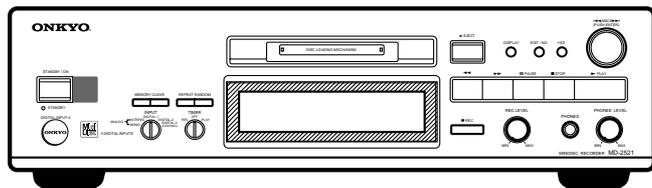# ONKYO®

MiniDisc Recorder

MD-2521

Instruction Manual

Thank you for your purchase of the Onkyo MD-2521 MD Recorder.
Please read this manual thoroughly before making connections and plugging in the AC power cord.
Following the instructions in this manual will enable you to obtain optimum performance and maximum listening enjoyment from your new MD-2521.
Please retain this manual for future reference.

Contents

Before using

Preparation

Operation

A few important notes

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 surfaces 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 an opening 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 appliance 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, especially near 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.

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.

"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.

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.

• Voltage Selector
Worldwide models are equipped with a voltage selector to conform with local power supplies. Be sure to set this switch to match the power supply in your area before plugging in the unit.

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.

FOR CANADIAN MODEL:
(POUR LE MODELE CANADIEN)

• 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.
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.

• 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 JUSQ'AU FOND.
L'INTERFÉRENCE RADIO ÉLECTRIQUE GÉNÉRÉE PAR CET APPAREIL NUMÉRIQUE DE TYPE B NE DÉPASSE PAS LES LIMITES ÉNONCÉES DANS LE RÈGLEMENT SUR LES PERTURBATIONS RADIO ÉLECTRIQUES, SECTION APPAREIL NUMÉRIQUE, DU MINISTÈRE DES COMMUNICATIONS.

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 qualified electrician.

FOR EUROPEAN MODEL

Declaration of Conformity

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

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

ONKYO EUROPE ELECTRONICS GmbH

Features

- **Outstanding sonic performance**
- **Front-panel digital optical input**
- **Front-panel analog stereo/mono switch**
- **3 digital inputs(2 optical,1 coaxial);1 digital optical output**
- **24-bit D/A converter**
- **Built-in sampling rate converter**
- **Convenient jog dial for track selection & character input**
- **Brushed aluminium front panel**
- **ꞧI compatible full-function remote control**
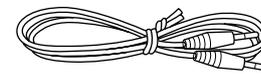
Supplied accessories

The number of accessories is indicated in brackets.
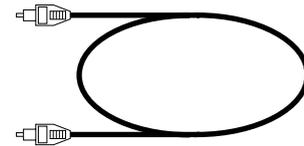Check that the following accessories are supplied with this unit.
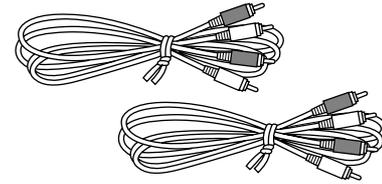
Audio connection cable (2)
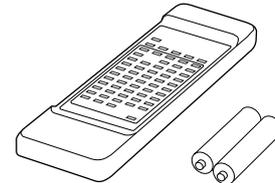
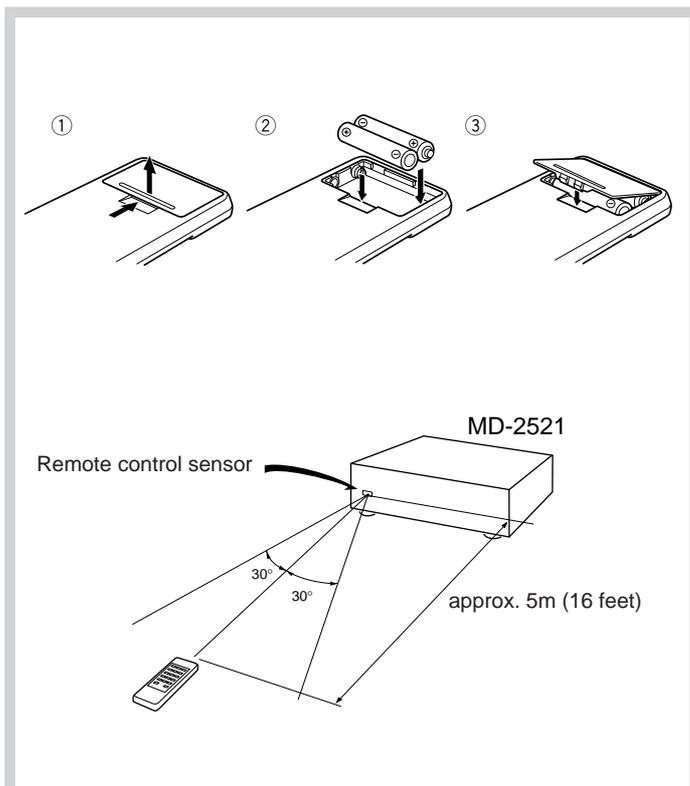Remote controller (RC-339MD) (1)
Dry batteries UM-3 (2)

ꞧI cable (1)

Optical cable (1)

Before operating this unit

Remote control sensor

MD-2521

30°
30°
approx. 5m (16 feet)

Inserting the remote controller 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 controller 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 controller

Direct the remote controller toward the remote sensor of the MD-2521. Note that remote controller is not possible when there is an obstacle between the remote controller and the sensor.

Note:
- Make sure that the unit's remote sensor is not exposed to strong light such as direct sunlight and inverter fluorescent light.
- Using the remote controller near infrared-ray emitting equipment or with other remote controllers may cause interference.
- Do not put a book or any other object on the remote controller. Doing so may depress the buttons, consuming the batteries.

System connection

- 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 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.
- Terminal protection caps are attached to the DIGITAL INPUT/OUTPUT terminals. Remove the cap for the terminal you wish to use when connecting the MD-2521 to digital equipment. Replace the caps if you are not using the DIGITAL INPUT/OUTPUT terminals.
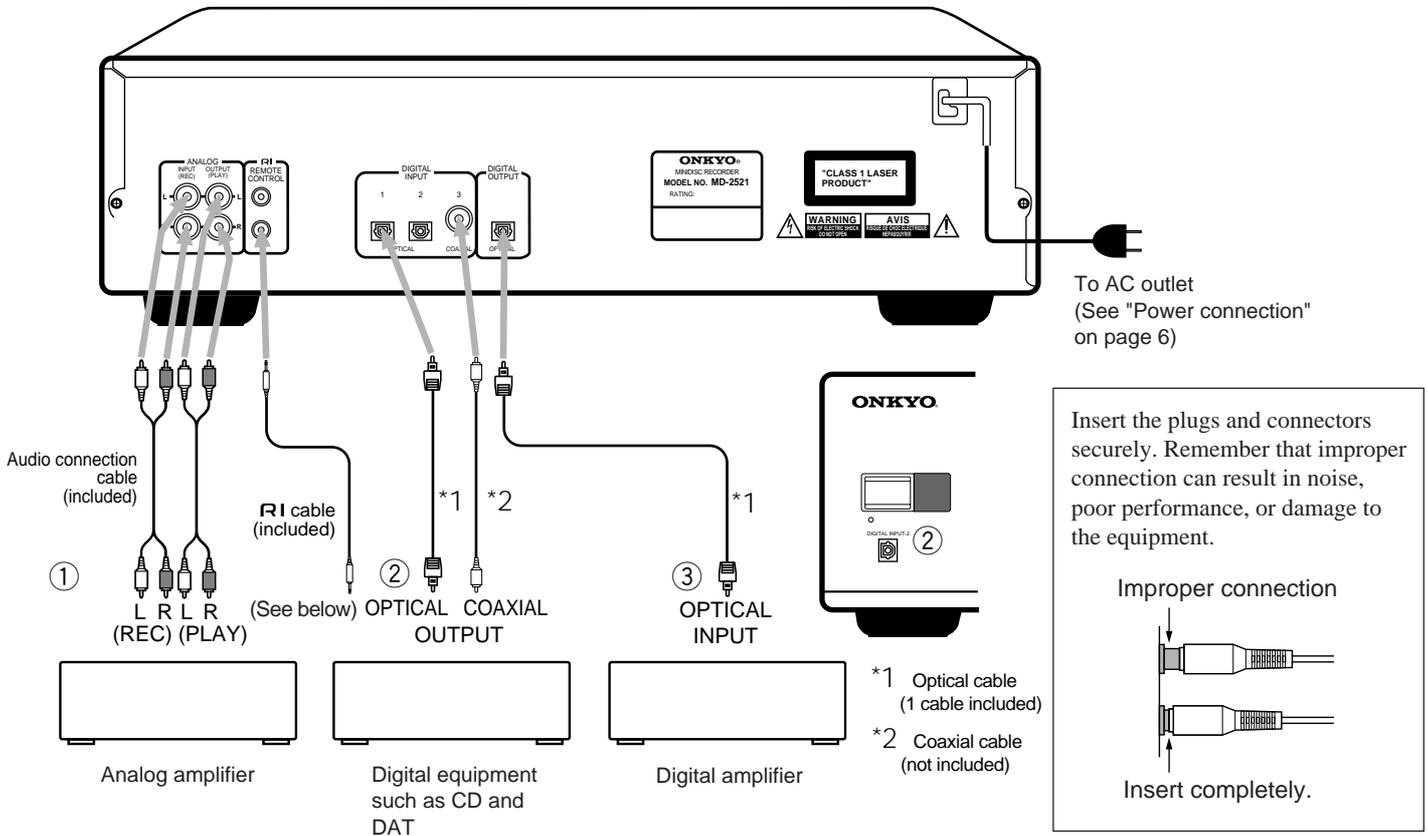
Connection for remote control (RI)

The RI jacks allow you to connect other Onkyo RI-compatible products for system operation. If your MD-2521 is connected to an RI-compatible CD player, for example, you can perform CD-synchro recording (see page 18). Furthermore, if your Onkyo RI-compatible amplifier or receiver is equipped with MD jacks and is connected properly, you can operate the MD recorder using the remote controller supplied with that product.
Note:
- The upper and lower RI REMOTE CONTROL jacks have the same function.
- Do not attempt to connect the RI jack to any equipment other than an ONKYO component that are equipped with an RI jack. Doing so could cause the unit to malfunction.

Connecting other components

① **Connection with the amplifier**
Connect the MD-2521 to the MD (or TAPE) jacks of your amplifier.

② **Connection to digital input terminal (DIGITAL INPUT)**
You can perform digital recording on the MD-2521 if a CD (Compact Disc) player or DAT (Digital Audio Tapedeck) equipped with a digital (OPTICAL/COAXIAL) output terminal is available. Use an optical

fiber cable for connection to the DIGITAL INPUT 1 or 2 terminal. The DIGITAL INPUT 2 terminal is provided on both the front and rear panel. The one on the front panel takes precedence if input is simultaneously made to both terminals. Use a coaxial cable for connection to the DIGITAL INPUT 3 terminal. These terminals can also be used for connecting an amplifier which is equipped with a digital output terminal.
Note:
If you attempt to perform digital recording using a digital input terminal which is not connected, "D.In Unlock" will appear.
Note:
Use the DIGITAL INPUT 1 terminal if you connect an Onkyo RI-compatible CD player (for example, DX-7511 and DX-7211).

③ **Connection to digital output terminal (DIGITAL OUTPUT)**
If your amplifier or receiver has a digital (OPTICAL) input terminal (DIGITAL INPUT), using this terminal provides clearer and more dynamic sound output.
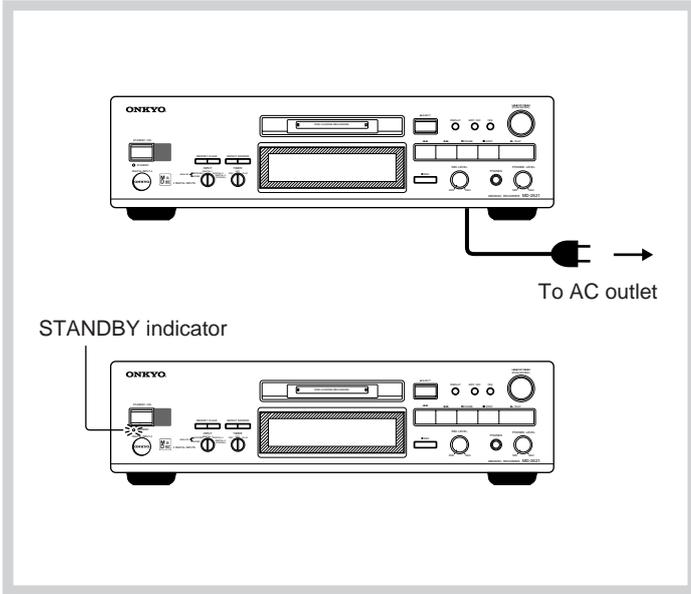
Power connection

Connecting the AC power cord and switching power on
Insert the AC power cord into a wall outlet. The STANDBY 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.

