

# Portable MiniDisc Player

Operating instructions

MZ-E35



Sony Corporation ©1998 Printed in Japan



## WARNING

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

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

### Caution

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

### Information

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.

### For Customers in the United States Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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

### For the customers in the U.S.A.

#### DISPOSAL OF NICKEL METAL HYDRIDE BATTERY.

#### NICKEL METAL HYDRIDE BATTERY. DISPOSE OF PROPERLY.

You can return your unwanted nickel metal hydride batteries to your nearest Sony Service Center.

**Note:** In some areas the disposal of nickel metal hydride batteries in household or business trash may be prohibited.

For the Sony Service Center nearest you call 1-800-222-SONY (United States only)

**Caution:** Do not handle damaged or leaking nickel metal hydride battery.

#### Owner's Record

The serial number is located inside the lid and the model number is located at the top. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. MZ-E35

Serial No. \_\_\_\_\_

"MD WALKMAN" is a trademark of Sony Corporation.

## Welcome!

Welcome to the world of the MiniDisc! Here are some of the capabilities and features you'll discover with the new MiniDisc Player.

- Small body almost the size of a MiniDisc jacket – Ideal weight and size; fits in your shirt pocket.
- Shock-resistant memory offsets up to 40 seconds of optical read errors.
- Low power-consumption design enables long playback with a single "chewing-gum type" rechargeable battery.
- Shuttle dial remote control with LCD – Keep the main unit in your pocket and operate the MiniDisc player through the shuttle dial on the remote control; The LCD displays track information, playback mode as well as battery condition.

# Playing an MD right away!

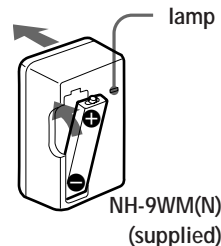
Before using the supplied rechargeable battery for the first time, charge it. Other choices are dry batteries and house current (see "Power sources"). The player automatically switches to play the stereo or monaural sound according to the recorded sound.

## 1 Charge the rechargeable battery.

Install the supplied rechargeable battery NH-9WM(N) to the supplied battery charger with correct polarity, and connect to a wall outlet.

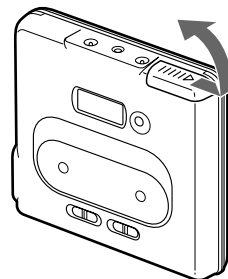
The charger lamp goes off when the charging has finished.

Full charging takes about 60 minutes.

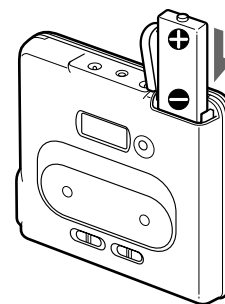


## 2 Insert the rechargeable battery.

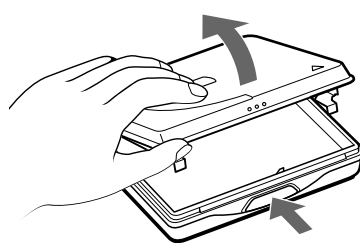
① Slide open the battery compartment lid like the arrow in the illustration.



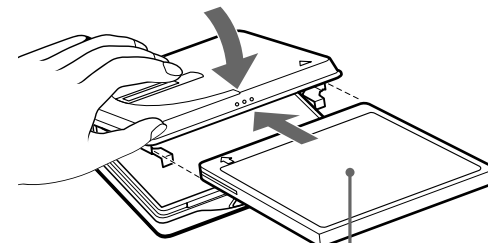
② Insert the battery with correct polarity.



## 3 Insert an MD.



① Press OPEN and open the lid.

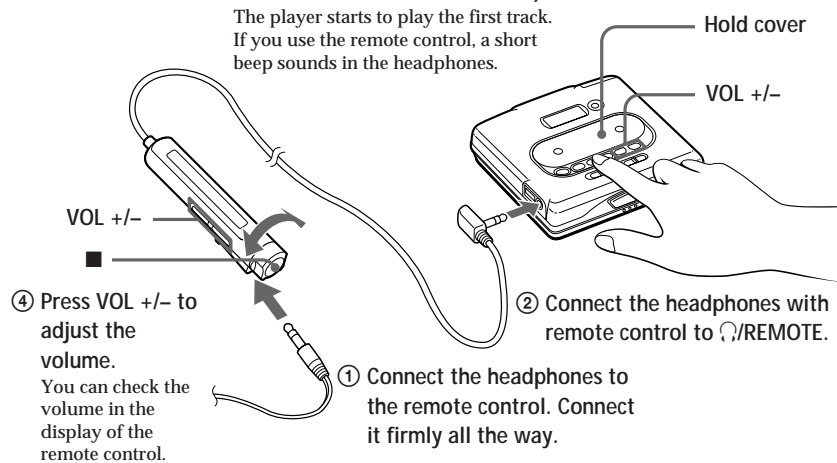


② Insert an MD with the label facing up and press the lid down to close.

