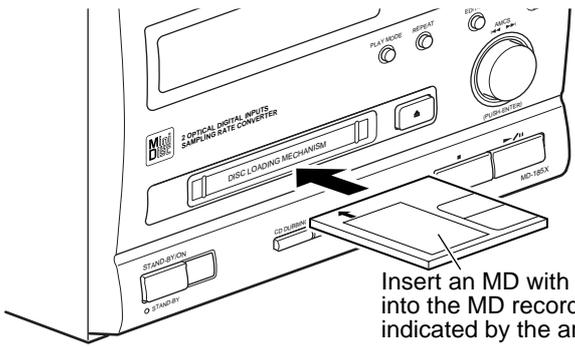- Data is recorded after the already-recorded area.

1   4   3,6   7   5

1

STAND-BY/ON

○ STAND-BY

2

Insert an MD with its label side up into the MD recorder in the direction indicated by the arrow.

Number of tracks on MD   Total recorded time

DIGITAL IN 1   17Tr   31m46s

3

INPUT

ANALOG IN   Analog In

4

● REC

TRACK
ANALOG IN   18   0m00s

Recording from an analog source

1. **Press the STAND-BY/ON button.**
   The STAND-BY indicator will go out.
2. **Load a recordable MD.**
   To check the time remaining for recording...
   When the MD recorder is stopped, press the DISPLAY button. Each press of the DISPLAY button changes the display as follows:
   The number of tracks on MD and the total recorded time → Remaining recording time on MD → Disc name ("No Name" when not set)
   - **To record by erasing all of the existing tracks on a prerecorded MD...**
   Erase all the tracks before you start recording (see page 24).
3. **Press the INPUT button until "Analog In" appears on the display.**
   The analog input source is now selected.
   Note:
   Make sure that the Input and Rec selectors on the amplifier are set to the "Recording Source" position.
4. **Press the ● REC button.**
   When your MD-185X is configured with CR-185X/CHR-185X, start playing the CD player before pressing the ● REC button in step 4.

5
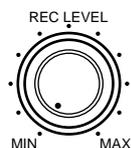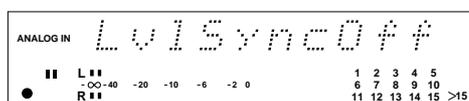
REC LEVEL

MIN   MAX

TRACK
ANALOG IN   18   0m00s

L ||||||||||||||
-∞-40 -20 -10 -6 -2 0
R ||||||||||

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15
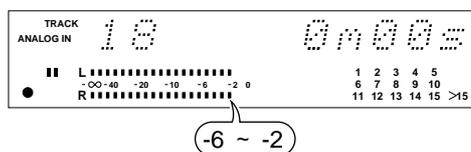
-6   -2

6

INPUT

ANALOG IN *LvlSyncOn*

L ||
-∞-40 -20 -10 -6 -2 0
R ||

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

ANALOG IN *LvlSyncOff*

L ||
-∞-40 -20 -10 -6 -2 0
R ||

1 2 3 4 5
6 7 8 9 10
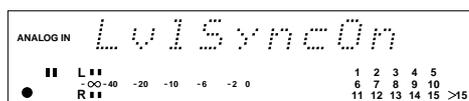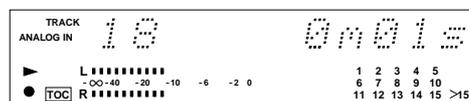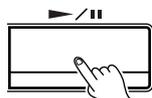11 12 13 14 15 >15

LEVEL-SYNC automatically updates a track at any rise of input level.

7

▶/||

TRACK
ANALOG IN   18   0m01s

▶ L ||||||||||
-∞-40 -20 -10 -6 -2 0
● TOC R ||||||||||

1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

Note:
If TOC is flashing when you press the ▲ button or the STAND-BY/ON button, it means the MD recorder is writing the recorded contents onto the MD. During this period, do not disconnect the power cord or apply strong vibrations to the MD recorder. Doing so may prevent normal recording onto the MD.
If the MD recorder's power cord is connected to the SWITCHED service power outlet on the rear panel of your amplifier, etc., do not turn off the amplifier.

5. **Using the REC LEVEL knob, adjust the recording level.**
Adjust the position of the REC LEVEL knob so that the indicator occasionally enters the -6 to -2 range.
When adjustment of the recording level is complete, stop playing the source.
6. **With the unit in recording standby mode, press the INPUT button to display the current Level Sync status (LvlSyncOn or LvlSyncOff).**
You can change the Level Sync ststus by pressing the INPUT button again. With "LvlSyncOn", the track number will be recorded automatically for each track.
• Pressing the INPUT button in other than the recording or recording standby mode changes the input source you set in step 3.
• Since interval between tracks is detected from the sound level, tracks to be recorded may not continue in the correct sequence in the following cases:
  • Recorded condition of the cassette tape is bad. (noise between tracks)
  • Low level sound continues, in classic music, etc.
  • Interval between tracks is extremely short.
  • Reception condition of tuner is bad (noise, etc.).
Note:
To Manually Record a Track Number
While recording, press the ● REC button when you wish to mark a track number.
If you wish to mark two or more track numbers sequentially, provide a sufficient interval between each press of the ● REC button. Too short (about 4 seconds or less) an interval may lead to a failure in marking track numbers.
7. **Press the ▶/|| button to start recording and then start playing the recording source immediately.**
The TOC indicator appears as soon as the recording starts.
The MD recorder will automatically stop when recordable time of the disc being recorded runs out.
To stop recording temporarily...
Press the ▶/|| button (or the || button on the remote controller). To resume recording, press the ▶/|| button again (or press the ▶ button on the remote controller).

To stop recording...
Press the ■ button.

To eject the MD...
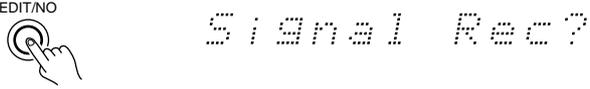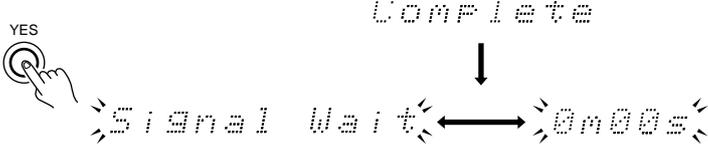Press the ■ button and then the ▲ button.

