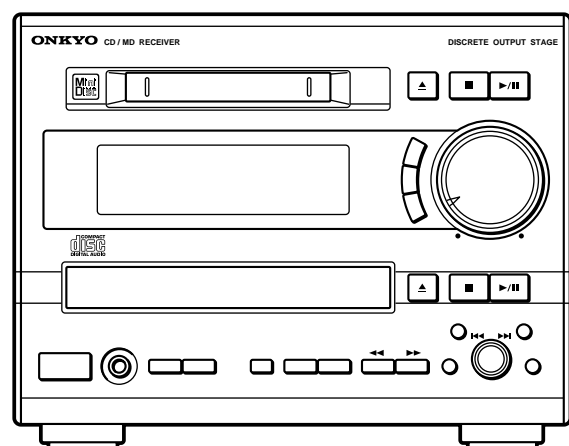


ONKYO®

CD/MD Receiver

FR-V3

Instruction Manual



Thank you for purchasing the ONKYO CD/MD Receiver.

Please read this manual thoroughly before making connections and turning on the power.

Following the instructions in this manual will enable you to obtain optimum performance and listening enjoyment from your new CD/MD Receiver.

Please retain this manual for future reference.

COMPACT
disc
DIGITAL AUDIO



Contents

Before Using 2

Connecting 6

Preparations 10

Basic Operation 16

Advanced Operation 26

Additional Operation 45

Others 52

WARNING:

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



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION:

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




The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



Important Safeguards

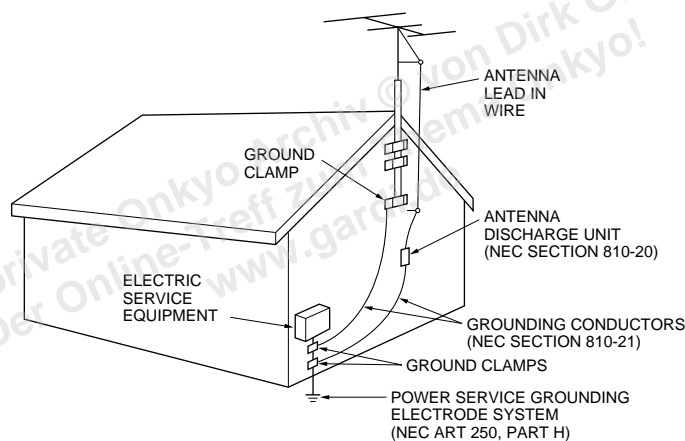
1. **Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** - All operating and use instructions should be followed.
5. **Water and Moisture** - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. **Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.

PORTABLE CART WARNING

S3125A
- 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.
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 20 cm (8 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. **Power Lines** - An outdoor antenna should be located away from power lines.
15. **Nonuse Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
16. **Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
17. **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.
18. **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.
19. **Outdoor Antenna Grounding** - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 1.

FIGURE 1:

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE



NEC – NATIONAL ELECTRICAL CODE

S2898A

Precautions

1. Warranty Claim

You can find the serial number on the rear panel of this unit. 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. AC Fuse

The fuse is located inside the chassis and is not user-serviceable. If power does not come on, contact your Onkyo authorized service station.

4. 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., AC 230 V, 50 Hz or AC 120 V, 60 Hz) written on the rear panel.

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

5. 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.

6. 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.

7. Care

From time to time you should wipe 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 dry, and wipe off 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 could damage the finish or remove the panel lettering.

8. 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.

US and foreign patents licensed from Dolby Laboratories Licensing Corporation.

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

DANGER:

INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK FAILED OR DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.

CAUTION:

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

"CLASS 1 LASER
PRODUCT"

This label on the left-hand side of the unit 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

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 apparatus 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 which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal 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.



Memory Preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves the contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in order to charge the back-up system.

The memory preservation period after the unit has been unplugged varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of a few weeks after the last time the unit has been unplugged. This period is shorter when the unit is exposed to a highly humid climate.

Main features/ Supplied accessories

◆ Main features

- CD/MD Receiver with Simple and Easy Operation
- Easy Dubbing from CD to MD
- Discrete Amplifier for Good Sound Quality
- Three Source Inputs – TAPE, LINE-1, and LINE-2
- Optical Digital Source Input & Digital Input Signal Sampling Frequency Rate Converter
- Signal Synchro Recording that is also associated with the external sources connected to the unit.

◆ Supplied accessories

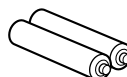
Check that the following accessories are supplied with your CD/MD Receiver.

The number of accessories is indicated in brackets.

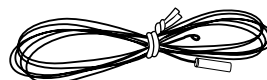
- Remote controller – RC-378S [1]



- Batteries (size AA/R6) [2]



- Indoor antenna (aerial) [1]



- Instruction Manual – this manual [1]

Table of contents

Important Safeguards/Precautions/Main features/Supplied accessories	2-4
---	-----

Connecting

6

Antenna (aerial) and speakers	6
Audio/video equipment	8

Preparations

10

Preparing the remote controller	10
Setting the clock	11
Understanding preparatory/common operation	14
Presetting radio stations automatically	15

Basic Operation

16

Playing a CD	16
Playing an MD	18
Listening to the radio	20
Basic CD Dubbing	22
Recording radio programs	24

Advanced Operation

26

Various ways of playing CDs and MDs	26
Adjusting the tone	29
Naming a CD, MD and its tracks, and preset channels	30
Advanced CD Dubbing	32
CD to MD Synchro Recording	32
Moving, dividing, combining, and erasing MD tracks	33
Recording from a connected source to an MD	38
Synchro Recording operation with an ONKYO stereo cassette tape deck	39
Using the timers	40

Additional Operation

45

Customizing the source names	45
Manual presetting/erasing/copying of radio stations	46
Using the optional remote controller	49

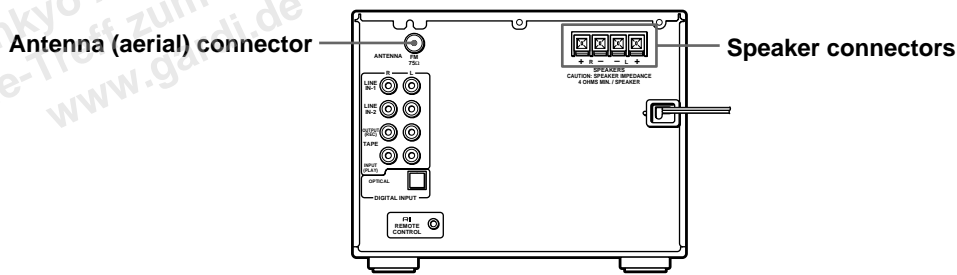
Others

52

Message list	52
Rules for digital recording	52
System limitations	54
Precautions for handling the Compact Disc (CD)	55
Precautions for handling the MiniDisc (MD)	55
Troubleshooting	56
Index to parts and controls	58
Specifications	back cover

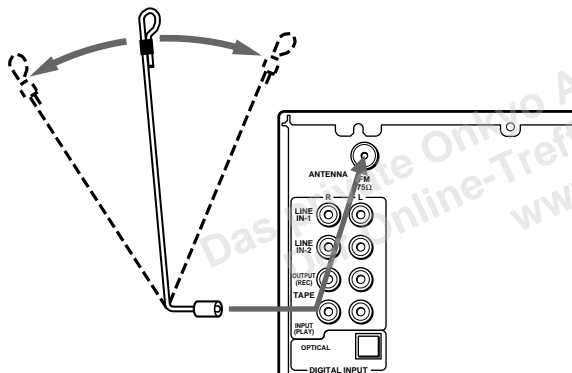
Antenna (aerial) and speakers

Antenna (aerial) connection is a must for auto clock setting. Do not connect the AC power cord (mains lead) at this time. The AC power cord will be connected on page 11.



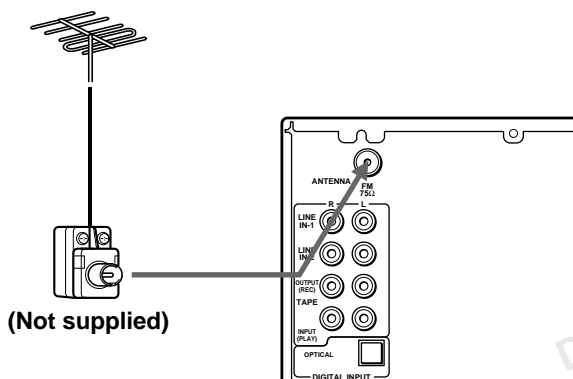
Connecting the supplied indoor antenna (aerial)

While listening to the radio on page 20, move the antenna (aerial) in various directions until the clearest signal is received. Then secure the antenna (aerial) with push pins in the position with the least distortion.



To connect the outdoor antenna (aerial)

If signals received via the indoor antenna (aerial) are not clear enough, connect an outdoor FM antenna (aerial).



WARNING

Do not install the antenna (aerial) near power lines because this could result in electrical shock.

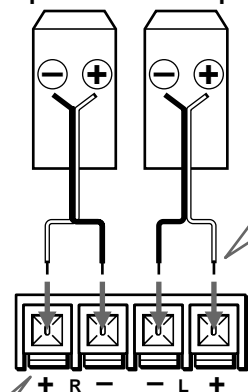
Note

Keep the antenna (aerial) away from noise sources, such as neon signs and busy roads.

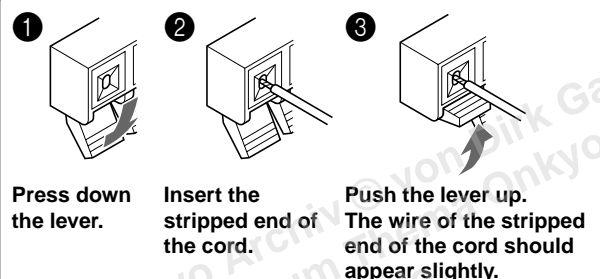
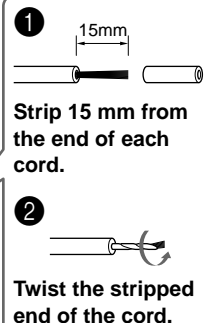
Connecting the speakers

(Speakers from behind)

Right speaker Left speaker

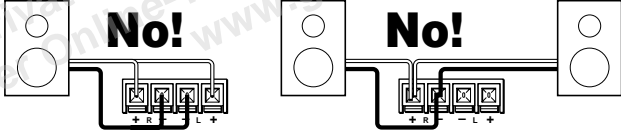


SPEAKERS
CAUTION: SPEAKER IMPEDANCE
4 OHMS MIN. / SPEAKER

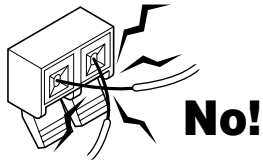


Notes

- Connecting the left and right speakers reversely or with wrong polarities can cause unnatural or distorted sound.
- The load impedance of each speaker must be between 4 and 16 ohms. Connecting speakers with less than 4 ohms impedance could cause damage to the unit amplifier.
- Do not connect the speaker cord to the L and R connectors at the same time and do not connect more than two speakers to the same speaker connectors.



- To prevent damage to circuits, never short-circuit the positive (+) and negative (–) speaker wires.



Audio/video equipment

Connect the white plugs of the audio cables to the L jacks and connect the red plugs of the audio cables to the R jacks.

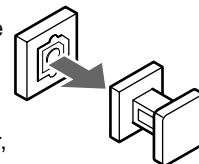
Tip

The source names appearing in the display can be customized to the connected component. (See page 14 and 45.)



Protective cap for the optical digital audio connector

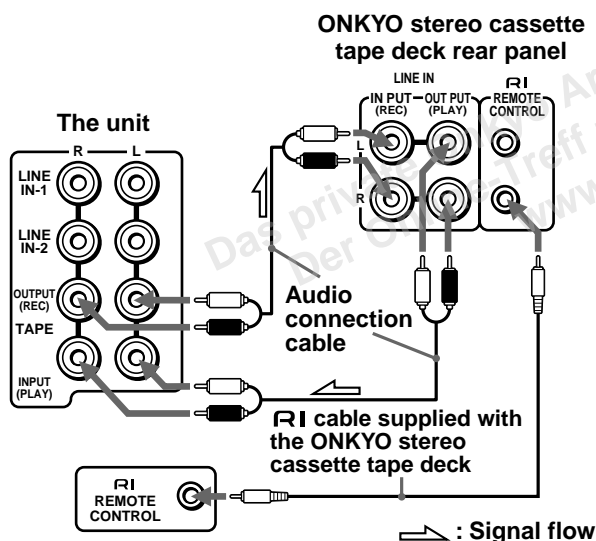
Remove the protective cap before you use the OPTICAL DIGITAL INPUT connector. Please retain it for future use. If you do not use the optical digital audio connector, make sure to replace the cap.



Connecting an ONKYO stereo cassette tape deck

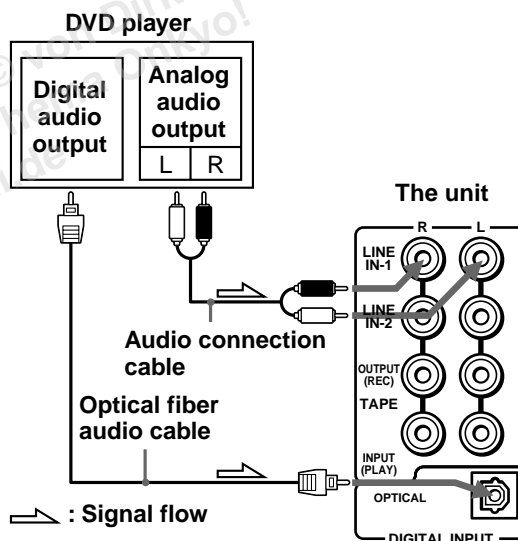
The illustration below describes the connection with an ONKYO stereo cassette tape deck.

To connect to other cassette tape deck, connect the TAPE OUTPUT (REC) and INPUT (PLAY) jacks of the unit to the INPUT (REC) and OUTPUT (PLAY) jacks of the cassette tape deck, respectively.



Connecting a DVD player

Analog connection is necessary in addition to the optical digital audio connection. To connect to the ONKYO DVD player, be sure to connect to the LINE IN-1 jacks with the audio connection cable, not the LINE IN-2 jacks.



What can you do with an ONKYO stereo cassette tape deck by connecting with an RI cable?

- An ONKYO stereo cassette tape deck can be operated with the supplied remote controller.
- Both the units can be turned on by turning on either unit.
- When you start playing a tape, the unit input selector will automatically be switched to the stereo cassette tape deck (TAPE).
- Synchro recording operations (see page 39).

About the OPTICAL DIGITAL INPUT connector

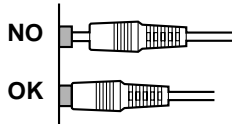
An optical digital audio output equipped CD player, satellite tuner, or DAT may be connected instead of a DVD player with an optical fiber audio cable for digital recording of them.

About the LINE IN-1 and IN-2 jacks

In addition to the above examples, a laser disc player, satellite broadcast tuner, or VCR may be also connected. Connect analog audio output jacks to the unit LINE IN-1 or IN-2 with the audio connection cable.

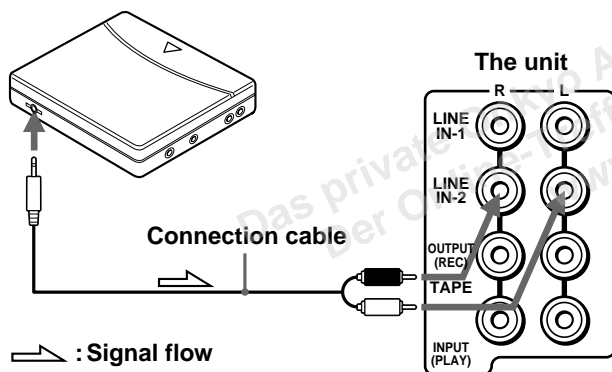
Notes

- ⊗ Do not place any object on the unit as this is dangerous because the ventilation slot may be blocked.
- There are some rules for digital recording (see page 52).
- The plugs of audio connection cable must be connected securely. Incomplete connection does not reproduce the sound.
- Do not bundle the audio connection cables with the speaker cords. This may impair the sound quality.
- If the TV screen and the unit interfere with each other, put more distance between the speakers and TV set.
- When connecting the digital audio output of a DVD player to the DIGITAL INPUT jack of the unit, set the DVD player to PCM output. Some DVD players cannot be set to PCM; in this case audio output is not possible, even when the two units are connected.



◆ Connecting a portable MD player

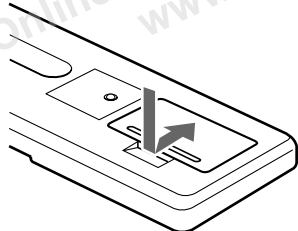
Cross-refer to the portable MD player's Instruction Manual.



Preparing the remote controller

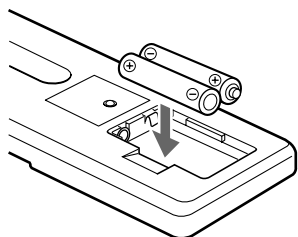
◆ Inserting the batteries

1



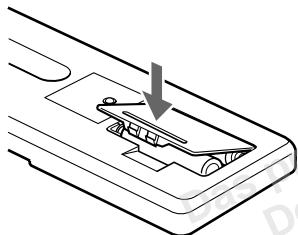
Detach the battery cover.

2



Insert the two R6 (size AA) batteries.
Be sure to match the + and – ends of the batteries with the diagram inside the battery compartment.

3



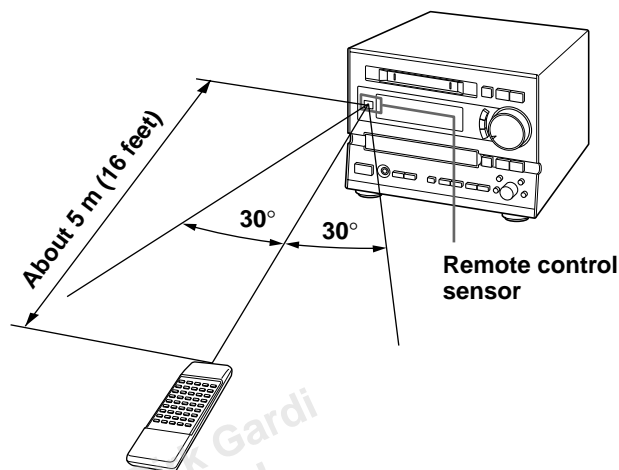
Attach the battery cover.

Notes

- Do not mix new batteries with old batteries or different kinds of batteries.
- To avoid corrosion, remove the batteries if the remote controller is not to be used for a long time.
- Remove dead batteries immediately to avoid damage from corrosion. If the remote controller does not operate smoothly, replace both the batteries at the same time.
- The life of the batteries supplied is about six months but this will vary depending on usage.

◆ Using the remote controller

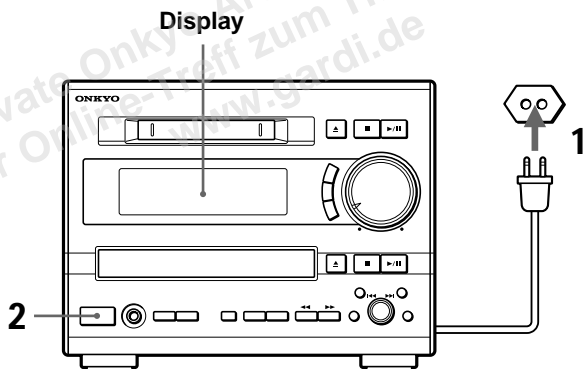
Point the remote controller toward the remote control sensor.



Notes

- Place the unit away from strong light such as direct sunlight or inverted fluorescent light which can prevent proper operation of the remote controller.
- Using another remote controller of the same type in the same room or using the unit near equipment which uses infrared rays may cause operational interference.
- Do not put any object such as a book on the remote controller. The buttons of the remote controller may be pressed by mistake and drain the batteries.
- Make sure the audio rack doors do not have colored glass. Placing the unit behind such doors may prevent proper remote controller operation.
- If there is any obstacle between the remote controller and the remote control sensor, the remote controller will not operate.

Setting the clock



Auto clock setting by ACCUCLOCK starts automatically when you first turn on the power after connecting the AC power cord (mains lead).

1 Connect the AC power cord (mains lead) to the wall outlet (the mains).

2 Press **STANDBY/ON**.
The unit turns on, then auto clock setting starts. "Wait" flashes in the display while the clock is being set. (It may take about five minutes to set the clock.)



When the clock setting has been successfully completed

"Clock Adjusted" will be scrolled in the display.

Clock Adjust

Then, the day of the week and the time will appear for a while before the normal display is turned on. See "Checking the day and time."

