

Operating Instructions

Owner's Record

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

Model No. M-88V

Serial No. _____

Sony Corporation © 1988 Printed in Japan

Precautions

On power source

- Operate the unit with two R03 (size AAA) batteries only.
- The nameplate indicating operating voltage, etc. is located on the rear exterior.

On operation

- Should any solid object or liquid fall into the unit, remove the batteries and have the unit checked by qualified personnel before operating it any further.

On location

- Do not leave the unit in a location near heat sources, in a place subject to direct sunlight, excessive dust, or mechanical shock, or in a car with its windows closed.
- Since a strong magnet is used for the speaker, **keep personal credit cards using magnetic coding or spring-wound watches away from the unit** to prevent possible damage from the magnet.

If you have any question or problem concerning your unit that is not covered in this manual, please consult the nearest Sony dealer.

Troubleshooting Guide

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

Trouble	Cause and/or Remedy
Cassette cannot be inserted.	<ul style="list-style-type: none"> • Cassette is inserted improperly. See "Cassette". • ∇ is depressed.
● cannot be depressed.	<ul style="list-style-type: none"> • No cassette in the cassette holder. • The cassette inserted has had the tabs removed from "Cassette".
● or ∇ cannot be locked.	<ul style="list-style-type: none"> • The tape is completely rewound towards \triangleright on the cassette holder. • Slide PAUSE in the opposite direction of \blacktriangle.
Playback/recording does not start or is unsatisfactory.	<ul style="list-style-type: none"> • Incorrect polarity of batteries. • Weak batteries. • Dirty head. See "Maintenance". • Slide START/STOP on the remote control microphone to START. • Set MIC SENS to H or VOR to OFF (Recording).
No sound from the speaker.	<ul style="list-style-type: none"> • The earphone is plugged in. • VOL is turned down completely.
Tape speed is excessively fast or slow during playback.	<ul style="list-style-type: none"> • Improper setting of TAPE SPEED.
Unsatisfactory erasing.	<ul style="list-style-type: none"> • Dirty head. See "Maintenance".

Specifications

Tape	MICROCASSETTE™ (normal position type)
Recording system	2 track 1-channel monaural
Speaker	Approx. 2.3 cm (9/32 inches) dia.
Tape speed	24 cm/s (15/16 ips), 1.2 cm/s (15/32 ips)
Frequency response	250-4,000 Hz (at 2.4 cm position)
Input/output	Earphone/microphone jack (1/8 inch)
	Input sensitivity 0.3 mV for 3 \times volume or lower impedance microphone (PLUG IN POWER)
Power output	Output for 8-300 ohm earphone
Battery life (recording)	160 mW (at 10% harmonic distortion)
	Sony UM-4 (NIU): Approx. 2.5 hours
	Sony AM4 (NI): Approx. 7 hours
Power requirement	3V DC, two R03 (size AAA) batteries
Dimensions	Approx. 63 \times 92.9 \times 26.7 mm (width)
	(2 1/2 \times 3 1/2 \times 1 1/4 inches)
Weight	Incl. projecting parts and controls
Accessories supplied	Approx. 190g (5.7 oz) incl. batteries
	Remote control microphone (1), Earphone microphone (1), Carrying case (1), Handstrap (1), Sony AM4 (NI) batteries (2) (only for the tourist model)

Design and specifications subject to change without notice

Note

This appliance conforms with EEC Directives 76/689 and 82/499 regarding interference suppression.

Optional Accessories

Microcassette MC-30, MC-80, 3MC-60
Connecting cord RK-G64 (miniplug to miniplug with attenuator)

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

Parts identification

- 1 VOX (voice operated recording) switch
- 2 EAR/MIC (earpiece/microphone) jack
- 3 Handcapping (supplied)
- 4 Cassette holder
- 5 TAPE SPEED selector (left side)
- 6 Tape counter
- 7 Battery compartment (bottom)
- 8 REC/BATT (recording/battery) indicator
- 9 MIC SENS (microphone sensitivity) switch
- 10 MIC (built-in microphone)
- 11 (record) button
- 12 Cue (fast forward) button (reverse) switch
- 13 PAUSE switch
- 14 (stop/ject) button

Maintenance

Cleaning the head
Prolonging tape life and contaminating the tape head. Every eight hours, use a moist cotton swab to clean the tape head. Do not use alcohol. Wipe gently with alcohol after every 10 hours of use.

Cleaning the casing
The casing is a soft foam slightly moistened with water or a mild detergent solution. Do not use alcohol. Wipe gently with alcohol after every 10 hours of use.

