

Portable MiniDisc Player

Operating Instructions
Mode d'emploi (au dos)



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 Canada
To prevent electric shock, do not use this polarized AC plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

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 or 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.

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. and Canada

RECYCLING NICKEL-CADMIUM BATTERIES

NICKEL-CADMIUM BATTERY. BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.
Ni-Cd Nickel-Cadmium batteries are recyclable. You can help preserve our environment by returning your unwanted batteries to your nearest Sony Service Center or Factory Service Center for collection, recycling or proper disposal. **Note:** In some areas the disposal of nickel-cadmium batteries in household or business trash may be prohibited.

For the Sony Service Center nearest you call 1-800-222-SONY (United States only) For the Factory Service Center nearest you call 416-499-SONY (Canada only)

Caution: Do not handle damaged or leaking nickel-cadmium batteries.

Owner's Record
The serial number is located inside the lid and the model number is located at the bottom. 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-EP11
Serial No. _____

"MD WALKMAN" is a trademark of Sony Corporation.

Welcome!

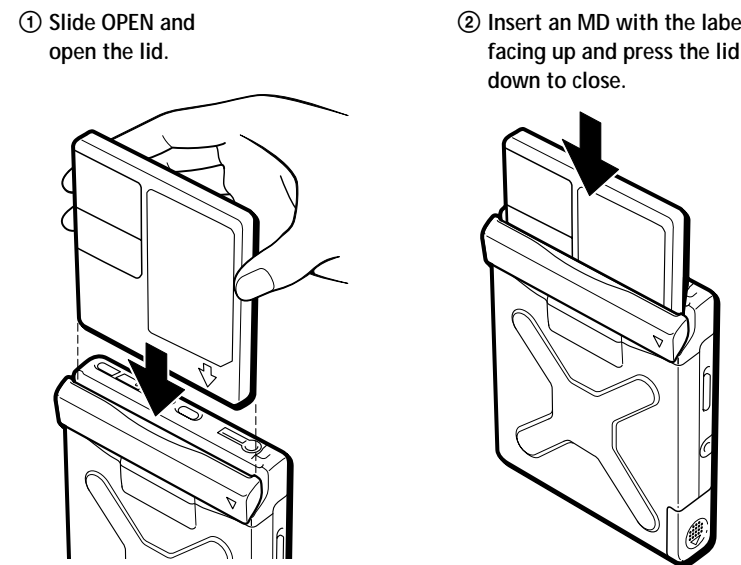
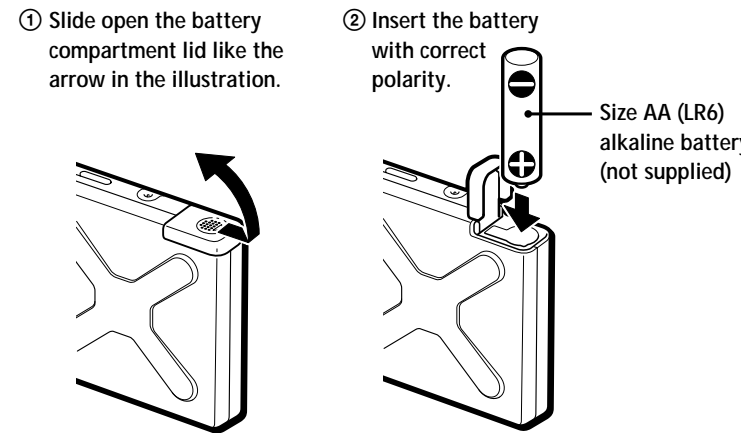
Welcome to the world of the MiniDisc! Here are some of the capabilities and features you'll discover with the new MiniDisc Player.

- Compact MiniDisc player using a new-designed head-loading system. You can insert or eject an MD while the player is in your pocket or bag.
- You can operate this player by inserting either a "chewing-gum type" rechargeable battery or a dry battery into the battery compartment of the player.
- Using only one size AA (LR6) dry battery by the power saving mechanism.
- The headphones with remote control including LCD display - You can also operate this player using the remote control (supplied) while the player is in your pocket.