THU 1903

If the clock setting has been unsuccessful

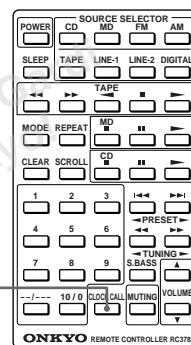
See "Checking the day and time."

What's ACCUCLOCK? What's RDS?

Many FM stations now transmit RDS signals which contain visual services such as PS (Program Service Name) and RT (Radio Text) in addition to the normal audio programs (see page 21).

RDS signals also carry the signals called CT (clock time and data signal) regularly. Using CT, the ACCUCLOCK function of the unit sets the clock and adjusts time three times (2, 3, and 14 hours) a day.

Checking the day and time



CLOCK CALL

Whenever you want to check the day and time, press **CLOCK CALL** on the remote controller. The time is displayed in a 24-hour cycle. For example, 5:30 pm will be displayed as "17:30."

(To resume the normal display, press **CLOCK CALL** again.)

If "Adjust" appears in the display

The clock setting was unsuccessful. There are a few reasons for this:

- **The antenna (aerial) connection is incomplete or the radio signals are weak.**

Check the antenna (aerial) connection or connect the outdoor antenna (aerial) (see page 6), then try "Setting the clock automatically by initiating ACCUCLOCK manually" on the next page.

- **The detected RDS broadcast does not have ACCUCLOCK signals.**

Some RDS broadcasting stations may not provide CT. Try "Setting the clock automatically by initiating ACCUCLOCK manually" on the next page.

If the wrong day or time appears in the display

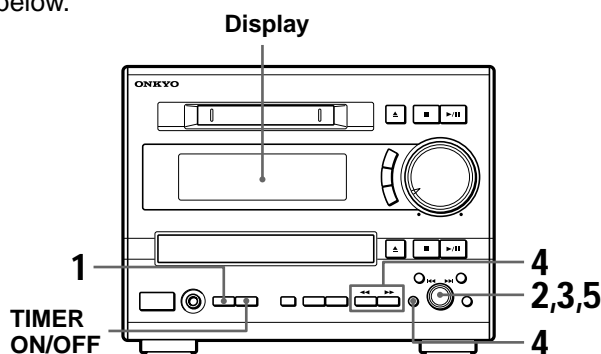
The RDS broadcasting signals detected may contain another country's CT especially in a border area. Try "Setting the clock automatically by initiating ACCUCLOCK manually" on the next page.

(Continued on the next page.)

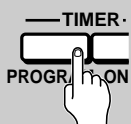
Setting the clock (continued)

◆ Setting the clock automatically by initiating ACCUCLOCK manually

The RDS broadcasting station to be used for obtaining CT can be detected automatically or set manually. In the case of automatic detection, the station which has the strongest signals will be selected; therefore, you may have the same unsuccessful result as described in "Checking the day and time" on the previous page. In such case, select another RDS broadcasting station manually in step 4 below.



1



Press **TIMER PROGRAM**.

"Clock" appears in the display. If the clock is already set, the timer program menu appears. In such case, press **TIMER PROGRAM** repeatedly until "Clock" appears in the display.

Clock

2



Press **MULTI JOG**.

"AccuClock" appears. If "ManualAdjust" appears, turn **MULTI JOG** until "AccuClock" appears.

AccuClock

3



Press **MULTI JOG**.

The following display appears. (The frequency that appears varies depending on the situation.)

AC represents **ACCUCLOCK**.

SOURCE FM 89.00MHz AC

4



When setting the RDS broadcasting station automatically

Press **MODE/AUTO/MONO**.

The unit starts scanning for the strongest RDS broadcasting station. When detected, frequency search stops and the RDS indicator lights.

SOURCE FM 87.50MHz AC

The RDS indicator lights.

If the RDS indicator has not lit, there is no efficient RDS broadcasting station. Set the clock manually (see next page).

When setting a RDS broadcasting station manually

Press **TUNING** ◀▶ to select the RDS broadcasting station.

When you have selected the RDS broadcasting station, the RDS indicator lights.

SOURCE FM 87.80MHz AC

The RDS indicator lights.

5



Press **MULTI JOG**.

The unit starts setting the clock by getting CT. "Wait" flashes while **ACCUCLOCK** is setting the clock. When the clock setting has been successfully completed, "Clock Adjusted" will be scrolled in the display. Then, the day and time appear for a while and then the normal display appears.

6

Check the result.

See "Checking the day and time" on the previous page.

If the clock setting has been unsuccessful

Start from the beginning, selecting another RDS broadcasting station manually in step 4, or set the clock manually (see next page).

Disabling/enabling ACCUCLOCK function

If the time adjustment function is unnecessary, you can disable ACCUCLOCK function. You can also resume (enable) this function later after disabling it.

1 Execute steps 1 and 2 in "Setting the clock automatically by initiating ACCUCLOCK manually" on the previous page.

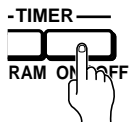
Check whether or not ACCUCLOCK function is active.

AccuClock

If these asterisks appear, ACCUCLOCK function is active.

2 Press TIMER ON/OFF.

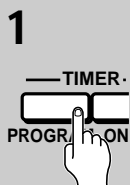
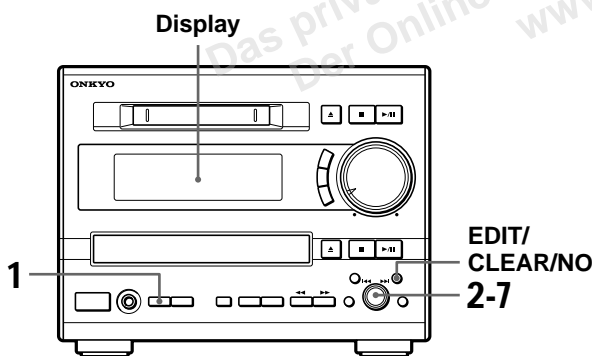
If ACCUCLOCK function was active in step 1, it has been disabled. If ACCUCLOCK function was inactive in step 1, it has been enabled.



AccuClock

Setting the clock manually

If the clock cannot be set by ACCUCLOCK, set the clock manually. In this case, the time adjustment function by ACCUCLOCK does not operate.



Press TIMER PROGRAM.

"Clock" appears in the display. If any timer program menu appears, press TIMER PROGRAM repeatedly until "Clock" appears in the display.

Clock

2



Press MULTI JOG.

If "AccuClock" appears, turn MULTI JOG until "ManualAdjust" appears.

ManualAdjust

3



Press MULTI JOG.

The day of the week flashes.

SUN 000

4



Turn MULTI JOG to set the present day.

THU 000

5



Press MULTI JOG.

The time flashes.

THU 000

6



Turn MULTI JOG to set the present time.

THU 1903

7



Press MULTI JOG to start the clock.

The dot for the seconds starts flashing. When you set the clock while the unit is in the standby mode, the present time will continue to be displayed.

1903

When you set the clock while the unit is on, the normal display will be resumed.

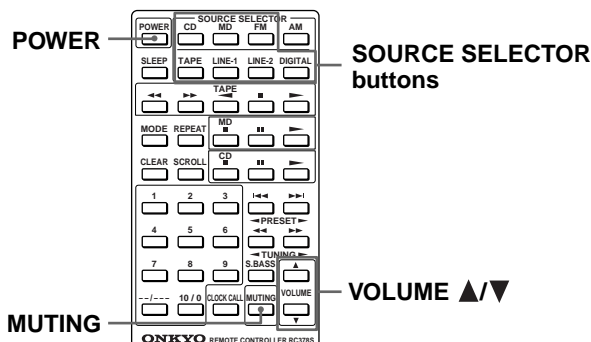
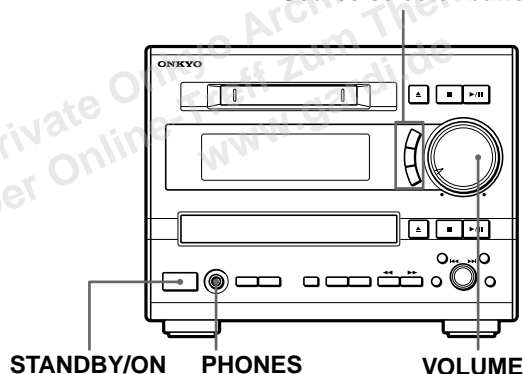
To cancel the clock setting

Press EDIT/CLEAR/NO in any step before you press MULTI JOG in step 7.

Understanding preparatory/common operation

This section explains preparatory/common operations: turning on/off the unit, choosing the required source, adjusting the volume, etc.

Source selector buttons



Turning on/off the unit

Press STANDBY/ON, or press POWER on the remote controller to turn on the unit. If you press the same button again, the unit will turn off and enter the standby mode.

Choosing the required source

You can choose CD, MD, tuner, or connected external audio/video equipment (TAPE, LINE-1, LINE-2, and DIGITAL) as the audio source.

Operating with the unit

Buttons	Usage
CD/MD	Each time you press this button, CD or MD will be switched.
TUNER	Press to choose the tuner
TAPE/LINE	Each time you press this button, TAPE, LINE-1, LINE-2, DIGITAL will be chosen in turn.

Operating with the remote controller

Press the following SOURCE SELECTOR buttons: CD, MD, FM for choosing the tuner, TAPE, LINE-1, LINE-2, and DIGITAL.

Notes

- The AM button does not operate.
- If "D.In Unlock" appears or the DIGITAL indicator flashes in the display when you have selected DIGITAL, no digital equipment is connected or the connected digital component is not turned on.

Adjusting the volume

Operating with the unit

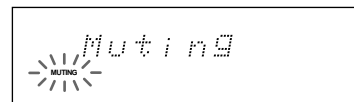
Turn VOLUME clockwise to increase the volume and counterclockwise to decrease the volume.

Operating with the remote controller

Press VOLUME ▲/▼ on the remote controller.

Muting the sound

Press MUTING on the remote controller. The MUTING indicator lights in the display.



To restore the sound, press MUTING again.

Tip

During muting:

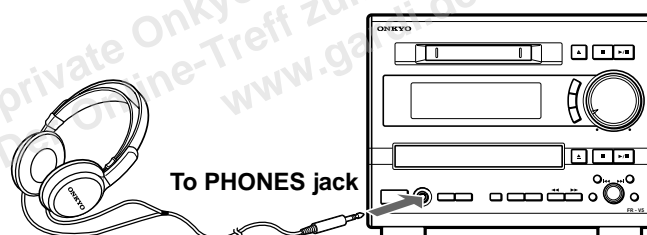
- if you press VOLUME ▲/▼ on the remote controller, the sound will be restored.
- if you turn off the unit, and turn on again, the sound will be restored.
- if you press TONE on the unit, the sound will be restored.

Listening through the headphones

Decrease the volume, then connect the stereo headphones mini plug to the PHONES jack.

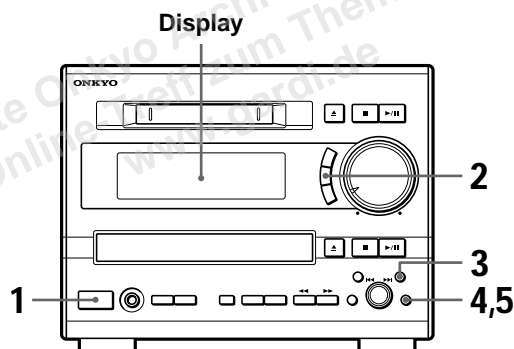
You can adjust the volume, and mute the sound as described above.

The speakers will reproduce no sound while the headphones are connected.



Presetting radio stations automatically

Auto presetting stores frequencies into memory for use in selecting radio stations by channel.



Before presetting

- You can preset up to 30 channels.
- If any radio stations are preset in the channels before you start auto presetting, all the preset channels will be replaced.

1 STANDBY / ON 	Press STANDBY/ON to turn on the unit.
2 TUNER 	Press TUNER to display "FM."
3 EDIT / CLEAR NO 	Press EDIT/CLEAR/NO repeatedly to display "AutoPreset?"
4 REPEAT YES 	Press REPEAT/YES. The reconfirmation message "AutoPreset??" appears in the display. To stop auto presetting, press EDIT/CLEAR/NO.
5 REPEAT YES 	Press REPEAT/YES. Auto presetting starts. It scans the best signal quality radio stations starting from the lowest frequency to the highest, then presets the selected radio stations to the channels sequentially, starting with 1.

Note

Auto presetting may store noise to some preset channels instead of radio stations depending on the area where you live. In such case, erase them manually (see page 47).

If auto presetting is unsuccessful

Check the antenna (aerial) connection and position (see page 6).

If you had a power failure or disconnected the AC power cord (mains lead)

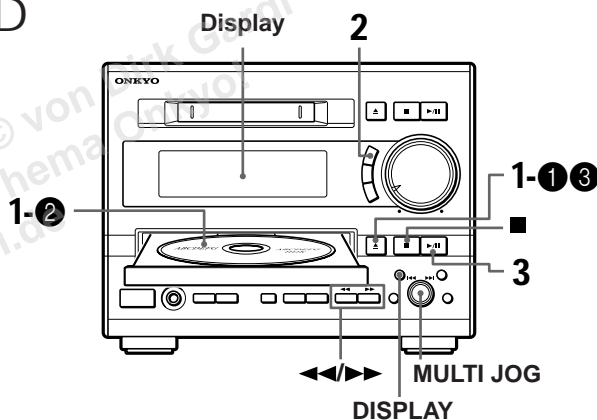
Memory will normally be preserved for two days after the power supply has stopped. If the data in memory has erased, repeat auto presetting.

Customizing the preset channels

The following additional functions are available:

- Naming the preset channels (see page 30),
- Erasing the preset channels (see page 47),
- Copying the radio station in the selected channel to another (see page 47), and
- Presetting radio stations manually (see page 46).

Playing a CD



1

CD



Insert the CD (Compact Disc).

- ① Press CD ▲ to open the disc tray.
- ② Put the CD in the tray.
Put the CD in the tray with the label side facing up.
Put 8-cm discs within the center circle of the tray.
- ③ Press CD ▲ to close the tray.

Tip

If the unit is in standby mode, it turns on automatically when you press CD ▲.

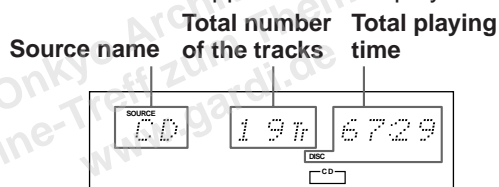
2

CD/MD



Press CD/MD repeatedly until "CD" appears in the display.

Each press switches the source to CD or MD.
The following CD information will appear in the display.



Tip

You can change the display information. See next page.

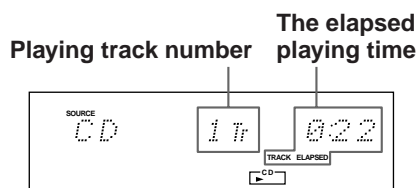
3

CD



Press CD ►/II to start playback.

The playback (►) indicator lights in the display.



To stop playback

Press CD ■.
Playback automatically stops when the last track has been played.

To take out the CD

Press CD ▲ to open the disc tray.

To pause

Press CD ►/II. "II" lights in the display. To restart playback, press CD ►/II again.

Selecting the track to play

- To locate the beginning of the playing track, turn MULTI JOG counterclockwise slightly. If you turn it further, you can select the former tracks in reverse order.

To select the next track in order, turn MULTI JOG clockwise.

If you have selected the track while the CD is stopped, press MULTI JOG to start playback.

Note

It may take a while to start playing back CDs with many tracks.

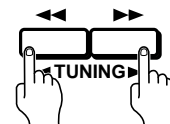


- The CD track can also be selected and played back by pressing MULTI JOG while the CD is playing or stopped. Each press shifts one track ahead.



Locating a particular point of the track

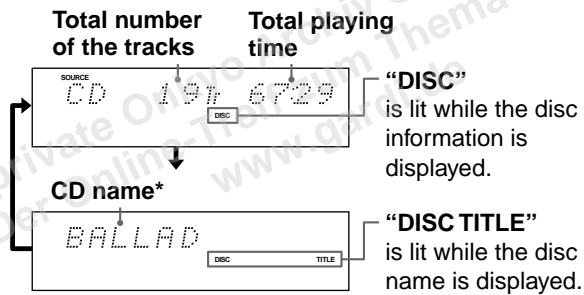
Press and hold ►► for fast-forwarding, and ◀◀ for fast-reversing during playback or pause until you find the point you want.



◆ Changing the display information – operating only with the unit

Press DISPLAY repeatedly to change the display as follows:

While the CD is stopped

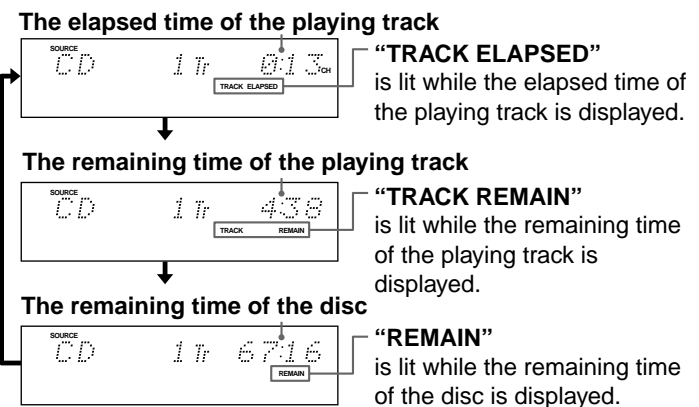


* If you have not named the CD, "No Name" appears in the display. (See "Naming a CD, MD and its tracks, and preset channels" on page 30.)

If you have a long disc name

You can scroll long names across the display by pressing SCROLL on the remote controller. (See below.)

During playback or pause



◆ Operating with the remote controller

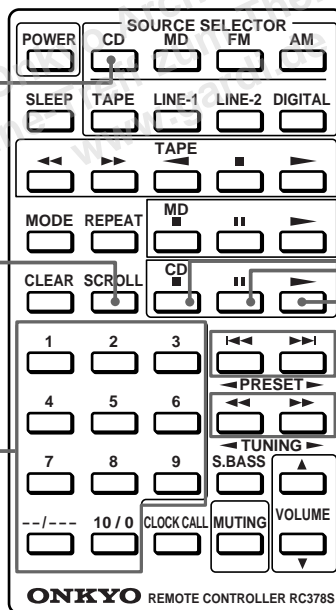
Press to switch the source to CD.

Press to scroll a long name across in the display.

Press the number buttons following the examples below to play back the desired track.

The track to play	Press
8	8
10	10/0
34	--/--, 3, 4
103	--/--, --/--, 1
	0, 3

--/-- represent f or the tens digit.



Press to stop playback.

Press to pause.

To restart playback, press the same button (II), or CD ►.

Press to play.

Playback starts if the CD is in the unit. The unit in standby mode turns on automatically.

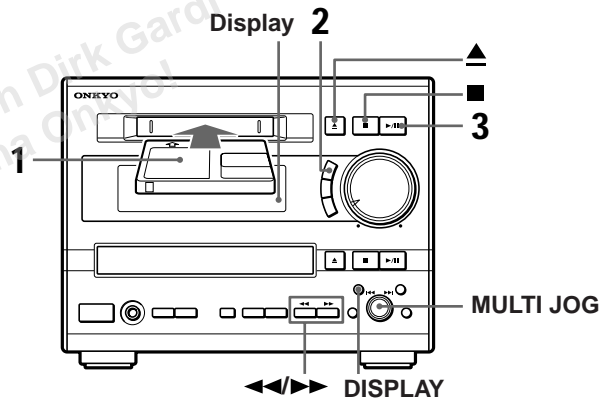
Press to select the track to play.

- Press I◀◀ to locate the beginning of the playing or pausing track. Press I◀◀ repeatedly to select the former tracks in reverse order.
- To select the next track in order, press ►►I repeatedly.

Press to locate a particular point of the track

Press and hold ►► for fast-forwarding, and ◀◀I for fast-reversing during playback or pause until you find the point you want.

Playing an MD



1

Insert the MD (Mini Disc).

The MD must be recorded.

Insert the end of the MD.

The arrow printed on the MD must face up and point to the unit.

Then push lightly so that the MD will automatically be loaded into the unit.

Tip

If the unit is in standby mode, it turns on automatically when you insert the MD.

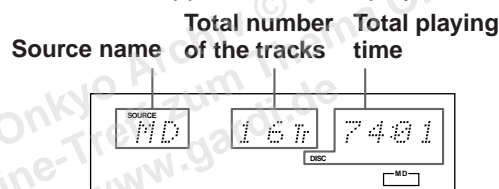
2



Press CD/MD repeatedly until "MD" appears in the display.

Each press switches the source to MD or CD.

The following MD information appears in the display.