Connection

Recording from Dubbing onto Other Equipment

Stop VOX and OFF. Plug the unit into a cassette recorder and set them to the play back or recording mode.

Identification des parties

- 1 Interrupteur d'enregistrement déclenché par la voix (VOX)
- 2 Boîte à écouteurs/microphone (EAR/MIC)
- 3 Bouton de la bande
- 4 Dégagement (fourni)
- 5 Logement de cassette
- 6 Sélecteur de vitesse (TAPE SPEED) (à gauche)
- 7 Compteur de bandes
- 8 Logement des piles (sur le fond)
- 9 Témoin d'enregistrement/des piles (REC/BATT)
- 10 Microphone de sensibilité (MIC SENS)
- 11 Microphone incorporé (MIC)
- 12 Touche d'enregistrement (●)
- 13 Sélecteur d'avance rapide/marche (CUE) (à gauche)
- 14 Touche d'arrêt momentané (PAUSE)
- 15 Touche d'arrêt/déjection (■/▲)

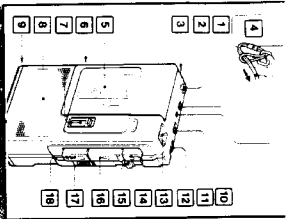
Entretien

Nettoyage de la tête
Prolonger la durée de vie de la cassette et éviter la contamination de la tête de la bande. Par conséquent, nettoyez la tête de la cassette avec un coton-tige humecté avec une solution détergente douce. Ne pas utiliser d'alcool. Lavez les dix heures de fonctionnement.

Nettoyage du boîtier
Le boîtier est une mousse douce légèrement imbibée d'eau ou d'une solution savonneuse douce. Ne pas utiliser d'alcool. Lavez les dix heures de fonctionnement.

Connexion

Enregistrement à copier à partir d'un autre appareil
Arrêtez l'enregistrement VOX sur OFF (arrêt). Branchez cet appareil à un magnétophone. Placez un de ces deux appareils en mode de lecture et l'autre en mode d'enregistrement.



- 1 Interrupteur de gravation contrôlée par la voix (VOX)
- 2 Boîte pour écouteurs/microphone (EAR/MIC)
- 3 Bouton pour avance
- 4 Déclenchement (fourni)
- 5 Sélecteur de vitesse de la cinte (TAPE SPEED) (à gauche)
- 6 Compteur de la cinte
- 7 Logement de la pile (sur le fond)
- 8 Indicateur de gravation/décharge de la pile (REC/BATT)
- 9 Commandeur de sensibilité du microphone (MIC SENS)
- 10 Commandeur de volume (VOL)
- 11 Microphone incorporé (MIC)
- 12 (●) bouton d'enregistrement
- 13 (CUE) bouton d'avance rapide (à gauche)
- 14 (PAUSE) bouton de contrôle de vitesse
- 15 (REVIEW) bouton de contrôle de vitesse
- 16 (■/▲) bouton de pause
- 17 (■/▲) bouton de pause
- 18 (■/▲) bouton de pause

Manutenimento

Limpieza de la cabeza
El magnetofono puede contaminar la cabeza de la cinta. Para eliminar el último sonido, limpie las partes mostradas con un paño de algodón humedecido en alcohol cada 10 horas de uso.

Limpieza de la caja
Limpie la caja con un paño suave ligeramente humedecido en agua o una solución poco concentrada de detergente. No emplee alcohol. Limpie cada diez horas de funcionamiento.

Conexión

Grabación desde otro equipo
Deslice VOX hacia OFF, conecte la unidad a una grabadora y pongala en el modo de reproducción o grabación.

- 1 Interruptor VOX (voice operated recording) switch
- 2 Box EAR/MIC (earpiece/microphone)
- 3 Advance button
- 4 Release (supplied)
- 5 Cassette compartment
- 6 TAPE SPEED selector (left side)
- 7 Tape counter
- 8 Battery compartment (bottom)
- 9 REC/BATT (recording/battery) indicator
- 10 MIC SENS (microphone sensitivity) switch
- 11 MIC (built-in microphone)
- 12 (record) button
- 13 Cue (fast forward) button (reverse) switch
- 14 PAUSE switch
- 15 (stop/ject) button

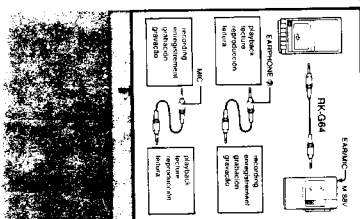
Manutenção

Limpieza da cabeça
A utilização prolongada poderá contaminar a cabeça da fita. Para melhor qualidade a reprodução do áudio, limpe as partes mostradas com um pano de algodão humedecido com álcool a cada 10 horas de utilização.