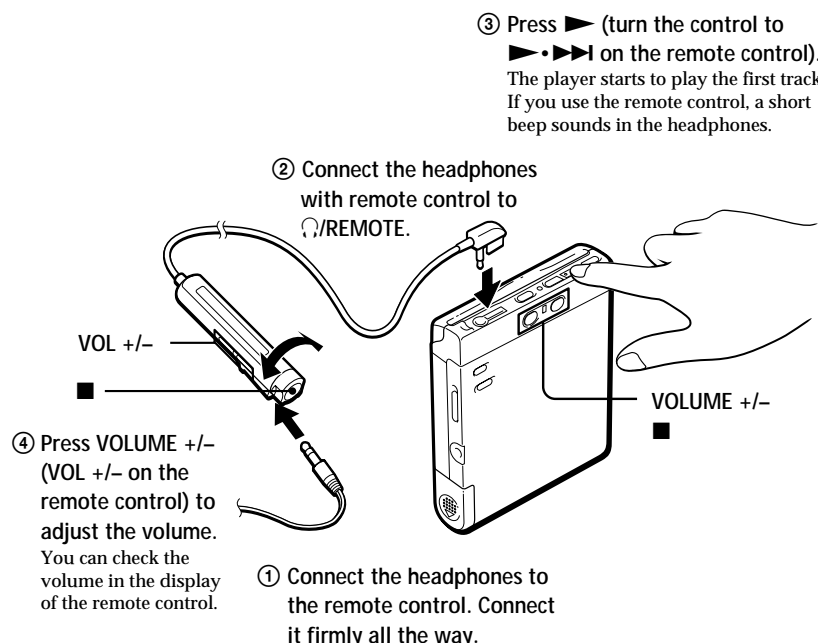
Playing an MD right away!

Prepare one size AA (LR6) alkaline battery. You can also use this player on a rechargeable battery and house current (see "Power sources"). The player automatically switches to play the stereo or monaural sound according to the recorded sound.

1 Insert the battery.



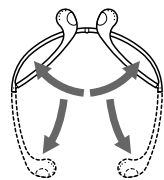
3 Play an MD.



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

| | |
|--|--|
| To | Press (Beeps in the headphones) |
| Pause | ■ (Continuous short beeps) Press ■ again to resume play. |
| Find the beginning of the current track | ◀◀ once (Turn the control to ◀◀ on the remote control) (Three short beeps) |
| Find the beginning of the next track | ▶▶ once (Turn the control to ▶▶ on the remote control) (Two short beeps) |
| Go backwards while playing ¹⁾ | keep pressing ◀◀ (Turn and hold the control to ◀◀ on the remote control) |
| Go forward while playing ¹⁾ | keep pressing ▶▶ (Turn and hold the control to ▶▶ on the remote control) |

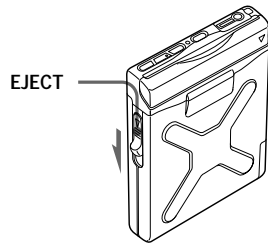
For customers in the United States
Unfold the supplied headphones as shown in the illustration below.



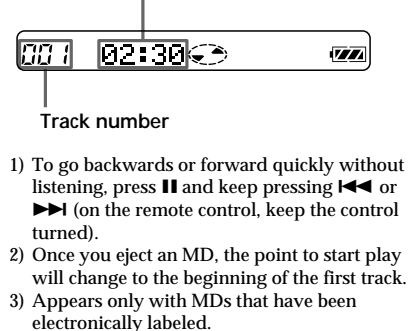
When using the headphones
Wear the "L" marked side to the left ear and the "R" marked side to the right ear.

If the play does not start
Make sure the player is not locked. See "To lock the controls."

To remove the MD
Press ■ and then slide EJECT²⁾. The disc compartment shutter opens and the MD ejects.



Display window while playing back
• Display window on the remote control
Track name³⁾ or elapsed time of the track being played
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 eject an MD, the point to start play will change to the beginning of the first track.
- 3) Appears only with MDs that have been electronically labeled.

Tip
The OPERATE lamp lights on the main unit when the MD Walkman is operating.