To AC outlet

STANDBY indicator
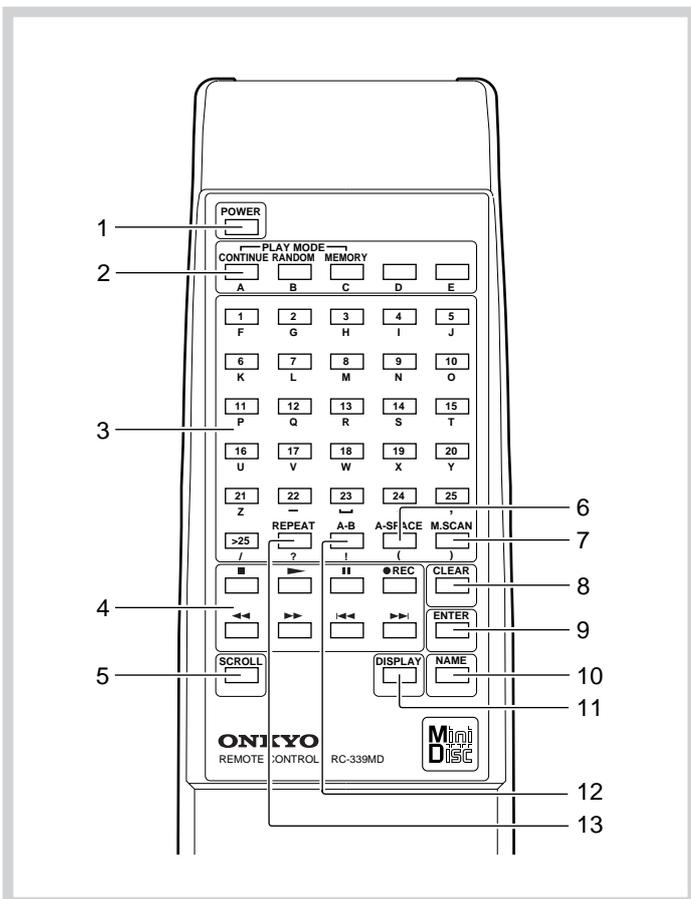
Remote controller

Remote controller

You can use the following buttons to control your MD recorder.
1. **POWER button** [8]
2. **PLAY MODE buttons** [11,13]
3. **Number and character buttons** [10,13,25]
4. **Operation buttons**
   ■   : Stop button [8]
   ▶   : Play button [8]
   ‖   : Pause button [8]
   ● REC   : Rec button [14,16,19]
   ◀◀   : Fast Reverse button [11,26]
   ▶▶   : Fast Forward button [11,26]
   ｜◀◀   : Down button [10,25]
   ▶▶｜   : Up button [10,25]
5. **SCROLL button** [9]
6. **A-SPACE button** [12]
7. **M.SCAN button** [11]
8. **CLEAR button** [13,26]
9. **ENTER button** [25]
10. **NAME button** [25]
11. **DISPLAY button** [9]
12. **A-B repeat button** [12]
13. **REPEAT button** [12]

Precautions for handling the MiniDisc (MD)

Shutte   Cartridge

a   Rear side
b   Record-protect tab
c   Record-protect hole
d   Front side
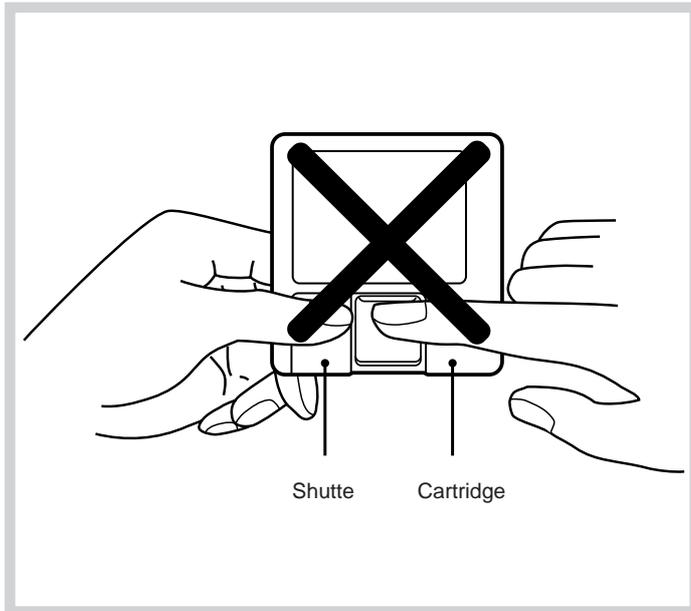
The MD is housed in a cartridge, so you can handle it without worrying about dust and fingerprints. Even so, a dirty or warped cartridge may cause malfunction. Always remember the following precautions so you can enjoy high-quality sound for a long time.

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.

When the unit is not to be used for an extended period
Remove the MD from the unit to avoid dust entering the MD cartridge. When the MD is in the unit, the shutter of the MD cartridge remains open.

Regular care
Wipe off dust and dirt accumulated on the cartridge surface with a dry cloth.
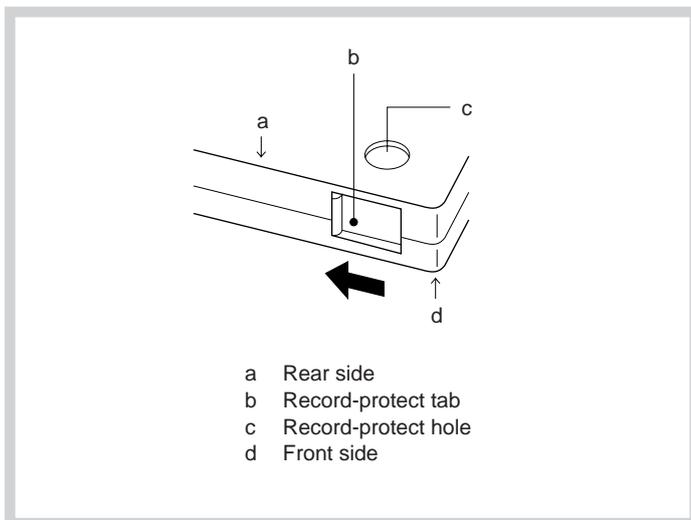
Removing the halfway inserted MD
If the "self-rock function" is activated and the MD cannot be removed, push the MD further into the MD recorder and then press the ▲ EJECT button to remove the MD.

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.

Storage Period of Backup Data
The recorded contents will be backed up inside the MD-2521 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 STANDBY/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 2 weeks. So, especially after a power failure, perform the above procedures as soon as possible after power is restored.

Playing an MD

■ STOP
▐▐ PAUSE

SCROLL

3
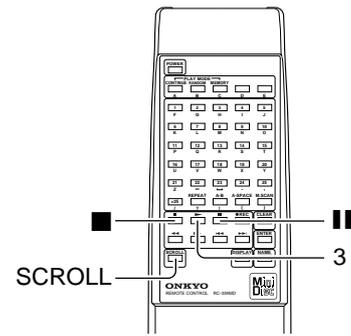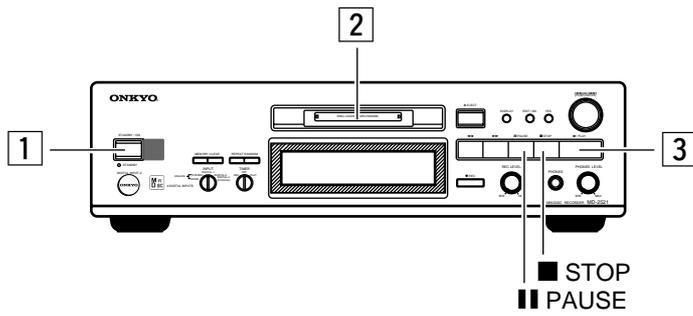
1

STANDBY / ON

Remote controller

POWER

○ STANDBY

No Disc

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | >20 |

L ▐▐
· ∞ -40 -30 -20 -10   -4 -2 0
R ▐▐

DIGITAL IN 1

LEVEL-SYNC

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

24Tr   36m42s

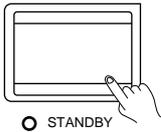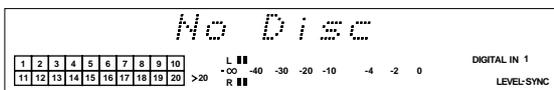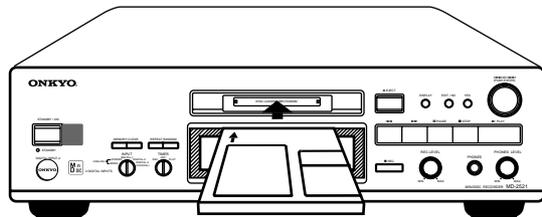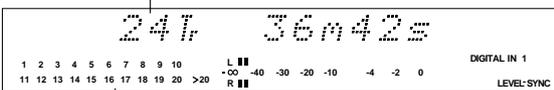| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | >20 |

L ▐▐
· ∞ -40 -30 -20 -10   -4 -2 0
R ▐▐

DIGITAL IN 1

LEVEL-SYNC

Current track number

3

► PLAY

PLAY indicator   Playing track number

► TRACK *1   0m01s*

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | >20 |

L ▐▐
· ∞ -40 -30 -20 -10   -4 -2 0
R ▐▐

DIGITAL IN 1

LEVEL-SYNC

■ STOP

▐▐ PAUSE

►◄ ▐▐
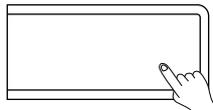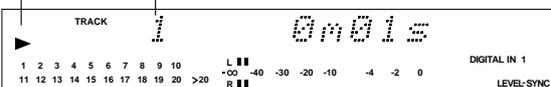
Normal play

1. **Press the STANDBY/ON button (or the POWER button on the remote controller).**
   The STANDBY 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 controller to shift the display. When a premastered disc is inserted, each track number is displayed in a box (for example, 1 , 2).
3. **Press the ► PLAY button (or the ► button on the remote controller).**
   The first track of the disc starts playing.

Note:
If the record-protect tab is open while playing a recordable MD, the display may show "Protected". You can ignore this message because it does not affect the playing of tracks.

Stopping play

Press the ■ STOP button (or the ■ button on the remote controller).

Stopping play temporarily

Press the ▐▐ PAUSE button (or the ▐▐ button on the remote controller).
To resume play, press the ► PLAY button.

Playing an MD

EJECT
DISPLAY

PHONES LEVEL
PHONES

SCROLL — DISPLAY

To take out the the MD

Press the ▲ EJECT button.

▲ EJECT
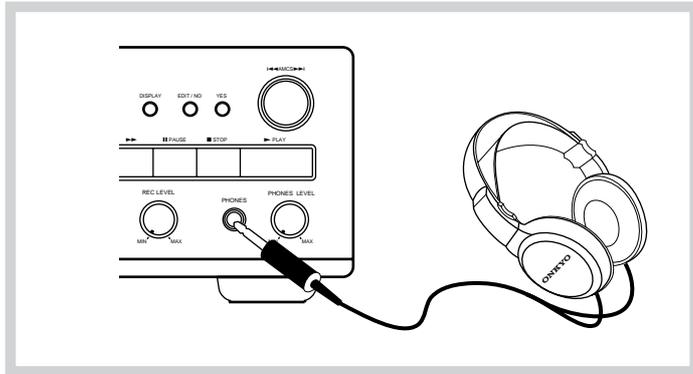
Listening with the headphones

Plug the headphones into the PHONES jack, and then adjust the sound level using the PHONES LEVEL knob.
- Turn the knob clockwise to increase the sound level; turn it counterclockwise to decrease the sound level.
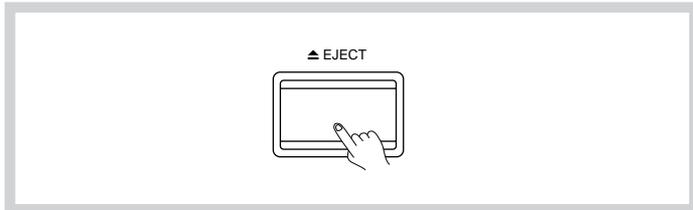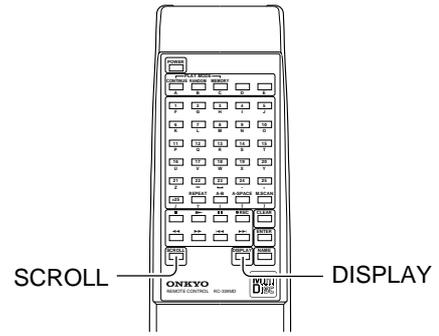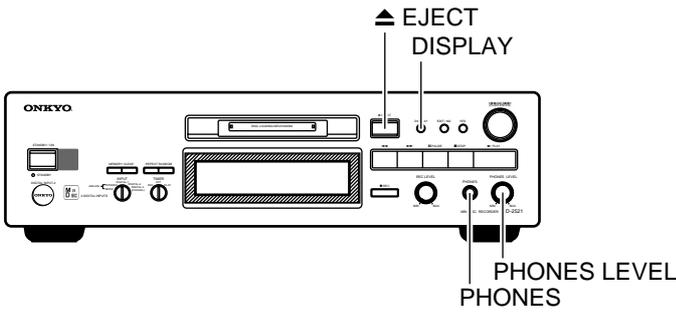
If the DISPLAY button is pressed when the MD recorder is playing...