Recording to an MD

1

INPUT

Digital In1

2

EDIT/NO

Signal Rec?

3

YES

Complete

↓

Signal Wait ⟷ *0n00s*

Signal Synchro recording

Even if your recording source is not Onkyo 口-compatible, you can perform synchronized recording.

1. **Press the INPUT button until "Digital In1", "Digital In2" or "Analog In" appears.**
   You can perform signal synchro recording with both digital and analog recording sources.
2. **Press the EDIT/NO button until "Signal Rec?" appears.**
3. **Press the YES button.**
   "Complete" appears, then the unit enters the Signal Wait mode.
   Note:
   If no signal is input for approx. 30 seconds in the input signal waiting mode, the MD recorder will enter the recording standby mode.

   Recording start as soon as the unit receivessignals from the recording source while "Signal Wait" is displayed.

1

AUTO SPACE   REC PAUSE   (K-185X)
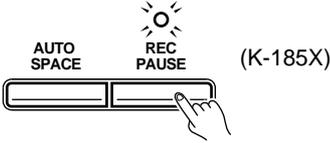
2

▶/❚❚
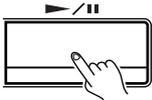
Synchronized recording to the Cassette Tape Deck (MD-Synchro recording)

When the MD-185X is configured into a system with Onkyo Separate Collection series components (CR-185X/CHR-185X and K-185X), synchronized recording from the MD recorder to the cassette tape deck is possible.

1. **Insert a cassette tape in the cassette tape deck and set the cassette tape deck in the recording standby mode.**
   See the cassette tape deck instruction manual for how to set the deck in the recording standby mode.
2. **Press the ▶/❚❚ button on the MD recorder (or the ▶ button on the remote control).**
   The cassette tape deck starts recording as soon as the MD starts playing.
   When the MD program is completed, the cassette tape deck stops recording and enters the recording standby mode again.

To stop MD-synchro recording
Press the ■ button on the MD recorder. The cassette tape deck then enters the recording standby mode.
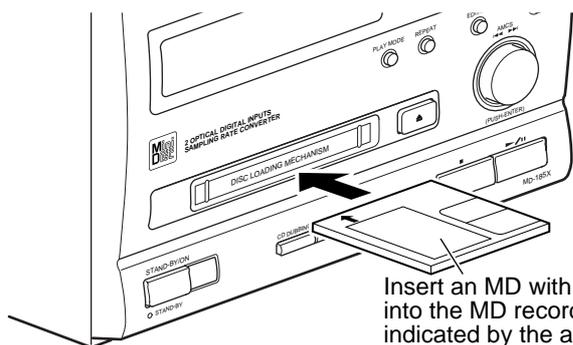
1

Insert an MD with its label side up into the MD recorder in the direction indicated by the arrow.

2

INPUT

Timer operation

When your MD recorder is configured into a system with Onkyo Separate Collection series components (CR-185X, CHR-185X and K-185X), you can record the desired broadcasting programs or play your favorite MD at a specified time using the CR-185X and CHR-185X tuner's timer.

See the CR-185X and CHR-185X instruction manual for how to use the Timer function.

1. **Insert an MD.**
   You can perform both playing and recording.
2. **Select an input.**
   When an analog input is to be recorded, such as from tuner, be sure to select the ANALOG IN mode by pressing the INPUT button.
3. **Set the timer on your CR-185X/ CHR-185X.**

Note:

To use the Timer function of the CR-185X and CHR-185X, connect the AC power cord of your MD-185X recorder to either a wall outlet or the UNSWITCHED AC outlet of another component in the system. (Make sure that the STAND-BY indicator of the MD-185X is lit.)

Check the Contents of Recording

• If you have not operated the unit since stopping a recording, the track to be played will flash in the track number. Press the ▶/❙❙ button to start playing the flashing track.

• To playback from the beginning of the MD, immediately after recording is stopped, press the ■ button again. Then, press the ▶/❙❙ button (or the ▶ button on the remote controller) to start playback.

Storage Period of Backup Data

The recorded contents will be backed up inside the MD-185X even if the MD recorder's power cord is accidentally unplugged or if a power failure occurs before they are stored to the disc (when TOC is lit) or when they are being stored to the disc (when TOC is flashing). You can restore the data which was backed up during such an accident or power failure by pressing the STAND-BY/ON button after plugging in the power cord or immediately after the power failure is solved. Note, however, that the period in which the backup data is stored is approx. only 1 hour. So, especially after a power failure, perform the above procedures as soon as possible after power is restored.

If power cut state is continued for one hour or more, recorded contents may be lost.

Protect Recordings from Accidental Erasure

You can make your MDs impossible to be recorded on by sliding the record-protect tab on the MDs to open the record-protect hole. To make the MDs recordable again, return the record-protect tab.

Record-protect tab

Record-protect hole

Back

Surface

23
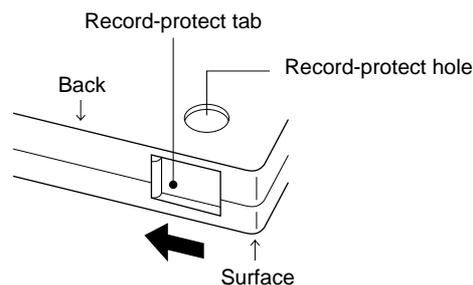
Editing the contents of an MD

You cannot edit the contents of premastered MDs.
Moreover, you cannot edit the MD when its record-protect hole is open ("Protected" is displayed).
Before starting the editing procedure, close the hole (see page 23).