## 4 Play an MD.

③ Press (turn the control to on the remote control).

The player starts to play the first track. If you use the remote control, a short beep sounds in the headphones.



④ Press VOL +/- to adjust the volume. You can check the volume in the display of the remote control.

① Connect the headphones to the remote control. Connect it firmly all the way.

To stop play, press . If you use the remote control, a short beep sounds in the headphones.

To	Press (Beeps in the headphones)
Pause	on the remote control (Continuous short beeps)  Press  again to resume play.
Find the beginning of the current track	or turn the control to  on the remote control once (Three short beeps)
Find the beginning of the next track	or turn the control to  on the remote control once (Two short beeps)
Go backwards while playing <sup>1)</sup>	keep pressing  or keep the control turned to  on the remote control
Go forward while playing <sup>1)</sup>	keep pressing  or keep the control turned to  on the remote control
Remove the MD	and then OPEN and open the lid. <sup>2)</sup>

### If the play does not start

Make sure the player is not locked. See "To lock the controls."

### Display window while playing back

- Display window on the remote control

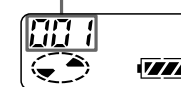
Track name<sup>3)</sup> or elapsed time of the track being played



Track number

- Display window on the player

Track number



- 1) To go backwards or forward quickly without listening, press and keep pressing or (on the remote control, keep the control turned).
- 2) Once you open the lid, the point to start play will change to the beginning of the first track.
- 3) Appears only with MDs that have been electronically labeled.

### Note

Do not press OPEN during playback. If you do, the lid opens and playback will stop.

### When using optional headphones

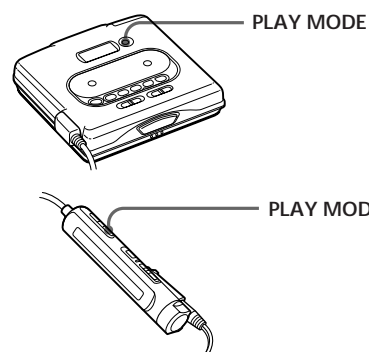
Use the headphones that have stereo-miniplug. You cannot use other types of headphones (microplug).

## ► Various ways of playback

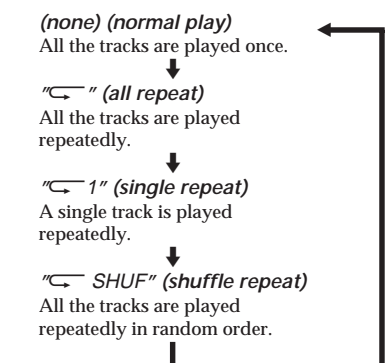
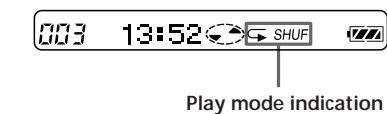
### Playing tracks repeatedly

**B**

You can play tracks repeatedly in three ways—all repeat, single repeat, and shuffle repeat.



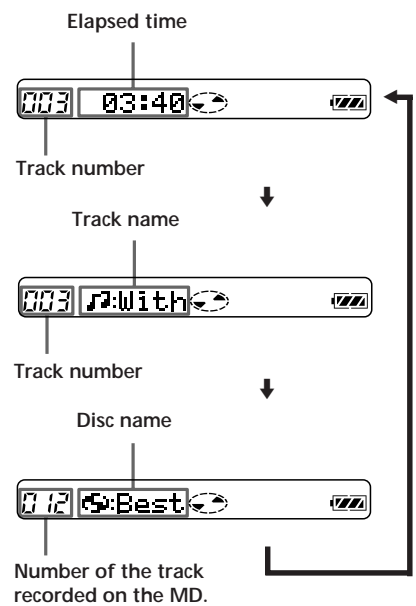
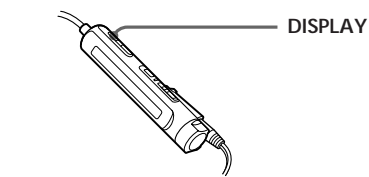
Press PLAY MODE while the player is playing an MD. Each time you press PLAY MODE, the play mode indication changes as follows.