Remote controller

DISPLAY   DISPLAY
↓
DISPLAY   DISPLAY
↓
DISPLAY   DISPLAY

TRACK   1   0m19s
►
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20 >20
L
R
-∞ -40 -30 -20 -10   -4 -2 0
DIGITAL IN 1
LEVEL-SYNC

TRACK   1   -2m55s
►
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20 >20
L
R
-∞ -40 -30 -20 -10   -4 -2 0
DIGITAL IN 1
LEVEL-SYNC

TITLE   TRACK   ONKYO
►
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
L
R
-∞ -40 -30 -20 -10   -4 -2 0
DIGITAL IN 1
LEVEL-SYNC
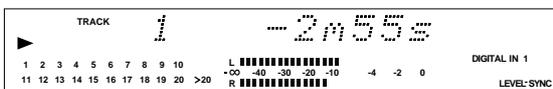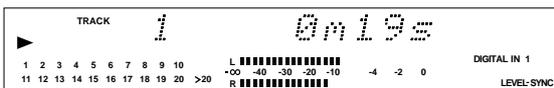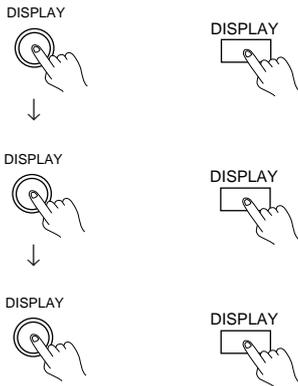
Changing the display mode

When the MD recorder is playing...
Pressing the DISPLAY button changes the display in the following sequence:

Playing track number and elapsed time
↓
Playing track number and remaining playing time
↓
Track name ("No Name" when not set)

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 (Disc name if it is a prerecorded MD software disc)
↓
Disc name ("No Name" when not set)

If the track name is too long to display...
You can scroll the track name by pressing the **SCROLL button** on the remote controller.
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.

Playing an MD

Number buttons

I◄◄,►►I
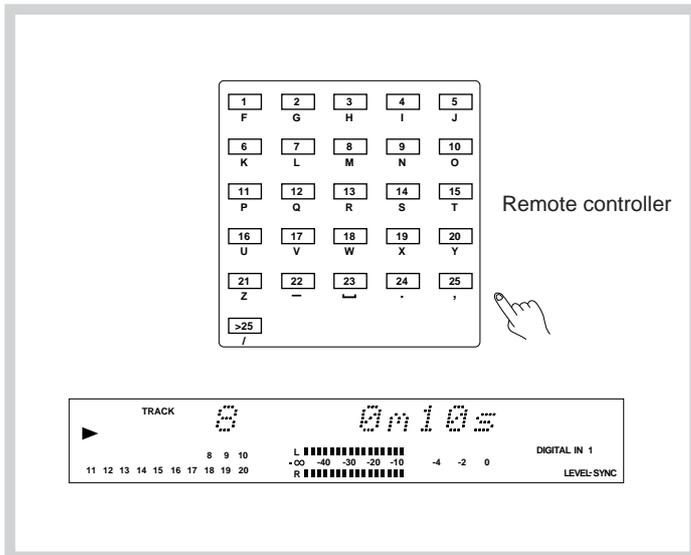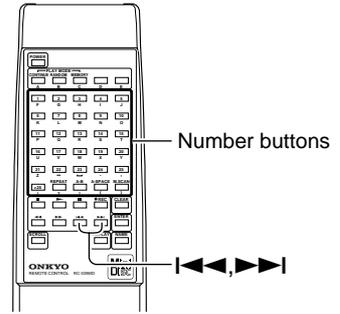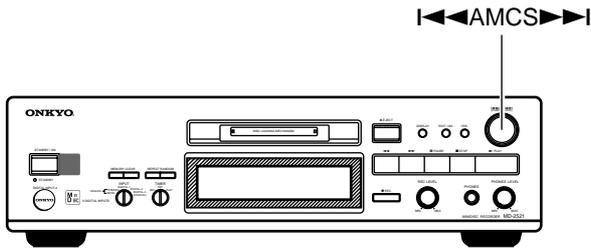
Selecting the track to play using the number buttons

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

Remote controller

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]

When the 21st or later track is playing, the >20 indicator lights.
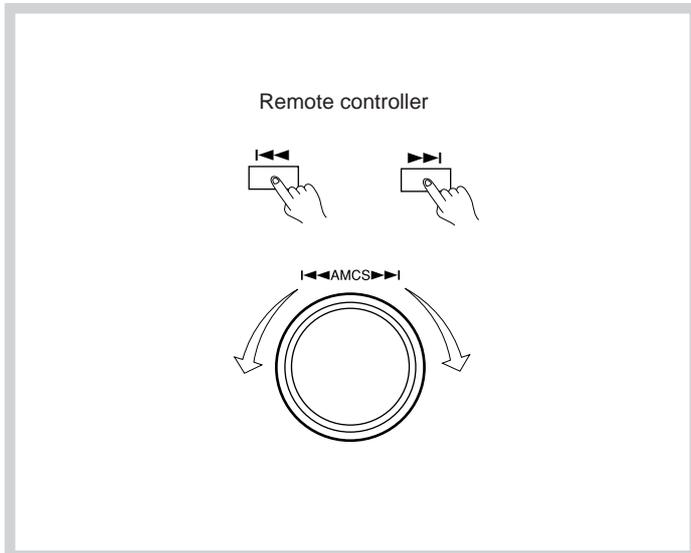
Changing the playing track using the AMCS

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 controller).

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 controller, use the I◄◄ or ►►I button to select the track, then press the ► button.

Remote controller

I◄◄   ►►I

I◄◄AMCS►►I

To play the next track or a later track...
Turn the AMCS knob clockwise (or press the ►►I button on the remote controller 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 controller several times) until the desired track is located.
In the memory play mode (see page 28), turning the AMCS knob (or pressing the I◄◄ or ►►I button) selects the track in the programmed sequence.

Playing an MD

RANDOM

◀◀, ▶▶

RANDOM

M.SCAN

▶

◀◀, ▶▶

Remote controller

M.SCAN

Flashes

M.Scan 8s

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20

L ▮▮▮▮▮▮▮▮▮▮▮▮▮
-∞ -40 -30 -20 -10   -4 -2 0
R ▮▮▮▮▮▮▮▮▮▮▮▮

DIGITAL IN 1

LEVEL·SYNC
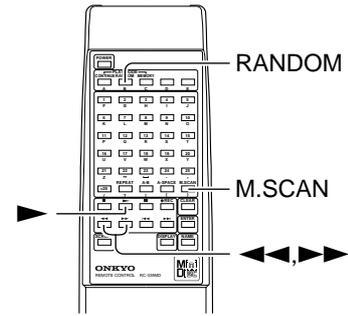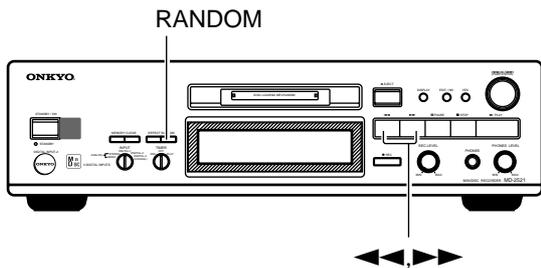
Music Scan (Remote controller only)

The following operation is possible using the remote controller 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 controller when the beginning of a track is playing to start normal play from that track.

Remote controller

◀◀   ▶▶

◀◀   ▶▶
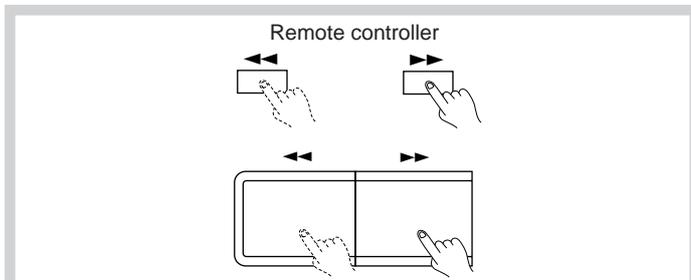
Searching for a part to play (Search play)

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.

Remote controller

◀◀   ▶▶

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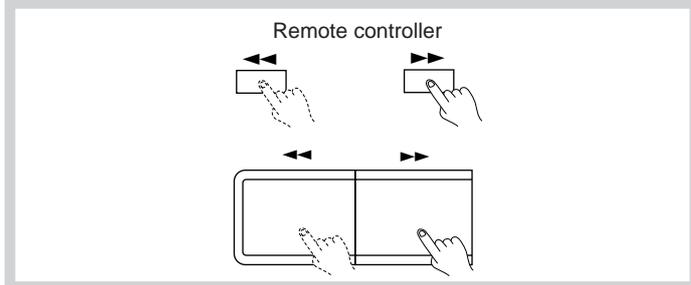
Searching for a part to play by using displayed time (at pause, high-speed search)
When playing is temporarily stopped (paused), keep pressing the ◀◀ or ▶▶ button and release it when the playing time of the part you want to hear is displayed. Press the ▶ PLAY button (or the ▶ button on the remote controller)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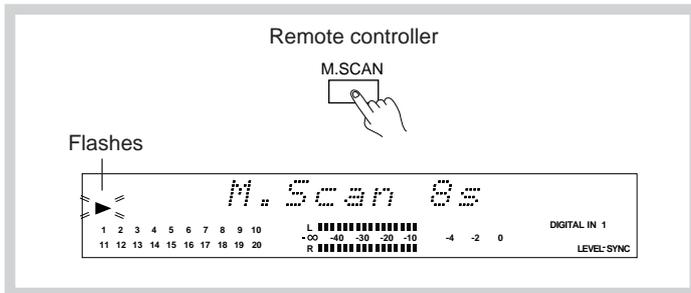**Note:**
• "Over" in the display indicates that the end of the last track is reached.

1

Remote controller

RANDOM   RANDOM

╲╲ ╱╱
RANDOM
╱╱ ╲╲
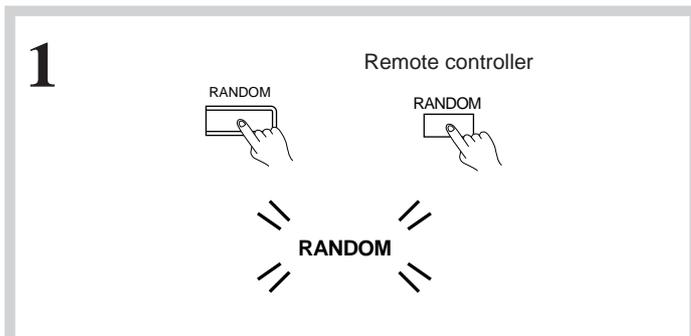
Playing tracks in a random order (Random play)

1. When the MD recorder is stopped, **press the RANDOM button.**
2. **Press the ▶ PLAY button (or the ▶ button on the remote controller).**

To exit the random mode
When the MD recorder is stopped, press the RANDOM button. (Or, press the CONTINUE button on the remote controller.)