2   1   3

1

Track number

Flashes

2

EDIT/NO

3

YES
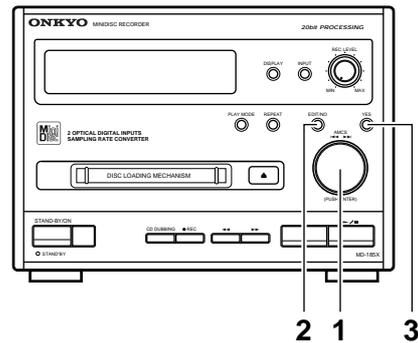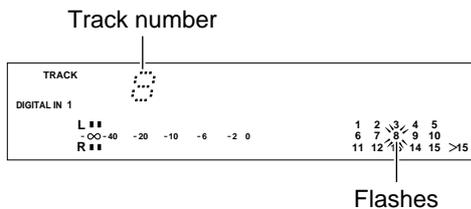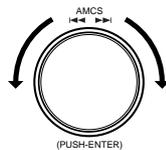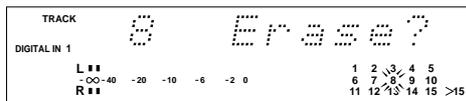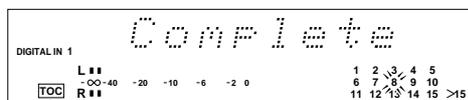
Lights when completed.

Erasing a track

The following operation is possible when the unit is stopped or paused.

1. **Turn the AMCS knob until the track number you want to erase is displayed.**
2. **Press the EDIT/NO button several times until "Erase?" appears in the display.**
    *   **To stop erasing a track...**
        Press the EDIT/NO button again, or press the ■ button.
3. **Press the YES button.**
    The selected track is erased. When the erasing of the track is completed, "Complete" appears in the display.
    *   When a track is erased, the tracks following that track are advanced, each given a new number which is smaller by one track than the previous track number. For example, if you erase track 2, track 3 will now be renumbered as track 2; track 4 will now be renumbered as track 3, and so on.

Note:
While the TOC indicator is lit or flashing, do not move or unplug the MD recorder.

To erase all tracks of an MD...
1) Press the ■ button.
2) Press the EDIT/NO button several times until "All Erase?" appears in the display.
    To cancel, press the EDIT/NO button or press the ■ button.
3) Press the YES button. "All Erase??" is displayed for confirmation.
    On the display, the track number flashes.
4) Press the YES button again.
    When the erasing of all tracks of the MD is completed, "Complete" appears in the display.

Note:
While the TOC indicator is lit or flashing, do not move or unplug the MD recorder.

1   3   2,4

1 EDIT/NO

TRACK
DIGITAL IN 1
8 Divide?
► L ▮▮▮▮▮▮▮▮▮
-∞ -40 -20 -10 -6 -2 0   8 9 10
R ▮▮▮▮▮▮▮▮   11 12 13 14 15 >15

2 YES

Rehearsal ◄► PositionOK?

3

AMCS
|◄◄ ►►|
(PUSH-ENTER)

TRACK
DIGITAL IN 1
DivPos +11
► L ▮▮▮▮▮▮▮▮▮
-∞ -40 -20 -10 -6 -2 0   8 9 10
R ▮▮▮▮▮▮▮   11 12 13 14 15 >15

Dividing point (0.5-sec silence)

Play(for 8sec)

4 YES

Complete
DIGITAL IN 1
► L ▮▮
TOC R ▮▮
-∞ -40 -20 -10 -6 -2 0   9 10
                          11 12 13 14 15 >15

Lights when completed.

Dividing a track

The following operation is possible when the unit playing or paused.

1. **Press the EDIT/NO button several times until "Divide?" appears in the display.**
   - **To stop dividing a track...**
   Press the EDIT/NO button again, or press the ■ button.
2. **Press the YES button.**
   The part at which the track is to be divided played repeatedly, with "Rehearsal" and "Position Ok?" alternately shown on the display.
3. **Turn the AMCS knob while listening to the part being played.**
   The dividing point is indicated by a silence of 0.5 second.
   Fine adjust the point where you wish to divide the track.
   Within the playing part, you can move the dividing point in the range of -100 to +100. (Increasing or decreasing the dividing point by 1 corresponds with approximately 0.02 second.)
4. **Press the YES button or AMCS knob to divide the track.**
   When the dividing of the track is completed, "Complete" appears in the display.
   - When a track is divided, the tracks following that divided track are moved backward, each given a new number which is larger by one track than the previous track number. For example, if you divide track 2 into two parts, the latter part will now be renumbered as track 3; the track 3 will now be renumbered as track 4; the track 4 will now be renumbered as track 5, and so on.
   To erase parts of a track, first divide the track in parts and then erase the parts you wish to erase. (See page 24 for how to erase tracks.)

Note:
While the TOC indicator is lit or flashing, do not move or unplug the MD recorder.

25

Editing the contents of an MD

2   1   3,4,5

1

2

EDIT/NO

```
TRACK        9  Combine?
DIGITAL IN 1
       L                        1  2  3  4  5
      -∞-40  -20  -10  -6  -2  0   6  7  8  9  10
       R                        11 12 13 14 15 >15
```

3

YES

```
TRACK      Comb#8+9?
DIGITAL IN 1
       L                        1  2  3  4  5
      -∞-40  -20  -10  -6  -2  0   6  7  8  9  10
       R                        11 12 13 14 15 >15
```

4

YES

```
Rehearsal  ↔  Track OK?
```

Combining point

Play(for 8sec)

5

YES

```
           Complete
DIGITAL IN 1
   ►     L
        -∞-40  -20  -10  -6  -2  0        8  9  10
  TOC   R                        11 12 13 14 15 >15
```

Lights when completed.

Combining tracks

You can combine two adjacent tracks into one. The following operation is possible when the unit is stopped, paused or playing.

1. **Turn the AMCS knob until the latter of the new track numbers is displayed.**
   - The selected track will be combined with the previous track.
   - If each of the combined tracks has a title, the previous track's title will remain and the latter track's title will be erased.
   - If the previous track only has a title, that title will remain.
   - If the latter track only has a title, that title will remain.
2. **Press the EDIT/NO button several times until "Combine ?" appears in the display.**
   - **To stop combining tracks...**
     Press the EDIT/NO button again, or press the ■ button.
3. **Press the YES button.**
   The two tracks to be combined are indicated on the display.
4. **Press the YES button again.**
   Check the part of the two tracks to be combined.
   The part at which the two tracks are to be combined play (for 8 seconds) repeatedly, with "Rehearsal" and "Track Ok?" alternately shown on the display.
5. **Press the YES button to combine the tracks you have selected.**
   - When the combining is completed, "Complete" appears in the display.
   - When tracks are combined, the tracks following those tracks are advanced, each given a new number which is smaller by one track than the previous track number. For example, if you combine track 3 with track 2, track 4 will now be renumbered as track 3; track 5 will now be renumbered as track 4, and so on.