Tip

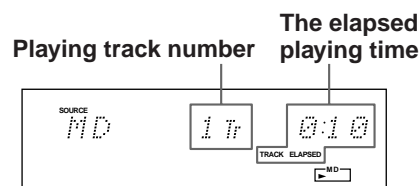
You can change the display information. See next page.

3



Press MD ►/II to start playback.

The playback (►) indicator lights in the display.



To stop playback

Press MD ■.

Playback automatically stops when the last track has been played.

To take out the MD

Press MD ▲ to eject.

To pause

Press MD ►/II. "II" lights in the display. To restart playback, press MD ►/II again.

Selecting the track to play

- To locate the beginning of the playing track, turn MULTI JOG counterclockwise slightly. If you turn it further, you can select the former tracks in reverse order.



To select the next track in order, turn MULTI JOG clockwise.

If you have selected the track while the MD is stopped, press MULTI JOG to start playback.



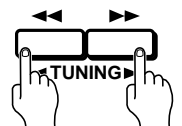
- The MD track can also be selected and played back by pressing MULTI

JOG while the MD is playing or stopped. Each press shifts one track ahead.



Locating a particular point of the track

Press and hold ►► for fast-forwarding, and ◀◀ for fast-reversing during playback or pause until you find the point you want.



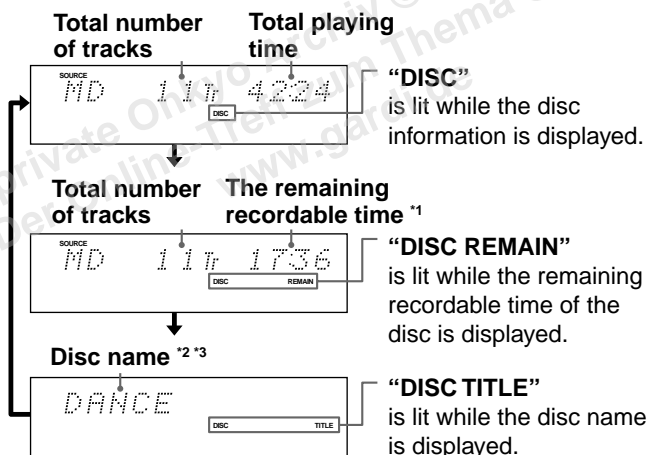
Note

If you operate this function during pause, no sound will be reproduced. Check the elapsed time in the display to locate the point.

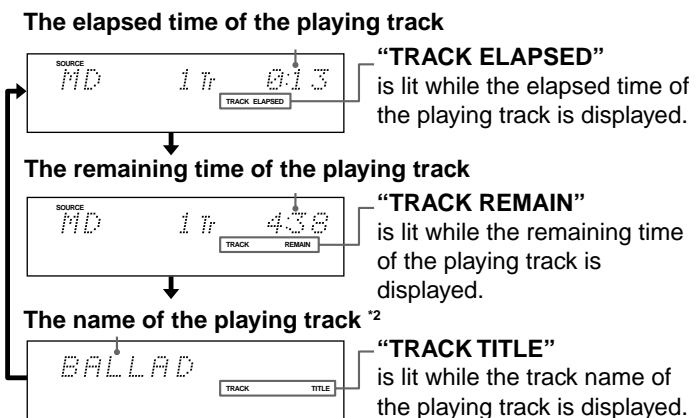
◆ Changing the display information – operating only with the unit

Press DISPLAY repeatedly to change the display as follows:

While the MD is stopped



During playback or pause



^{*1} If you insert an MD produced only for playback use, this information won't appear.

^{*2} If there is no name on the disc, only the track number appears.

See "Naming a CD, MD and its tracks, and preset channels" on page 30.

^{*3} If the MD is not recorded, "MD BlankDisc" appears.

If you have a long name

You can scroll long names across the display by pressing SCROLL on the remote controller.

◆ Operating with the remote controller

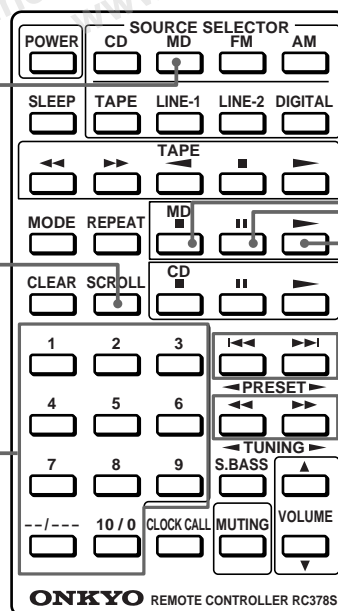
Press to switch the source to MD.

Press to scroll a long name across in the display.

Press the number buttons following the examples below to play back the desired track.

The track to play	Press
8	8
10	10/0
34	--/--, 3, 4
103	--/--, --/--, 1 0, 3

--/-- represent f or the tens digit.



Press to stop playback.

Press to pause.

To restart playback, press the same button (II), or MD ►.

Press to play.

Playback starts if the recorded MD is in the unit.
The unit in standby mode turns on automatically.

Press to select the track to play.

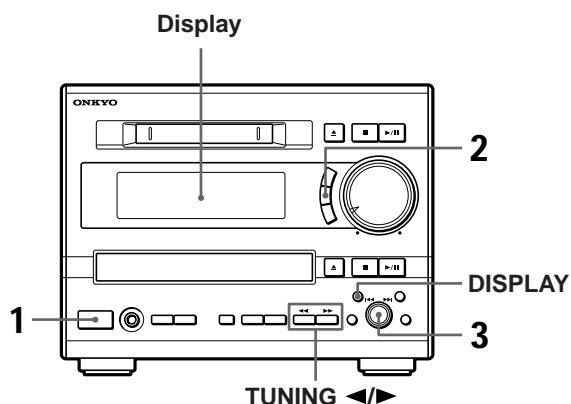
- Press I◀◀ to locate the beginning of the playing or pausing track. Press I◀◀ repeatedly to select the former tracks in reverse order.
- To select the next track in order, press ►►I repeatedly.

Press to locate a particular point of the track

Press and hold ►► for fast-forwarding, and ◀◀ for fast-reversing during playback or pause until you find the point you want.

Listening to the radio

Preset radio stations before you proceed to the following steps. (See page 15.)



1

STANDBY / ON



Turn on the unit.

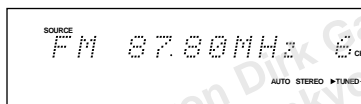
2

TUNER



Press TUNER.

"FM", frequency, and the preset channel you called last will appear.



3



PUSH TO ENTER

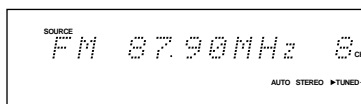


PUSH TO ENTER

Turn MULTI JOG, or press it repeatedly until the desired preset channel appears in the display.

To choose the next channel, turn clockwise or press.

To choose the previous channel, turn counterclockwise.



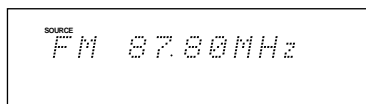
Tip

To jump to the last channel from the first channel, turn MULTI JOG counterclockwise.

Tuning in the radio station manually

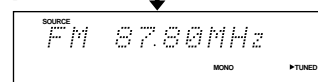
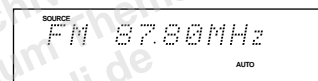
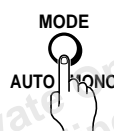
You can also tune in the radio station manually.

- 1 Turn on the unit.
- 2 Press TUNER.
- 3 Press TUNING ◀▶ to tune in the radio station.



Tuning in radio stations with weak signals

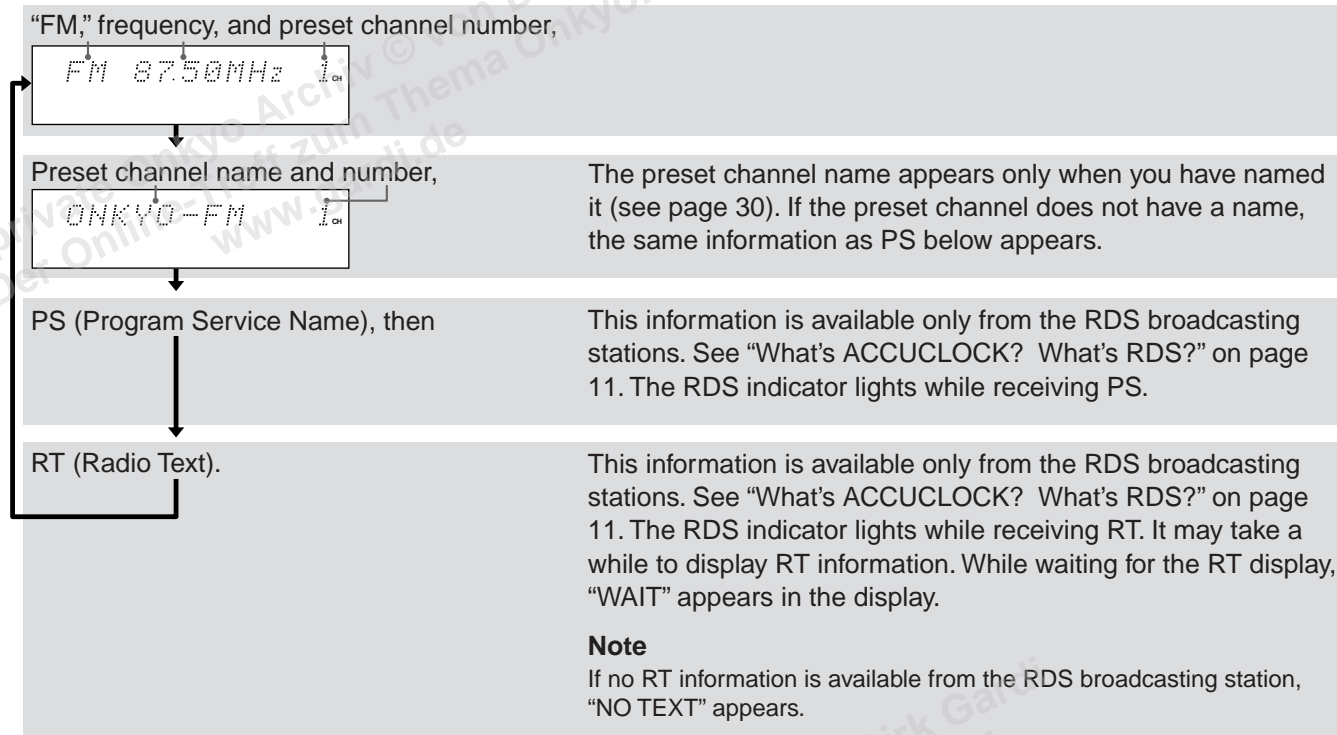
The STEREO indicator lights when stereo broadcasting is received. If the STEREO indicator does not light steadily, the signal may be weak or there may be a lot of noise. In this case, press MODE/AUTO/MONO on the unit to receive the radio frequency in monaural to reduce the noise or sound interruption.



To return to the stereo mode, press MODE/AUTO/MONO again.

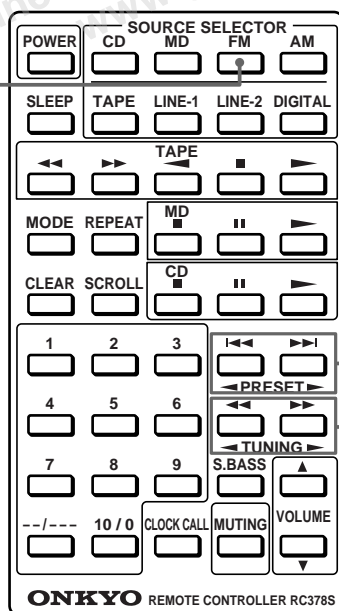
◆ Changing the display information – operating only with the unit

Press DISPLAY repeatedly to change the display as follows:



◆ Operating with the remote controller

Press to switch the source to the tuner.

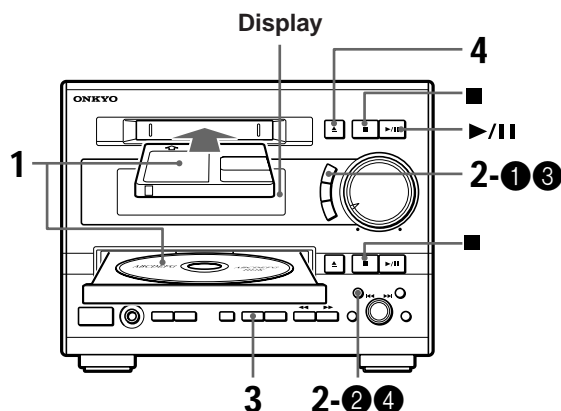


Press PRESET ► to choose the next preset channel, and ◀ to choose the previous channel.

Press TUNING ◀/▶ to tune in the radio station manually.

Basic CD Dubbing

- The MD will be recorded in digital.
- If the MD is prerecorded, the new recording will be made on the blank portion. The track numbers will be added to the existing track numbers sequentially.



1

Insert the CD and MD.

See step 1 in "Playing a CD" on page 16 and "Playing an MD" on page 18.
The MD must be recordable.

2



DISPLAY



DISPLAY

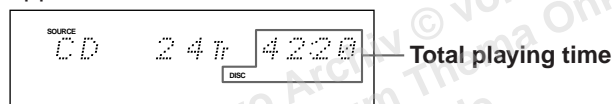


Check the remaining recordable time.

① Press CD/MD repeatedly until "CD" is displayed.

② Check the total playing time.

Press DISPLAY repeatedly until the desired information appears.

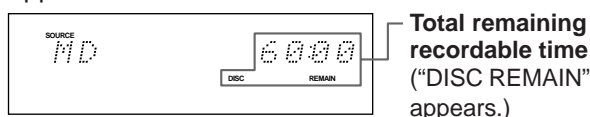


Total playing time

③ Press CD/MD repeatedly until "MD" is displayed.

④ Check the remaining recordable time.

Press DISPLAY repeatedly until the desired information appears.



Total remaining recordable time ("DISC REMAIN" appears.)

Tips

- Record level adjustment is not required.
- All the track numbers on the CD will be copied to the MD regardless of the LevelSync function setting (see page 25).

To stop recording

Press MD ■ or CD ■. Dubbing automatically stops when the last CD track has been played or the end of the MD has been reached.

To check the CD/MD information while recording

See next page.

Notes

- You cannot change the source while recording.
- ►/II (Play/Pause button) and ▲ (Eject button) do not operate during CD dubbing.

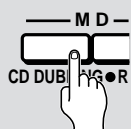
If CD dubbing has been incomplete

The incompletely recorded track will be erased automatically.

Checking the recordings

After completing recording, or stopped recording by pressing ■, press MD ►/II on the unit or MD ► on the remote controller. Only the newly recorded portion will be played back from the beginning.

3



Press CD DUBBING to start dubbing.

The DUB indicator lights in the display (see the illustrations on the next page).

When dubbing does not start

- If "Cannot Rec" appears,
The MD is a playback-only disc. Change to a recordable MD.
- If "Protected" appears,
The record-protect window is open. Close the window by sliding the record-protect tab. (See page 55.)
- If "Disc Full" appears,
There is no space for recording. Replace with a new MD.

4



Press MD ▲ after completing recording.



The TOC indicator flashes.

See next page.

The TOC indicator flashes while the data is being recorded onto the MD, and then the MD is ejected.

When the TOC indicator lights or flashes

Information such as track numbers will be recorded onto the TOC (Table Of Contents) of the MD when you eject the MD, turn off the unit, or stop recording.

Therefore, *do not disconnect the AC power cord (mains lead) or apply vibration to the unit under the following conditions:*

- **When the TOC indicator lights,**

The data to be recorded onto the TOC is preserved in the unit memory.

- **When the TOC indicator flashes,**

The data is being recorded onto the MD.

This will prevent normal TOC writing.

If you had a power failure or disconnected the AC power cord (mains lead) when the TOC indicator was lit or flashing

The recorded contents in the unit memory will be erased and will not be recorded onto the MD.

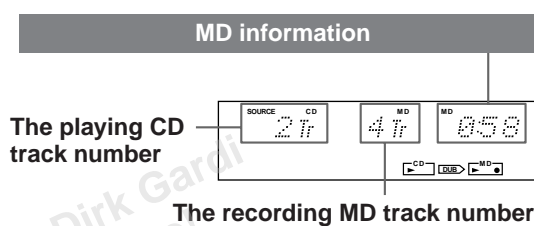
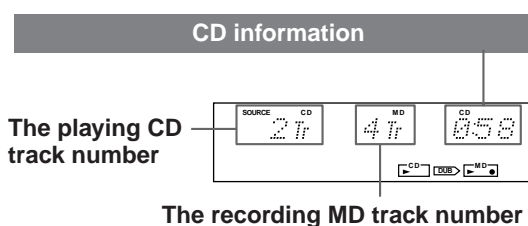
If “Retry Error” appears in the display

Eject the MD, then insert it again and retry recording.

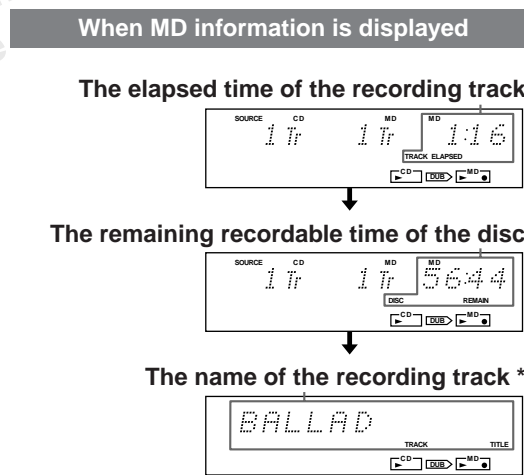
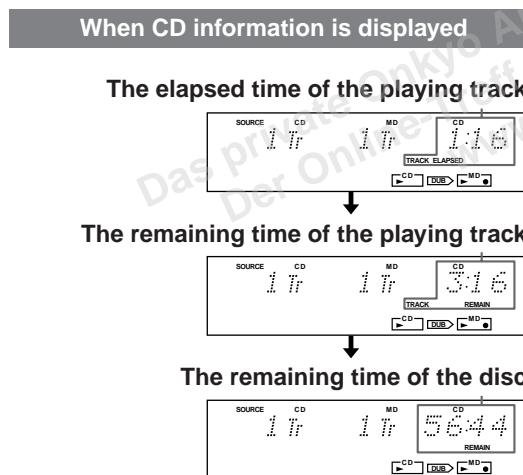
◆ Checking the CD/MD information while recording

1 Press CD/MD button to switch the information to CD or MD.

The CD/MD button operates as an information switcher.

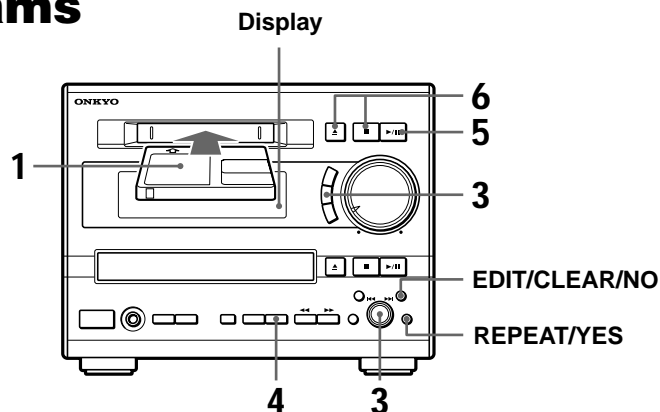


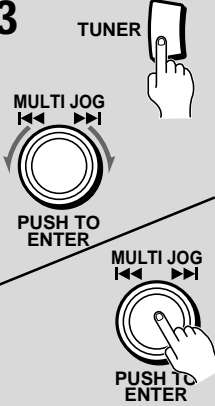


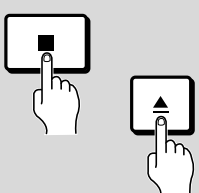
2 Press DISPLAY repeatedly to change the display as follows:



* Only displayed when the track is named, see “Naming a CD, MD and its tracks, and preset channels” on page 30.

