

SONY

3-858-734-23 (1)

Microcassette™ - Corder

Operating Instructions

Owner's Record

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

Model No. M-950 Serial No. _____

M-950

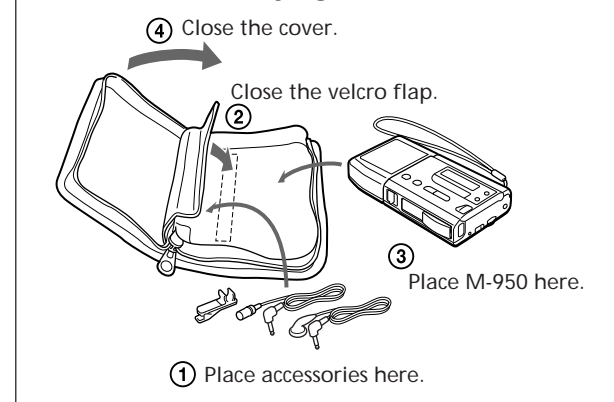
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Welcome!

Thank you for purchasing the Sony Microcassette-Corder. Some features are:

- Super-mini size Microcassette-Corder with automatic reverse function and feather-touch buttons.
- Supplied detachable speaker.
- LCD (Liquid Crystal Display) that shows tape counter, remaining battery power and tape transport direction.
- Zero stop counter that stops the tape automatically at 000 in rewind and review mode.
- VOR (Voice Operated Recording) system that starts and stops recording automatically in response to the sound, to save tapes and batteries.

How to use the carrying case



▶ Getting Started

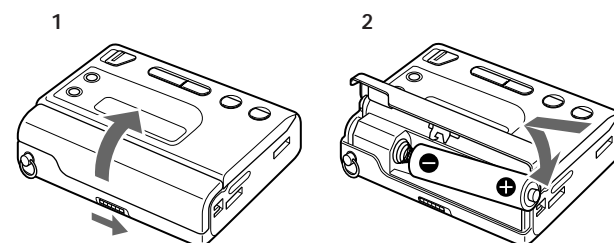
Preparing a Power Source

Choose one of the following power sources.

Dry Batteries

Make sure that nothing is connected to the DC IN 1.5V jack.

For the main unit



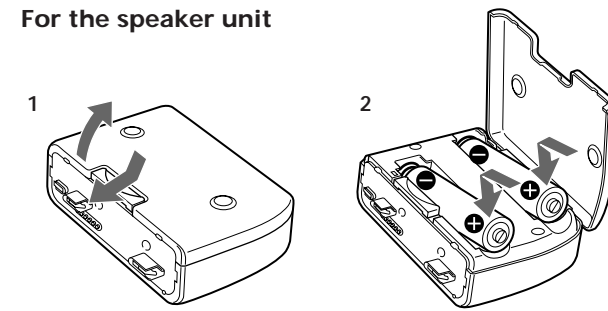
- 1 Slide OPEN on the battery compartment in the direction of the arrow to open the battery compartment lid.
- 2 Insert one size AAA (R03) battery (not supplied) with correct polarity.

Note

Make sure that the battery is inserted with correct polarity. You may not be able to distinguish between ⊕ and ⊖ with some batteries.

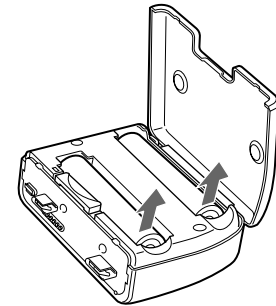
- 3 Close the lid until it clicks.

For the speaker unit



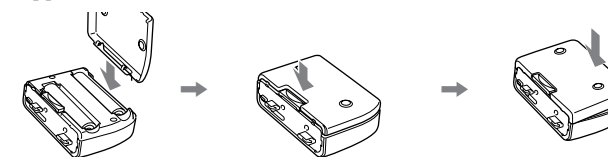
- 1 Push and slide OPEN on the speaker unit in the direction of the arrow as illustrated to open the battery compartment lid.
- 2 Insert two size AAA (R03) batteries (not supplied) with correct polarity.
- 3 Close the lid until it clicks.

To take out the batteries



To attach the battery compartment lid if it is accidentally detached

Insert a wire, push the OPEN button-side and then push the opposite side of the OPEN button.



Battery life (Approximate hours)

Battery	Recording without speaker unit	Recording (when speaker unit is installed*)	Playback (when speaker unit is installed*)
Sony alkaline LR03 (SG)	5.5	22	24
Sony R03 (SB)	1.5	10	11.5

* When one battery is installed in the main unit and two batteries are installed in the speaker unit

We recommend to use long-life alkaline batteries.