Note:
While the TOC indicator is lit or flashing, do not move or unplug the MD recorder.
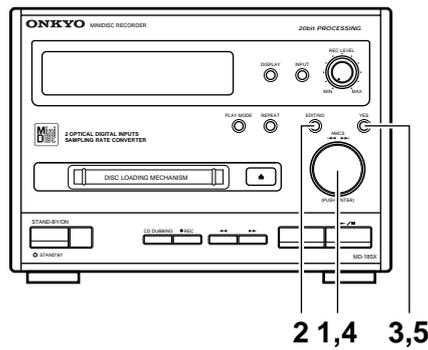
2   1,4   3,5

Moving a track

The following operation is possible when the unit is stopped or paused.

1. Turn the AMCS knob until the track number you want to move is displayed.

2. Press the EDIT/NO button several times until "Move?" appears in the display.

To stop moving a track...
Press the EDIT/NO button again, or press the ■ button.

3. Press the YES button.
The selected track number and a destination track number appear in the display.

4. Turn the AMCS knob until the desired destination track number is displayed.

5. Press the YES button or AMCS knob to move the selected track.
When the moving of the track is completed, "Complete" appears in the display.

• When a track is moved, the track numbers are renumbered, based on the track number of the moved track, so that they are consecutive. For example, if you move track 3 to track 1, track 1 will now be renumbered as track 2; track 2 will now be renumbered as track 3, and so on.

Note:
While the TOC indicator is lit or flashing, do not move or unplug the MD recorder.

1

2
EDIT/NO

TRACK   6   Move?
DIGITAL IN 1
L ▮▮
−∞ −40 −20 −10 −6 −2 0
R ▮▮
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

3
YES

4
AMCS

Move:6→1?
TRACK
DIGITAL IN 1
L ▮▮
−∞ −40 −20 −10 −6 −2 0
R ▮▮
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

5
YES

Complete
DIGITAL IN 1
L ▮▮
−∞ −40 −20 −10 −6 −2 0
TOC R ▮▮
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15 >15

Lights when completed.
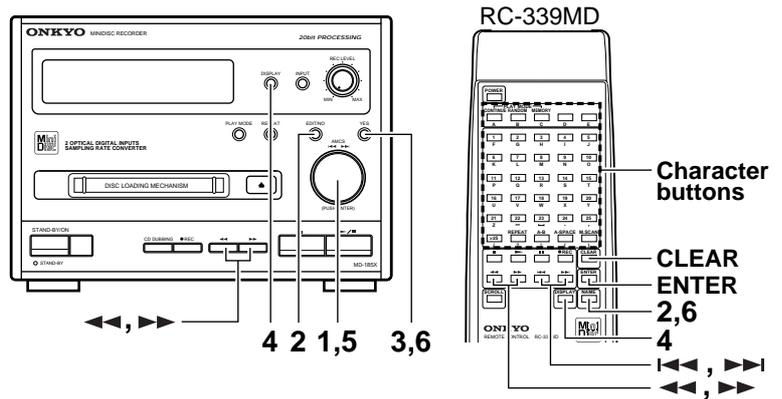
27

Naming a track or disc

To name a disc...
The MD recorder must be stopped.
To name a track...
The MD recorder may be stopped, paused, playing, or recording.
You can enter up to 100 characters for each track name. The characters being entered are canceled if the track which is playing or being recorded changes.

RC-339MD

Character buttons

CLEAR
ENTER
2,6
4
◄◄ , ►►
◄◄ , ►►

4 2 1,5   3,6

◄◄ , ►►

---

1 | To name a disc | To name a track
AMCS
◄◄ ►►
(PUSH-ENTER)

2 | Remote control
EDIT/NO   NAME
DISC
DIGITAL IN 1   `Name In?`
L ▪▪ -∞ -40 -20 -10 -6 -2 0   1 2 3 4 5
R ▪▪   6 7 8 9 10
                                 11 12 13 14 15 >15

3 | YES
DISC
DIGITAL IN 1   `A⏋`
L ▪▪ -∞ -40 -20 -10 -6 -2 0   1 2 3 4 5
R ▪▪   6 7 8 9 10
                                 11 12 13 14 15 >15

4 | Remote control
DISPLAY   DISPLAY
DISC
DIGITAL IN 1   `A⏋`
L ▪▪ -∞ -40 -20 -10 -6 -2 0   1 2 3 4 5
R ▪▪   6 7 8 9 10
                                 11 12 13 14 15 >15

5 | Remote control
AMCS
◄◄ ►►
(PUSH-ENTER)
↓
AMCS
◄◄ ►►
(PUSH-ENTER)

┌─PLAY MODE─┐
CONTINUE RANDOM MEMORY
A   B   C   D   E
1   2   3   4   5
F   G   H   I   J
6   7   8   9   10
K   L   M   N   O
11   12   13   14   15
P   Q   R   S   T
16   17   18   19   20
U   V   W   X   Y
21   22   23   24   25
Z   —   .   ,
     REPEAT A-B A-SPACE M.SCAN
>25
/   ?   !   (   )

DISC
DIGITAL IN 1   `A⏋ ONKYO`
-∞ -40 -20 -10 -6 -2 0   1 2 3 4 5
R ▪▪   6 7 8 9 10
                            11 12 13 14 15 >15

