

# Cassette-Corder

Operating Instructions  
Инструкция по эксплуатации

TCM-900DV

Sony Corporation © 2001 Printed in China

http://www.world.sony.com/

## For the customers in the United States

### Owner's Record

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

Model No. TCM-900DV

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

## 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.

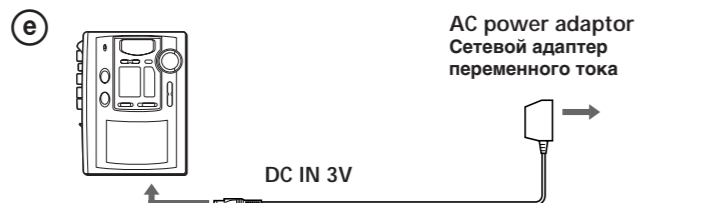
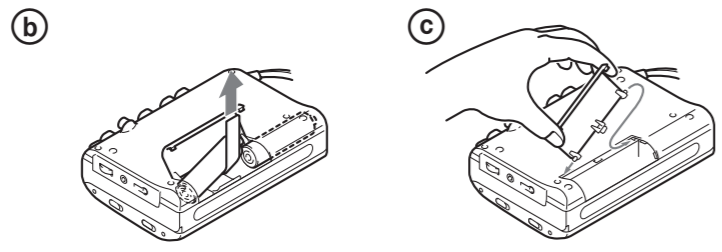
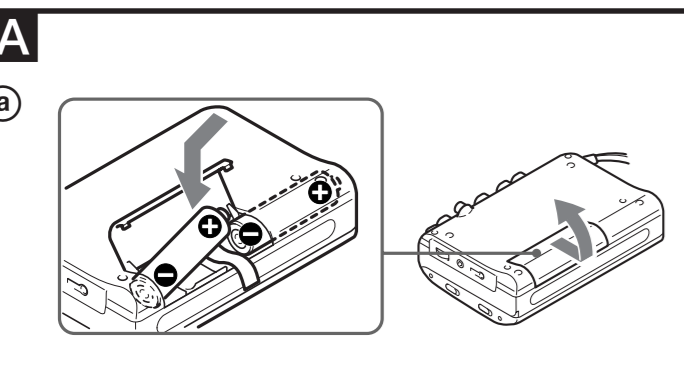
## For the customers in Russia

### Для покупателей в России

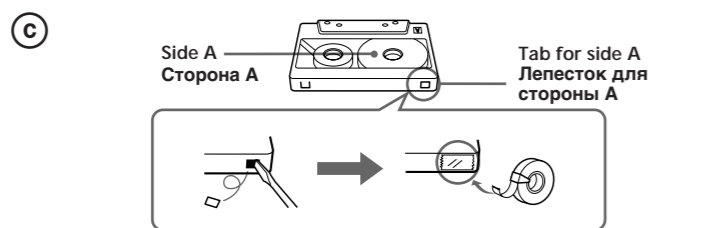
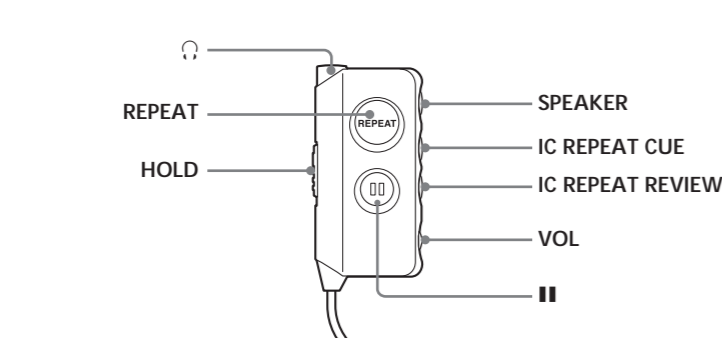
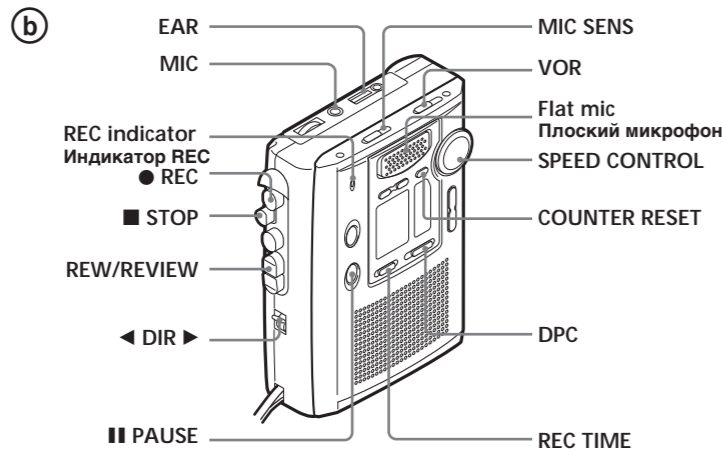
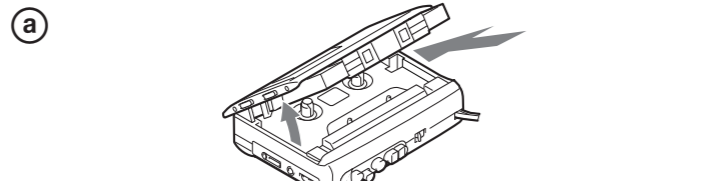
This is valid only in Russia.  
Это действительно только в России.