Recording radio programs



1	Insert an MD. See step 1 in "Playing an MD" on page 18. The MD must be recordable.
2	Check the remaining recordable time. See step 2-③ and ④ on page 22.
3 	Press TUNER, then turn MULTI JOG or press it repeatedly to choose the preset channel. <div data-bbox="742 929 1109 1041" data-label="Image"> </div> <div data-bbox="1125 1097 1460 1198" data-label="Text"> <p>To change the LevelSync function setting See next page.</p> </div> <div data-bbox="1125 1209 1460 1310" data-label="Text"> <p>To adjust the recording levels See next page.</p> </div>
4 	Press ● REC to set the MD to recording pause. The recording (●) and pause () indicators light in the display. <div data-bbox="742 1332 1109 1433" data-label="Image"> </div> <div data-bbox="470 1444 981 1512" data-label="Text"> <p>If the MD does not set recording pause See "When dubbing does not start" on page 22.</p> </div> <div data-bbox="1125 1344 1460 1467" data-label="Text"> <p>Tip You can change the display information by pressing DISPLAY.</p> </div> <div data-bbox="1125 1478 1460 1691" data-label="Text"> <p>To pause recording Press MD >/II. "II" lights in the display. To restart recording, press the same button. The track number will be marked when recording resumes.</p> </div>
5 	Press MD >/II to start recording. The elapsed recording time <div data-bbox="391 1646 1109 1736" data-label="Text"> <p>The source being recorded The recording track number</p> </div> <div data-bbox="742 1624 1109 1736" data-label="Image"> </div> <div data-bbox="478 1736 1109 1870" data-label="Text"> <p>To mark a track number at the desired point Press ● REC while recording. Keep a sufficient interval (more than four seconds) to mark the next track number. If it is too short, the track number may not be marked.</p> </div> <div data-bbox="1125 1702 1460 1870" data-label="Text"> <p>To stop recording Press MD ■. Recording automatically stops when the end of the MD has been reached.</p> </div>
6 	Press MD ■ after completing recording, then press MD ▲. The TOC indicator flashes while the data is being recorded onto the MD, and then the MD is ejected. <div data-bbox="742 1982 1109 2094" data-label="Image"> </div> <div data-bbox="805 2094 1109 2128" data-label="Text"> <p>The TOC indicator flashes</p> </div> <div data-bbox="1125 1892 1460 2004" data-label="Text"> <p>Checking the recordings before ejecting the MD See page 22.</p> </div> <div data-bbox="1125 2016 1460 2116" data-label="Text"> <p>When the TOC indicator lights or flashes See page 23.</p> </div>

◆ Marking track numbers – LevelSync

- LevelSync is the function which marks track numbers when the source input level starts rising from a minimum point. If the LevelSync function is on, the track numbers will be automatically marked while recording onto the MD. (If the soundless portion of the recording source is too short, the track number will not be marked.)
- To mark the track numbers manually, turn the LevelSync function off, then execute “To mark a track number at the desired point” in step 5 on the previous page.
- When the LEVEL-SYNC indicator is lit, the LevelSync function is on. If you set LevelSync to Off, the indicator will be turned off.

The LevelSync indicator



To change the LevelSync setting, execute the following steps while the MD is recording or in recording pause. (To quit changing while setting, press EDIT/CLEAR/NO.)

1 EDIT / CLEAR 	<p>Press EDIT/CLEAR/NO repeatedly until “LevelSync?” appears in the display.</p> <div data-bbox="391 1077 754 1178"> </div>
2 REPEAT 	<p>Press REPEAT/YES. “On → Off?” or “Off → On?” appears.</p> <div data-bbox="391 1312 754 1413"> </div>
3 REPEAT 	<p>Press REPEAT/YES. If the LevelSync function has turned off, “LevelSyncOff” appears, and if the LevelSync function has turned on, “LevelSyncOn” appears.</p> <div data-bbox="391 1655 754 1756"> </div>

◆ Adjusting the recording level in analog recording

If the recording level isn’t appropriate, adjust the recording level manually.
Execute the following steps while the MD is recording or in recording pause.

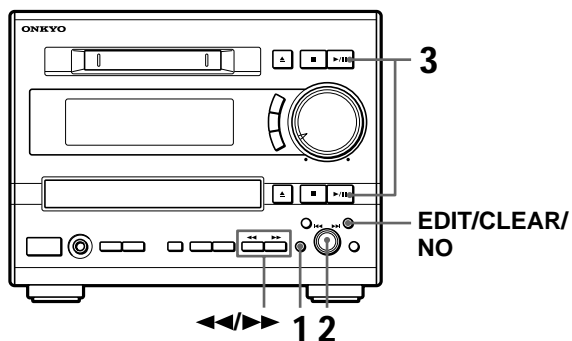
1 EDIT / CLEAR 	<p>Press EDIT/CLEAR/NO repeatedly until “Rec Level?” appears in the display.</p> <div data-bbox="1090 495 1458 595"> </div>
2 REPEAT 	<p>Press REPEAT/YES.</p>
3 MULTI JOG PUSH TO ENTER	<p>Turn MULTI JOG to set the recording level adjustment value between 1 and 4.</p> <p>Recording level adjustment value</p> <div data-bbox="1090 1016 1458 1120"> </div> <p>Select the value so the maximum recording level indicator lights between -6 to -2 (dB).</p>
4 MULTI JOG PUSH TO ENTER	<p>Press MULTI JOG. “Complete” appears. You can press REPEAT/YES instead of pressing MULTI JOG.</p> <div data-bbox="1090 1422 1458 1523"> </div>

Various ways of playing CDs and MDs

Five different playback modes are available in addition to normal playback in Basic Operation. Insert the CD or MD before you operate (see page 16 and 18).

◆ MEMORY playback

You can select and store track numbers (up to 25) in the desired playback order.

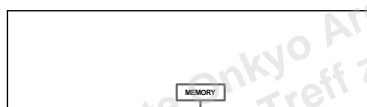


While the source is CD or MD, and in stop mode

1



Press **MODE/AUTO/MONO** repeatedly until the **MEMORY** indicator lights in the display.



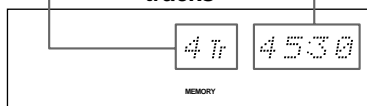
The **MEMORY** indicator lights.

2



Turn **MULTI JOG** to select the first track you want to play back, then press **MULTI JOG**. The selected track is stored in memory. To select the next track to be played, repeat this step.

Track number to be stored in memory The total time of the programmed tracks



To cancel a track number stored in memory

Press **EDIT/CLEAR/NO**. Each press erases the last track number stored in memory.

Note

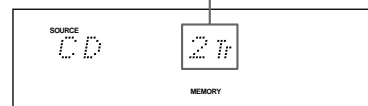
If the total playing time of the programmed tracks exceeds the time below, "----:--" will be displayed. Even in such case, **MEMORY** playback will be carried out normally.
CD : 99 minutes and 59 seconds
MD : 255 minutes and 59 seconds

3



Press **▶/||** of the selected source to start **MEMORY** playback.

The playing track number



When the unit finishes playing the track which number you stored last, playback stops. The track numbers stored in memory will be retained.

To erase a track number from memory

- While in **MEMORY** playback mode, and the CD/MD is stopped, press **EDIT/CLEAR/NO**. Each press erases the last track number stored in memory.
- If you change the playback mode, all the stored data for **MEMORY** playback will be erased.

To select a track number in memory

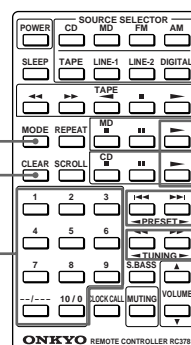
Turn **MULTI JOG** or press it repeatedly during **MEMORY** playback.

To check the track numbers in memory

Press **◀/▶** while the CD/MD is stopped.

Operating with the remote controller

1
CLEAR



3

Press **▶** of the selected source.

2

Number buttons
See pages 17 and 19.
(These buttons do not operate during **MEMORY** playback.)

To erase a track number from memory

- While in **MEMORY** playback mode, and the CD/MD is stopped, press **CLEAR**. Each press erases the last track number stored in memory.
- If you change the playback mode, all the stored data for **MEMORY** playback will be erased.

To select a track number in memory

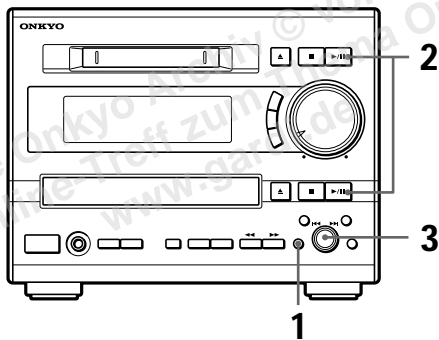
Press **◀/▶** repeatedly during **MEMORY** playback.

To check the track numbers in memory

Press **◀/▶** while the CD/MD is stopped.

◆ 1 TR (one track) playback

You can play back only a single track using this mode.



While playing or pausing the CD or MD

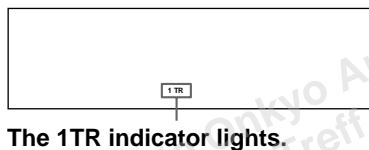
Press MODE/AUTO/MONO repeatedly until the 1TR indicator lights in the display.

The playing or pausing track will be played back.

While the source is CD or MD, and in stop mode



Press MODE/AUTO/MONO repeatedly until the 1TR indicator lights in the display.

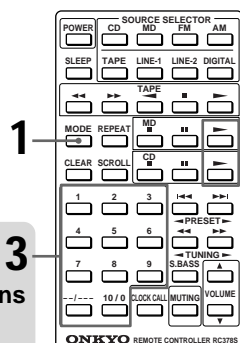


Press ►/|| of the selected source.
1 TR (one track) playback starts.



If you wish to select another track, turn MULTI JOG.

Operating with the remote controller

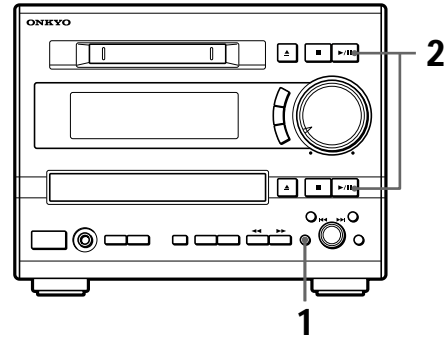


2 Press ► of the selected source.

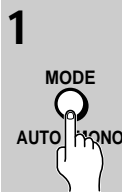
3 Number buttons
See pages 17 and 19.

◆ RANDOM playback

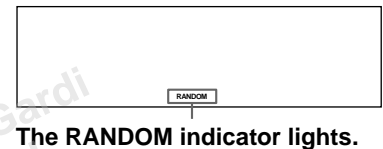
All the tracks on the disc will be shuffled, then played back.



While the source is CD or MD, and in stop mode



Press MODE/AUTO/MONO repeatedly until the RANDOM indicator lights in the display.

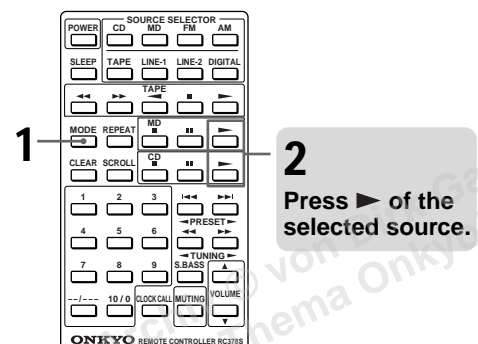


Press ►/|| of the selected source.
RANDOM playback starts.

The playing track



Operating with the remote controller



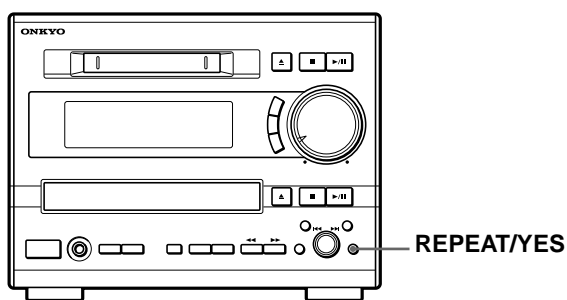
2 Press ► of the selected source.

(Continued on the next page.)

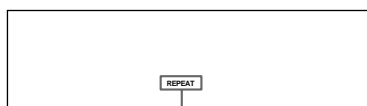
Various ways of playing CDs and MDs (continued)

◆ REPEAT/CHAIN REPEAT playback

- The REPEAT mode plays back a CD or MD repeatedly, and the CHAIN REPEAT mode plays back both the CD and MD in turns.
- You can set this mode in whatever the CD or MD operation is (in playback, pause, and stop mode) as long as the selected source is CD or MD.
- You can combine either REPEAT or CHAIN REPEAT mode with MEMORY, 1 TR, or RANDOM mode. In CHAIN REPEAT mode, you can set the other combination mode individually to CD and MD.

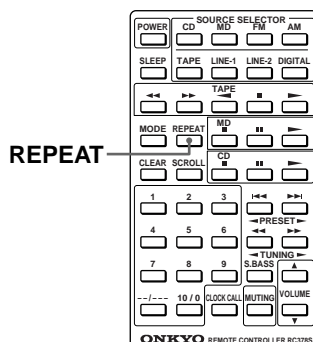


Press REPEAT/YES repeatedly until the REPEAT or CHAIN REPEAT indicator lights in the display.
The REPEAT or CHAIN REPEAT playback mode is set.

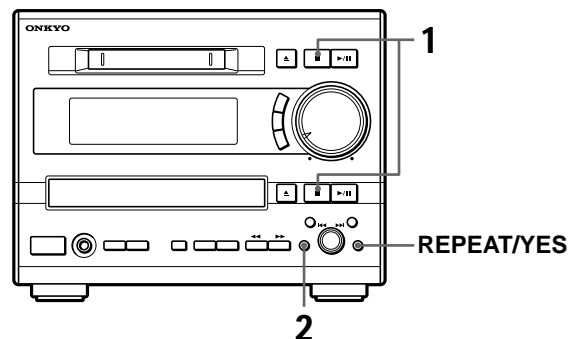


The REPEAT or CHAIN REPEAT indicator lights.

Operating with the remote controller



◆ Canceling the playback mode



Canceling 1TR, MEMORY, and RANDOM mode

1



Press ■ of the selected source to stop playback.

2



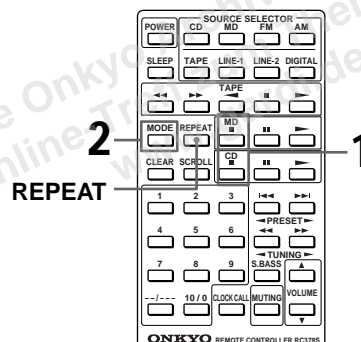
Press MODE/AUTO/MONO repeatedly until neither the MEMORY, 1TR, or RANDOM indicator lights in the display.

Canceling REPEAT and CHAIN REPEAT mode



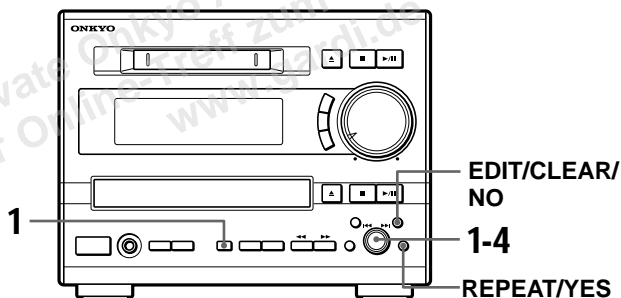
Press REPEAT/YES repeatedly until neither the REPEAT or CHAIN REPEAT indicator lights in the display.

Operating with the remote controller



Adjusting the tone

You can adjust the bass and treble sound, and turn Super Bass mode On or Off.



4



Press MULTI JOG.

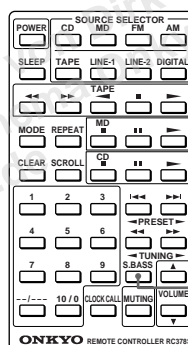
The normal display resumes.

Tips

You can resume normal display by pressing EDIT/CLEAR/NO after adjusting each tone.

Operating with the remote controller

Only Super Bass mode can be controlled with the remote controller.



S. BASS

Each press switches Super Bass mode On or Off.

1



Press **TONE** to display “Bass,” then turn **MULTI JOG** clockwise to reinforce bass, or counterclockwise to attenuate it. You can set the number of value between -10 and $+10$ in every two unit.

Bass + 8

2



Press **MULTI JOG** to display “Treble,” then turn **MULTI JOG** clockwise to reinforce treble, or counterclockwise to attenuate it. You can set the number of value between -10 and $+10$ in every two unit.

Treble + 4

3



Press **MULTI JOG** to display “S. BASS,” then turn **MULTI JOG** clockwise to turn Super Bass mode On, or counterclockwise to turn it Off.

If you set Super Bass mode On, the super bass sounds will be boosted.

S. Bass On

The S.BASS indicator lights when you turn Super Bass mode On.

Naming a CD, MD and its tracks, and preset channels

◆ Naming a CD

After inserting the CD and selecting CD for the source, execute "Entering a name" on the right column.

- You can enter up to 28 letters per name.
- You can name up to 24 CDs. The names will be stored in the unit memory. If you insert the same CD after taking it out, the unit will recognize the CD and display its name.

◆ Naming an MD disc or track

- You can enter up to 100 characters per name.
- As the name will be stored onto the MD disc, there is no limit to the number of MDs.
- Use a recordable MD with the record-protect window closed.

- 1 Insert the MD, then select MD as the source.
- 2 To name the disc, go straight to step 3. To name a track, select the track.
- 3 Execute "Entering a name" on the right column.

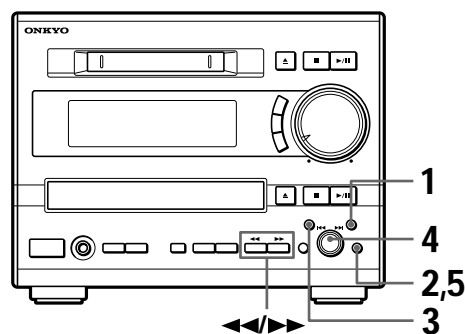
Notes

- If the MD is record-protected or a playback-only disc, you cannot name the disc. (See page 55.)
- Before naming the disc, check that no particular track is selected. If a track is selected, press MD ■.
- A track can be named during either recording or playback. If recording or playback of the next track starts before you finish inputting the name, the input name will be invalid.
- You can only name the disc in normal playback mode.
- Information such as names will be recorded onto the TOC of the MD when you eject the MD, turn off the unit, or stop recording. Therefore, do not disconnect the AC power cord (mains lead) or apply vibration to the unit when the TOC indicator lights or flashes. (See "When the TOC indicator lights or flashes" on page 23.)

◆ Naming a preset channel

After selecting the preset channel to name, execute "Entering a name" on the right column. You can enter up to 8 characters per name.

◆ Entering a name

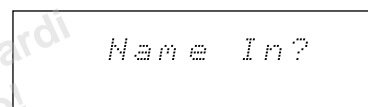


1

EDIT / CLEAR



Press **EDIT/CLEAR/NO** repeatedly until "Name In?" appears in the display.



2

REPEAT



Press **REPEAT/YES**.

Whenever you wish to quit naming, press and hold **EDIT/CLEAR/NO**, then press **REPEAT/YES**.

3

DISPLAY



Press **DISPLAY** repeatedly until the character type you wish to enter appears in the display.

You can select the following character entry modes cyclically:

- "A" for capital letters,
- "a" for small letters,
- "1" for numbers and symbols, and
- "♪" for Easy Title* (see next page).

* This mode cannot be selected when naming a preset channel.

The character type appears.



4

MULTI JOG



PUSH TO ENTER



MULTI JOG



PUSH TO ENTER

Turn **MULTI JOG** to select the character (or title when in Easy Title mode), then press it to enter.


Repeat this step for the next character. If you wish to change the type of characters, repeat step 3 followed by this step.

If you entered a wrong character
See "Correcting and erasing a character."

If you add a new character between characters
See "Inserting a character."

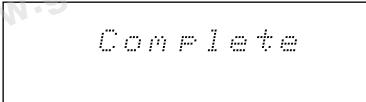
5

REPEAT



YES

Press REPEAT/YES when you have completed entering all the characters.



Whenever you wish to quit naming, press and hold EDIT/CLEAR/NO, then press REPEAT/YES.

What characters can be entered?

You can enter the following characters:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9
> <) (; : _ \$ % & + - * / = ? ! ' " . ,
_ (space) H (insert)

What's Easy Title?

The following music related words are prepared for easy entry:

BALLAD	LIVE	African	Anthology	Heavy
BLUES	POPS	American	Best of *	Hit Songs
CLASSIC	REGGAE	Asian	Collection	Omnibus
DANCE	ROCK	British	Favorite	Selection
FUSION	SOUL	Euro	Happy	Special
JAZZ	TECHNO	German	Super	
	VOCAL	Japanese	*	

* _ stands for space.

Correcting and erasing a character

If the unit is not in "Name In" mode, execute steps 1 and 2 in "Entering a name." Then follow the steps below.

- 1 Press ◀ or ▶ repeatedly until the character you wish to correct or erase flashes.