Naming a track or disc

1. **Turn the AMCS knob until the track number which you want to enter a name is displayed.**
    • To name a disc, start from step 2, skipping step 1.
    Note:
    When the MD recorder is paused, playing, or recording, the track number which is displayed is selected, and therefore, this step is unnecessary.
2. **Press the EDIT/NO button several times until "Name In?" appears in the display.**
    Or, with the remote control, press the NAME button.
    When you name a track, the TRACK indicator will turn on.
    To stop naming a disc or track
    Press the ■ or YES button while pressing the EDIT/NO button.
3. **Press the YES button.**
    The blinking cursor appears.
4. **Select the character input mode using the DISPLAY button.**
    You can enter upper case letters, lower case letters, numbers and symbols. Each press of the DISPLAY button changes the type of characters you can enter as follows:
    Upper case letter (A, B, C...)
    ↓
    Lower case letters (a, b, c...)
    ↓
    Numbers and symbols (1, 2, 3...)
    ↓
    Easy title (♪)
5. **Enter a track name or disc name using the AMCS knob.**
    Turn the AMCS knob to display the character you want to enter, and then press the AMCS knob to enter it. Following the same procedure, enter the remaining characters.
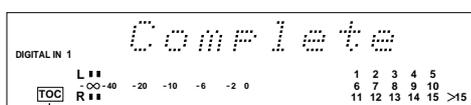   **To enter a name with the remote control...**
    You can enter numbers (1 to 9, 0 by the 10 button), uppercase and lowercase letters, and symbols (only those indicated below the buttons) by directly operating the buttons.

6

Remote control

YES   NAME

```
        Complete
DIGITAL IN 1
     L ▮▮
     -∞-40  -20  -10  -6  -2  0        1  2  3  4  5
 TOC R ▮▮                              6  7  8  9 10
                                      11 12 13 14 15 >15
```

Lights when completed.

The ⏮ and ⏭ buttons on the remote control can be used to select characters. If this is the case, press the ENTER button or the ▶▶ button to enter them.

To change the type of characters entered...
Go back to step 4 and change the character input mode. Then, select and enter characters using the AMCS knob.

To correct the character entered...
Move to the character you want to correct using the ◀◀ and ▶▶ buttons (the character blinks), and then reenter the character you want.

To insert a character...
Move to the point at which you want to insert a character using the ◀◀ and ▶▶ buttons (the insertion point blinks).
Then turn the AMCS knob counter-clockwise (▶◀ blinks) and press the AMCS Knob (the cursor blinks).
Finally, enter the character you want.

To erase a character...
Move to the character which you want to erase using the ◀◀ and ▶▶ buttons (the character blinks) and then press the EDIT/NO button or CLEAR button on the remote controller (RC-339MD).

To make one space...
Turn AMCS knob to display (␣) and press the knob to set.
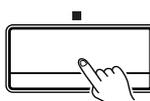
6. **Press the YES button.**
   "Complete" appears in the display.
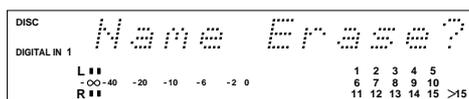   Or, with the remote control, press the NAME button.

Note:
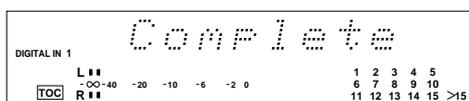While the TOC indicator is lit or flashing, do not move or unplug the MD recorder.

1

■

2

EDIT/NO

```
DISC
DIGITAL IN 1  Name Erase?
     L ▮▮
     -∞-40  -20  -10  -6  -2  0        1  2  3  4  5
     R ▮▮                              6  7  8  9 10
                                      11 12 13 14 15 >15
```

3

YES

```
        Complete
DIGITAL IN 1
     L ▮▮
     -∞-40  -20  -10  -6  -2  0        1  2  3  4  5
 TOC R ▮▮                              6  7  8  9 10
                                      11 12 13 14 15 >15
```

Lights when completed.

Erasing the disc name and all track names at one time

1. **Press the ■ button.**
2. **Press the EDIT/NO button to display "Name Erase?".**
   Press the EDIT/NO button several times until "Name Erase?" appears in the display.
   Note:
   Once the disc name and all track names are erased, they cannot be restored.
3. **Press the YES button.**
   All track names and the disc name are erased.

Message list

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

Message	Meaning
Blank Disc	A new recordable MD or a recordable MD without disc or track names is inserted.
Cannot Copy	An attempt was made to make a second copy from a digitally dubbed MD (see "Rules for Digital Recording" on pages 31, 32).
Cannot Edit	An attempt was made to edit the disc during MEMORY or RANDOM play or in recording standby mode, or an attempt to edit a premastered disc was made.
Cannot Rec	An attempt was made to record onto a premastered (read-only) disc.
D. In Unlock	The digital equipment (CD player, DAT, etc.) has not been connected properly. Otherwise, the connected digital equipment is not operating properly.
Disc Error	The disc is abnormal (scratched or missing a TOC).
Disc Full	The disc is full (see "System Limitations" on this page).
Impossible	The disc could not be edited.
Mecha Error	An error occurred in the unit's internal mechanism.
Memory Full	An attempt was made to record a 26th track.
Full	The titling capacity of the disc has reached its limit.
Name Full	Number of characters has reached the limit for input to one MD.
No Change	The naming attempt failed.
No Disc	There is no disc in the unit.
No Track	The inserted disc has a disc title but no tracks.
Not Audio	An attempt was made to play a non-audio disc.
Over	In pause mode (when playing is paused), the ▶▶ (Fast Forward) button was pressed to the end of the disc.
Protected	The inserted disc is record-protected.
Retry Error	The recording attempt failed due to a consecutive disturbance or scratches on the MD.
Temp Over	An abnormally high temperature is detected in the unit's internal mechanism.
TOC Error	The reading of the TOC failed.
TOC Writing	The unit is writing the recorded or edited contents to the MD
U-TOC Error	The writing of the recorded or edited contents failed.

System limitations

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

- **"Disc Full" lights up even before the disc has reached the maximum recording time (60 or 74 minutes)**
When 255 tracks have been recorded on the disc, "Disc Full" lights up regardless of the total recorded time. More than 255 tracks cannot be recorded on the disc. To record new tracks, erase unnecessary tracks or use another MD.

- **"Disc Full" lights up before the maximum number of tracks is reached**
Fluctuations in emphasis within tracks are sometimes interpreted as track intervals, incrementing the track count and causing the "Disc Full" indication to light up.

- **The remaining recording time does not increase even after erasing numerous short tracks**
Tracks of under 12 seconds in length are not counted and so erasing them may not lead to an increase in the recording time.