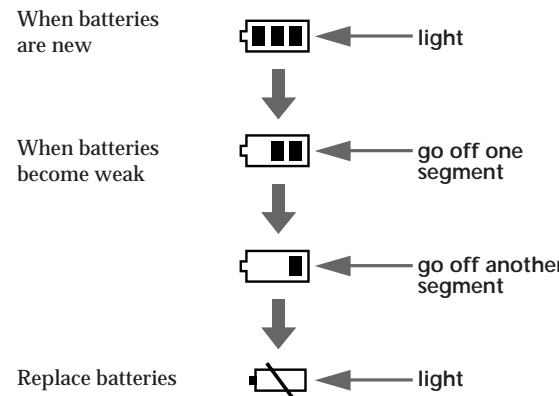
Notes

- Do not charge a dry battery.
- Do not use a new battery with an old one.
- Do not use different types of batteries.
- When you do not use the unit for a long time, remove the batteries to avoid any damage caused by battery leakage and subsequent corrosion.
- Dry batteries will not be expended when another power source is connected.

When to replace the batteries

The battery indicator in the display window shows the remaining battery power.

When the battery is used up, ☹ appears in the display window. Replace all the batteries (one battery in the main unit if the speaker is not installed) with new ones. The ☹ lamp changes as illustrated:

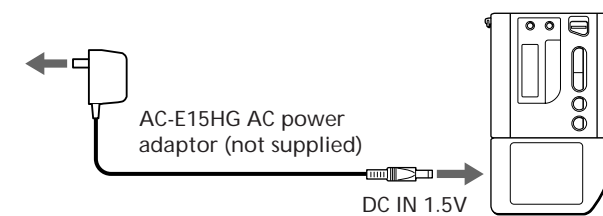


Notes

- When you have changed the batteries to new ones, the battery indicator appears in the display window after running the tape once.
- If you insert exhausted batteries (especially manganese batteries), ☹ may not appear even though the other indicators appear properly. If the unit does not operate properly, replace the batteries with new ones.
- While the tape runs rapidly (fast forward or rewind), ☹ may appear. Replace the batteries only when the tape does not run properly.
- During playback, the battery indicator may temporarily flicker when you turn up the volume.
- The tape will run for a while after ☹ appears; however, a big noise may be heard from the speaker or recording may not be made. When ☹ appears, replace all the batteries at once.
- At the beginning or end of the tape ☹ may momentarily appear. If the indicator disappears, you do not need to replace the batteries.

House Current

- 1 Connect the AC-E15HG AC power adaptor (not supplied) to DC IN 1.5V of the speaker.
- 2 Connect the other end of the AC power adaptor to a wall outlet.



Note

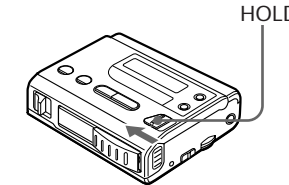
Use the AC-E15HG AC power adaptor. Do not use any other AC power adaptor.



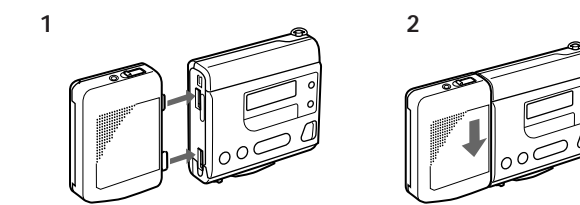
Polarity of the plug

Releasing HOLD

Unlock the unit before operating by sliding HOLD in the opposite direction of the arrow.

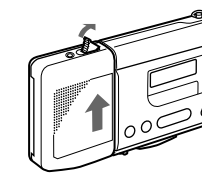


Installing the Speaker Unit



- 1 Attach the speaker unit to the main unit.
- 2 Slide the speaker unit as illustrated until it clicks.

To remove the speaker unit



- 1 Keep holding both the main unit and the speaker unit with your both hands, release the speaker lock.
- 2 With the speaker locked released, remove the speaker unit straight out from the main unit.