Аудиокассетный диктофон  
Сделано в Китае

Изготовитель: Сони Корпорейшн  
Адрес: 1-7-1 Конан, Минато-ку,  
Токио 108-0075, Япония



## B



## English

### Welcome!

Thank you for purchasing the Sony Cassette-Corder. This Cassette-Corder is equipped with a REC TIME switch that lets you record double the normal length on any cassette.

**Note**  
Tapes recorded with the REC TIME switch in the DOUBLE position cannot be played properly by a tape recorder without the REC TIME switch function.

### Getting Started

### Preparing a Power Source

Choose one of the following power sources.

### Dry Batteries (see Fig. A-ⓐ)

Make sure that nothing is connected to the DC IN 3V jack.

- 1 Open the battery compartment lid.
- 2 Insert two size R6 (AA) batteries with correct polarity and close the lid.

- 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.

### To take out the batteries (see Fig. A-ⓑ)

### To attach the battery compartment lid if it is accidentally detached (see Fig. A-Ⓒ)

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

When the batteries are exhausted, appears in the display window. Replace both batteries with new ones.

The battery indicator in the display window changes as illustrated:

- Notes**
- After the batteries are replaced, the battery indicator will not appear until the Cassette-Corder is operated.
  - may appear during fast forward (cue) and rewind (review). Replace the batteries only if the Cassette-Corder is not operating properly.
  - If appears, the tape operates normally for a while, but the internal speaker may emit noise and recording may not proceed properly. Always change the batteries when appears.
  - When the tape starts to run or when it finishes, may appear momentarily. If the indicator goes off immediately, there is no need to replace the batteries.

### Battery life (Approx. hours) (JEITA\*)

	Sony alkaline LR6 (SG)	Sony R6P (SR)
Recording	12	3
Playback	10	2
DPC Playback**	6.5	1.5

\* Measured valued by the standard of JEITA (Japan Electronics and Information Technology Industries Association) (Using a Sony HF series cassette tape on which music has been recorded is played at volume setting 7)

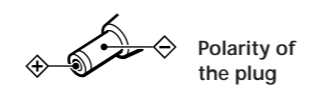
\*\* With the DPC switch on AUTO and the SPEED CONTROL dial all the way to FAST.

**Note**  
The battery life may shorten depending on the operation of the unit.

For maximum performance we recommend that you use alkaline batteries.

### House Current (see Fig. A-Ⓓ)

Connect the AC power adaptor to DC IN 3V and to a wall outlet. Use the AC-E30HG AC power adaptor (not supplied). (For "Sony World Model": for Japan, use AC-E30L, not supplied). Do not use any other AC power adaptor.



**Note**  
Specifications for AC-E30HG vary for each area. Check your local voltage and the shape of the plug before purchasing.

### Operating the Unit

### Recording

You can record right away with the built-in microphone. Make sure that nothing is connected to the MIC jack.

Place the unit on a hard surface such as a desk with the cassette holder side up so that the flat mic can record effectively.

- 1 Press COUNTER RESET to reset the tape counter.

**Note**  
The number in the tape counter will increase when playing back the forward side, and decrease when playing back the reverse side.