- **Some tracks cannot be combined with others**
Track combination may become impossible when tracks are edited.

- **The total recorded time and the remaining time on the disc may not total the maximum recording time (60 or 74 minutes)**
Recording is done in minimum units of 2 seconds each, no matter how short the material. The contents recorded may thus be shorter than the maximum recording capacity. Disc space may also be further reduced by scratches.

- **Track created through editing may exhibit sound dropout during searching operations.**

- **Track numbers are not recorded correctly**
Incorrect assignment or recording of track numbers may result (1) when CD tracks are divided into several smaller tracks during digital recording, or (2) when certain CDs are recorded with both the LEVEL-SYNC indicator on and automatic track marking function on.

- **TOC indicator appears for a long time**
If the inserted recordable disc is bland new, the TOC indicator appears on the display longer than those that have been used.

Preset titles for easy titling

In the Easy Titling mode, you can enter the following titles by simply choosing one.

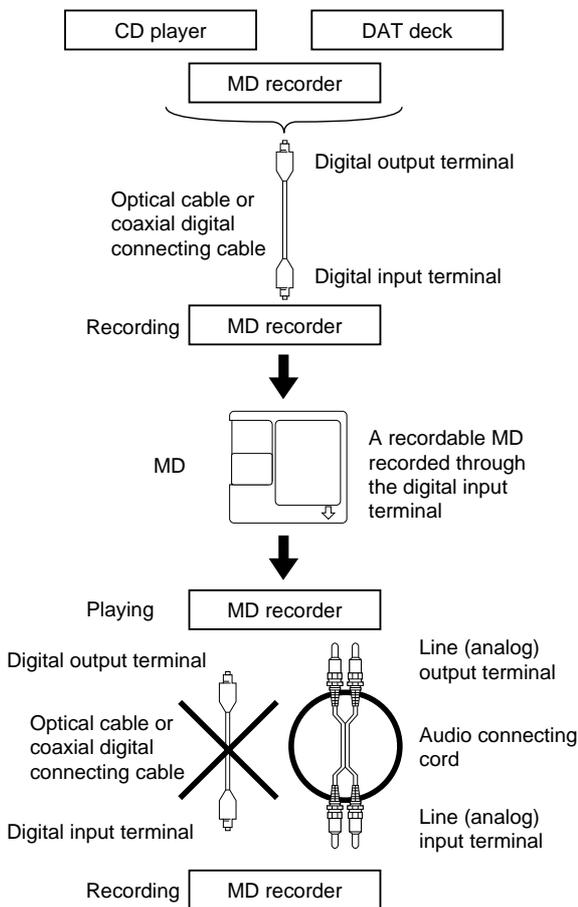|			
BALLAD	ROCK	Euro	Happy
BLUES	SOUL	German	Heavy
CLASSIC	TECHNO	Japanese	Hit songs
DANCE	VOCAL	Anthology	Omnibus
FUSION		Best of	Selection
JAZZ	African	(One space will be added	Special
LIVE	American	following "of".)	Super
POPS	Asian	Collection	Space (⎵)
REGGAE	British	Favorite	

Rules for digital recording

Guide to the serial copy management system

Since your MD unit uses the Serial Copy Management System (SCMS), MDs recorded through the digital input terminal cannot be used to make subsequent copies to other MDs through the digital output terminal. The following diagram shows a system for making copies through the digital or analog terminals.
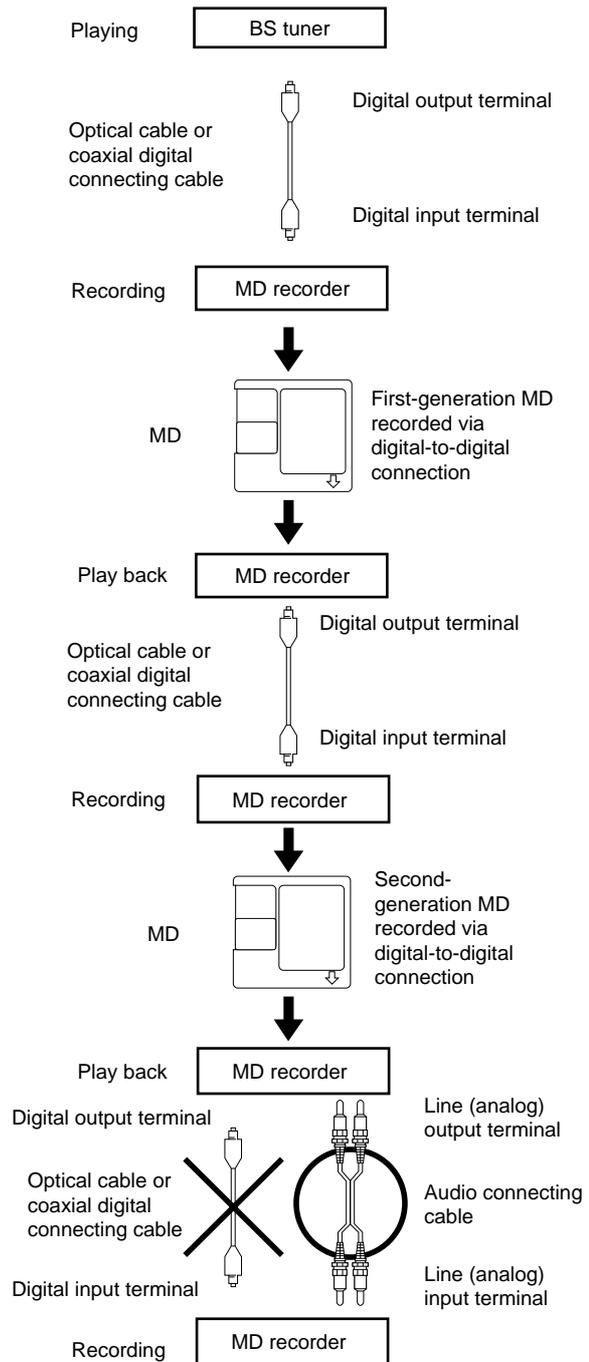
Rule 1

You can record digital source (CD, prerecorded MD, and DAT equipment with a sampling frequency of 44.1 kHz) to a recordable MD through the digital input terminal.