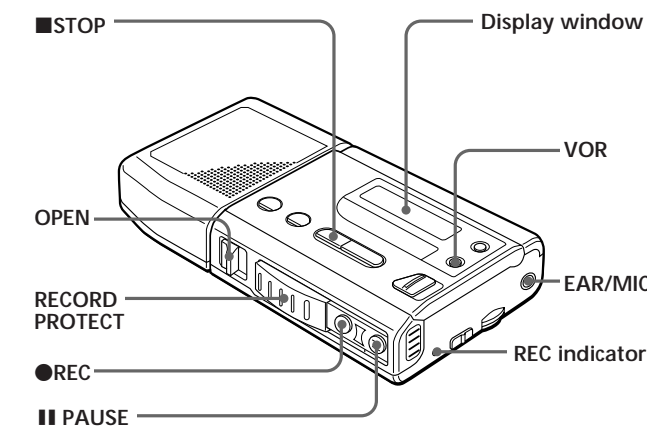
Notes

- When removing the speaker unit, make sure you are holding both the speaker unit and the main unit firmly; otherwise, the speaker unit may drop out.
- Before removing the speaker unit, make sure the tape has stopped completely; otherwise, noise may be heard or a tape may stop running.

▶ Operating the Unit

Recording

You can record right away with the built-in microphone, with or without the speaker unit. Make sure that nothing is connected to the EAR/MIC jack.



- 1 Slide OPEN on the cassette compartment in the direction of the arrow and open the lid.
- 2 Take out any slack in the tape and insert the cassette with the side to start recording facing the lid.
- 3 Close the cassette compartment lid until it clicks.
- 4 Make sure that VOR L or VOR H is not displayed in the display window. For normal recording, if VOR L or VOR H is displayed, make it disappear. Refer to "VOR (Voice Operated Recording)".
- 5 Slide the RECORD PROTECT cover so that ● REC and || PAUSE buttons appear.
- 6 Press ● REC.

Recording starts. While recording, the REC indicator lights and REC appears in the display window.

Note
Make sure the tab on the upper (forward) side is not removed; otherwise, recording cannot be made.

If you start recording from the upper side (◀ FWD appears in the display window), recording automatically goes on to the reverse side (REV ▶ appears in the display window) and the unit turns off automatically when the tape comes to the end of the reverse side. If the tab is removed, however, you cannot record on that side.

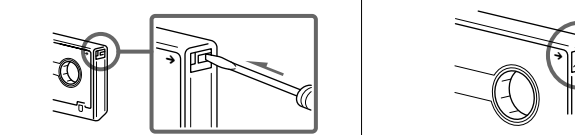
To	Press or slide
Stop recording	■ STOP
Pause recording	PAUSE To release pause recording, press ● REC.
Take out a cassette	Press ■ STOP and slide OPEN on the cassette compartment lid in the direction of the arrow.

Notes

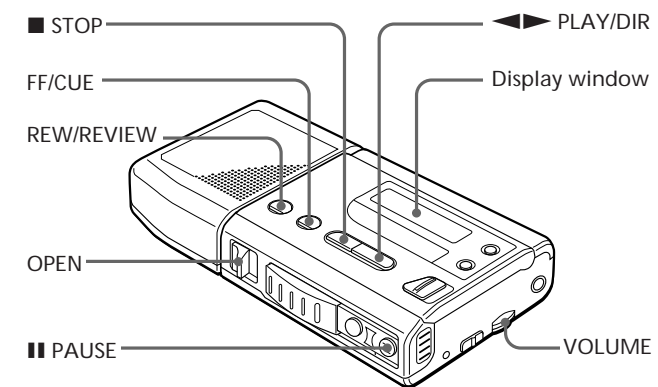
- Before taking out the cassette, make sure that the sound of the unit operating has stopped.
- When earphones or an external microphone is connected to the EAR/MIC jack, the built-in microphone does not work.

To prevent a tape from being accidentally recorded over

Break out and remove the cassette tabs. To reuse the cassette for recording, cover the tab hole with adhesive tape.



Playing a Tape



- 1 Slide OPEN on the cassette compartment in the direction of the arrow and open the lid.
 - 2 Take out any slack in the tape and insert the cassette with the side to start playing facing the lid.
 - 3 Close the cassette compartment lid until it clicks.
 - 4 Press ◀▶ PLAY/DIR.
 - 5 Adjust the volume using VOLUME.
- If the playback starts from the upper side (◀ FWD appears in the display window), playback goes on to the reverse side (REV ▶ appears in the display window) and the unit turns off automatically.