2 When correcting

Enter the desired character (or title) following steps 3 and 4 in "Entering a name."

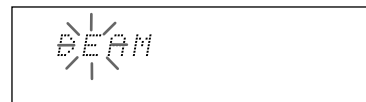
When erasing

Press EDIT/CLEAR/NO on the unit or CLEAR on the remote controller.

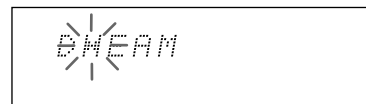
Inserting a character

If the unit is not in "Name In" mode, execute steps 1 and 2 in "Entering a name." Then follow the steps below.

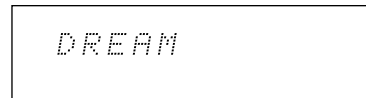
- 1 Press ◀ or ▶ repeatedly until the character behind the point at which you wish to enter a new character flashes.



- 2 Turn MULTI JOG until "H" appears, then press MULTI JOG.



- 3 Enter the desired character (or title) following steps 3 and 4 in "Entering a name."



Erasing the name given to a CD or MD

This will erase both the disc name and all the track names from an MD.

- 1 Select CD or MD as the source.
- 2 Press EDIT/CLEAR/NO until "Name Erase?" appears in the display.
- 3 Press REPEAT/YES.
"Complete" appears and the name will be erased.

The name of a CD may be erased without the CD being inserted.

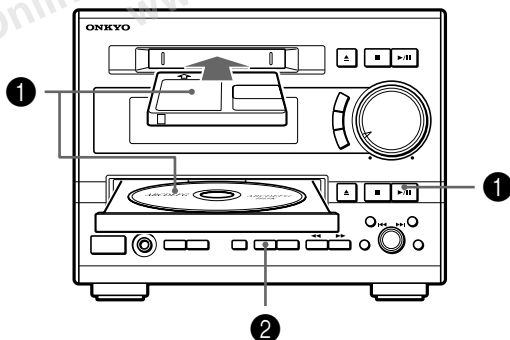
- 1 Select CD as the source, then press EDIT/CLEAR/NO.
"Name Erase?" appears in the display.
- 2 Press REPEAT/YES.
After scrolling the disc names the display will flash.
- 3 Turn MULTI JOG to select the disc name you wish to erase.
- 4 Press REPEAT/YES.
"Complete" appears and the name will be erased.

Erasing the name given to a preset channel

- 1 Select TUNER as the source.
- 2 Turn MULTI JOG to select the preset channel name you wish to erase.
- 3 Press EDIT/CLEAR/NO until "Name Erase?" appears in the display.
- 4 Press REPEAT/YES.
"Complete" appears and the name will be erased.

Advanced CD Dubbing

◆ Dubbing a track you are listening to from the beginning



- ❶ Insert a CD and an MD, then press **CD ►/II** to start playing back the CD.
Use a recordable MD with the record-protect window closed.
- ❷ While listening to the CD, just press **CD DUBBING**.
Playback of the track playing when you pressed CD DUBBING will restart from the beginning, then dubbing start. Dubbing will automatically stop at the end of the track, although the CD continues playing.

◆ Dubbing a CD playing in various playback mode onto the MD

- ❶ Insert a CD and an MD, then select **CD** as the source.
Use a recordable MD with the record-protect window closed.
- ❷ Set the playback mode.
You can set MEMORY or 1 TR playback mode. You may also combine REPEAT mode with them. (See pages 26 to 28.)
Do not start playback yet.
- ❸ Press **CD DUBBING** to start dubbing.

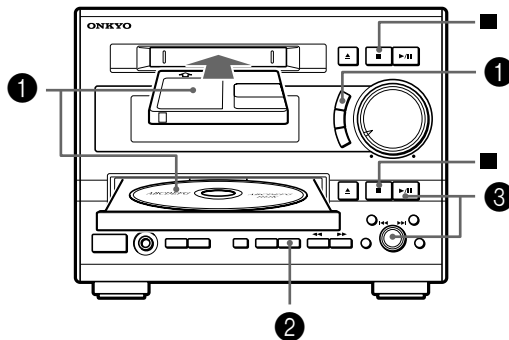
Notes

- Normally the incompletely recorded track will be erased (see "If CD dubbing has been incomplete" on page 22). However, if recording is interrupted during dubbing of a single track, the track will be recorded up to the point at which recording was interrupted.
- When combined with 1 TR playback, only the first track of the CD will be dubbed even if other tracks are selected.
- When digital recording is done on a single track from the CD in repeat mode, no track number is marked. (This means that if the same track is repeated ten times during recording, it will be regarded as one track.)

CD to MD Synchro Recording

◆ CD to MD synchro recording

This function is convenient for CD editing to MD.



- ❶ Insert a CD and an MD, then select **CD** as the source.
Use a recordable MD with the record-protect window closed.
- ❷ Press **● REC** to set the MD to recording pause.
- ❸ Select the track by turning **MULTI JOG**, then press **CD ►/II** to start synchro recording.
CD playback and MD recording start at the same time.

Pausing the CD and selecting the next music to record

- ❶ Press **CD ►/II** to pause.
MD recording pauses at the same time.
- ❷ Select the track by turning **MULTI JOG**, then press **CD ►/II** to start synchro recording.

To stop recording

Press **MD ■** to stop recording. The CD continues playing. If you press **CD ■**, the CD stops playing, but the MD returns to recording pause.

Moving, dividing, combining, and erasing MD tracks

◆ Five basic functions

• All Erase

This function erases all the tracks and names to initialize the MD. ("Blank Disc" is displayed.)

• Erase

This function erases the selected track.

• Move

This function moves the selected track to the desired position.

• Divide

This function divides the selected track.

• Combine

This function combines the selected track and the immediately preceding track.

◆ Combination use of the basic functions

Erasing a part of the track – Divide and Erase

Divide the track at the end of or at the beginning of the portion you wish to erase. If necessary, repeat this operation to separate the unwanted portion. Then, erase the separated track.

Combining the tracks separately positioned – Move and Combine

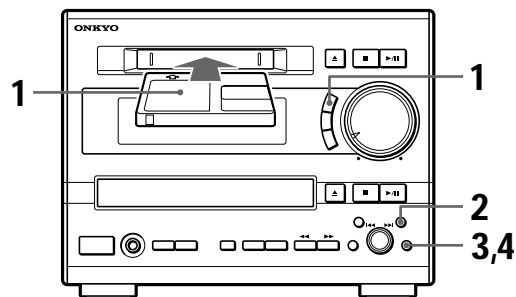
If the tracks you want to combine are in different locations, move the track to be merged to a position behind the other track, then combine them.

Notes

- Information of the edited or erased contents using the above functions will be recorded onto the TOC of the MD when you eject the MD, turn off the unit, or stop recording. Therefore, do not disconnect the AC power cord (mains lead) or apply vibration to the unit when the TOC indicator lights or flashes. (See "When the TOC indicator lights or flashes" on page 23.)
- If the MEMORY, RANDOM, or 1TR indicator is lit in the display, you cannot edit or erase any track. In such case, cancel the MEMORY, RANDOM, and 1TR playback mode (see page 28) before starting the operation.

◆ Erasing all the tracks of the MD – All Erase

- This is done only while the MD is stopped.
- To cancel the operation, press MD ■.



1



Insert the MD, then select MD as the source.

Use a recordable MD with the record-protect window closed.

2



Press EDIT/CLEAR/NO repeatedly until "All Erase?" appears in the display.

All Erase?

3



Press REPEAT/YES.

The reconfirmation message "All Erase??" appears.

All Erase??

4



Press REPEAT/YES to erase all the tracks.

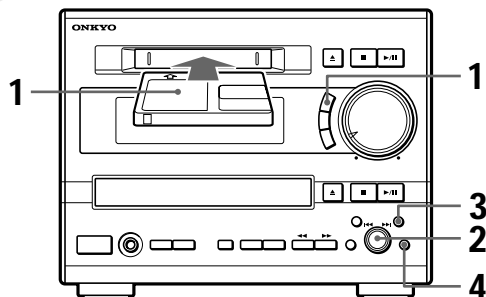
"Complete" appears. All the tracks of the MD have been erased.

Complete

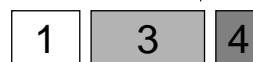
Moving, dividing, combining, and erasing MD tracks (continued)

◆ Erasing a selected track – Erase

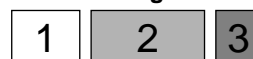
- This is done while the MD is stopped or paused.
- To cancel the operation, press MD ■.



Deleting the selected track



Renumbering the tracks



1

CD/MD



Insert the MD, then select MD as the source.

Use a recordable MD with the record-protect window closed.

2



Turn MULTI JOG to select the track to erase.

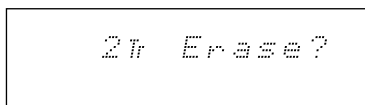


3

EDIT / CLEAR



Press EDIT/CLEAR/NO repeatedly until “Erase?” appears in the display.



4

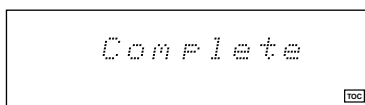
REPEAT



Press REPEAT/YES to erase the track.

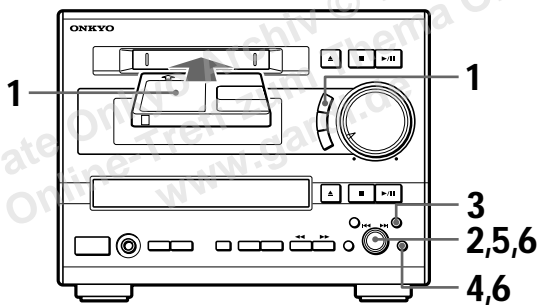
“Complete” appears.

The selected track was erased and all the other remaining tracks have been renumbered from the top.



◆ Moving the selected track – Move

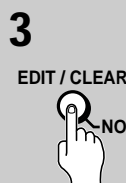
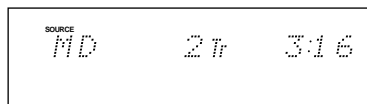
- This is done while the MD is stopped or paused.
- To cancel the operation, press MD ■.



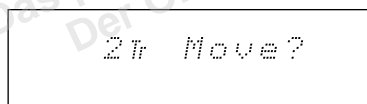
1 Insert the MD, then select MD as the source.
Use a recordable MD with the record-protect window closed.



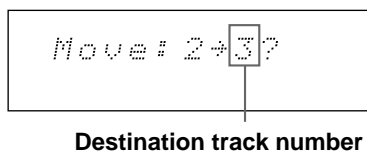
2 Turn MULTI JOG to select the track to move.



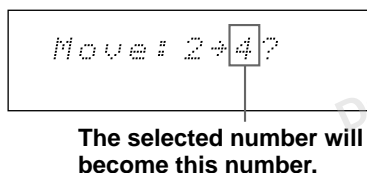
3 Press **EDIT/CLEAR/NO** repeatedly until “Move?” appears in the display.



4 Press **REPEAT/YES**.
The destination track number appears pointed by the arrow.



5 If necessary, turn MULTI JOG to change the destination track number.



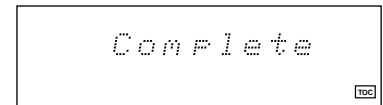
6



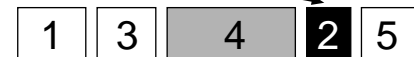
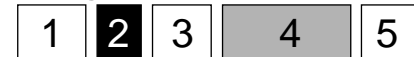
Press **REPEAT/YES** or **MULTI JOG** to move.

“Complete” appears.

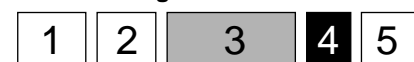
The selected track was moved and all the tracks have been renumbered from the top.



Moving the selected track



Renumbering the tracks

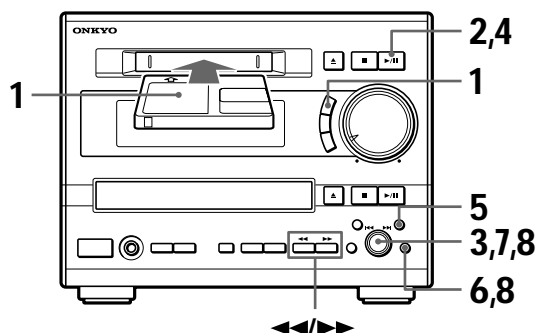


(Continued on the next page.)

Moving, dividing, combining, and erasing MD tracks (continued)

◆ Dividing a selected track – Divide

- This is done while the MD is playing or paused.
- When the selected track is named (see page 30), only the preceding one of the divided tracks will receive the name.
- To cancel the operation, press MD ■.



1
CD/MD
Insert the MD, then select MD as the source.
Use a recordable MD with the record-protect window closed.

2
Press MD ►/II.
Playback will start.

3
MULTI JOG
PUSH TO ENTER
Turn MULTI JOG to select the track to divide.
You may press ►► to fast-forward, or ◀◀ to fast-reverse to locate the point in the selected track.

SOURCE
MD 2T 300

4
Press MD ►/II at the point you wish to divide.
The MD will be paused.

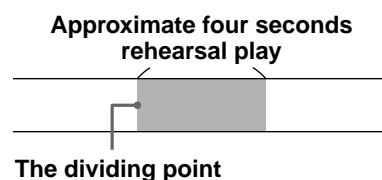
5
EDIT / CLEAR
Press EDIT/CLEAR/NO repeatedly until "Divide?" appears in the display.

2T Divide?

6
REPEAT
YES
Press REPEAT/YES.

Press REPEAT/YES.

"Rehearsal" and "Position OK?" appear alternatively and the approximate four-second section around the dividing point will be played repeatedly.

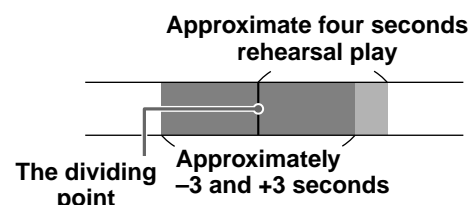


7
MULTI JOG
PUSH TO ENTER
If necessary, turn MULTI JOG for fine adjustment of the dividing point.
You may adjust the dividing point between the value -45 and +45 (approximately -3 and +3 seconds) within the selected track.

If necessary, turn MULTI JOG for fine adjustment of the dividing point.

You may adjust the dividing point between the value -45 and +45 (approximately -3 and +3 seconds) within the selected track.

Position+11



8
REPEAT
YES
Press REPEAT/YES or MULTI JOG to divide.

Press REPEAT/YES or MULTI JOG to divide.

"Complete" appears.

The selected track was divided and all the tracks have been renumbered from the top.

Complete

Dividing the selected track

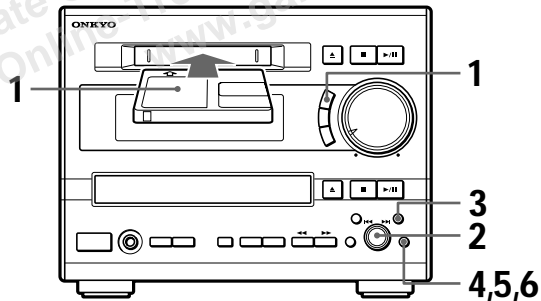


Renumbering the tracks



◆ Combining selected tracks – Combine

- This is done while the MD is playing, paused, or stopped.
- Only when the preceding track has a name, the name will be the name of the combined track.
- To cancel the operation, press MD ■.



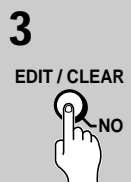
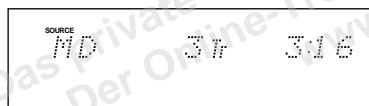
1 Insert the MD, then select MD as the source.

Use a recordable MD with the record-protect window closed.

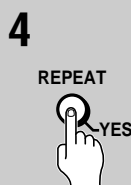
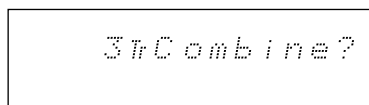


2 Turn MULTI JOG to select the track to be combined with.

The selected track will be combined with the preceding track, so it is impossible to select the first track.

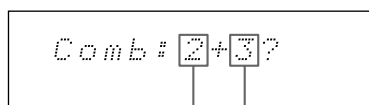


3 Press **EDIT/CLEAR/NO** repeatedly until “Combine?” appears in the display.



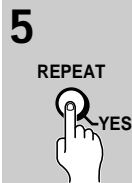
4 Press **REPEAT/YES**.

The selected track and preceding track are displayed.



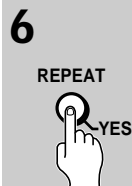
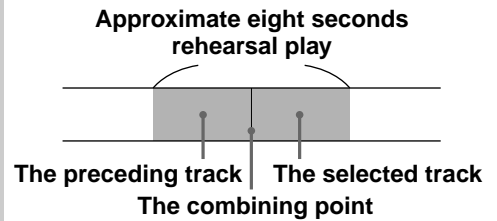
The preceding track

The selected track



5 Press **REPEAT/YES**.

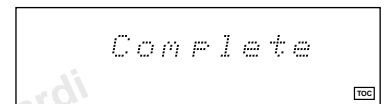
“Rehearsal” and “Track OK?” appear alternatively and the approximate eight-second section around the combining point will be played repeatedly.



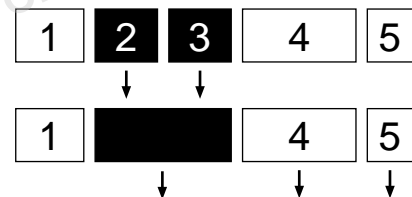
6 Press **REPEAT/YES** to combine.

“Complete” appears.

The selected track and preceding track were combined and all the tracks have been renumbered from the top.



Combining the selected and preceding tracks

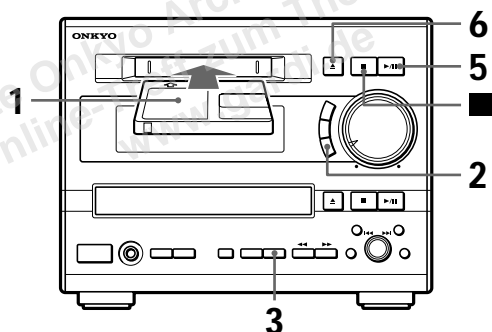


Renumbering the tracks



Recording from a connected source to an MD

You can record the sound from connected equipment (see page 8) onto an MD. Digital or analog recording is possible depending on the connected source.



1

Insert an MD.

Use a recordable MD with the record-protected window closed.

2



Press TAPE/LINE repeatedly until the wished source appears in the display.

The source name appears in the following way:

TAPE→LINE-1→LINE-2→DIGITAL



Notes

- If you changed the source name (see page 45), the new source name appears.
- If the DIGITAL indicator flashes in the display when you have selected DIGITAL, no digital equipment is connected or the connected digital component is not turned on.

3



Press ● REC to set the MD to recording pause.

Note

If "D.In Unlock appears or the DIGITAL indicator flashes in the display when you have selected DIGITAL, no digital equipment is connected or the connected digital component is not turned on.

If the MD does not set recording pause

See "When dubbing does not start" on page 22.

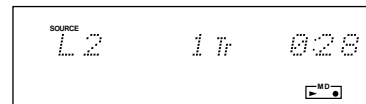
4

Start playing the selected source.

5



Press MD ►/II to start recording.



To change the LevelSync function setting

See page 25.

To mark a track number while recording

Press ● REC while recording. Keep a sufficient interval (more than four seconds) to mark the next track number. If it is too short, the track number may not be marked.

To pause recording

Press MD ►/II.

To restart recording, press the same button.

To stop recording

Press MD ■.

Recording automatically stops when the end of the MD is reached.

To adjust the recording levels

See page 25.

To check the completed recording

See page 22.

6



Press MD ▲ when you have finished recording.

See "When the TOC indicator lights or flashes" on page 23.

About digital recording

This unit is equipped with a digital input signal sampling frequency rate converter which converts the other type of sampling frequency to 44.1 kHz before recording. This enables the unit, other than the CD player which has the same sampling frequency, to digitally record the source with different sampling frequencies, such as a DAT or satellite broadcast whose sampling frequency is 32 or 48 kHz.

◆ Signal Synchro Recording

Signal Synchro Recording is the function that starts recording onto an MD when a sound signal is received from the source connected to the unit input jacks.

❶ **Execute steps 1 to 3 on the previous page.**
The MD is set to recording pause.

❷ **Press ● REC.**

“Signal Rec” appears in the display, then the MD switches to Signal Synchro Recording pause.



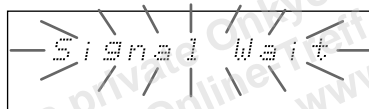
❸ **Start playing the selected source.**

When a sound signal is received from the source, the MD will automatically start recording.
(You do not need to press MD ►/II to start recording in step 5 on the previous page.)