- 2 Insert a normal (TYPE I) tape. To record on both sides Place the tape with the side to start recording facing the cassette compartment lid. To record on a single side Place the tape with the side to be recorded facing the unit.

- 3 Choose recording sides. To record on both sides Set to FWD. Recording will start from the side facing the cassette holder window (forward side) and switches automatically to the reverse side at the end of the side (Auto Reverse).

To record on a single side Set to REV. Recording will start from the side facing the unit (reverse side).

- 4 Set REC TIME to the desired mode. NORMAL (4.8cm/s): for optimum sound. Recommended for normal recordings. DOUBLE (2.4cm/s): for double recording time (for example, 120 minutes using both sides of a 60-minute cassette). Suitable for recording conferences, dictations, etc. Not recommended to record music.

### Dry Batteries (see Fig. A-ⓐ)

Make sure that nothing is connected to the DC IN 3V jack.

- 1 Open the battery compartment lid.
- 2 Insert two size R6 (AA) batteries with correct polarity and close the lid.

- 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.

### To take out the batteries (see Fig. A-ⓑ)

### To attach the battery compartment lid if it is accidentally detached (see Fig. A-Ⓒ)

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

When the batteries are exhausted, appears in the display window. Replace both batteries with new ones.

The battery indicator in the display window changes as illustrated:

- Notes**
- After the batteries are replaced, the battery indicator will not appear until the Cassette-Corder is operated.
  - may appear during fast forward (cue) and rewind (review). Replace the batteries only if the Cassette-Corder is not operating properly.
  - If appears, the tape operates normally for a while, but the internal speaker may emit noise and recording may not proceed properly. Always change the batteries when appears.
  - When the tape starts to run or when it finishes, may appear momentarily. If the indicator goes off immediately, there is no need to replace the batteries.

**To monitor sound**  
Connect supplied headphones firmly to the jack on the remote control. Then connect the remote control firmly to the EAR jack on the Cassette-Corder. Adjust monitoring volume with VOL on the remote control. The recording level is not affected.

- Notes**
- Do not use a Hi-position (TYPE II) or metal (TYPE IV) tape. If you do, the sound may be distorted when you play back the tape, or the previous recording may not be erased completely.
  - The SPEED CONTROL switch works in the playback mode only. Recording will be made independent of this control.

- Notes on recording sides**
- When recording on both sides, recording will not be made for a few seconds while the tape is switching sides.
  - When you open the cassette holder, the direction of the tape is reset to the forward side.
  - The switch cannot be used during recording.

**Notes on VOR (Voice Operated Recording)**

- When you use the VOR system in a noisy place, the unit will stay in the recording mode. If the sound is too soft, on the contrary, the unit will not start recording. Set MIC SENS to H (high) or L (low) depending on the conditions to pick up necessary sound only.
- The VOR system depends on the environmental conditions. If you cannot get the desired results even after adjusting MIC SENS, set VOR to OFF.

- 6 Set VOR to: ON to start and pause recording automatically to the sound. OFF to start and stop recording manually.

**Note**  
When the sound to be recorded is not loud enough, set the VOR switch to OFF, or the unit may not start recording.

### To prevent a tape from being accidentally recorded over (see Fig. B-Ⓒ)

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

At the end of the reverse side, recording stops and the unit turns off automatically.

To Stop recording	Press  STOP
Pause recording	Press  PAUSE To release pause recording, press  PAUSE again.*
Review the portion just recorded	Press and hold  during recording. Release the button at the point to start.
Take out a cassette	Press  STOP and open the cassette compartment lid by hand.

\* PAUSE will also be automatically released when STOP is pressed (stop-pause-release function).

(turn over)

## Русский

**От фирмы-изготовителя!**  
Благодарим за покупку кассетного магнитофона Sony. Данный кассетный магнитофон оснащен переключателем REC TIME, который позволяет Вам увеличить время записи в два раза на любой кассете.

**Примечание**  
Ленты, записанные при нахождении переключателя REC TIME в позиции DOUBLE, не могут быть воспроизведены надлежащим образом на кассетном магнитофоне без функционального переключателя REC TIME.

### Начало эксплуатации

### Подготовка источника питания

Выберите один из следующих источников питания.

### Сухие батарейки (см. рис. A-ⓐ)

Убедитесь, что к гнезду DC IN 3V не подсоединены никакие устройства.