To	Press or slide
Stop playback	■ STOP
Pause playback	PAUSE To release pause playback, press ◀▶ PLAY/DIR*.
Fast forward**	FF/CUE during stop
Rewind**	REW/REVIEW during stop
Fast forward while listening to the sound (CUE)	FF/CUE during Playback
Rewind while listening to the sound (REVIEW)	REW/REVIEW during playback
Play the other side during playback	◀▶ PLAY/DIR
Play the other side during stop	■ STOP for more than 2 seconds
Take out a cassette	Press ■ STOP and slide OPEN in the direction of arrow.

* The || PAUSE button is released automatically when the ■ STOP button is pressed (stop-pause-release function).
** The tape stops at the end of the tape and the power is turned off automatically (automatic shut-off mechanism).

Note

Before taking out the cassette, make sure that the sound of the unit operating has stopped.

INFORMATION

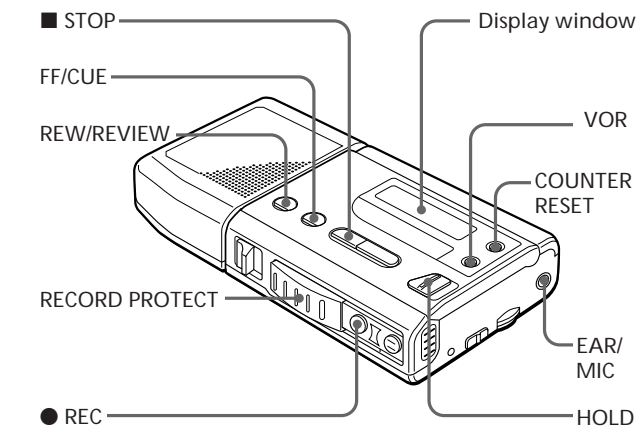
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate 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 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.

Using Various Functions



To select the side to be recorded

To record on both sides continuously

- 1 Insert a cassette with the side to start recording facing the lid.
- 2 Start recording on the upper side (◀ FWD appears in the display window). If REV ▶ is displayed, press ■ STOP for more than 2 seconds to display ◀ FWD.

When recording reaches the end of the upper side, it will automatically continue on the reverse side.

Notes

- Make sure the tabs on both sides are not removed.
- Even if only the tab on the reverse side is removed, recording cannot be made.

To Record on one side only

- 1 Insert a cassette with the side to start recording facing away from the lid (reverse side).
- 2 Start recording on the reverse side (REV ▶ appears in the display window). If ◀ FWD is displayed, press ■ STOP for more than 2 seconds to display REV ▶.

When recording reaches the end of the reverse side, it will automatically stop.

Note

Make sure the tab on the reverse side is not removed.

VOR (Voice Operated Recording)

The VOR system works only while recording. Press VOR to display VOR L or VOR H first and then press ● REC. The unit automatically starts recording the sound and pauses when there is no sound (you can save tapes and batteries).

VOR L: To record for dictation in a noisy place.

VOR H: To record at meetings or in a quiet place.

When you use this system in a noisy place the unit stays in the recording mode. If the sound is too soft, on the contrary, the unit will not start recording. Press VOR to display VOR L (low) or VOR H (high) depending on the conditions. When you do not use this function, press VOR during recording until VOR L or VOR H disappears in the display window.

Notes

- The VOR system depends on the environment conditions. If you cannot get the desired results, record without the VOR system.
- When using the VOR system, the unit starts recording only when a sound is detected, therefore, the beginning of the word may not be recorded. For an important recording, we recommend to recording without the VOR system.
- The VOR L or VOR H indicator appears during playback too.

Start recording during playback

Press ● REC during playback, recording starts immediately. It is useful when you want to re-record the portion which was just recorded.

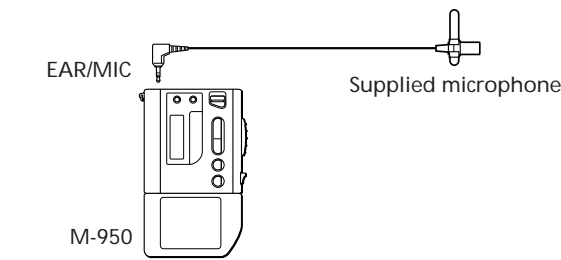
Review the portion just recorded

Press REW/REVIEW during recording. Release the button at the point to start playback.

Recording with the supplied Microphone

Connect the supplied microphone to EAR/MIC. The built-in microphone will be disconnected and the sound through the external microphone will be recorded.

To start recording, insert a cassette and press ● REC.