❹ **Execute step 6 on the previous page.**

About Signal Wait function

Signal Wait is the function which switches the MD to Signal Wait recording pause if the incoming signal stops for four seconds or longer. “Signal Wait” appears in the display while waiting for the next incoming signal.



If the signal starts coming in within about 26 seconds the MD starts recording. (If more than 26 seconds have elapsed without incoming signals, the MD will be switched back to the normal recording pause.)

Notes

- This function always operates when the LevelSync function is On. If you set LevelSync function to Off (see page 25), then Signal Wait function does not operate.
- For track numbers to be marked automatically, the signature code included in the digital signal at the beginning and ending of each track is necessary. Some equipment and broadcasts do not include this signal, and in such a case track numbers will not be marked automatically.

Synchro Recording operation with an ONKYO stereo cassette tape deck

The following types of recording are possible when you have connected an ONKYO stereo cassette tape deck (see page 8).

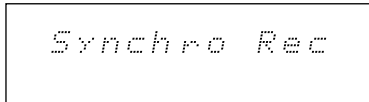
- Synchro Recording from the unit CD to the stereo cassette tape deck,
- Synchro Recording from the unit MD to the stereo cassette tape deck, and
- Synchro Recording from the stereo cassette tape deck to the unit MD.

For Synchro Recording from the unit CD or MD to the stereo cassette tape deck, please refer to the stereo cassette tape deck Instruction Manual.

Synchro Recording from the stereo cassette tape deck to the unit MD is described below.

Synchro Recording from the stereo cassette tape deck to the MD

While the unit MD is in recording pause, start playing back the stereo cassette tape deck. The source will automatically be switched to TAPE, then recording from the stereo cassette tape deck to the MD starts at the same time.



To stop Synchro Recording

Press ■ of the stereo cassette tape deck. The MD switches to recording pause.

Notes for the ONKYO stereo cassette tape deck, K-185X connected to the unit

If the incoming signal to the ONKYO stereo cassette tape deck, K-185X is too high during CD dubbing, execute the steps below to lower the recording level.

- ❶ **Press TAPE/LINE until “TAPE” appears in the display.**
- ❷ **Press EDIT/CLEAR/NO repeatedly until “Dub. Setting?” appears.**
- ❸ **Press REPEAT/YES.**
“Level=High” appears.
- ❹ **Turn MULTI JOG until “Level=Low” appears.**
- ❺ **Press MULTI JOG.**
“Complete” appears.

Using the timers

The unit provides 5 different types of timer: Sleep, Once, Weekday, Weekend, and Rec timer.

◆ Five basic functions

Sleep timer

This timer turns off the unit automatically when the set remaining time has reached zero. It is convenient, for example, when you fall asleep to music or a radio program.

Once, Weekday, and Weekend timer

- These timers turn on the unit when the set start time is reached, then the source (CD, MD, FM, TAPE*, LINE-1*, LINE-2*, or DIGITAL*) set in the timer is selected.
 - If you set the source in the timer to CD*, MD*, or TAPE* connected to an ONKYO stereo cassette tape deck, playback starts automatically.
 - If you set the source in the timer to FM (tuner), the set preset channel will be on.
- * If you have changed the name, the changed name will appear (see page 45).
- Then the unit is turned off when the set end time is reached.
- Once timer operates only once.
- Weekday timer operates every Monday to Friday (initial setting).
You can customize Weekday timer for your own weekdays.
- Weekend timer operates every Saturday and Sunday (initial setting).
You can customize Weekend timer for your own weekends.

Rec timer

- This timer turns on the unit when the set start time is reached, then starts recording the set source to the following set recorders:
 - MD,
 - ONKYO stereo cassette tape deck, or
 - both of the above recorders.
- Then it turns off the unit when the set end time is reached.
- Rec timer operates only once.

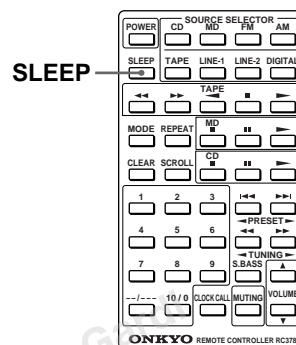
Tips

While Rec timer is operating, the sound will be muted. To check the sound during timer recording, press MUTING on the remote controller to turn off the muting function.

◆ Using Sleep timer

Operating with the remote controller

Sleep timer can be set between 90 and 10 minutes decreasing in intervals of 10 minutes.

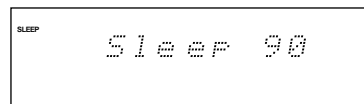


SLEEP



Press SLEEP while you are listening to music or a radio program.

“Sleep 90” appears in the display. The unit will turn off in 90 minutes. Each press of the same button makes the remaining time shorter by 10 minutes.



Checking the remaining time

Press SLEEP while Sleep timer is on. If you press SLEEP while the remaining time is displayed, the remaining time is reduced by 10 minutes.

Canceling Sleep timer

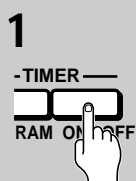
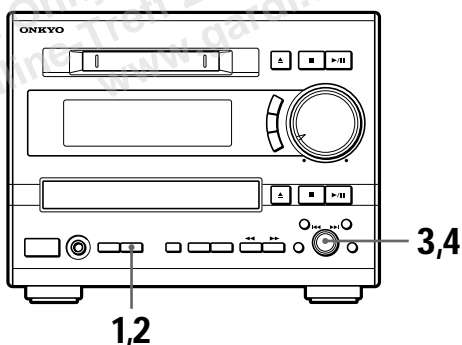
Press SLEEP repeatedly until “Sleep off” appears in the display.

Turning off the unit automatically after completing CD Dubbing

If you set Sleep timer while you are carrying out the CD Dubbing to the MD or ONKYO stereo cassette tape deck, the unit will turn off after completing CD dubbing regardless of the remaining time you set. This is convenient for starting CD Dubbing before going to bed or going out.

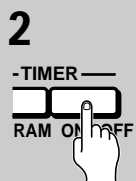
Operating with the unit

Sleep timer can be set between 90 and 10 minutes decreasing in intervals of 10 minutes. Setting the timer from 1 to 99 in one-minute increments is also possible using MULTI JOG.



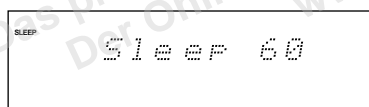
1 Press TIMER ON/OFF while you are listening to music or a radio program.

"Sleep 90" appears in the display window. The unit will turn off in 90 minutes.



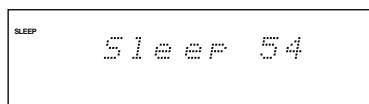
2 Press TIMER ON/OFF if you wish to make the remaining time shorter.

Each press makes the remaining time shorter by ten minutes as follows: 90→80→...→10→off.



3 Turn MULTI JOG if you wish to set the remaining time in one-minute increments.

Turn MULTI JOG clockwise to increase the remaining time by up to 99 minutes, or counterclockwise to decrease the remaining time down to one minute.



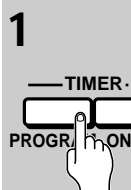
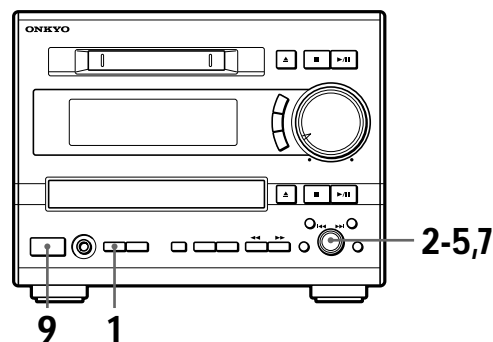
4 Press MULTI JOG.

Sleep timer starts operating.

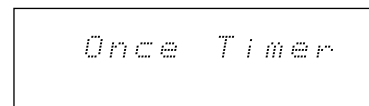
The SLEEP indicator lights.



Setting Once, Weekday, Weekend, and Rec timer



Press TIMER PROGRAM repeatedly until the timer menu you wish to set appears.



→ Once Timer → Weekday Timer → Weekend Timer → Rec Timer → Clock* → normal display

* Select "Clock" to set the clock (see pages 12 and 13).



Press MULTI JOG, then turn it to select the source.

When setting Once, Weekday, and Weekend timer

Following playing sources appear in turn:

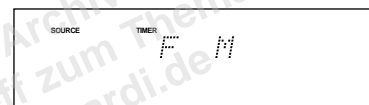
CD ↔ MD ↔ FM ↔ TAPE*
↓ ↑
DIGITAL* ↔ LINE-2* ↔ LINE-1*

When setting Rec timer

Following playing sources to be recorded appear in turn:

FM ↔ LINE-1* ↔ LINE-2* ↔ DIGITAL*
↑ ↓

* If you have changed the name, the new name appears (see page 45).
Connect the timer equipped source.



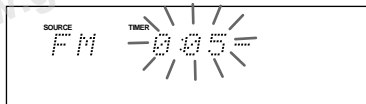
(Continued on the next page.)

Using the timers (continued)

3



Press MULTI JOG, then turn it to select the start time.

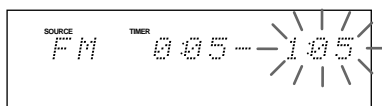


4



Press MULTI JOG, then turn it to select the end time.

After you press MULTI JOG in this step, the end time will automatically be set to one hour after the start time.

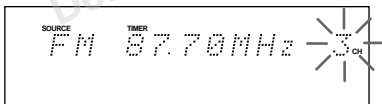


5



If you have selected FM in step 2

Press MULTI JOG, then turn it to select the wished preset channel.



If you have selected the source other than FM in step 2

Proceed to the next step.

6

When setting Weekday and Weekend timer

Execute "Setting your own weekdays and weekends" on the next page if necessary.

When setting Rec timer

Execute "Setting the day and selecting the recorder for Rec timer" on the next page.

When setting Once timer

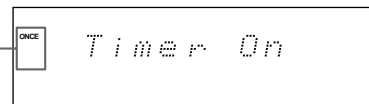
Proceed to the next step.

7



Press MULTI JOG.

"Timer On" is displayed and the timer you have set turns on.



ONCE	=	Once Timer
W.DAY	=	Weekday Timer
W.END	=	Weekend Timer
REC	=	Rec Timer

8

Prepare the source set in the timer.

When setting Once, Weekday, or Weekend timer

Prepare the source for playback (e.g. inserting a CD).

Adjust the volume before proceeding to the next step. This is because the volume when the timer turns on the unit, will become the same as the volume when you switch off the unit to operate the timer.

When setting Rec timer

Insert an MD with the record-protect window closed into the unit.

Adjust the recording level, or turn on or off LevelSync function (see page 25) if necessary.

9

STANDBY / ON



Turn off the unit.

The timer does not operate if the power is on. Make sure to turn off the unit after using, even if currently being used.



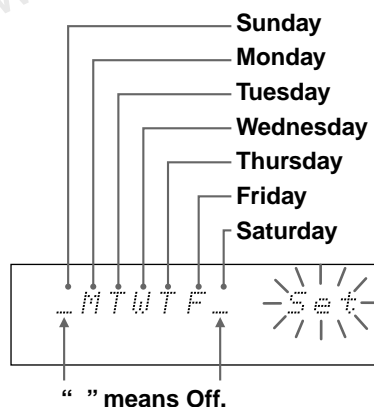
The indicator of the set timer lights in the display.

◆ Setting your own weekdays and weekends

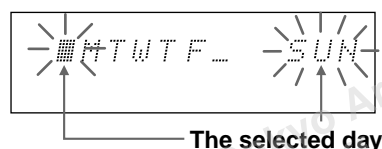
① Press MULTI JOG.

Check On/Off setting of the weekdays (when setting Weekday timer) or weekend (when setting Weekend timer).

If you do not need to change the setting, skip the following steps, then proceed to step 7 on the previous page.



② Turn MULTI JOG to select the day setting that you wish to reverse.



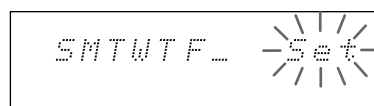
③ Press MULTI JOG to reverse the setting.

Each press turns the day On or Off in turn.



④ To change the setting of other days, repeat steps ② and ③.

⑤ Turn MULTI JOG until "Set" appears in the display.



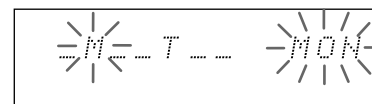
◆ Setting the date and selecting the recorder for Rec timer

① Press MULTI JOG.

The following display appears.



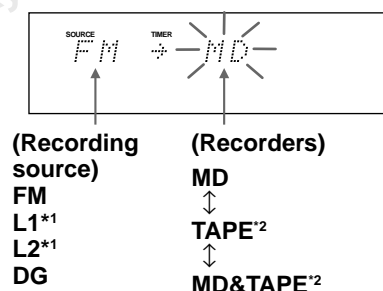
② Turn MULTI JOG to change the recording date.



Selecting "NEXT" instead of the date

If the start time you set in step 3 on the previous page is within 24 hours of the current time, you may select "NEXT" by turning MULTI JOG instead of selecting date so that you do not have to worry about whether the day is the current date or next day.

③ Press MULTI JOG, then turn it to select the recorder.



*1 If you have changed the name, the new name appears (see page 45).

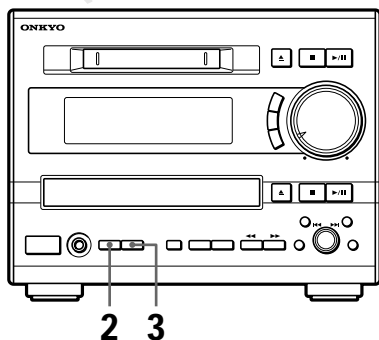
*2 Rec timer with TAPE only operates when you connected an ONKYO stereo cassette tape deck (see page 8).

You can record the same source to the MD and stereo cassette tape deck at the same time if you select MD&TAPE.

Using the timers (continued)

◆ Switching the set timer On/Off

You can switch each set timer to Off, or On after switching it Off.



1

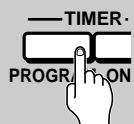
Check each timer to see whether it is On or Off.

The indicator of the timer set to On is lit in the display.

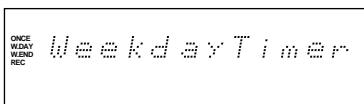


ONCE = Once Timer
 W.DAY = Weekday Timer
 W.END = Weekend Timer
 REC = Rec Timer

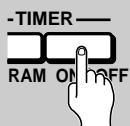
2



Press TIMER PROGRAM repeatedly until the desired timer appears in the display.

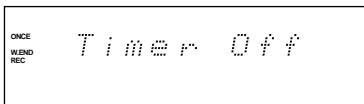


3



Press TIMER ON/OFF.

If the timer was On, it will become Off, and if the timer was Off, it will become On.



Note

If you set the timer to On, be sure to prepare the source, and turn off the unit as described in step 8 and 9 on page 42.

◆ If the start or end time of a timer overlaps another timer

If the same start time is set in more than one timer

The priority of the timers is follows:

Once, Weekday, Weekend, and Rec timer in order.

If the start time of a timer has arrived while another timer is operating

The timer that operated first has priority over the overlapped timer. The latter timer will be canceled, including the end time.

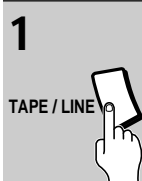
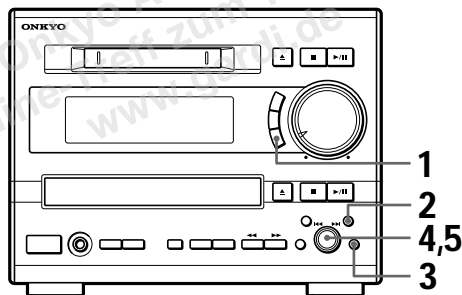
When you are setting the timer, make sure to keep at least a one minute interval between the end time of the former timer and the start time of the latter timer.

What happens to a Rec or Once timer if it does not operate because the power was On or overlapped another timer?

The timers will automatically be switched to Off.

Customizing the source names

You can change the source name appearing in the display to suit the connected component on page 8.

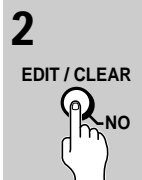


Press TAPE/LINE until the source whose name you wish to change appears in the display.

The source name appears in the following way:

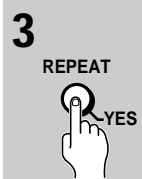
TAPE → LINE-1 → LINE-2 → DIGITAL

LINE-2



Press EDIT/CLEAR/NO repeatedly until "Name Select?" appears in the display.

Name Select?



Press REPEAT/YES.



Turn MULTI JOG to select a new name for the source.

Depending on the source you've selected in step 1, the name changes in the following order:

TAPE* ↔ DAT ↔ VCR

LINE-1* ↔ DVD ↔ VIDEO DISC

TV ↔ DSR ↔ CS ↔ BS

LINE-2* ↔ DVD ↔ VIDEO DISC

PC ↔ TV ↔ DSR ↔ CS ↔ BS

DIGITAL* ↔ DVD/dig ↔ V.DISC/dig

↕

PC/dig

↕

DSR/dig ↔ CS/dig ↔ BS/dig

* The name in bold letters is the initial name.

DVD

5



Press MULTI JOG to enter the new name.

"Complete" appears.

Complete

You may press REPEAT/YES instead of MULTI JOG to get the same result.

To cancel changing the name, press EDIT/CLEAR/NO instead of pressing MULTI JOG or REPEAT/YES.

About the shorten source names

The short source names appear in the display depending on the situation. Check the short names in the table below.

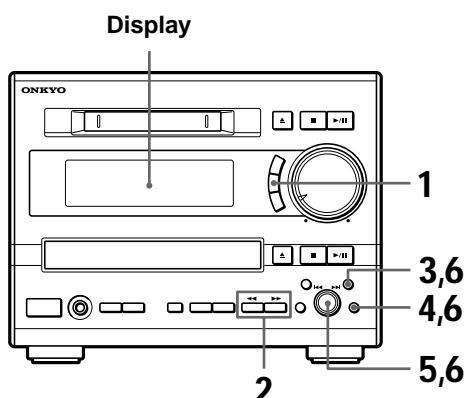
Ordinary names	Shorten names
BS	BS
CS	CS
DSR	DR
DAT	DT
DIGITAL	DG
DVD	DV
LINE-1	L1
LINE-2	L2
PC	PC
TAPE	TA
TV	TV
VCR	VC
VIDEO DISC	VD

Manual presetting/erasing/copying of radio stations

◆ Presetting radio stations manually – Preset Write

You can preset radio stations automatically as described on page 15, but manual presetting is also possible.

- You can preset up to 30 channels, including the channels which are already registered on page 15.
- You can select the desired preset channel number.



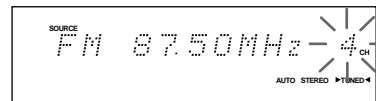
1 	<p>Press TUNER. "FM" appears in the display.</p>
2 <p>or</p>	<p>Press TUNING ◀▶ to tune in the radio station you wish to preset. If you hold down either of the buttons, the frequency keeps changing.</p>
3 	<p>Press EDIT/CLEAR/NO repeatedly until "Preset Write?" appears in the display.</p>
4 	<p>Press REPEAT/YES. The channel number to be preset flashes.</p>

To cancel presetting, press EDIT/CLEAR/NO instead.

5



If you wish to change the channel number, turn MULTI JOG.



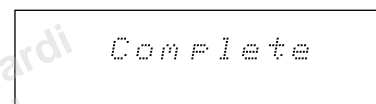
6



Press MULTI JOG to confirm.

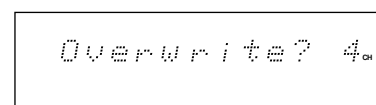
You may press REPEAT/YES instead of MULTI JOG to get the same result.

If "Complete" appears



The radio station is registered to the preset channel.

If "Overwrite?" appears



The channel you've selected is registered already.

- **To register the new radio station by deleting the existing radio station**
 Press REPEAT/YES.
- **To cancel presetting**
 Press EDIT/CLEAR/NO.

REPEAT



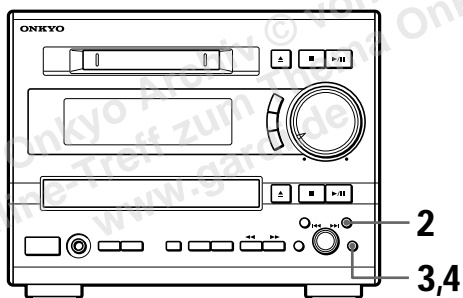
EDIT / CLEAR



7

Repeat steps 2 to 6 to preset the next channel.