2

▶ PLAY   Remote controller

▶

TRACK *12*   *0m00s*   RANDOM

▶

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20

L ▮▮
-∞ -40 -30 -20 -10   -4 -2 0
R ▮▮

DIGITAL IN 1

LEVEL·SYNC

Playing an MD

REPEAT

A-B

REPEAT

Remote controller

REPEAT   REPEAT

REPEAT

Remote controller

REPEAT   REPEAT
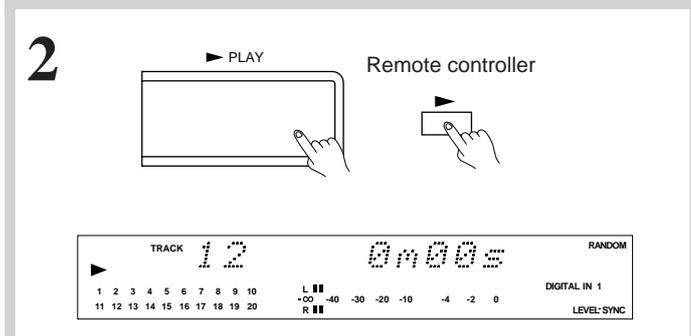
REPEAT   REPEAT
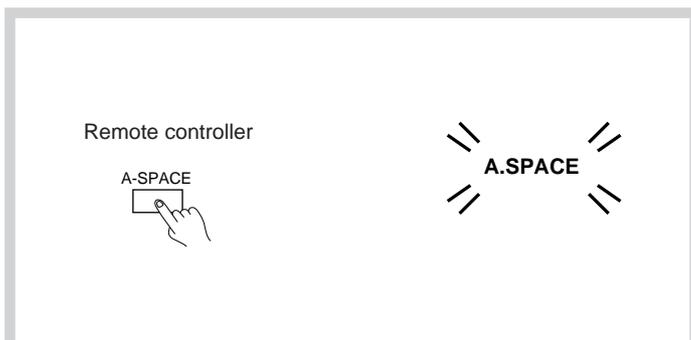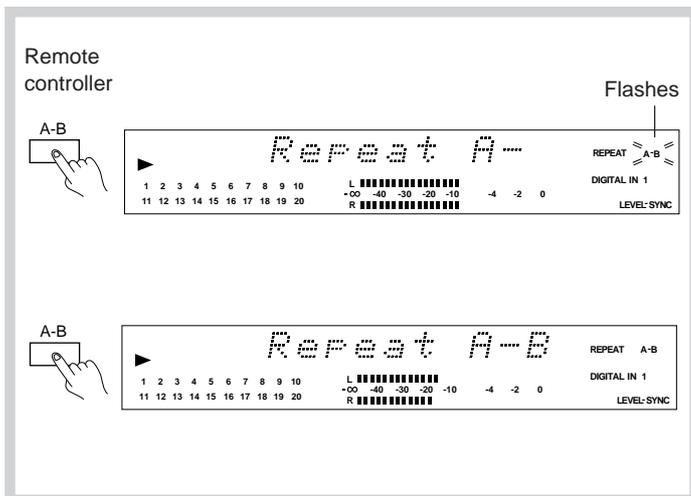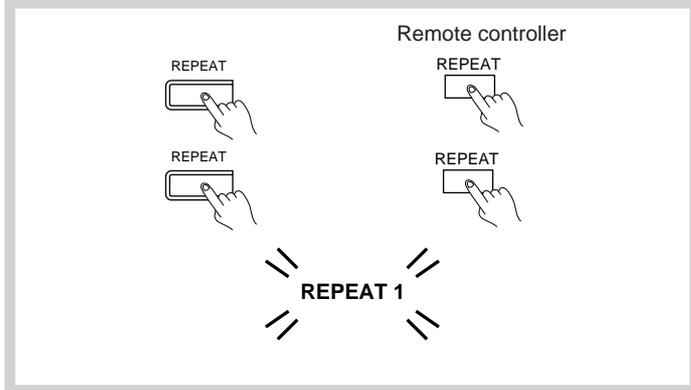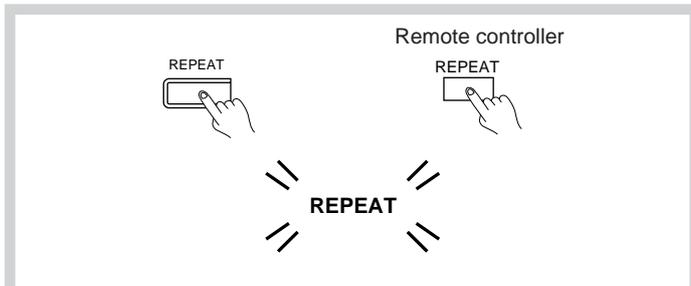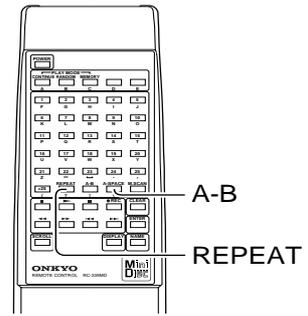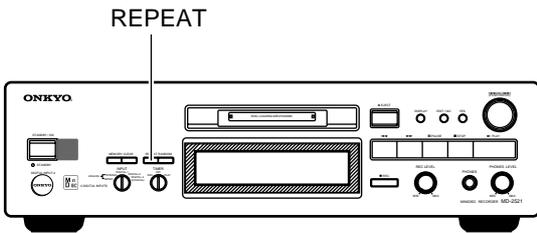
REPEAT 1

Playing track(s) or desired section repeatedly

To repeat the playing of all tracks of the disc, press the REPEAT button on the remote controller 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 controller 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.

Remote controller   Flashes

A-B

Repeat A—   REPEAT   A-B

► 1 2 3 4 5 6 7 8 9 10   L   DIGITAL IN 1
11 12 13 14 15 16 17 18 19 20   -∞ -40 -30 -20 -10   -4 -2 0   LEVEL·SYNC
R

A-B

Repeat A—B   REPEAT   A-B

► 1 2 3 4 5 6 7 8 9 10   L   DIGITAL IN 1
11 12 13 14 15 16 17 18 19 20   -∞ -40 -30 -20 -10   -4 -2 0   LEVEL·SYNC
R

To repeat a desired section of a track... (Remote controller only)
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 controller (Point A).**
2. **While the track is still playing, specify the end of the section by pressing the A-B button on the remote controller (Point B) a second time.**
   Section A to B of the track will be repeated.

To stop the repeating of the section...
Press the REPEAT button and the "REPEAT A-B" indicator disappears. Otherwise, press the STOP button or the A-B button.

Note:
You must specify the Points A and B (representing the section to be repeated) within the same track.

Using the Auto Space function (Remote controller only)

This feature is useful when you record onto a cassette tape.

Press the A-SPACE button on the remote controller.
The A.SPACE indicator will appear in the display. If you now start recording to the tape, a silent section of about 3 seconds will be inserted between the recorded tracks.

Remote controller   **A.SPACE**

A-SPACE

To cancel the Auto Space mode...
Press the A-SPACE button again.
The A.SPACE indicator will go out and the mode will be canceled.

Using the program function (Memory play)

- You can program up to 25 tracks.
- If the total playing time of the programmed tracks exceeds 1000 minutes, "---m--s" will be displayed.
- Tracks with an extremely short playing time may not be programmed. If you attempt to do so, "Too Short" will be displayed.

CLEAR

■STOP

CLEAR

1

Remote controller

MEMORY   MEMORY   **MEMORY**

2

I◄◄AMCS►►I

Remote controller

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 /				

I◄◄AMCS►►I
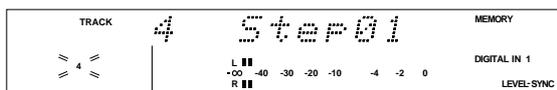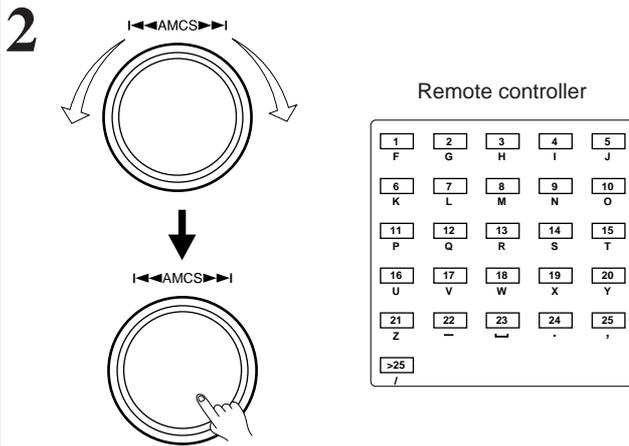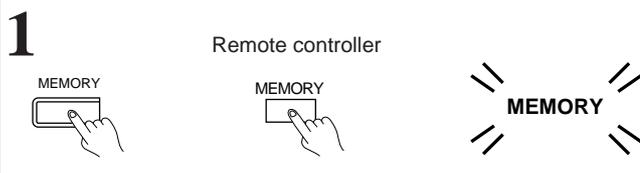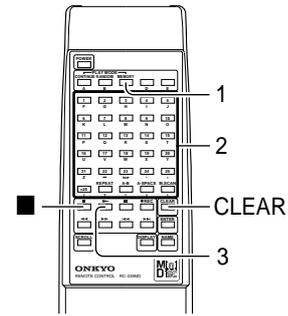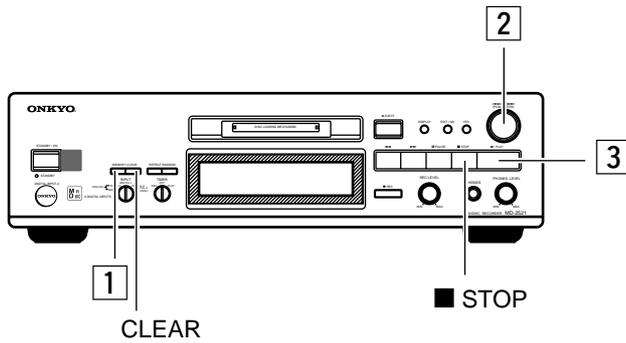
Programmed track number
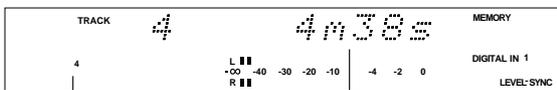
Programmed track   Playing time of programmed track

3

► PLAY   Remote controller

►

PLAY indicator   Playing track number
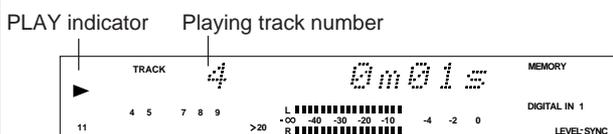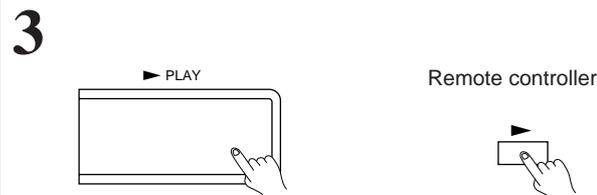
1. When the MD recorder is stopped, **press the MEMORY button.**
2. **Using the AMCS knob, select the tracks in the order you want to play.**
   Turn the AMCS knob until the track number you want to program is displayed (the playing time of the track is displayed). Then, **press the AMCS knob** to program 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 ► PLAY button (or the ► button on the remote controller) to start memory play.**
   When the playing of all programmed tracks is over, the MD recorder stops while retaining the programmed tracks in memory.

Exiting the Memory play mode:
When the MD recorder is stopped, **press the MEMORY button** and "MEMORY" disappears from the display. (Or, press the CONTINUE button on the remote controller.)

Clearing the last track stored:
Press the STOP button, or the CLEAR button, when the Memory play is stopped. The last track in memory is cleared.

To add tracks to the program:
First stop playing the program and then follow the procedure described in step 2.

Recording to an MD

• 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 7.)

1

STANDBY / ON

○ STANDBY

2

Number of tracks on MD   Total recorded time

```
17Tr   31m46s
```
1 2 3 4 5 6 7 8 9 10   L   DIGITAL IN 1
11 12 13 14 15 16 17   -∞ -40 -30 -20 -10 -4 -2 0
                        R   LEVEL-SYNC

3

INPUT

DIGITAL-1
ANALOG ─ STEREO   DIGITAL-2
          MONO   DIGITAL-3
                         (COAXIAL)

```
A.In Stereo
```
1 2 3 4 5 6 7 8 9 10   L   ANALOG IN
11 12 13 14 15 16 17   -∞ -40 -30 -20 -10 -4 -2 0
                        R   LEVEL-SYNC

4

|◀◀AMCS▶▶|

Flashes

```
TRACK  10
```
                                ANALOG IN
1 2 3 4 5 6 7 8 9 10   L
11 12 13 14 15 16 17   -∞ -40 -30 -20 -10 -4 -2 0
                        R   LEVEL-SYNC

5

● REC

```
TRACK 10      0m00s
```
II●   ANALOG IN
1 2 3 4 5 6 7 8 9 10   L
11 12 13 14 15 16 17   -∞ -40 -30 -20 -10 -4 -2 0
                        R   LEVEL-SYNC

6

REC LEVEL

MIN   MAX

```
TRACK 10      0m00s
```
II●   ANALOG IN
1 2 3 4 5 6 7 8 9 10   L ■■■■■■■■■■■■■■■■■■
11 12 13 14 15 16 17   -∞ -40 -30 -20 -10 -4 -2 0
                        R ■■■■■■■■■■■■■■■■■   LEVEL-SYNC