Notes

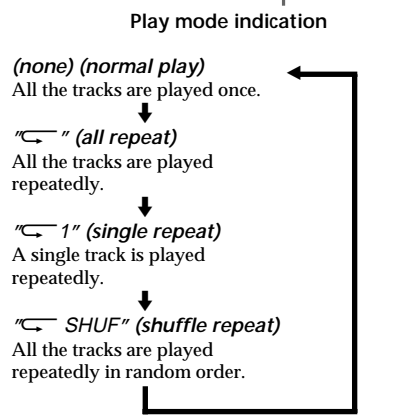
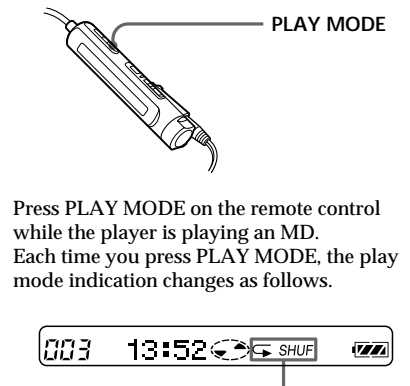
- Do not open the disc compartment shutter by force, as this may lead to a malfunction.
- Do not slide EJECT during playback. If you do, the MD will eject and playback will stop.

When using optional headphones
Use the headphones that have stereo-miniplug. You cannot use other types of headphones with microplugs.

Various ways of playback

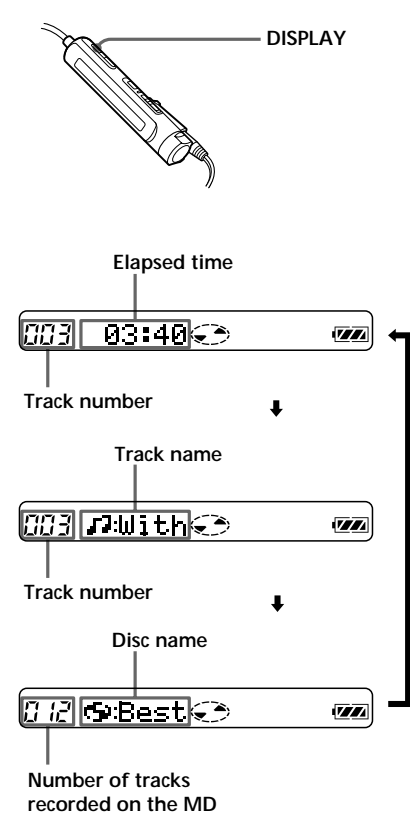
Playing tracks repeatedly

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



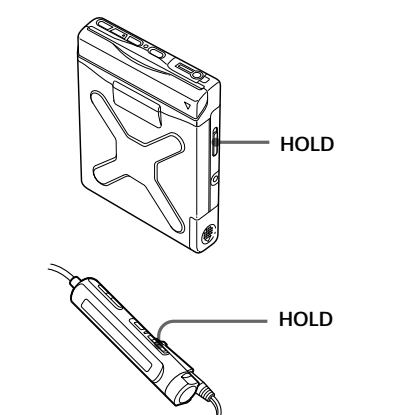
Tips on playback

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.



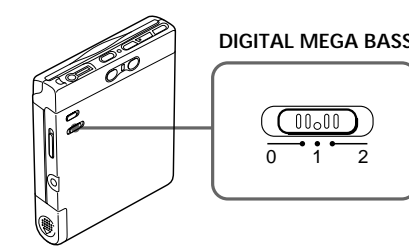
Note
Disc and track names appear only with MDs that have been electronically labeled.

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



Slide HOLD in the direction of the →. On the player, slide HOLD to lock the controls of the player.

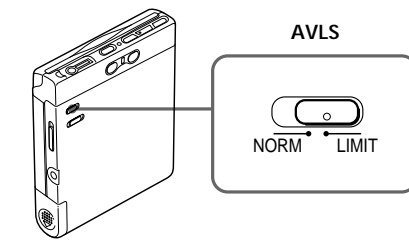
To emphasize bass (DIGITAL MEGA BASS)
The DIGITAL MEGA BASS function intensifies low frequency sound for richer quality audio reproduction.



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 is 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.

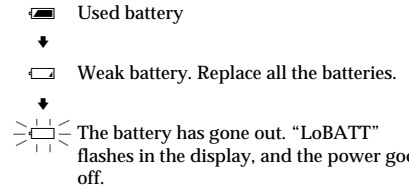


Set AVLS to LIMIT. The volume is kept at a moderate level, even if you try to turn the volume above the limited level.