However, you cannot make subsequent copies from the recordable MD to other recordable MDs through the digital output terminal. Subsequent copies can only be made through analog output terminal.

CD player　　　　DAT deck

MD recorder

Digital output terminal

Optical cable or coaxial digital connecting cable

Digital input terminal

Recording　MD recorder

MD

A recordable MD recorded through the digital input terminal

Playing　MD recorder

Digital output terminal

Line (analog) output terminal

Optical cable or coaxial digital connecting cable

Audio connecting cord

Digital input terminal

Line (analog) input terminal

Recording　MD recorder

Rule 2

You can record the digital input signal of a digital satellite broadcast onto a recordable MD via the digital input terminals on MD recorder which is capable of handling a sampling frequency of 32 kHz or 48 kHz. You can then record the contents of this recorded MD (first-generation) onto another recordable MD via digital input terminals on the MD recorder to create a second-generation digital copy.

Note, however, that with some BS tuners, second-generation digital copying may not be possible.
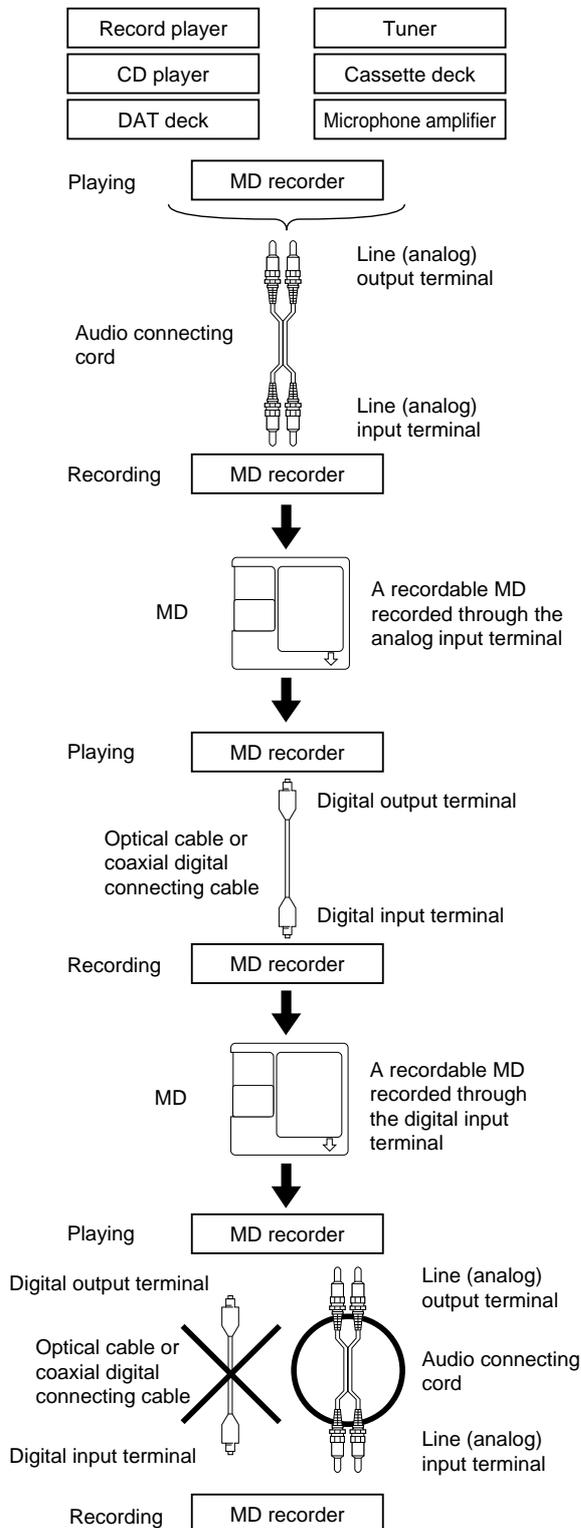
Playing　BS tuner

Digital output terminal

Optical cable or coaxial digital connecting cable

Digital input terminal

Recording　MD recorder

MD

First-generation MD recorded via digital-to-digital connection

Play back　MD recorder

Digital output terminal

Optical cable or coaxial digital connecting cable

Digital input terminal

Recording　MD recorder

MD

Second-generation MD recorded via digital-to-digital connection

Play back　MD recorder

Digital output terminal

Line (analog) output terminal

Optical cable or coaxial digital connecting cable

Audio connecting cable

Digital input terminal

Line (analog) input terminal

Recording　MD recorder

Rules for digital recording

Rule 3

A recordable MD with material recorded from analog sources (analog records or FM programs, etc.) through the line input terminal can be copied to another recordable MD through the digital output terminal.

However, you cannot make subsequent copies from the recordable MD to other recordable MDs through the digital output terminal. Subsequent copies can only be made through analog output terminal.

Record player	Tuner
CD player	Cassette deck
DAT deck	Microphone amplifier

Playing — MD recorder

Line (analog) output terminal

Audio connecting cord

Line (analog) input terminal

Recording — MD recorder

MD — A recordable MD recorded through the analog input terminal

Playing — MD recorder

Digital output terminal

Optical cable or coaxial digital connecting cable

Digital input terminal

Recording — MD recorder

MD — A recordable MD recorded through the digital input terminal

Playing — MD recorder

Digital output terminal / Line (analog) output terminal

Optical cable or coaxial digital connecting cable / Audio connecting cord

Digital input terminal / Line (analog) input terminal

Recording — MD recorder

When MD recorders are connected using analog terminals, the number of dubbings is not limited.