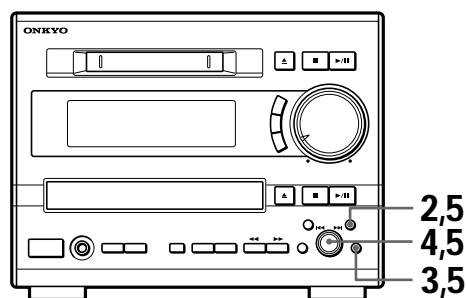
◆ Erasing a preset channel – Preset Erase



1	<p>Call the preset channel you wish to erase (see page 20).</p> <div data-bbox="391 685 758 786" data-label="Text"> <p>FM 87.80MHz 4.</p> </div>
2	<p>Press EDIT/CLEAR/NO repeatedly until “PresetErase?” appears in the display.</p> <div data-bbox="391 958 758 1059" data-label="Text"> <p>PresetErase?</p> </div>
3	<p>Press REPEAT/YES. The confirming message appears.</p> <div data-bbox="391 1193 758 1294" data-label="Text"> <p>Erase OK? 4.</p> </div> <p>To stop erasing, press EDIT/CLEAR/NO.</p>
4	<p>Press REPEAT/YES. “Complete” appears. The preset channel has been erased.</p> <div data-bbox="391 1536 758 1637" data-label="Text"> <p>Complete</p> </div>

◆ Copying a preset channel – Preset Copy

If you copy the preset channel to another channel, the name of the preset channel (see page 30) will also be copied to the other channel.



1	<p>Call the preset channel you wish to copy (see page 20).</p> <div data-bbox="1088 786 1461 887" data-label="Text"> <p>FM 87.80MHz 4.</p> </div>
2	<p>Press EDIT/CLEAR/NO repeatedly until “PresetCopy?” appears in the display.</p> <div data-bbox="1088 1059 1461 1160" data-label="Text"> <p>PresetCopy?</p> </div>
3	<p>Press REPEAT/YES.</p> <div data-bbox="1088 1267 1461 1368" data-label="Text"> <p>FM 87.80MHz 4.</p> </div>
4	<p>Turn MULTI JOG to select the preset channel number you wish to copy to.</p> <div data-bbox="1088 1536 1461 1637" data-label="Text"> <p>FM 87.80MHz 6.</p> </div>
5	<p>Press MULTI JOG to confirm. You may press REPEAT/YES instead of MULTI JOG to get the same result.</p> <p>If “Complete” appears</p> <div data-bbox="1088 1865 1461 1966" data-label="Text"> <p>Complete</p> </div> <p>The same radio station is copied to the preset channel.</p>

(Continued on the next page)

Manual presetting/erasing/copying of radio stations (continued)

If “Overwrite?” appears

Overwrite? 6.

The channel you have selected to copy to is registered already.

- **To register the new radio station by deleting the existing radio station**

Press REPEAT/YES.

- **To cancel copying**

Press EDIT/CLEAR/NO.

REPEAT



EDIT / CLEAR



Tips for relocating the radio station to another preset channel number

You can relocate the radio station to another preset channel by combining the Preset Copy and Preset Erase functions.

For example, to move the radio station registered in channel 3 to channel 8:

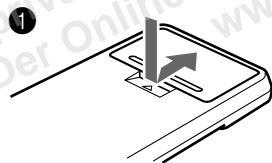
- ➊ **Copy channel 3 to channel 8, then**
- ➋ **Erase channel 3.**

Using the optional remote controller

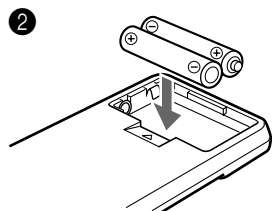
Mainly designed to control the ONKYO MD recorder, the optional remote controller enables you to operate some functions easier and provides extra functions.

(In this manual, the illustration of the optional remote controller, RC-339MD is used.)

◆ Inserting the batteries

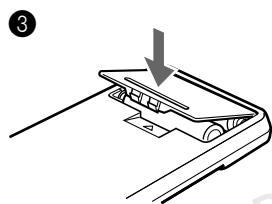


Detach the battery cover.



Insert the two R6 (size AA) batteries.

Be sure to match the + and – ends of the batteries with the diagram inside the battery compartment.



Attach the battery cover.

Notes

- Do not mix new batteries with old batteries or different kinds of batteries.
- To avoid corrosion, remove the batteries if the remote controller is not to be used for a long time.
- Remove dead batteries immediately to avoid damage from corrosion. If the remote controller does not operate smoothly, replace both the batteries at the same time.
- The life of the batteries supplied is about six months but this will vary depending on usage.

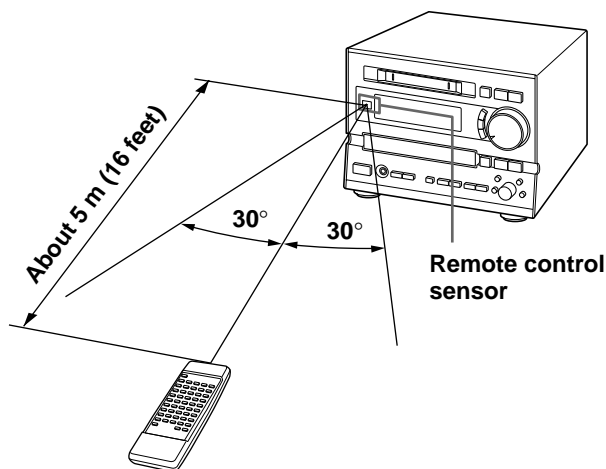
◆ Using the remote controller

Point the remote controller toward the remote control sensor.

The optional remote controller buttons operate in the same way as RC-378S (supplied with the unit) buttons with the same marks and names. (However, POWER button does not operate for this unit.)

Note

The DISPLAY button operates in the same way as the DISPLAY button of the unit.



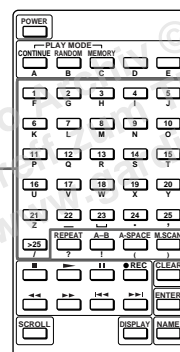
Notes

- Place the unit away from strong light such as direct sunlight or inverted fluorescent light which can prevent proper operation of the remote controller.
- Using another remote controller of the same type in the same room or using the unit near equipment which uses infrared rays may cause operational interference.
- Do not put any object such as a book on the remote controller. The buttons of the remote controller may be pressed by mistake and drain the batteries.
- Make sure the audio rack doors do not have colored glass. Placing the unit behind such doors may prevent proper remote controller operation.
- If there is any obstacle between the remote controller and the remote control sensor, the remote controller will not operate.

◆ Selecting and playing a track using the number buttons

- You can select and play tracks by pressing the single number buttons of the same number up to 25.
- If the track number is greater than 25, press **>25** followed by each digit number in order. The button **10** is used as zero in this case.

Number buttons



(Continued on the next page.)

Using the optional remote controller (continued)

• Examples for the tracks from 1 to 25

The selecting track The number buttons

10 10

25 25

• Examples for the tracks from 26 to 99

The selecting track The number buttons

30 >25 3 10

34 >25 3 4

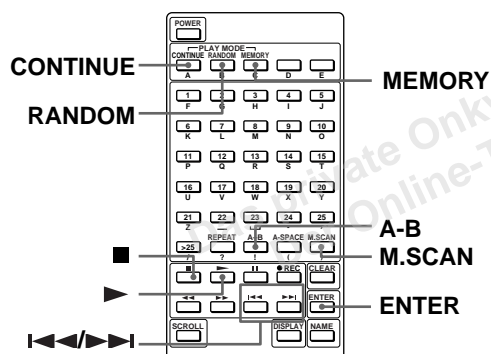
• Examples for the track 100 and higher

The selecting track The number buttons

100 >25 >25 1 10 10

103 >25 >25 1 10 3

◆ Various ways of playing an MD



Repeat playback between specified two points using the A-B button – A-B Repeat

- 1 While playing back the MD, mark the repeat start point (A) by pressing A-B.
- 2 Press A-B at the repeat end point (B).
The repeat playback between A and B points starts.

To stop A-B repeat

- Press A-B or REPEAT. A-B repeat will be canceled.
- Press ■, the playback will stop. A-B repeat will be canceled at the same time.

Finding the desired track using sampling playback – Music Scan

Music Scan plays back the beginning of every track only for eight seconds per track.

- 1 While the MD is playing back or stopped, press M.SCAN.

The ► indicator of the MD flashes in the display, then Music Scan starts.

- 2 If you find the music you wish to play, press M.SCAN or ►.

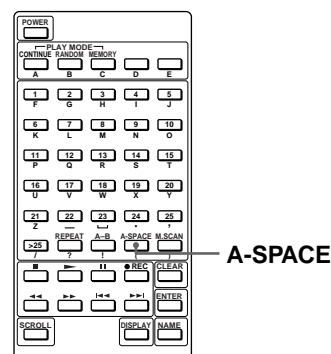
The normal playback starts from the beginning of the track.

MEMORY and RANDOM playback (See pages 26 and 27 for reference.)

Press RANDOM or MEMORY while the MD is stopped. In MEMORY playback, you can also use ◀◀/▶▶ to select the tracks followed by ENTER to confirm instead of using the number buttons. To cancel RANDOM or MEMORY playback mode, press CONTINUE while the MD is stopped.

◆ Spacing tracks (Auto Space)

It is possible to play back the MD with a silent interval of approximately 3 seconds between tracks.



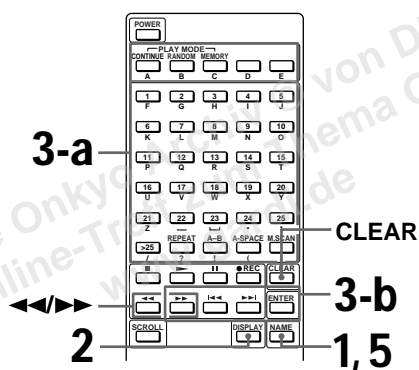
- Press A-SPACE.


The present setting will be displayed ("A.Space On" or "A.Space Off").

When "A.Space On" is selected, the Auto Space function will operate.


Press A-SPACE while the display is lit to switch between On and Off.

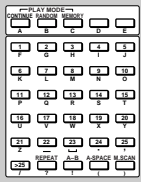
◆ Entering a name





- 1**


Execute steps 1 and 2 in “Entering a name” on page 30.

Tip
If you are naming an MD disc or tack, just press NAME.
- 2**


Press DISPLAY repeatedly until the character type you wish to enter appears in the display.
See step 3 on page 30 for details.
- 3-a**


Press the character buttons to enter the desired characters printed on the buttons.
Refer to “What characters can be entered?” on page 31.
If the character you wish to enter is not printed on the buttons, execute step 3-b below.

Entering an Easy Title
See page 31 for the Easy Title explanation.
Easy Titles can only be entered in the 3-b way.
- 3-b**



Press <=> repeatedly until the desired character appears in the display, then press ENTER or >> to confirm.
The Easy Title must be entered in this way. Other characters can also be entered in this way.

If you have entered a wrong character
See “Correcting and erasing a character.”

If you wish to add a character between characters
See “Inserting a character.”

4

Repeat step 3-a or 3-b to enter the next character.

If you wish to change the character type, execute step 2 in advance.

5



When finished entering the name, press REPEAT/YES.

“Complete” appears in the display.

Tip

If you are naming an MD disc or track, you can use the NAME button.

◆ Correcting and erasing a character

If the unit is not “Name In” mode, execute step 1 in “Entering a name” on the left column, then follow the steps below.

- 1** Press <=> repeatedly until the character you wish to correct or erase flashes.
- 2** *When correcting*
Enter the desired character (or title) following steps 2 and, 3-a or 3-b on the left column.

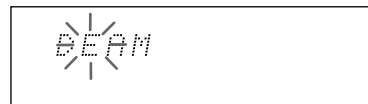
When erasing

Press CLEAR.

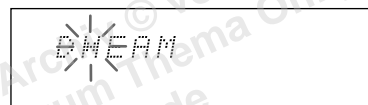
◆ Inserting a character

If the unit is not “Name In” mode, execute step 1 in “Entering a name” on the left column, then follow the steps below.

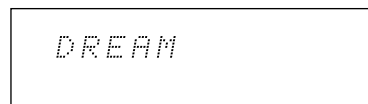
- 1** Press <=> repeatedly until the character behind the point at which you wish to enter a new character flashes.



- 2** Press <=> repeatedly until “H” appears, then press ENTER.



- 3** Enter the desired character following steps 2 and, 3-a or 3-b on the left column.



Message list

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

Message	Meaning
Blank Disc	A recordable MD without disc or track names is inserted.
Cannot Copy	An attempt was made to make a second digital copy from a digitally dubbed MD (see "Rules for digital recording" on the right column).
Cannot Edit	An attempt was made to edit a playback-only disc.
Cannot Rec	An attempt was made to record onto a playback-only disc.
Cannot Set	An attempt was made to set a timer while another timer is operating, or an attempt was made to set the clock using ACCUCLOCK.
D. In Unlock	The digital equipment (CD player, DAT, etc.) has not been connected properly. Otherwise, the connected digital equipment is not operating properly.
Disc Error	The disc is abnormal (scratched or missing a TOC).
Disc Full	The disc is full (see "System limitations" on page 54).
FULL	An attempt was made to enter a character over the maximum character capacity while naming.
Impossible	The disc could not be edited.
MD Writing	The unit is writing the recorded or edited contents to the MD.
Mecha Error	An error occurred in the unit's internal mechanism.
Memory Full	An attempt was made to store a 26th track or a 31th channel.
Name Full	The naming capacity of the disc or unit has reached its limit.
No Change	The name has not been changed.
No Disc	There is no disc in the unit.
No Track	The inserted disc has a disc name 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.
Recording	An attempt was made to switch to another source while recording.
Retry Error	The recording attempt failed due to a consecutive disturbance because of the scratches on the MD or vibration.
Sorry	An attempt was made to combine tracks which can not be combined, or to divide a track at the beginning of it.
TOC Error	The reading of the disc or the recording onto the disc failed.

Rules for digital recording

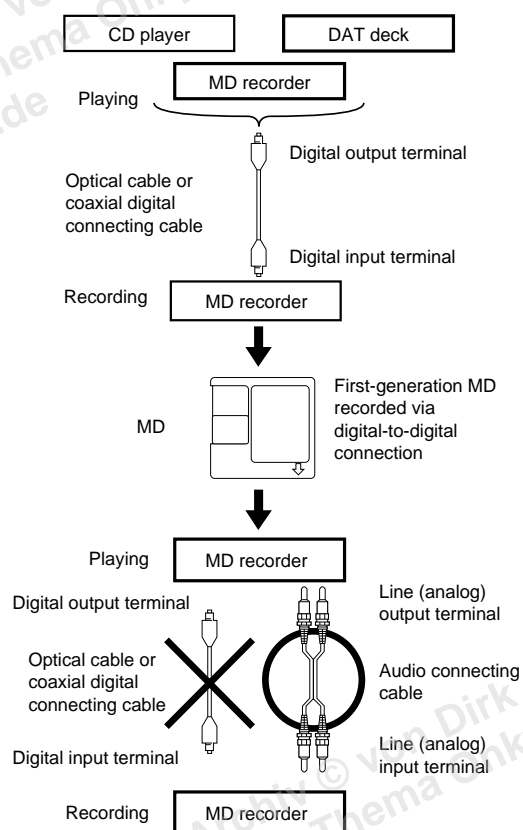
Guide to the serial copy management system

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

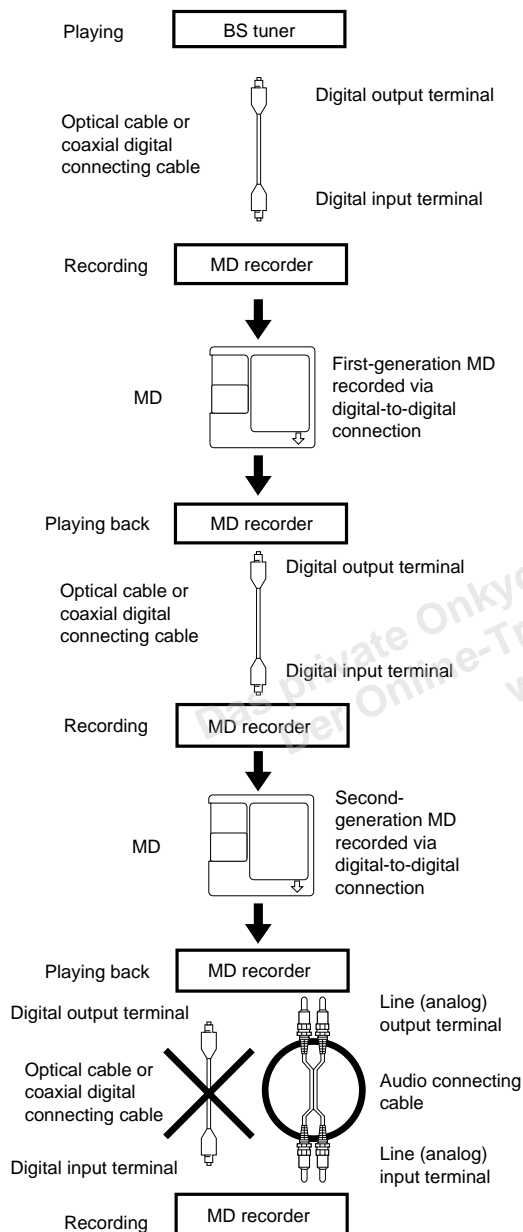
You can record digital source (CD, premastered MD, and DAT equipment with a sampling frequency of 44.1 kHz) to a recordable MD through the digital input terminal.

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.



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.

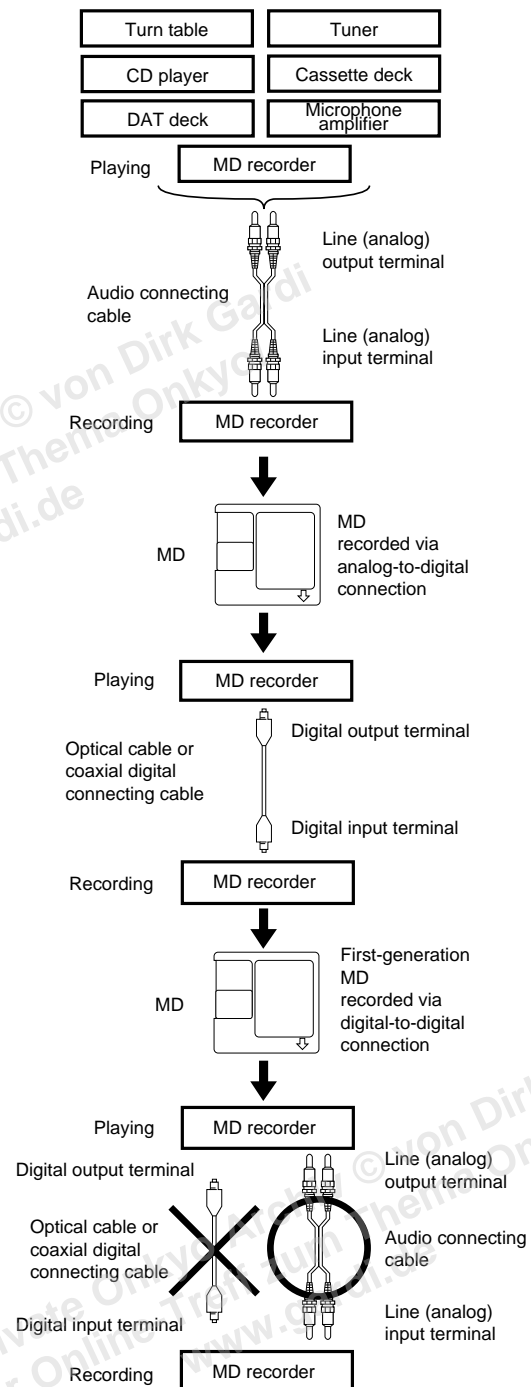


Rule 3

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.

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



System limitations

The MD recording system in the unit 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, 74, or 80 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 recordable 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 remaining recordable 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, 74, or 80 minutes)**

Recording is done in minimum units of 2 seconds each, no matter how short the material is. 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 the Level Sync On for automatic track marking.

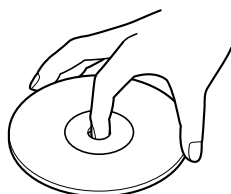
- **“MD Reading” appears for a long time**

If the inserted recordable disc is brand new, “MD Reading” appears on the display longer than those that have been used.

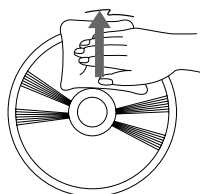
Precautions for handling the Compact Disc (CD)

Important notes on handling CDs

- 1 Carefully lift the disc from the disc case, making sure to hold the disc by its edges or the hole in the middle.