Limpieza do aparelho
Limpie a parte exterior do aparelho com um pano macio. Limpe a caixa com um pano suave ligeiramente humedecido em água ou uma solução pouco concentrada de detergente. Não utilize álcool. Limpe a caixa a cada dez horas de utilização.

Ligação

Gravação ligada com outros aparelhos
Posicione VOX para OFF. Ligue o aparelho com um gravador casete e ligue-o em modo de leitura ou de gravação.



Battery

When to replace

Replace the batteries with new ones when the REC/BATT indicator glows faintly and sound becomes distorted or unstable.

Cassette

Use only the **MICROCASSETTE** (standard Microcassettes) with this unit.

When the cassette holder does not close correctly, reset the tape. Do not force the holder.

To protect cassettes from accidental erasure

Break out and remove the tab.

To reuse the cassette

Cover the slot with plastic tape.

Recording

Which Microphone for Which Situation

Choose the microphone you use according to the recording condition, and adjust MIC SENS as follows.

Examples

What to be recorded	Microphone
Telephone conversation	Earphone microphone A The supplied earphone can also be used as a microphone. Attach to your ear and hold the telephone receiver over it.
Conference or interview	Remote control microphone B You can start and stop the tape with the START/STOP switch. PAUSE on the unit does not operate. You can also attach it to a pocket or a collar using the clip on the rear.
	Built-in microphone MIC It is deactivated, when the EAR/MIC jack is used
Own voice	Earphone microphone Remote control microphone

Connecting both microphones together

Only the earphone microphone is activated. You can also use START/STOP.

Set the unit for recording

Press ●.

The REC/BATT indicator blinks according to the sound being recorded and goes off when the tape stops.

For long, continuous recording

Slide TAPE SPEED to 1.2 cm. A 120-minute recording can be made using both sides of the MC-60 microcassette. (If you play back that tape with another unit, sound quality may be changed.) Normally set to 2.4 cm for optimum sound. The recording time will be half that of the 1.2 cm speed.

Recording only when sound is picked up (VOR system*)

Slide VOR to ON.

The unit will go into the recording mode only when the microphone picks up sound.

* With the VOR (voice operated recording) system, recording starts automatically at a certain sound level, and stops when sound is no longer detected. This is useful to avoid an empty recording.

Adjust MIC SENS according to a microphone

	MIC SENS*
Earphone microphone	M or H
Built-in microphone	
Remote control microphone	L or M

*L: Only for loud sound M: Normal recording H: For low sound

While the VOR system operating

Recording will not stop when the sensitivity is too high and will not start when it is too low.

	MIC SENS**
A loud place	L or M
A quiet or open place	M or H

**L: Start only at high sound level M: Normal H: At low sound level.

Reviewing the material just recorded

During recording, slide ◀▶▶▶ to ▶▶▶▶. When you release playback will begin automatically from that point.

Notes

- When you use an optional microphone or earphone, use one with a monaural mini-plug (2 terminals). One with a stereo mini-plug (3 terminals) may cause malfunction of the unit.
- You cannot listen to the sound being recorded through the earphone nor the speaker.

If the unit has not been used for a long time

Set it in the playback mode to warm it up for a few minutes before inserting a cassette.

At the end of the tape

In record or playback mode, the tape stops and the locked button will be released automatically. (Automatic shut-off mechanism)
After advancing or rewinding the tape to its end, be sure to press ■/▲ to release ◀▶▶▶.

Stopping

Press ■/▲.

Pausing

Slide PAUSE to ▲.

To resume play, slide to the original position

When the supplied remote control microphone is plugged in PAUSE on the unit does not operate.

Playback

- Slide TAPE SPEED to the position used for recording.
- Press ▼.
- Adjust volume.

When the earphone is plugged in

The speaker will be disconnected automatically.

Advancing rapidly Slide ◀▶▶▶ to ◀▶▶▶.
Rewinding Slide ◀▶▶▶ to ▶▶▶▶.
Skipping over or repeating a certain portion during playback Slide ◀▶▶▶. When you release, playback will begin from that point. Slide.
Changing to the recording mode directly during playback. Press ●. When you use an optional earphone, recording will not be done.