Precautions for handling the MiniDisc (MD)

Shutter   Cartridge
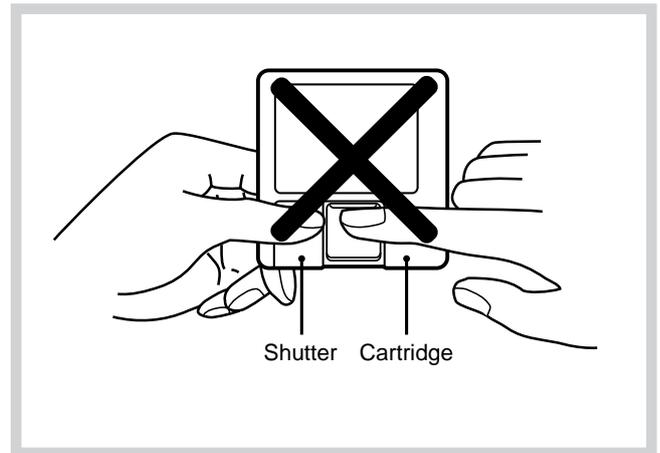
The MD is housed in a cartridge, so you can handle it without worrying about dust and fingerprints. Even so, a dirty or warped cartridge may cause malfunction. Always remember the following precautions so you can enjoy high-quality sound for a long time.

Do not touch the disc in the cartridge directly with your fingers.
Do not open the shutter by hand. Doing so may damage the disc.

Storage location
Avoid storing MDs in a place subject to direct sunlight, high temperature, or high humidity.

Regular care
Wipe off dust and dirt accumulated on the cartridge surface with a dry cloth.

Removing the halfway inserted MD
If the "self-rock function" is activated and the MD cannot be removed, push the MD further into the MD recorder and then press the ▲ button to remove the MD.

Troubleshooting guide

If you encounter a difficulty while using your unit, use this troubleshooting guide as an aid to remedy the problem. Because the unit contains a microcomputer to provide advanced functions, it may malfunction due to external noise or static electricity. If this happens, disconnect the power cord and then plug it in again after about 5 seconds. You must also be sure that the system components are properly connected.

If the MD recorder still does not operate correctly, disconnect the power plug, then plug it in again while pressing EDIT/NO button and YES button simultaneously.

Note that any TOC information held in this MD recorder will be erased by this operation.

If the problem persists even after you try this remedy, or it is not listed in the table, disconnect the power cord and then consult the shop from which you purchased the unit or your nearest ONKYO service station, informing them of your name, address, phone number, type of unit, and the details of the problem.

• The unit does not operate or operates poorly.
> *Cause:* The disc may be damaged ("Disc Error" appears).
>> *Remedy:* Take the disc out and insert it again. If "Disk Error" remains, replace the disc. (See page 32 "Precautions for handling the MiniDisc (MD)")

• The unit does not play.
> *Cause:* Moisture has formed inside the unit.
>> *Remedy:* Take the MD out and leave the unit in a warm place for several hours until the moisture evaporates (See page 33).
> *Cause:* The unit is not on.
>> *Remedy:* Insert the AC power cord (main lead) plug into the wall outlet (the mains) securely.
> *Cause:* The disc is inserted in the wrong direction.
>> *Remedy:* Slide the MD into the disc compartment with the label side up and the arrow pointing toward the opening until the unit grips it (See page 10).
> *Cause:* The disc may not be recorded (the track numbers do not appear).
>> *Remedy:* Replace the disc with one that has been recorded.

• The sound has a lot of static.
> *Cause:* Strong magnetism from a television or a similar device is interfering with operations.
>> *Remedy:* Move the unit away from the source of strong magnetism.

• The unit does not record.
> *Cause:* The disc is record-protected ("Protected" appears).
>> *Remedy:* Close the record-protect slot (See page 23).
> *Cause:* The unit is not connected properly to the sound source.
>> *Remedy:* Make connections properly to the sound source.
> *Cause:* The analog recording level is too low.
>> *Remedy:* Turn the REC LEVEL control knob to adjust the recording level properly.
> *Cause:* A premastered disc is inserted.
>> *Remedy:* Replace it with a recordable disc.
> *Cause:* There is not enough time left on the disc.
>> *Remedy:* Replace it with another recordable disc with fewer recorded tracks.
> *Cause:* There has been a power failure or the power cord has been disconnected.
>> *Remedy:* The contents of the recording may be lost permanently. After connecting the power cord or immediately after power has been restored, the STAND-BY/ON button. (See page 23"Storage Period of Backup Data".)
> *Cause:* An attempt was made to record from a digital input source, but it is not connected by the optical cable ("D. In Unlock" appears).
>> *Remedy:* Connect the digital input source by the optical cable or set the INPUT button to "Analog In".

• The disc name or track name cannot be entered.
> *Cause:* The disc is record-protected ("Protected" appears).
>> *Remedy:* Close the record-protect slot (See page 23).
> *Cause:* A premastered (read-only) disc is inserted ("Cannot Rec" appears).
>> *Remedy:* Replace it with a recordable disc.

If the unit does not operate properly even after attempting the prescribed remedies, unplug and then plug in the power cord again.

Condensation

This is the same phenomena that causes windows to become misted up with water drops in a heated room during the winter. The MD recorder also sometimes gets dew (water drops) on the optical lens inside the player under the following conditions.
- Immediately after you turn a heater on.
- If the MD recorder is placed in a room with full of steam or dampness.
- If you suddenly bring the MD recorder in from the cold outside into a warm room.

If the MD recorder is exposed to dew condensation

You can leave it as it is. Sometimes the recorder cannot read the signal sent from the disc by laser and the recorder doesn't work. Depending on the surrounding conditions you can remove the disc and leave the power on for at the longest one hour. The dew will evaporate and the recorder will work properly. If it doesn't work after several hours, please consult the nearest ONKYO authorized service center.

Specifications

System: MiniDisc digital audio system
Recording system: Magnetic field modulation overwrite system
Signal read out system: Optical non-contact
Recording time: Max. 74 min. (when using MDW-74)
Number of revolutions: About 400 - 900 rpm (constant linear velocity)
Error correction system: Advanced Cross Interleave Reed-solomon code
Sampling frequency: 44.1 kHz
Number of channels: 2 (stereo)
Frequency response: 10 Hz - 20 kHz
Signal to noise ratio: 98 dB or more when playing
Output level: 1.3 volts r.m.s.
Power supply rating: AC 230 V, 50 Hz
                               AC 120 V, 60 Hz
Power consumption: 12W (AC230V, 50Hz)
                               14W (AC120V, 60Hz)
Dimensions (W × H × D):   185 × 131 × 298 mm
                               (7-5/16" × 5-3/16" × 11-3/4")
Weight: 2.9 kg (6.4 lbs.)

Specifications and features are subject to change without notice.