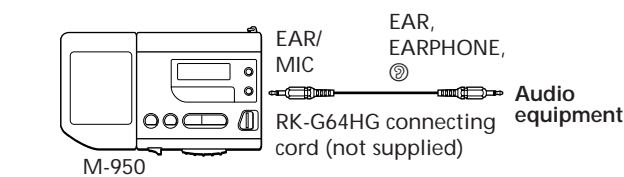


Recording with the connected equipment

Use VOR system depending on the environment condition.

Notes (Before recording)

- When connecting cords, be sure you connect plugs firmly.
- Make a trial recording to make sure that you made connections correctly and adjusted the volume properly.
- The following examples use Sony products. If you have any problem when using other products, read the instruction manual of those products.



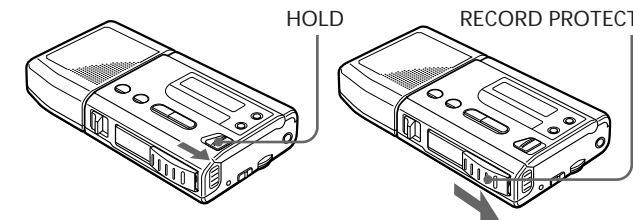
- 1 Insert a cassette.
- 2 Adjust the sound of the connected equipment.
- 3 Press ● REC.

Using Other Functions

HOLD function

This function locks the unit to prevent it from operating when you accidentally press a button except VOR, COUNTER RESET, ● REC and || PAUSE. To lock the unit, slide HOLD ◀ in the direction of the arrow. The ◀ indicator appears in the display window.

To prevent ● REC and || PAUSE from pressing, slide the RECORD PROTECT cover so that the buttons cannot be seen.



To check the direction of the tape in the display window

◀ FWD appears when recording on the upper side.

REV ▶ appears when recording on the reverse side.

The indication will disappear about one minute after the tape starts running. To display the indication, press ■ STOP.

Display during recording/playback	Side of the tape during recording/playback
	Upper side
	Reverse side

TAPE SPEED selector

2.4 cm: For optimum sound (recommended for normal use). A 60-minute recording can be made using both sides of the MC60 microcassette.

1.2 cm: For longer recording time. A 120-minute recording can be made using both sides of the MC60 microcassette.

Tape counter

While the upper side of the tape is running (◀ FWD appears in the display window), the numbers in the tape counter increase. While the reverse side is running (REV ▶ appears in the display window), they decrease.

Press COUNTER RESET to return to 000.

To return the tape to the position of 000

Press COUNTER RESET for more than 2 seconds until ZERO STOP appears in the display window. During rewind or REVIEW, the tape stops at 000. Press COUNTER RESET for more than 2 seconds to make the ZERO STOP indicator disappear.

Additional Information

Precautions

On power

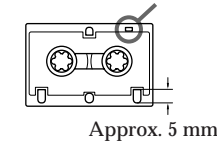
Operate the unit only on 1.5V DC. For AC operation, use the AC power adaptor recommended for the unit. Do not use any other type. For battery operation, use two size AAA (R03) batteries.

On the unit

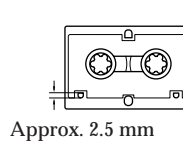
- Use only the MICROCASSETTE™ (standard microcassettes) with this unit. Non-standard cassettes cannot be used because their "L" dimension (see illustration) is different.

Standard

Only standard microcassettes have a small indentation of side A.



Non-standard



- Do not leave the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Should any solid object or liquid fall into the unit, remove the batteries or disconnect the AC power adaptor, and have the unit checked by qualified personnel before operating it any further.
- When you do not use the unit for long, remove the batteries to avoid damage caused by battery leakage and subsequent corrosion.
- If the unit has not been used for a long time, set it in the playback mode and warm it up for a few minutes before inserting a tape.

Keep personal credit cards using magnetic coding or spring-wound watches etc. away from the unit to prevent possible damage from the magnet used for the speaker.

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

Troubleshooting

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

Recording cannot be made.

- The batteries are weak. Replace the battery for the main unit and both batteries for the speaker unit, if the speaker is installed, with new ones.
- There is no cassette.
- The tab on the tape has been removed. To reuse the tape for recording, cover the tab hole with adhesive tape.
- The record/playback head is contaminated.
- VOR has been set improperly when VOR function is activated.
- Connection is made incorrectly.
- The earphones are plugged in to EAR/MIC. Disconnect it.

You cannot insert the cassette.

- The cassette is inserted front side back.

You cannot close the cassette compartment lid.

- The cassette is inserted into the wrong part (it should be inserted into the lid side).
- The cassette is not inserted completely.