-4 ' -2

Recording from an analog source

1. **Press the STANDBY/ON button.**
   The STANDBY 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:
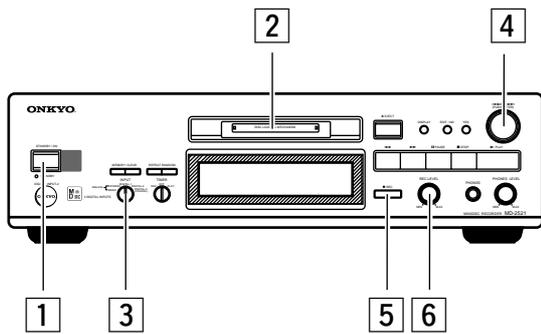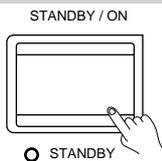   The number of tracks on MD and the total recorded time →
   Remaining recording time on MD → Disc name ("No Name" when not set)
3. **Select the "ANALOG (STEREO or MONO)" mode using the INPUT selector switch.**
   The analog input source is now selected.
   Note:
   Make sure that the Input and Rec selectors on the amplifier are set to the "Recording Source" position.
   The MD's recording time will be doubled if you select "ANALOG MONO" instead of "ANALOG STEREO".
   Note:
   Even if "ANALOG MONO" is selected, the input source should be connected so that signals are fed to both the L and R jacks of the ANALOG INPUT connector.
4. **Select the position (track number) of the MD where you wish to start recording.**
   • If a new MD is used for recording, or if you wish to record over existing track(s) of an MD, ignore this step and proceed to step 5.
   • **To record while erasing existing tracks on a prerecorded MD...**
   Turn the AMCS knob to select the track number from which you wish to start recording. (The selected track number will flash.) The recording will be performed while erasing that track and, if any, the subsequent tracks, as the recording time requires.
   • **To record by erasing all of the existing tracks on a prerecorded MD...**
   Start recording with Track 1 selected using the AMCS knob or after erasing the whole contents of the MD (see "To erase all tracks of an MD" on page 21).
5. **Start playing the recording source and then press the ● REC button on the MD-2521.**
   The MD recorder is now in the recording standby mode.
   If you have selected a track over which you start recording, the "TRACK" indicator and the track numbers of that track and later track(s) in the track number display will flash.
6. **Using the REC LEVEL knob, adjust the recording level.**
   Adjust the position of the REC LEVEL knob so that the indicator occasionally enters the -4 to -2 range.
   When adjustment of the recording level is complete, stop playing the source.
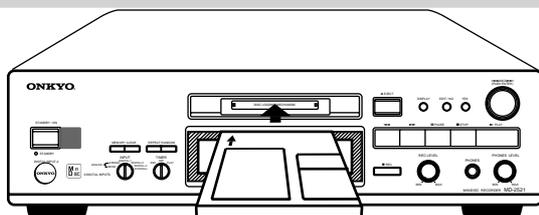
Recording to an MD

7

1

EDIT / NO

`Level Sync?`
ANALOG IN

2

YES

`On→Off?`

or

EDIT / NO

`Off→On?`

YES

`LevelSyncOn`
ANALOG IN

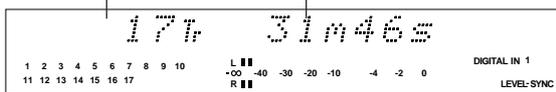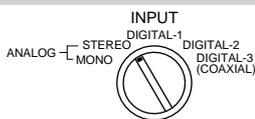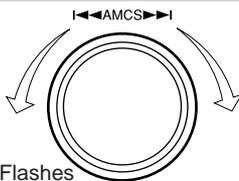**LEVEL-SYNC**

LEVEL-SYNC indicator

8

► PLAY

REC indicator

`TRACK 10    0m01s`
ANALOG IN
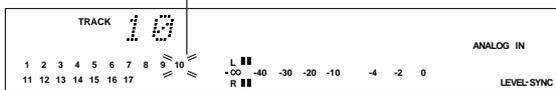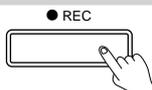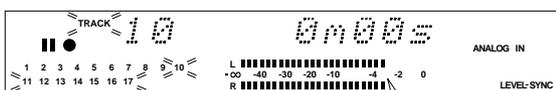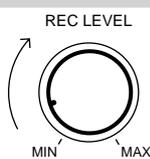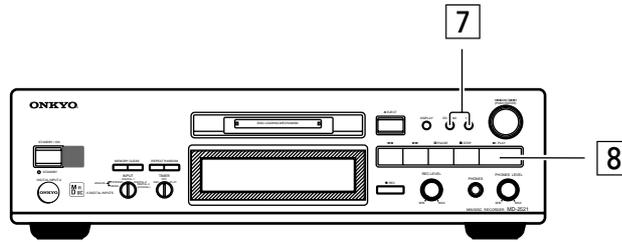
LEVEL-SYNC

7. **Set the "Level Sync" mode for automatic recording of the track numbers.**

   LevelSync is the function which marks track numbers when the source input level starts raising from a minimum point. If the LevelSync function is on, the track numbers will automatically be marked while recording onto the MD.

   When the LEVEL-SYNC indicator is lit, the LevelSync function is on. If you set LevelSync to Off, the indicator will be turned off.

   To change the LevelSync setting, execute the following steps while the MD is recording or in recording pause.

   First press the EDIT/NO button ("Level Sync?" appears) and then the YES button ("Off→ On?" or "On→ Off?" is shown depending on the current setting). To change the current setting, press the YES button; Otherwise, press the EDIT/NO button.

Note:

*   The MD recorder determines the end and beginning of tracks by the strength of the input signals. Therefore, for some recording sources which include silent passages, track numbers will not be marked correctly.

    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 an interval may lead to a failure in marking track numbers.

8. **Press the ► PLAY button to start recording and then start playing the recording source immediately.**

   The MD recorder stops automatically when recording of the disc is completed up to the final track.

To stop recording temporarily...

Press the ❙❙ PAUSE button. To resume recording, press the ► PLAY button again.

To stop recording and check the contents of recording...

Press the ■ STOP button. When recording has been stopped, the first of the newly recorded track numbers is shown in flashing display, allowing you to playback the newly recorded contents from the beginning by pressing the ► PLAY button.

To playback from the beginning of the MD, immediately after recording is stopped, press the ■ STOP button again. Then, press the ► PLAY button to start playback.

To eject the MD...

Press the ■ STOP button and then the ▲ EJECT button.

Note:

If TOC is flashing when you press the ▲ EJECT button or the STANDBY/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 plugged into the SWITCHED power outlet on the rear panel of the amplifier etc., do not power off the amplifier until the TOC indicator disappears.

Recording to an MD

6 4

7

1 3 5
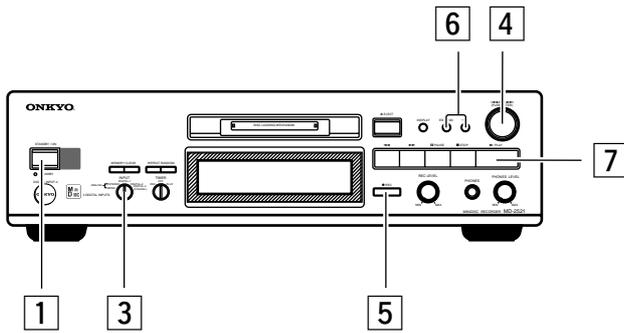
- This MD recorder contains a digital input signal sampling rate converter.
  This converter can handle the following sampling frequencies:
  - 44.1 kHz (CD player, etc.)
  - 32 kHz (DAT, satellite broadcasting, etc.)
  - 48 kHz (DAT, satellite broadcasting, etc.)

1
STANDBY / ON

○ STANDBY

2

Number of tracks on MD   Total recorded time

```
17Tr   31m46s
```

1 2 3 4 5 6 7 8 9 10   L   -∞ -40 -30 -20 -10 -4 -2 0   DIGITAL IN 1
11 12 13 14 15 16 17   R   LEVEL-SYNC

3
INPUT

DIGITAL-1

STEREO   DIGITAL-2
ANALOG—   DIGITAL-3
       MONO   (COAXIAL)

```
Digital In1
```

1 2 3 4 5 6 7 8 9 10   L   -∞ -40 -30 -20 -10 -4 -2 0   DIGITAL IN 1
11 12 13 14 15 16 17   R   LEVEL-SYNC

4
I◀◀AMCS▶▶I

TRACK 10

1 2 3 4 5 6 7 8 9 10   L   -∞ -40 -30 -20 -10 -4 -2 0   DIGITAL IN 1
11 12 13 14 15 16 17   R   LEVEL-SYNC

Flashing

5
● REC

TRACK 10   0m00s

1 2 3 4 5 6 7 8 9 10   L   -∞ -40 -30 -20 -10 -4 -2 0   DIGITAL IN 1
11 12 13 14 15 16 17   R   44.1kHz
                                                             LEVEL-SYNC

Lights

Recording from a digital source

1. **Press the STANDBY/ON button.**
   The STANDBY 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)
3. **Select the "DIGITAL-1", "DIGITAL-2" or "DIGITAL-3 (COAXIAL)" mode using the INPUT selector switch.**
   The digital input source is now selected.
   DIGITAL-1: Select if you have connected the recording source equipment to DIGITAL IN 1.
   DIGITAL-2: Select if you have connected the recording source equipment to DIGITAL IN 2.
   The DIGITAL INPUT 2 terminal is provided on both the front and rear panel. The one on the front panel takes precedence if input is simultaneously made to both terminals.
   DIGITAL-3: Select if you have connected the recording source equipment to DIGITAL IN 3.
   Note:
   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 terminal if you connect the unit to an Onkyo CD player with DIGITAL OPTICAL output terminal (for example, DX-7511).
4. **Select the position (track number) of the MD where you wish to start recording.**
   - If a new MD is used for recording, or if you wish to record over the existing track(s) of an MD, ignore this step and proceed to step 5.
   - **To record while erasing existing tracks on a prerecorded MD...**
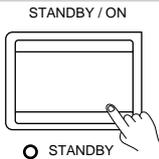   Turn the AMCS knob to select the track number from which you wish to start recording. (The selected track number will flash.) The recording will be performed while erasing that track and, if any, the subsequent tracks, as the recording time requires.
   - **To record by erasing all of the existing tracks on a prerecorded MD...**
     Start recording with Track 1 selected using the AMCS knob or after erasing the whole contents of the MD (see "To erase all tracks of an MD" on page 21).
5. **Press the ● REC button.**
   The MD recorder is now in the recording standby mode.
   The sampling frequency (32 kHz, 44.1 kHz, or 48 kHz) of the digital input source is indicated in the display.
   Note:
   If the display shows "D.In Unlock", the digital input source has not been connected correctly. Check the connection of the digital input source.
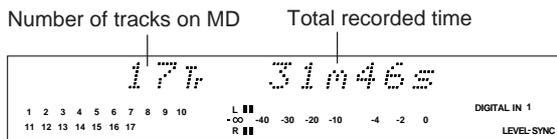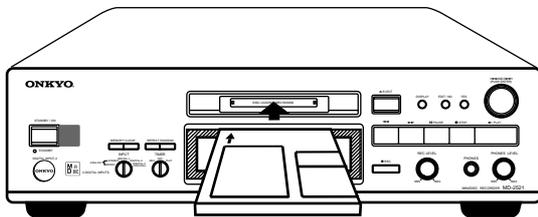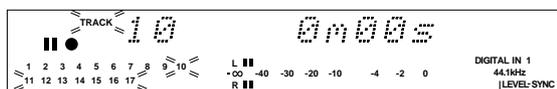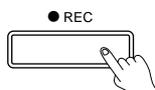
Recording to an MD

6

1 EDIT / NO

    Level Sync?

2 YES

    On→Off?

    EDIT / NO   or

    Off→On?

    YES

    LevelSyncOn

LEVEL-SYNC indicator

7

► PLAY

REC indicator

    TRACK 1 0   0m01s

If overwrite-recording is started at the beginning of a track

| 1 | 2 | 3 | 4 | 5 | 6 |

| 1 | 2 | 3 | 4 | 5 |

Recording was started here.   Recording was stopped here.
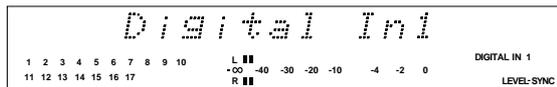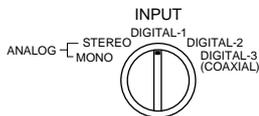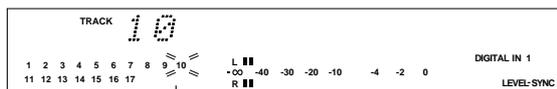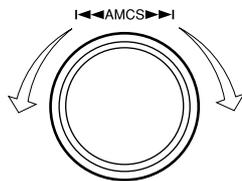
Newly recorded track

If overwrite-recording is started in the middle of a track

| 1 | 2 | 3 | 4 | 5 | 6 |

| 1 | 2 | 3 | 4 | 5 | 6 |

Recording was started here.   Recording was stopped here.