## Tips on playback

### To know the track name and time

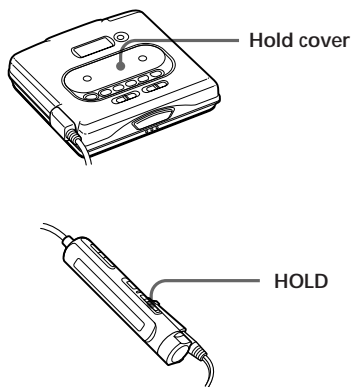
Press DISPLAY on the remote control while the player is playing an MD. Each time you press DISPLAY, the display changes as follows.



**Note**  
Disc and track names appear only with MDs that have been electronically labeled.

### To lock the controls

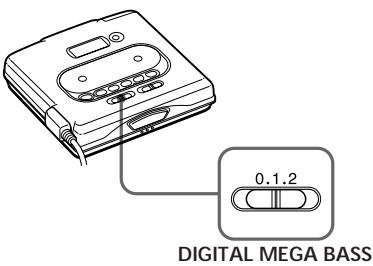
To prevent the buttons from being accidentally operated when you carry the player, use this function.



Slide the Hold cover on the player to cover the control buttons. On the remote control, slide HOLD in the direction of the → to lock the controls.

### To emphasize bass (DIGITAL MEGA BASS)

The DIGITAL MEGA BASS function intensifies low frequency sound for richer quality audio reproduction.



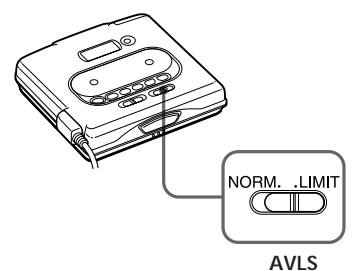
Slide DIGITAL MEGA BASS. Choose 1 (slight effect) or 2 (strong effect). To cancel the effect, set DIGITAL MEGA BASS to 0.

#### Note

If the sound becomes distorted when emphasizing bass, turn down the volume.

### To protect your hearing (AVLS)

The AVLS (Automatic Volume Limiter System) function keeps down the maximum volume to protect your ears.



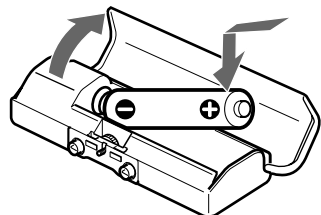
Set AVLS to LIMIT. The volume is kept at a moderate level, even if you try to turn the volume above the limited level.

## ► Power sources

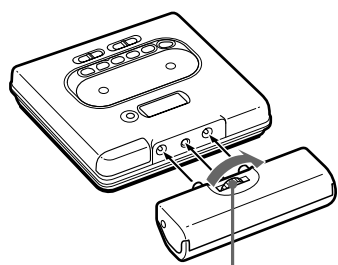
You can use the player on a dry battery, house current, or a Ni-MH rechargeable battery.

### Using on a dry battery

**1** Insert one size AA (LR6) alkaline battery (not supplied) into the supplied battery case, and close the lid.



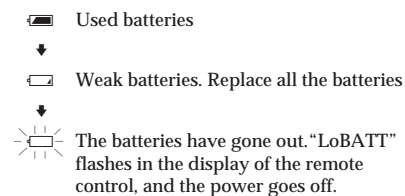
**2** Attach the battery case to the player.



Turn to LOCK side. To release the battery case, turn to RELEASE.

#### When to replace or charge the batteries

You can check the battery condition with the battery indication displayed while using the player.



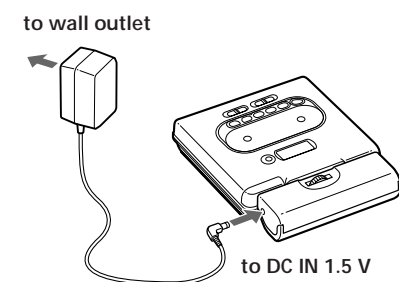
Batteries	Playback
Ni-MH rechargeable battery (NH-9WM (N))	Approx. 6 hours
One size AA (LR6) alkaline battery	Approx. 8 hours
One size AA (LR6) alkaline battery and a Ni-MH rechargeable battery (NH-9WM(N))	Approx. 16 hours

\* The battery life may be shorter due to operating conditions and the temperature of the location.