- 2 A dry, soft cloth may be used to wipe dust and fingerprints off the surface of CDs.



Do not use volatile agents on discs, such as thinner or benzine. Also, do not use conventional record cleaner or antistatic agents.

- Do not place a CD in direct sunlight or locations subject to high humidity or low temperature.
- Do not store a CD in this unit tray for a long period of time.

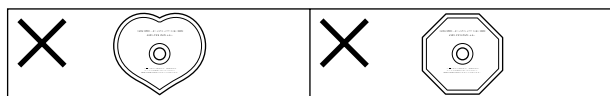
Playable discs

This unit can play back the following discs.

	Disc mark	Contents	Disc size	Maximum playback time
Audio CDs		Audio	12 cm	74 minutes
			8 cm (CD single)	20 minutes

You cannot play back discs other than those listed above.

Do not use discs that are not audio discs (eg. CD-ROMs for use with personal computers), as these could damage the speakers and amplifier.



Avoid using heart-shaped or octagonal discs. Playing irregularly shaped discs may damage the internal mechanism of the unit.

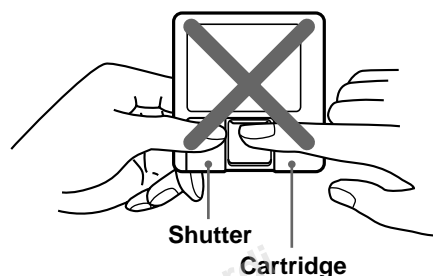
Do not use discs on which adhesive from adhesive tape or a disc label (if it is a rental disc) remains. Otherwise, you may not be able to eject the discs or the unit may become inoperative.

Precautions for handling the MiniDisc (MD)

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

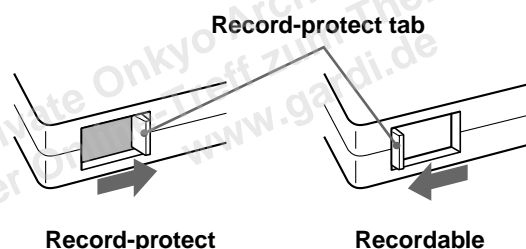
Wipe off dust and dirt accumulated on the cartridge surface with a dry cloth.

Removing the halfway inserted MD

If the "self-lock function" is activated and the MD cannot be removed, push the MD further into the MD disc slot and then press MD (eject button) to remove the MD.

Protecting recordings from accidental erasure

You can protect your MDs from accidental recording by sliding the record-protect tab on the MDs to open the record-protect window. To make the MDs recordable again, return the record-protect tab.



Troubleshooting

Use this troubleshooting guide as an aid to remedy any problems.

Problems may also be caused by any of the other components connected to this unit. Please check the table below, cross-referencing with the instruction manuals of the other components. If the problem still persists after trying these remedies and referring to the other components' instruction manuals, consult your nearest ONKYO authorized service center, giving your name, address, phone number, product name, and the details of the problems.

	Symptom	Cause	Remedy	Pages
Amplifier	The unit does not turn on.	The AC power cord (mains lead) is not fully inserted into the wall outlet (the mains).	Insert the AC power cord (mains lead) plug to the wall outlet (the mains) securely.	11
	No sound is reproduced from neither the left or right speaker.	<ul style="list-style-type: none"> The wire of the speaker cord is touching the other jacks, connectors, or metal parts. The volume level is turned down to the minimum. The sound is muted with the muting function. The headphones are connected to the PHONES jack. The audio cables are not inserted firmly. 	<ul style="list-style-type: none"> Check the speaker connections. Adjust the volume level. Press MUTE on the remote control to restore the sound. Turn down the volume level first, then disconnect the headphones. Check the connections and insert the audio connection cable plugs firmly. 	6
				14
				14
	Noise is heard.	Strong magnetism from a television or a similar device is interfering with operations.	Turn off any television or similar devices or move them away from the unit.	9
CD/MD	The disc skips sounds.	<ul style="list-style-type: none"> Vibrations are being transmitted to the unit. The disc is severely scratched. The disc is extremely dirty. – CD 	<ul style="list-style-type: none"> Place the unit in a vibration free location. Replace the disc with a new one. Clean the disc. 	– 55 55
	Track numbers cannot be stored when setting MEMORY playback.	<ul style="list-style-type: none"> There is no disc inserted in the unit. A track number not on the disc is being input. 	<ul style="list-style-type: none"> Insert a disc into the unit. Input only the track numbers on the disc. 	16, 18, 26 26
	The disc is loaded in the disc tray, but playback will not begin.	<ul style="list-style-type: none"> The disc is inserted with the wrong side facing upward. – CD The disc is extremely dirty. – CD The disc is dirty or damaged. ("Disc Error" appears in the display.) – MD The disc inserted is not recorded. – MD Moisture has formed inside the unit. 	<ul style="list-style-type: none"> Insert the disc with the label side facing upward. Clean the disc. Replace the disc with a new one. The disc may be reused after erasing all the data. Replace the disc with a recorded one. Take the disc out and leave the unit for several hours until the moisture evaporates. 	16, 55 55 52, 55 33 18 3
CD	Search time (when moving to a specific track) is extremely long.	<ul style="list-style-type: none"> The disc is dirty. The disc is scratched. 	<ul style="list-style-type: none"> Clean the disc. Replace the disc with a new one. 	55 55
MD	Disc cannot be loaded.	The wrong side of the disc being inserted is facing to the unit.	Insert the disc in the direction of the arrow printed on the disc.	18
	The unit does not record.	<ul style="list-style-type: none"> The disc is record-protected. ("Protected" appears in the display.) The unit is not connected properly to the sound source. The analog recording level is too low. A playback-only disc is inserted. ("Cannot Rec" appears in the display.) There is not enough time left on the disc. The optical digital audio cable is not connected properly. ("D. In Unlock" appears in the display.) There has been a power failure or the AC power cord (mains lead) has been disconnected. "Retry Error" appears in the display. 	<ul style="list-style-type: none"> Close the record-protect window on the disc. Check the connections and insert the audio connection cable plugs firmly. Adjust the recording level properly. Replace the disc with a recordable one. Replace the disc with another recordable disc with enough recording time, or delete unnecessary tracks of the disc. Connect the optical digital audio cable properly. The recorded contents in the unit memory will be erased and will not be recorded onto the MD. Eject the MD, then insert it again and retry recording. 	22, 52, 55 8 25 22, 52 33, 34 8, 14, 38 23 23
	The disc name or track name cannot be entered.	<ul style="list-style-type: none"> The disc is record-protected. ("Protected" appears.) A playback-only disc is inserted. ("Cannot Rec" appears.) 	<ul style="list-style-type: none"> Close the record-protect window on the disc. Replace the disc with a recordable one. 	30, 55 30, 55
If the unit does not operate properly even after attempting the prescribed remedies, unplug and then plug in the power cord again.				

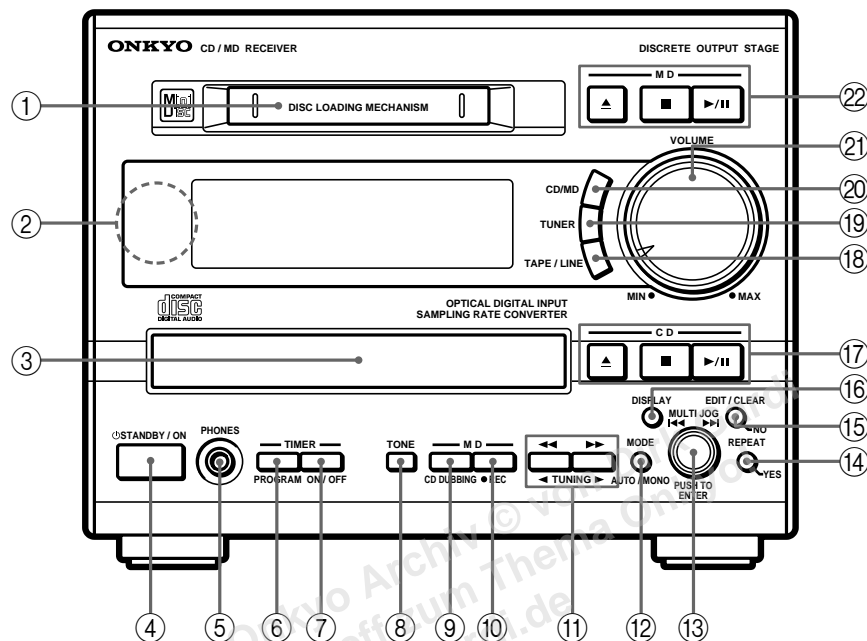
	Symptom	Cause	Remedy	Pages
Tuner	Too much noise is heard or sound is interrupted occasionally. ("STEREO" indicator does not light steadily.)	<ul style="list-style-type: none"> FM stereo wave may produce a hiss noise when a certain level is reached. The position or direction of the antenna (aerial) is incorrect. Station is too weak. 	<ul style="list-style-type: none"> Switch the frequency receiving mode to MONO. Lower the treble level. Adjust the position, height, and direction of the antenna (aerial). Connect an outdoor FM antenna (aerial). Try to use an antenna (aerial) having more elements. [For installation of the outdoor antenna (aerial), consult your nearest dealer as it requires a special technique and experience.] 	20 29 6 6
	Sound is distorted or sound volume decreases.	<ul style="list-style-type: none"> The radio wave is distorted. Cars are running or airplanes are flying near the house. 	_____	—
	Sound is excessively distorted.	There is a tall building or a mountain nearby. [The waves transmitted from transmission center (direct waves) and the waves diffracted by buildings or mountains (diffraction waves) interfere with each other causing multi bass distortion.]	_____	—
Timer	The timer did not operate.	<ul style="list-style-type: none"> The unit was on when the start time arrived. The timer overlapped another timer. 	<ul style="list-style-type: none"> The timer does not operate if the unit has been turned on. To set the timer, turn off the unit. Set the timer to a different time. 	42, 44 44
	No sound was reproduced when the timer is activated.	<ul style="list-style-type: none"> While the Rec timer is operating, the sound will be muted. When the playback timer (Once, Weekday, or Weekend timer) is operating, the volume will become the same as the volume when you last switched the unit off. 	<ul style="list-style-type: none"> If you wish to check the recording sound, press MUTE on the remote control to turn off the muting function. Adjust the volume. Adjust the volume properly before you turn off the unit to set the timer. 	40 42, 44
Remote control	The remote control does not operate.	<ul style="list-style-type: none"> The batteries in the remote control are dead. Your position is too far from the unit's remote control sensor or outside of the sensor's detection angle. There is some obstruction between the remote control and the unit. 	<ul style="list-style-type: none"> Replace the batteries with new ones. Check the effective range of the remote control. Try to operate the remote control from a different angle, or remove the obstruction. 	10, 49 10, 49 10, 49
	The remote control operates the unit but does not operate the ONKYO stereo cassette tape deck.	<ul style="list-style-type: none"> The RI cable is not connected. 	<ul style="list-style-type: none"> Connect the system correctly cross-referring to the ONKYO stereo cassette tape deck instruction manual. Connect the unit and stereo cassette tape deck using the RI cable supplied with the stereo cassette tape deck. 	8 8

This unit contains a sensitive microcomputer, which under certain circumstances might fail to operate due to excessive noise interference. In such case, disconnect the AC power from the electrical outlet, wait five seconds and replace.

Index to parts and controls

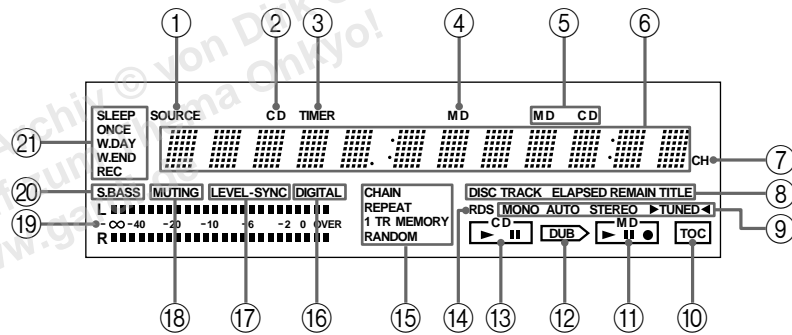
For operational instructions, refer to the page indicated in brackets.

◆ Front panel



- | | |
|---|---|
| ① MD disc slot [18] | ⑬ MULTI JOG dial [12, 16, 18, 20, 25, 29, 30, 41, 45] |
| ② Remote control sensor [10, 49] | ⑭ REPEAT/YES button [15, 28, 30, 33 to 37] |
| ③ CD disc tray [16] | ⑮ EDIT/CLEAR/NO button [15, 25, 30, 33 to 37, 45 to 47] |
| ④ STANDBY/ON button [11, 14] | ⑯ DISPLAY button [17, 19, 21 to 23] |
| ⑤ PHONES jack [14] | ⑰ CD operation buttons [16] |
| ⑥ TIMER PROGRAM button [12, 13, 41, 44] | ⑱ TAPE/LINE button [14, 38, 45] |
| ⑦ TIMER ON/OFF button [41, 44] | ⑲ TUNER button [14, 15, 20, 46] |
| ⑧ TONE button [29] | ⑳ CD/MD button [14, 16, 18, 22] |
| ⑨ MD CD DUBBING button [22, 32] | ㉑ VOLUME control [14] |
| ⑩ MD ● REC button [24, 32, 38] | ㉒ MD operation buttons [18] |
| ⑪ ◀▶ buttons [16, 18, 31] | |
| TUNING ◀▶ buttons [20] | |
| ⑫ MODE button [26, 27] | |
| AUTO/MONO button [12, 20] | |

◆ Display



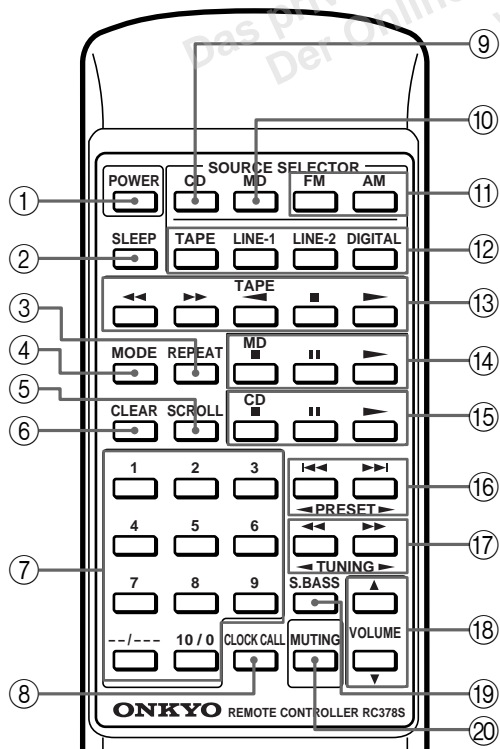
When lit, the ① to ⑤ indicators show what the multi-purpose display (⑥) under them is currently displaying.

- ① SOURCE indicator [12, 16, 18, 38]
- ② CD indicator [23]
- ③ TIMER indicator [41]
- ④ MD indicator [23]
- ⑤ MD/CD setting indicators [23]
- ⑥ Multi-purpose display

- ⑦ CH (channel) indicator [15, 20]
- ⑧ When lit, the indicators show what the multi-purpose display (⑥) above them is currently displaying. [17, 19, 23]
- ⑨ Indicators for radio frequency information [20]
- ⑩ TOC indicator [22, 23]
- ⑪ MD operation indicators [18, 23, 24]
- ⑫ DUB indicator [22, 23]

- ⑬ CD operation indicators [16, 22]
- ⑭ RDS indicator [11 to 13]
- ⑮ Playback mode indicators [26 to 28]
- ⑯ DIGITAL indicator [14, 38]
- ⑰ LEVEL-SYNC indicator [25]
- ⑱ MUTING indicator [14]
- ⑲ Recording level indicator [25]
- ⑳ S.BASS indicator [29]
- ㉑ Timer indicators [40 to 44]

◆ Remote controller



- ① POWER button [14]
- ② SLEEP button [40]
- ③ REPEAT button [28]
- ④ MODE button [26 to 28]
- ⑤ SCROLL button [17, 19]
- ⑥ CLEAR button [26, 31]
- ⑦ Number buttons [17, 19]
- ⑧ CLOCK CALL button [11]
- ⑨ CD button [14, 17]
- ⑩ MD button [14, 19]
- ⑪ FM button [14, 21] (The AM button doesn't operate for this unit.)
- ⑫ TAPE/LINE-1/LINE-2/DIGITAL buttons [14]
- ⑬ Operation buttons for an ONKYO stereo cassette tape deck
- ⑭ MD operation buttons [19]
- ⑮ CD operation buttons [17]
- ⑯ I<=> buttons [17, 19, 26]
- ⑰ PRESET buttons [21]
- ⑱ TUNING buttons [20]
- ⑲ S.BASS button [29]
- ⑳ MUTING button [14]

Specifications

General

Power supply	AC 230 V, 50 Hz AC 120 V, 60 Hz
Power consumption	66 W
Dimensions (W × H × D)	205 × 154 × 356 mm
Weight	5.5 kg

Amplifier

Power output	2 × 20 W at 4 Ω 1kHz DIN 2 × 17 W at 6 Ω 1kHz DIN 2 × 15 W at 8 Ω 1kHz DIN 2 × 15 W min, RMS at 8 Ω 1 kHz no more than 0.2 % THD
Dynamic power	2 × 25 W at 4 Ω EIAJ 2 × 24 W at 4 Ω 2 × 18 W at 8 Ω
Total harmonic distortion	0.2 % at rated power
IM distortion	0.2 % at rated power
Damping factor	40 at 8 Ω
Sensitivity and impedance	TAPE: 150 mV, 50 kΩ LINE-1 IN: 150 mV, 50 kΩ LINE-2 IN: 150 mV, 50 kΩ
Frequency response	10 to 50,000 Hz : +0/-3 dB
Tone control	Bass ±8 dB at 100 Hz Treble ±8 dB at 10,000 Hz S. Bass +8 dB at 40 Hz
Signal to noise ratio	TAPE: 100dB (IHF A) LINE-1 IN: 100dB (IHF A) LINE-2 IN: 100dB (IHF A)
Muting	-50 dB

CD player

Signal readout system	Optical non-contact
Frequency response	10 Hz to 20 kHz (± 2 dB)
Wow and flutter	Below threshold of measurability

MD recorder

System	MiniDisc digital audio system
Recording system	Magnetic field modulation overwrite system
Signal readout system	Optical non-contact
Recording time	Max. 80 min. (when using a 80 minute recording time disc)
Frequency response	10 Hz to 20 kHz (± 2 dB)
Wow and flutter	Below threshold of measurability
Tuner	
Tuning range	87.50 to 108.00 MHz (50 kHz steps)
Usable sensitivity	Mono: 12.8 dBf, 1.2 μV (75 Ω IHF) 1.0 μV (75 Ω DIN) Stereo: 18.0 dBf, 2.2 μV (75 Ω IHF) 25.0 μV (75 Ω DIN)
50 dB quieting sensitivity	Mono: 18.8 dBf, 2.4 μV (75 Ω) Stereo: 38.8 dBf, 24.0 μV (75 Ω)
Capture ratio	2.0 dB
Image rejection ratio	85 dB
IF rejection ratio	90 dB
Signal to noise ratio	Mono : 73 dB IHF Stereo : 67 dB IHF
Selectivity	50 dB DIN (±300 kHz at 40 kHz devi.)
Harmonic distortion	Mono: 0.5 % Stereo: 0.8 %
Frequency response	30 to 15,000 Hz (±1.5 dB)
Stereo separation	40 dB at 1,000 Hz 30 dB at 100 to 10,000 Hz

Specifications and features are subject to change
without notice.

ONKYO CORPORATION

Sales & Product Planning Div. : 2-1, Nisshin-cho, Neyagawa-shi, OSAKA 572-8540, JAPAN
Tel: 0720-31-8111 Fax: 0720-33-5222

ONKYO U.S.A. CORPORATION

200 Williams Drive, Ramesy, N.J. 07446, U.S.A.
Tel: 201-825-7950 Fax: 201-825-8150 E-mail: onkyo@onkyousa.com

ONKYO EUROPE ELECTRONICS GmbH

Industriestrasse 20, 82110 Germering, GERMANY
Tel: 089 84 93 20 Fax: 089 84 93 226 E-mail: info@onkyo.de

ONKYO CHINA LIMITED

Units 2102-7, Metroplaza Tower I, 223 Hing Fong Road, Kwai Chung,
N.T., HONG KONG Tel: 852 2429 3118 Fax: 852 2428 9039