Newly recorded track

---

6. Set the "Level Sync" mode for automatic recording of the track numbers.
- If the Rec source is "CD" or "MD", track numbers are recorded automatically. So simply go ahead to the next step.
  LevelSync is the function which marks track numbers when the source input level starts raising from a minimum point. If the LevelSync function is on, the track numbers will automatically be marked while recording onto the MD.
  When the LEVEL-SYNC indicator is lit, the LevelSync function is on. If you set LevelSync to Off, the indicator will be turned off.
  To change the LevelSync setting, execute the following steps while the MD is recording or in recording pause.
  First press the EDIT/NO button ("Level Sync?" appears) and then the YES button ("Off→On?" or "On→Off?" is shown depending on the current setting). To change the current setting, press the YES button; Otherwise, press the EDIT/NO button.
  To manually record a track number...
  During recording, press the ● REC button when you wish to mark the track number.
  Note:
  In order for the MD recorder to record the track numbers automatically, the digital input signals must include the information of the beginning and ending points of the recorded tracks. If your input source cannot output this information, however, the track numbers will not be recorded automatically. In this case, use the Level Sync function.

7. Start recording.
  Press the ► PLAY button and then start playing the recording source immediately.
  The MD recorder stops automatically when recording of the disc is completed up to the final track.

To stop recording temporarily...
Press the ❙❙ PAUSE button. To resume recording, press the ► PLAY button again.

To stop recording and check the contents of recording...
Press the ■ STOP button. When recording has been stopped, the first of the newly recorded track numbers is shown in flashing display, allowing you to playback the newly recorded contents from the beginning by pressing the ► PLAY button.

To playback from the beginning of the MD, immediately after recording is stopped, press the ■ STOP button again. Then, press the ► PLAY button to start playback.

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

Note:
If TOC is flashing when you press the ▲ EJECT button or the STANDBY/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 plugged into the SWITCHED power outlet on the rear panel of the amplifier etc., do not power off the amplifier until the TOC indicator disappears.

Overwrite-recording

If you start recording while erasing tracks following the specified track (which is called "overwrite-recording") and stop before the previously recorded track has been completely erased, the unerased part of the track following the point which the recording has been stopped will be recorded as an independent new track.
During overwrite-recording, the "TRACK" indicator flashes.

17

Recording to an MD

```
   \       /
    \     /
 Auto  Cut
    /     \
   /       \
```

```
   \       /
    \     /
 Smart  Space
    /     \
   /       \
```

Useful functions available during digital recording

If "Auto Cut" appears during digital recording...
This message appears if more than 30 seconds of silence on the source is encountered during digital recording. If this occurs, the MD recorder will stop recording and enter the recording standby mode, while leaving an apploximately 5 second silence on the MD.
To resume recording, press the ▶ PLAY button.

If "Smart Space" appears during digital recording.
This message appears if more than 3 seconds and less than 30 seconds of silence is encountered during digital recording.
If this occurs, the MD recorder will insert an apploximately 5 second silence and wait for the sound to follow after the silence to continue the recording.

1

● REC

```
TRACK  10        0m00s
II ●
1 2 3 4 5 6 7 8 9 10   L II                              DIGITAL IN  1
                     - ∞ -40  -30  -20  -10    -4   -2   0   44.1kHz
                       R II                                LEVEL-SYNC
```

2

CD player
(DX-7511, DX-7211 etc.)

▶ PLAY

(MD-2521)

```
▶  ● TOC  Synchro  Rec
1 2 3 4 5 6 7 8 9 10   L II                              DIGITAL IN  1
                     - ∞ -40  -30  -20  -10    -4   -2   0   44.1kHz
                       R II                                LEVEL-SYNC
```

CD-synchro recording

If your MD-2521 is connected to an Onkyo **RI**-compatible CD player (for example, DX-7511 and DX-7211), you can start recording by simply pressing the PLAY button on 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 "Recording to an MD" on page 14-17.
    You can perform CD-synchro recording only when the MD-2521's DIGITAL IN 1 terminal is connected to the digital output terminal of the CD player via an optical cable.
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 STOP button on the CD player. The MD recorder then enters the recording standby mode.

Recording to an MD

1
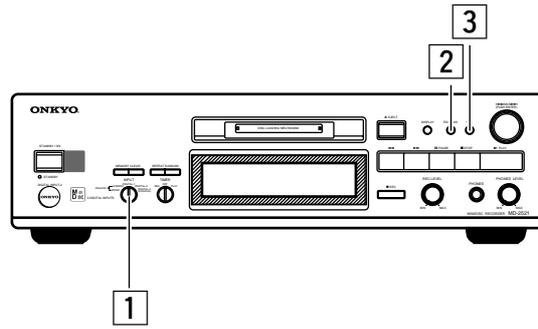
INPUT
ANALOG — STEREO / MONO
DIGITAL-1
DIGITAL-2
DIGITAL-3 (COAXIAL)

Digital In1

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17

L
-∞ -40 -30 -20 -10 -4 -2 0
R

DIGITAL IN 1
LEVEL-SYNC

2

EDIT / NO

Signal Rec?

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17

L
-∞ -40 -30 -20 -10 -4 -2 0
R

DIGITAL IN 1
LEVEL-SYNC

3

YES

Complete

↓

Signal Wait ⟷ *0m00s*

Signal Synchro recording

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

1. **When stopped, press the INPUT button until "Digital In1", "Digital In2", "Digital In3", "A.In Stereo", "A.In Mono" 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. Recording start as soon as the unit receivessignals from the recording source while "Signal Wait" is displayed.

Timer operation

1

2

TIMER
REC OFF PLAY

or

TIMER
REC OFF PLAY

3

MD-2521

Timer

Using the Audio Timer

You can use a commercially available audio timer for recording and playing.

1. **Load an MD.**
   • When recording onto an MD which already contains program material, the new contents will be recorded on the MD following the existing tracks.

2. **Set the timer switch of the MD-2521 to "REC" or "PLAY".**
   • Set the audio timer approximately 1 minute earlier than actually you want to start recording. The MD recorder may require time to write to and to read out the TOC after it is activated by the timer.
   • For how to set your audio timer, see the instruction manual that came with it.

3. **Plug in the AC power cord of the MD-2521 to the audio timer.**
   • If the MD becomes full during recording, the recording will stop immediately with the MD recorder entered in the STANDBY mode.
   • After using the audio timer for recording, be sure to energize the MD recorder (by plugging in its AC power cord to a wall outlet or the UNSWITCHED outlet of another system component) within 2 weeks. If the MD recorder is not energized during that period, the recorded materials may be lost.

Editing the contents of an MD

You can edit the contents of an MD during normal play or when the MD recorder is stopped.
You cannot edit the contents on premastered discs.

1
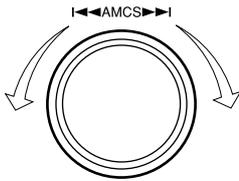
Track number
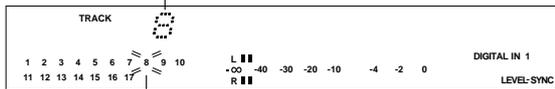
Flashes

2

EDIT / NO
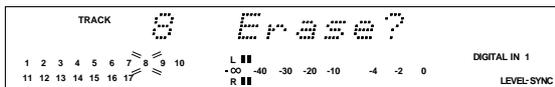
3

YES

Lights when completed
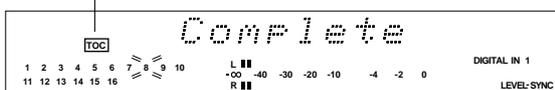
Erasing a track

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 ■ STOP 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:
   - When "Protected" is shown on the display, it indicates that the MD's record protect hole is open. Before editing the MD, close the record protect hole.
   - If the TOC indicator is lit or flashing, do not rock the unit or unplug the power cord.

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

21

Editing the contents of an MD
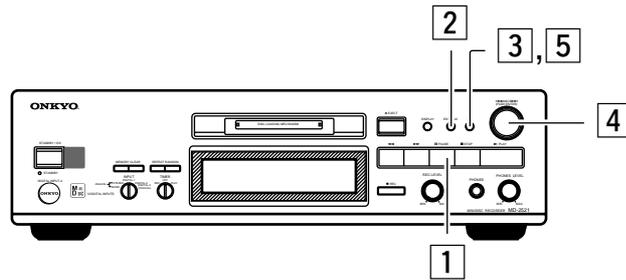
Dividing a track

1. **Press the ❚❚ PAUSE button when the point at which you wish to divide is playing.**

2. **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 ■ STOP button.

3. **Press the YES button.**
 The part after the point specified by pressing the ❚❚ PAUSE button in 1 will play repeatedly, with "Rehearsal" and "Position OK?" alternately shown on the display.

4. **Turn the AMCS knob while listening to the part being played.**
 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 -128 to +127. (Increasing or decreasing the dividing point by 1 corresponds with approximately 0.06 second.)

5. **Press the YES button 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.

Note:
 • When "Protected" is shown on the display, it indicates that the MD's record protect hole is open. Before editing the MD, close the record protect hole.
 • If the ⊺ᴏᴄ indicator is lit or flashing, do not rock the unit or unplug the power cord.

Editing the contents of an MD

Note, however, that you cannot combine an ana...
type of track (e.g., recorded via analog stereo, ...

1

I◀◀AMCS▶▶I

2

EDIT / NO

TRACK 8 Combine?

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17

L ·∞ -40 -30 -20 -10 -4 -2 0
R

DIGITAL IN 1

LEVEL·SYNC

3

YES

Rehearsal ◀▶ Track Ok?

4

YES

Lights when completed

► TOC Complete

7 8 9 10
11 12 13 14 15 16

L ·∞ -40 -30 -20 -10 -4 -2 0
R

DIGITAL IN 1

LEVEL·SYNC
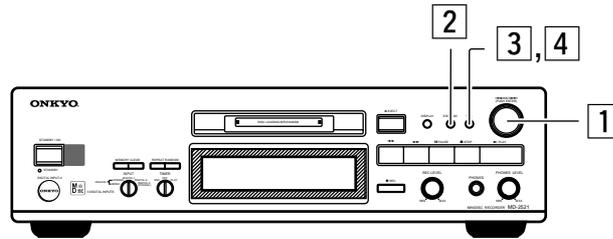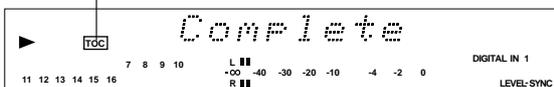
Combining tracks

You can combine two adjacent tracks into one.
Note, however, that you cannot combine an analog monaural track with
another type of track (e.g., recorded via analog stereo, Digital 1, Digital
2).

1. **Turn the AMCS knob until the latter of the track numbers you
   wish to combine 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 be lost.
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 ■ STOP button.
3. **Press the YES button.**
   Check the part of the two tracks to be combined.
   The part of the two tracks combined will play repeatedly, with
   "Rehearsal" and "Track Ok?" alternately shown on the display.
4. **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
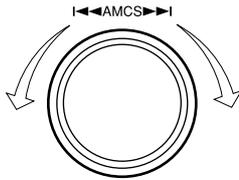   will now be renumbered as track 4, and so on.

Note:
   • When "Protected" is shown on the display, it indicates that the
   MD's record protect hole is open. Before editing the MD, close the
   record protect hole.
   • If the TOC indicator is lit or flashing, do not rock the unit or
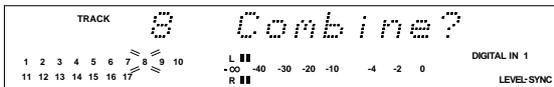   unplug the power cord.
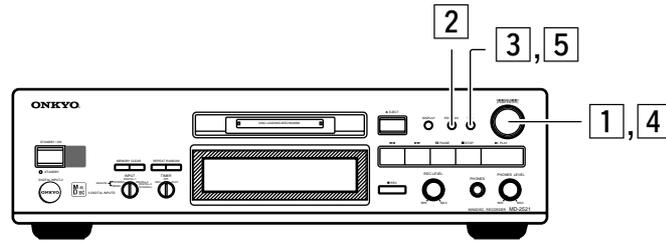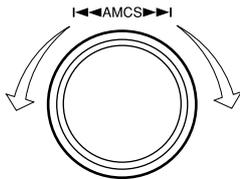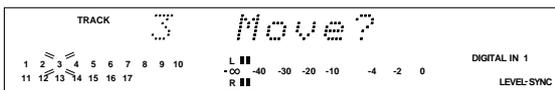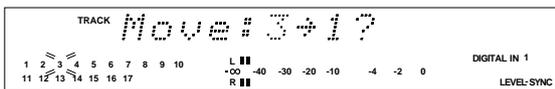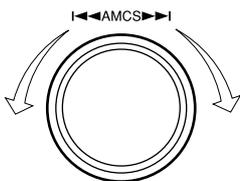
Editing the contents of an MD
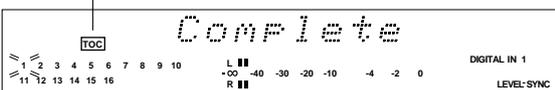
Moving a track

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 ■ STOP 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 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.
   • If a track is moved during play, the moved track will be played.