### Using on house current

Before using the player, remove the rechargeable battery if it is installed.

- Attach the supplied battery case to the player.
- Connect the AC-E15L AC power adaptor (not supplied) to the DC IN 1.5V jack of the player.
- Connect the AC power adaptor to a wall outlet.



**Note**  
The battery indication is displayed while using the AC power adaptor.

## ► Additional information

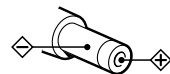
### Precautions

#### On safety

- Do not put any foreign objects in the DC IN 1.5 V jack.

#### On power sources

- For use in your house: Use the AC power adaptor AC-E15L (not supplied). Do not use any other AC power adaptor since it may cause the player to malfunction.



Polarity of the plug

- The player is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the player itself has been turned off.
- If you are not going to use this player for a long time, be sure to disconnect the power supply (AC power adaptor, dry batteries, rechargeable batteries, or car battery cord). To remove the AC power adaptor from the wall outlet, grasp the adaptor plug itself; never pull the cord.
- For use in the car: Use the CPA-9 car connecting pack and the DCC-E215 car battery cord (not supplied).

#### On charging

- Be sure to use the supplied battery charger.
- Charging time may vary depending on the battery condition.
- When you use the battery for the first time or after a long period of disuse, the battery life may be shorter. In this case, charge and discharge the battery several times. The battery life will be restored.
- If the rechargeable battery capacity becomes half the normal life, replace it with a new one.

#### On heat build-up

- Heat may build up in the player if it is used for an extended period of time. In this case, leave the player to cool down.

#### On installation

- Never use the player where it will be subjected to extremes of light, temperature, moisture or vibration.
- Never wrap the player in anything when it is being used with the AC power adaptor. Heat build-up in the player may cause malfunction or injury.

#### On the headphones

##### Road safety

Do not use headphones while driving, cycling, or operating any motorized vehicle. It may create a traffic hazard and is illegal in many areas. It can also be potentially dangerous to play your player at high volume while walking, especially at pedestrian crossings. You should exercise extreme caution or discontinue use in potentially hazardous situations.

##### Preventing hearing damage

Avoid using headphones at high volume. Hearing experts advise against continuous, loud and extended play. If you experience a ringing in your ears, reduce the volume or discontinue use.

##### Caring for others

Keep the volume at a moderate level. This will allow you to hear outside sounds and to be considerate of the people around you.

#### On the MiniDisc cartridge

- Do not break open the shutter.
- Do not place the cartridge where it will be subject to light, temperature, moisture or dust.

#### On cleaning

- Clean the player casing with a soft cloth slightly moistened with water or a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzene as it may mar the finish of the casing.
- Wipe the disc cartridge with a dry cloth to remove dirt.
- Dust on the lens may prevent the unit from operating properly. Be sure to close the disc compartment lid after inserting or ejecting an MD.

#### Notes on the batteries

Incorrect battery usage may lead to leakage of battery fluid or bursting batteries. To prevent such accidents, observe the following precautions:

- Install the + and - poles of the batteries correctly.
- Do not try to recharge the batteries.
- When the player is not to be used for a long time, be sure to remove the batteries.
- If a battery leak should develop, carefully and thoroughly wipe away battery fluid from the battery compartment before inserting new ones.

#### Note on mechanical noise

The player gives out mechanical noise while operating, which is caused by the power-saving system of the player and it is not a trouble.

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

## Troubleshooting

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

### The player does not work or works poorly.

- You tried to play with no disc in the player ("No DISC" flashes).
  - Insert an MD.
- The remote control is locked.
  - Slide HOLD against the arrow to unlock the remote control.
- Moisture has condensed inside the player.
  - Take the MD out and leave the player in a warm place for several hours until the moisture evaporates.
- The rechargeable battery or dry battery is weak (LoBATT flashes).
  - Replace the dry battery or recharge the battery.