Playback is not possible even if you press ◀▶ PLAY/DIR

- The tape has reached the end. Rewind the tape.
- The TAPE SPEED switch is not set to the 1.2 cm or 2.4 cm position.
- The batteries are weak. Replace the battery for the main unit and both batteries for the speaker unit, if the speaker is installed, with new ones.

During CUE/REVIEW the tape stops or does not run.

You cannot fast-forward or rewind.

- The batteries are weak. Replace the battery for the main unit and both batteries for the speaker unit, if the speaker is installed, with new ones.
- The zero stop counter function works. Press COUNTER RESET for more than 2 seconds to make ZERO STOP disappear from the display window.

The unit does not operate.

- The batteries have been inserted with incorrect polarity.
- The batteries are weak. Replace the battery for the main unit and both batteries for the speaker unit, if the speaker is installed, with new ones.
- The AC power adaptor or car battery cord is not firmly connected.
- The batteries have been inserted; however, the AC power adaptor is also connected but not plugged into the wall outlet.
- There is no cassette.
- HOLD is slid in the direction of the arrow. Slide HOLD in the opposite direction of the arrow.

No sound comes from the speaker.

- The earphones are plugged in to EAR/MIC. Disconnect it.
- The volume is turned down completely.

The sound drops out, sound quality becomes worse or sound has excessive noise.

- The volume is turned down completely.
- The batteries are weak. Replace the battery for the main unit and both batteries for the speaker unit, if the speaker is installed, with new ones.
- The record/playback head is contaminated.
- The earphone plug/microphone plug is dirty. Clean the plug, insert it into the jack, turn it a few times, then disconnect it and connect it again.
- If the cassette has been put on a speaker without its case, the sound quality may be distorted.

Recording is interrupted.

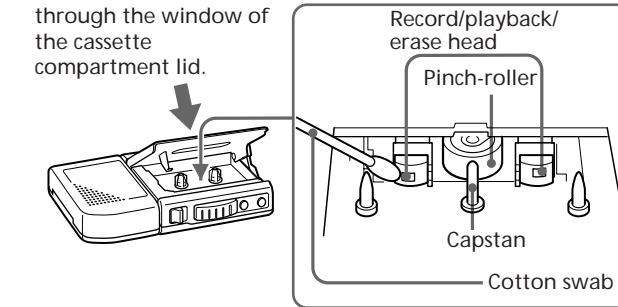
- The VOR system is working. When you do not use VOR, press it to make VOR L or VOR H disappear from the display window.

Recording cannot be erased completely.

- The erase head is contaminated.

Maintenance

You can see the inside through the window of the cassette compartment lid.



To clean the tape heads and path

Wipe the heads, pinch roller, and the capstan with a cotton swab moistened with alcohol every 10 hours of use. You can see the inside through the window of the cassette compartment lid. Clean the pinch-roller from top to bottom by rotating it.

To clean the exterior

Use a soft cloth slightly moistened in water. Do not use alcohol, benzene or thinner.

To clean the microphone plug

Clean the plug of the supplied microphone periodically with a soft dry cloth. Otherwise, noise may be recorded. When using an optional external microphone, clean its plug in the same way.

Specifications

Tape

MICROCASSETTE™ (normal position type)

Recording system

2-track 1 channel monaural

Frequency range

300 - 4,000 Hz

Speaker

Approx. 3.6 cm (1 7/16 in.) dia.

Power output

80 mW

Input

Microphone input jack (minijack/plug in power) (same jack as the earphone jack) sensitivity 0.33 mV for 3 kilohms or lower impedance microphone

Output

Earphone jack (minijack) for 8 - 300 ohms earphone

Power requirements

1.5 V DC

One size AAA (R03) battery for the main unit and two for the speaker unit

Dimensions (w/h/d) (incl. projecting parts and controls)

Approx. 64.7 × 67 × 21.8 mm

(2 5/8 × 2 3/4 × 7/8 in.)

Approx. 64.7 × 108 × 21.8 mm with the speaker unit

(2 5/8 × 4 3/8 × 7/8 in.)

Mass

Main unit: Approx. 100 g (3.5 oz.)

Speaker unit: Approx. 40 g (1.4 oz.)

Approx. 120 g (4.2 oz.) when using, incl. one battery and cassette

Approx. 180 g (6.3 oz.) with the speaker unit, incl. two batteries

Supplied accessories

Microphone (1), Holder clip for microphone (1)
Earphone (1), Carrying case (1), Hand strap (1)

Design and specifications are subject to change without notice.

This warranty is valid only in the United States.