Note:
   • When "Protected" is shown on the display, it indicates that the MD's record protect hole is open. Before editing the MD, close the record protect hole.
   • If the TOC indicator is lit or flashing, do not rock the unit or unplug the power cord.

Naming a track or disc
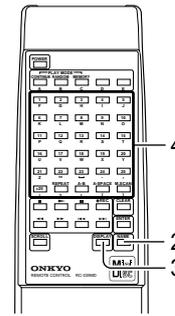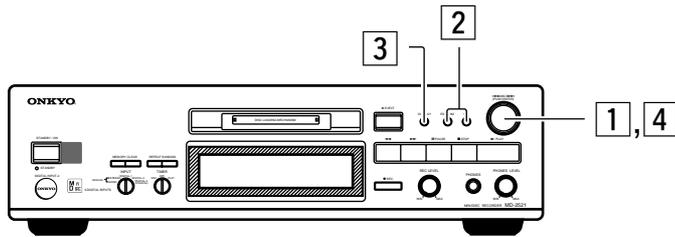
To name a disc
To name a track
I◄◄AMCS►►I

1

2 Remote controller
EDIT / NO
NAME

DISC   Name In?
1 2 3 4 5 6 7 8 9 10   L ▮▮   DIGITAL IN 1
11 12 13 14 15 16 17   -∞ -40 -30 -20 -10 -4 -2 0
R ▮▮   LEVEL-SYNC

YES
TITLE DISC   A]
1 2 3 4 5 6 7 8 9 10   L ▮▮   DIGITAL IN 1
11 12 13 14 15 16 17   -∞ -40 -30 -20 -10 -4 -2 0
R ▮▮   LEVEL-SYNC

3 Remote controller
DISPLAY
DISPLAY

The type of characters
TITLE DISC   A]
1 2 3 4 5 6 7 8 9 10   L ▮▮   DIGITAL IN 1
11 12 13 14 15 16 17   -∞ -40 -30 -20 -10 -4 -2 0
R ▮▮   LEVEL-SYNC

4
I◄◄AMCS►►I
Remote controller

I◄◄AMCS►►I

┌─ PLAY MODE ─┐
CONTINUE RANDOM PROGRAM
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   /   ?   !   (   )

TITLE DISC   A] ONKYO
1 2 3 4 5 6 7 8 9 10   L ▮▮   DIGITAL IN 1
11 12 13 14 15 16 17   -∞ -40 -30 -20 -10 -4 -2 0
R ▮▮   LEVEL-SYNC

To name a disc...
The MD recorder must be stopped.
To name a track...
The MD recorder may be stopped, paused, playing, or recording.

- The characters being entered are canceled if the track which is playing or being recorded changes.
- You cannot name tracks during overwrite-recording.
- You can enter up to 100 characters, although the number of characters you can enter for each disc or track name depends on the character type.

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. Press the YES button.**
   The blinking cursor appears.
   Or, with the remote controller, press the NAME button.
   When you name a track, the TRACK indicator will turn on.
3. **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 (♪) (See page 27)

   With the remote controller, press the DISPLAY button to change the character input mode.
4. **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 controller...**
     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.
     The I◄◄ and ►►I buttons on the remote controller 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 3 and change the character input mode. Then, select and enter characters using the AMCS knob.

Naming a track or disc
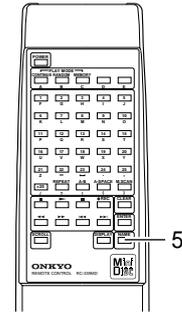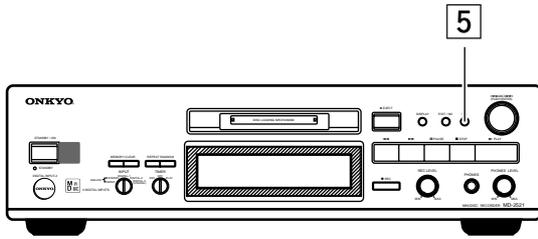
5

YES

Remote controller

NAME

Lights when completed

```
         Complete
TOC
1 2 3 4 5 6 7 8 9 10        L ▌▌                                DIGITAL IN 1
11 12 13 14 15 16          ·∞ -40 -30 -20 -10    -4 -2  0
                            R ▌▌                              LEVEL-SYNC
```

1

EDIT / NO

```
DISC  Name Erase?
1 2 3 4 5 6 7 8 9 10        L ▌▌                                DIGITAL IN 1
11 12 13 14 15 16 17       ·∞ -40 -30 -20 -10    -4 -2  0
                            R ▌▌                              LEVEL-SYNC
```

2

YES

Lights when completed

```
         Complete
TOC
1 2 3 4 5 6 7 8 9 10        L ▌▌                                DIGITAL IN 1
11 12 13 14 15 16 17       ·∞ -40 -30 -20 -10    -4 -2  0
                            R ▌▌                              LEVEL-SYNC
```


5. Press the YES button.
"Complete" appears in the display.
Or, with the remote controller, press the NAME button.

To correct the character entered...
After the above Step 2, move to the character you want to correct using the ◄◄ and ►► buttons (the character blinks), and then re-enter the character you want.

To insert a character...
After the above Step 2, move the blinking cursor using the ◄◄ and ►► buttons to where you want to insert a character, turn the AMCS knob counterclockwise until ▶◄ flashes and then press that knob. The cursor starts blinking, allowing the insertion of a character.

To erase a character...
After the above Step 2, move to the character you want to erase using the ◄◄ and ►► buttons (the cursor blinks) and then press the EDIT/NO button or the CLEAR button on the remote controller.

Note:
The disc name or track name you entered will be stored when the EJECT button or STANDBY/ON button is pressed next time. If TOC is lit or flashing in the display, which indicates that the information is being stored, do not disconnect the power cord, turn off the main power or apply strong vibrations to the MD recorder.

Erasing the disc name and all track names at one time

1. Press the EDIT/NO button to display "Name Erase?".
When the MD recorder is stopped, 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.
2. Press the YES button.
All track names and the disc name are erased.
Note:
• When "Protected" is shown on the display, it indicates that the MD's record protect hole is open. Before editing the MD, close the record protect hole.
• If the TOC indicator is lit or flashing, do not rock the unit or unplug the power cord.

Message list

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

Message	Meaning
All Erase!!	An attempt was made to record onto a faulty MD.
Blank Disc	A new (blank) or erased disc has been inserted.
Cannot Copy	An attempt was made to make a second copy from a digitally dubbed MD (see "Rules for Digital Recording" on page 29, 30).
Cannot Edit	An attempt was made to edit the disc during MEMORY or RANDOM play.
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.
Disc Error	The disc is abnormal (scratched or missing a TOC).
Disc Full	The disc is full (see "System Limitations" on page 29).
Impossible	An editing attempt was failed.
Memory Full	An attempt was made to record a 26th track.
Name Full	The titling capacity of the disc has reached its limit.
No Change	The disc or track name was not changed.
No Disc	There is no disc in the unit.
No Track	The inserted disc has a disc title but no tracks.
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	The first recording attempt failed due to a disturbance or scratch on the MD, and a second recording is being made.
Retry Error	The recording attempt failed due to a consecutive disturbance or scratches on the MD.
Sorry	An attempt was made to combine tracks that cannot be combined or to divide a track at the beginning.

Even if "Disc Error" is displayed, you may be able to record on the disc. Press the ● REC button and, when "All Erase!!" appears in the display, try pressing the ● REC button again.

Preset titles for easy titling

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

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

Troubleshooting

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 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 "Disc Error" remains, replace the disc (See "Precautions for handling the MiniDisc(MD)" on page 7).

- **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 3).
  Cause: The unit is not on.
  > *Remedy:* Press the STANDBY/ON button to turn the unit on.
  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 8).
  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 tab (See page 7).
  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 (See page 14).
  Cause: A premastered disc is inserted ("Cannot Rec" appears).
  > *Remedy:* Replace it with a recordable disc. (You cannot record on premastered discs.)
  Cause: There is not enough time left on the disc.
  > *Remedy:* Replace it with another recordable disc with fewer recorded tracks. Or, erase unused tracks.
  Cause: An attempt was made to record from a digital input source, but it is not connected by the optical cable.
  > *Remedy:* Connect the digital input source by the optical cable or set the INPUT selector to "ANALOG" (STEREO or MONO).
  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, press the STANDBY/ON button.(See "Storage Period of Backup Data" on page 7.)

- **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 7).
  Cause: A premastered (read-only) disc is inserted ("Cannot Rec" appears).
  > *Remedy:* Replace it with a recordable disc. (You cannot enter track or disc names on premastered discs.)

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

Information

System Limitation

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 Reading" appears for a long time**

If the inserted recordable disc is bland new, the "TOC Reading" appears on the display longer than those that have been used.

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, premastered 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.

29
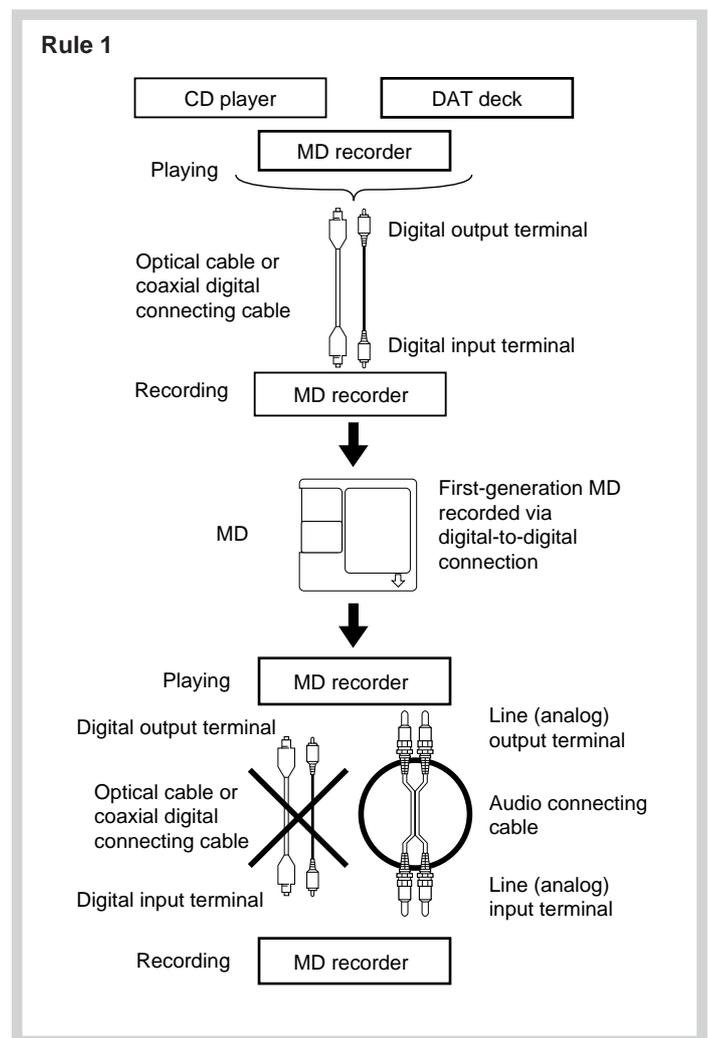
Information

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.