Power sources

When to replace or charge the battery

You can check the battery condition with the battery indication on the remote control while using the player.

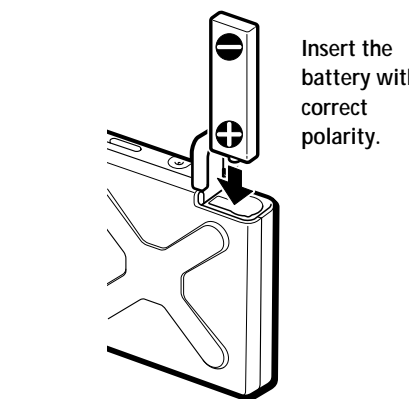


| Battery life* | Playback |
|-------------------------------------|-----------------|
| Ni-Cd rechargeable battery (NC-6WM) | Approx. 2 hours |
| One size AA (LR6) | Approx. 5 hours |

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

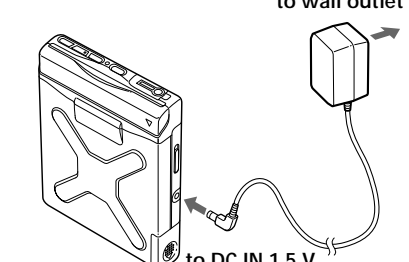
Using on a rechargeable battery

- 1 Charge the rechargeable battery NC-6WM (not supplied) with the battery charger. Refer to the instructions manual that came with the charger for charging.
- 2 Open the battery compartment lid and insert the charged battery.



Using on house current

- 1 Connect the AC-E15L AC power adaptor (not supplied) to the DC IN 1.5V jack of the player.
- 2 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.

- The player is not connected with 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 battery, rechargeable battery, 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 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.

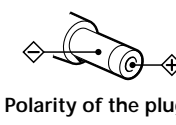
On the MiniDisc cartridge
• Do not break open the shutter.
• Do not place the cartridge where it will be subject to light, temperature, moisture or dust.

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 and ejecting an MD.

Notes on the battery
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 battery correctly.
• Do not try to recharge the battery.
• When the player is not to be used for a long time, be sure to remove the battery.
• If a battery leak should develop, carefully and thoroughly wipe away battery fluid from the battery compartment before inserting a new one.

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 player is locked.
 - ▶ Slide HOLD against the arrow to unlock the player.
- 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 are weak (□ "LoBATT" flashes).
 - ▶ Replace the dry battery or recharge the battery.
- The rechargeable battery or dry battery has 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) ("ERROR" 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.
 - 1 Disconnect all the power sources.
 - 2 Leave the player for about 30 seconds.
 - 3 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 away from the source of strong magnetism.

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 VOLUME +/-.
• AVLS is on.
• Slide AVLS to NORM.

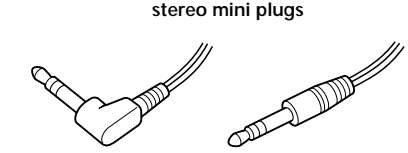
Specifications

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 7mm 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 cadmium rechargeable battery NC-6WM (not supplied)
One size AA (LR6) battery (not supplied)
Sony AC Power Adaptor AC-E15L (not supplied) connected at the DC IN 1.5 V jack
Battery operation time
See "When to replace or charge the battery"
Dimensions
Approx. 80 × 18.5 × 104 mm (w/h/d)
(3 1/4 × 3/4 × 4 1/8 in.) not including projecting parts and controls
Mass
Approx. 160 g (5.6 oz.) the player only
Approx. 200 g (7.1 oz.) incl. a premastered MD, and a Sony alkaline LR6 (SG) battery
Supplied accessories
Headphones with a remote control (1)
Carrying pouch (1)

Optional accessories
AC-E15L AC power adaptor¹⁾
Ni-Cd rechargeable battery NC-6WM
Battery charger for NC-6WM BC-7 series
DCC-E215 Car battery cord
CPA-9 Car Connecting Pack
MDR-series Stereo headphones²⁾
SRS-A41 Sony Active Speakers
CK-MD4 MiniDisc Carrying Case
CK-MD10 MiniDisc Filing Box

¹⁾ 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.
²⁾ 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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Design and specifications are subject to change without notice.