- The rechargeable battery or dry battery have been installed incorrectly.
  - Install the battery correctly.
- An MD with no recording on it is inserted ("BLANK" flashes).
  - Insert a recorded MD.
- The player cannot read the disc (it's scratched or dirty) ("Err" on the player or "ERROR" on the remote control flashes).
  - Reinsert or replace the disc.
- While operating, the player received a mechanical shock, too much static, abnormal power voltage caused by lightning, etc.
  - Restart the operation as follows.
    - Disconnect all the power sources.
    - Leave the player for about 30 seconds.
    - Connect the power source.

### The MD is not played normally.

- The player is set to the repeat mode ("↺" is displayed).
  - Press PLAY MODE repeatedly until "↺" disappears, then start playing.

### An MD is not played from the first track.

- Disc playing stopped before it came to the last track.
  - Press ◀ repeatedly or eject and reinsert the MD once to go back to the beginning of the disc, and restart playing after checking the track number in the display.

### Playback sound skips.

- The player is placed where it receives continuous vibration.
  - Put the player on a stable place. A very short track may cause sound to skip.

### Sound has a lot of static.

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

### Charging the rechargeable battery does not start. (in case of the charger with a lid)

- The lid of the battery charger is not closed properly.
  - Close the lid and slide the switch on it.

### No sound comes through the headphones.

- The headphones plug is not firmly connected.
  - Connect the headphones plug firmly to the remote control. Then connect the remote control plug firmly to the ◯/REMOTE jack.
- Volume is too low.
  - Adjust the volume by pressing VOL +/-.
- AVLS is on.
  - Slide AVLS to NORM.

## Specifications

### System

Audio playing system  
MiniDisc digital audio system  
Laser diode properties  
Material: GaAlAs  
Wavelength: λ = 790 nm  
Emission duration: continuous  
Laser output: less than 44.6 μW\*  
\* This output is the value measured at a distance of 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.

### Revolutions

400 rpm to 900 rpm (CLV)  
Error correction  
Advanced Cross Interleave Reed Solomon Code (ACIRC)

### Sampling frequency

44.1 kHz  
Coding  
Adaptive Transform Acoustic Coding (ATRAC)  
Modulation system  
EFM (Eight to Fourteen Modulation)  
Number of channels  
2 stereo channels  
1 monaural channel  
Frequency response  
20 to 20,000 Hz ± 3 dB  
Wow and Flutter  
Below measurable limit  
Outputs  
Headphones: stereo mini-jack, maximum output level 5 mW + 5 mW, load impedance 16 ohm

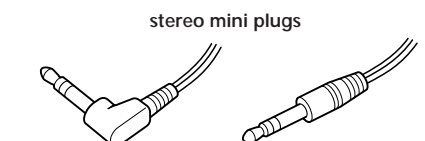
### General

Power requirements  
Nickel metal hydride rechargeable battery NH-9WM (supplied)  
One size AA (LR6) battery (not supplied)  
Sony AC Power Adaptor AC-E15L<sup>1)</sup> (not supplied) connected at the DC IN 1.5 V jack  
Battery operation time  
See "When to replace or charge the batteries"  
Dimensions  
Approx. 82.5 × 19.1 × 80 mm (w/h/d) (3 1/4 × 25/32 × 3 1/4 in.) not including projecting parts and controls  
Mass  
Approx. 115 g (4.1 oz.) the player only  
Approx. 155 g (5.5 oz.) incl. a premastered MD and a nickel metal hydride rechargeable battery NH-9WM  
Supplied accessories  
Battery Charger (1)  
Rechargeable battery (1)  
Rechargeable battery carrying case (1)  
Headphones with a remote control (1)  
Dry battery case (1)  
Carrying pouch (1)  
Ear pad (2)

### Optional accessories

AC-E15L AC power adaptor<sup>1)</sup>  
Nickel metal hydride rechargeable battery NH-9WM  
DCC-E215 Car battery cord  
CPA-9 Car Connecting Pack  
MDR-series Stereo headphones<sup>2)</sup>  
SRS-A41 Sony Active Speakers  
CK-MD4 MiniDisc Carrying Case  
CK-MD10 MiniDisc Filing Box

- The operative voltage for the AC power adaptor varies depending upon the country in which it is sold. Therefore, purchase the AC power adaptor in the country you intend to use it.
- Whether you should plug the headphones directly to ◯/REMOTE on the main unit or to a remote control, use only headphones with stereo mini plugs.



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

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