Rule 2

Playing | BS tuner

Optical cable or coaxial digital connecting cable — Digital output terminal

Digital input terminal

Recording | MD recorder

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

Play back | MD recorder

Optical cable or coaxial digital connecting cable — Digital output terminal

Digital input terminal

Recording | MD recorder

MD — Second-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

Line (analog) output terminal

Audio connecting cable

Line (analog) input terminal

Recording | MD recorder

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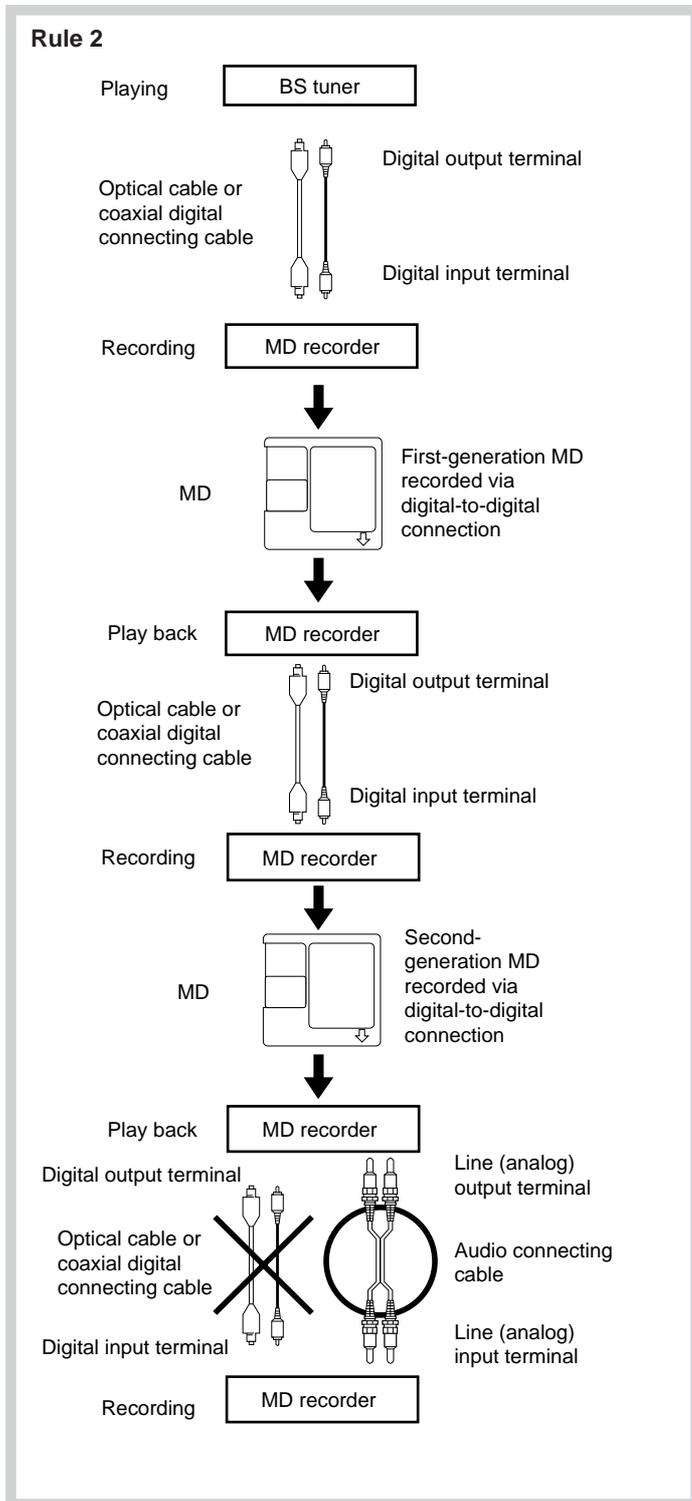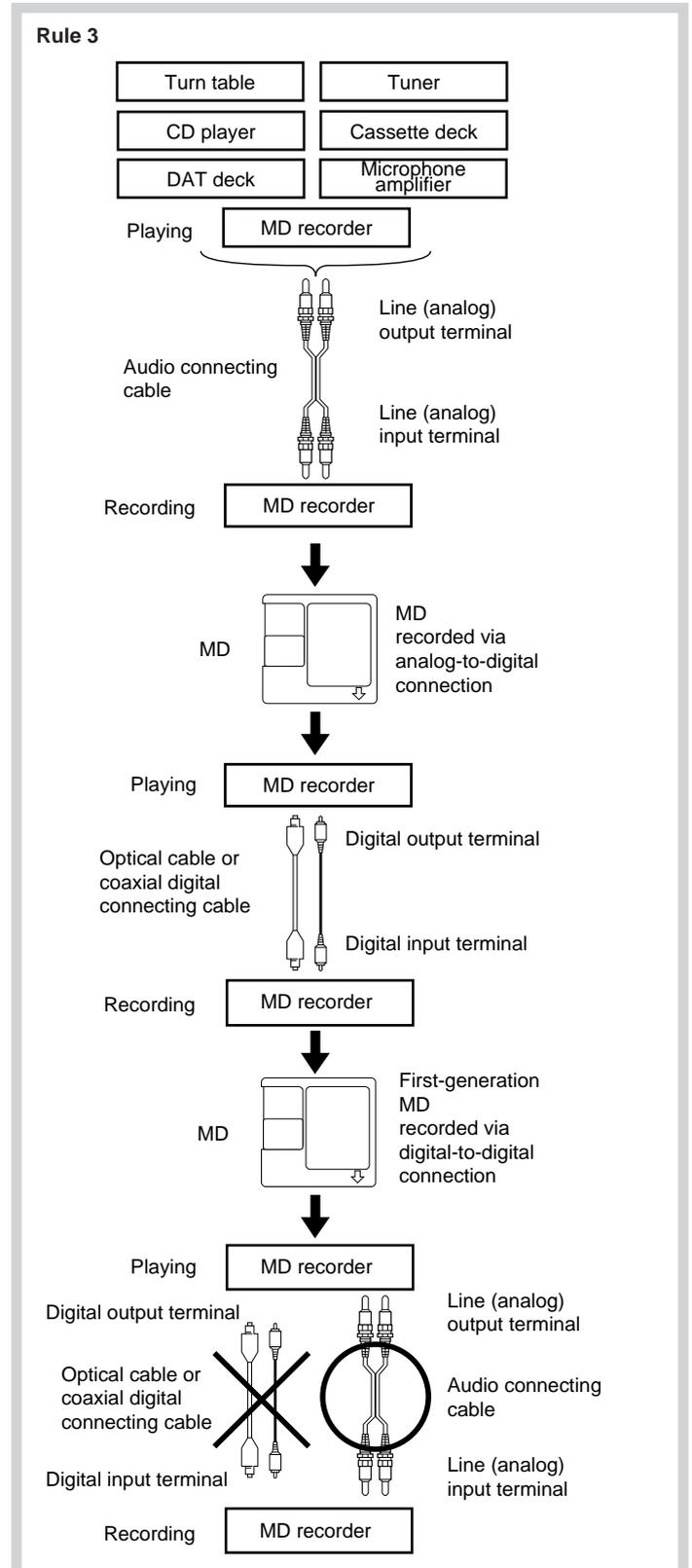 to other recordable MDs through the digital output terminal. Subsequent copies can only be made through analog output terminal.

Rule 3

Turn table | Tuner
CD player | Cassette deck
DAT deck | Microphone amplifier

Playing | MD recorder

Audio connecting cable — Line (analog) output terminal

Line (analog) input terminal

Recording | MD recorder

MD — MD recorded via analog-to-digital connection

Playing | MD recorder

Optical cable or coaxial digital connecting cable — Digital output terminal

Digital input terminal

Recording | MD recorder

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

Playing | MD recorder

Digital output terminal

Optical cable or coaxial digital connecting cable

Digital input terminal

Line (analog) output terminal

Audio connecting cable

Line (analog) input terminal

Recording | MD recorder

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

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 [   ].
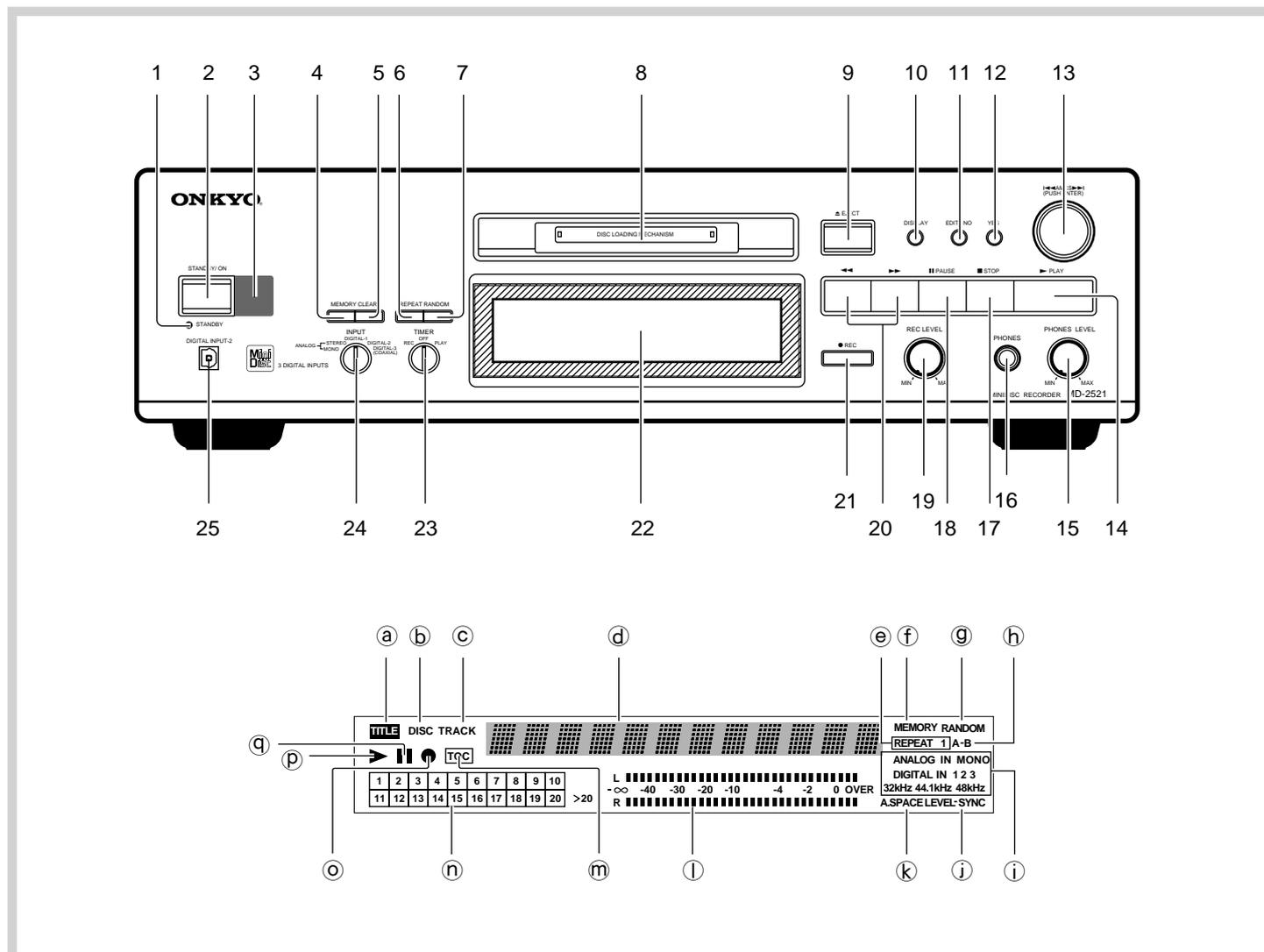
Front panel

1. **Standby indicator (STANDBY) [8]**
2. **Standby/On button (STANDBY/ON) [8]**
3. **Remote control sensor [4]**
4. **Memory button (MEMORY) [13]**
5. **Clear button (CLEAR) [13]**
6. **Repeat button (REPEAT) [12]**
7. **Random button (RANDOM) [11]**
8. **Disc slot**
9. **Eject button (▲) [9]**
10. **Display button (DISPLAY) [9]**
11. **Edit/No button (EDIT/NO) [15, 17, 19, 21-26]**
12. **Yes button (YES) [15, 17, 19, 21-26]**
13. **AMCS knob (I◄◄ AMCS ►►I) [10,13]**
14. **Play button (► PLAY) [8]**
15. **Phones level Knob [9]**
16. **Headphone jack (PHONES) [9]**
17. **Stop button (■ STOP) [8]**
18. **Pause button (II PAUSE) [8]**
19. **Rec level control knob (REC LEVEL) [14]**
20. **Fast forward/Fast reverse buttons (◄◄ , ►►) [11, 26]**
21. **REC button (● REC) [14, 16, 19]**
22. **Display**
23. **Timer switch (TIMER) [20]**
24. **Input selector switch (INPUT) [14, 16, 19]**
25. **DIGITAL INPUT-2 [5]**

Display

ⓐ **TITLE indicator**
ⓑ **DISC indicator**
ⓒ **TRACK indicator**
ⓓ **Time/Title display**
ⓔ **REPEAT indicator**
ⓕ **MEMORY indicator**
ⓖ **RANDOM indicator**
ⓗ **A-B repeat indicator**
ⓘ **Input setting indicator**
ⓙ **LEVEL-SYNC indicator**
ⓚ **A.SPACE indicator**
ⓛ **Peak level meter**
ⓜ **TOC indicator**
ⓝ **Track number display**
ⓞ **REC indicator**
ⓟ **Play indicator**
ⓠ **Pause indicator**

Specifications

System:	MiniDisc digital audio system
Recording system:	Magnetic field modulation overwrite system
Signal read out system:	Optical non-contact
Recording time:	Stereo: Max. 74 min.
	(when using MDW-74)
	Mono: Max. 148 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 ($\pm$0.5 dB)
Signal to noise ratio:	105 dB or more when playing
Output level:	2.0 volts r.m.s.
Power supply rating:	AC 230 V, 50 Hz
Power consumption:	14 watts
Dimensions (W $\times$ H $\times$ D):	435 $\times$ 121 $\times$ 310 mm
	(17-1/8" $\times$ 4-3/4" $\times$ 12-3/16")
Weight:	4.5 kg (9.9 lbs.)

Specifications and features are subject to change without notice.