- 1 Откройте крышку батарейного отсека.
- 2 Вставьте две батарейки размера R6 (AA), соблюдая надлежащую полярность, и закройте крышку.

- Примечания**
- Не заряжайте сухую батарейку.
  - Не используйте новую батарейку со старой.
  - Не используйте батарейки разных типов.
  - Если Вы не используете аппарат в течение длительного времени, выньте батарейки во избежание какого-либо повреждения вследствие утечки внутреннего вещества из батареек с последующей коррозией.
  - Сухие батарейки не будут работать в случае подсоединения другого источника питания.

**Для подсоединения крышки батарейного отсека при её случайном отсоединении (см. рис. A-ⓑ)**  
Не используйте аппарат в течение длительного времени, выньте батарейки во избежание какого-либо повреждения вследствие утечки внутреннего вещества из батареек с последующей коррозией.

### Для извлечения батареек (см. рис. A-Ⓒ)

### Когда следует заменять батарейки (см. рис. A-Ⓓ)

Батарейный индикатор в окошке дисплея показывает оставшийся заряд батарейного блока.

Когда батарейки разрядятся, в окошке дисплея появится индикация . Замените обе батарейки на новые. Батарейный индикатор в окошке дисплея будет изменяться следующим образом:

- Примечания**
- После замены батареек батарейный индикатор не будет появляться до начала работы кассетного магнитофона.
  - Во время ускоренной перемотки (поиска) вперед или назад может появиться индикатор . Заменить батарейки следует только в том случае, когда аппарат не функционирует надлежащим образом.

- Если появится индикатор , лента будет нормально перемещаться в течение некоторого времени, но внутренний динамик может излучать шум, а запись может происходить неправильно. Всегда заменяйте батарейки на новые при появлении индикатора .
- В начале или в конце ленты может временно высвечиваться индикатор . Вам не нужно заменять батарейки.

**Срок службы батареек (Приблиз. часов) (JEITA\*)**

	Щелочные батарейки Sony LR6 (SG) R6P (SR)	Батарейки Sony LR6 (SG) R6P (SR)
Запись	12	3
Воспроизведение	10	2
Воспроизведение** DPC	6.5	1.5

\* Измеренное значение по стандарту JEITA (Japan Electronics and Information Technology Industries Association) (При использовании кассеты с лентой серии Sony HF и воспроизведении музыкальной записи при установке громкости в положение 7)

\*\* При переключателе DPC, установленном в положение AUTO, и регуляторе SPEED CONTROL вплоть до положения FAST.

**Примечание**  
Срок службы батареек может сократиться в зависимости от условий работы аппарата.

Для максимальной производительности рекомендуется использовать щелочные батарейки.

### Домашняя электросеть (см. рис. A-Ⓓ)

Подсоедините сетевой адаптер переменного тока к гнезду DC IN 3V и к стеновой розетке. Используйте сетевой адаптер переменного тока AC-E30HG (не прилагается). (Для всемирной модели Sony: в Японии используйте AC-E30L, не прилагается.) Не используйте каких-либо других сетевых адаптеров переменного тока.

- 5 Установите переключатель MIC SENS для выбора чувствительности микрофона в одно из положений: H (высокая) для записи на собраниях или записи отдаленных или неотчетливых звуков. L (низкая) для записи под диктовку или для записи близкого и громкого звука.

**Примечание**  
Технические характеристики для AC-E30HG для каждой области разные. Перед покупкой проверьте Ваше местное напряжение и форму штекера.

### Эксплуатация аппарата

### Запись (см. рис. B-ⓐ, ⓑ)

Вы можете выполнять запись непосредственно через встроенный микрофон. Убедитесь, что ничего не подключено к гнезду MIC. Поместите аппарат на жесткой поверхности, например, на столе, направив его стороной кассетодержателя вверх, чтобы плоский микрофон мог эффективно производить запись.

- 7 Нажмите кнопку REC. Одновременно с ней будет нажата кнопка PLAY, и начнется запись. Во время движения ленты лампочка REC загорается и мигает в зависимости от силы звука.

- 1 Нажмите кнопку COUNTER RESET для сброса показаний счетчика ленты.

**Примечание**  
Число на счетчике ленты будет увеличиваться при воспроизведении верхней стороны и уменьшаться при воспроизведении обратной стороны.

- 2 Вставьте обычную ленту (TYPE I). Для записи на обе стороны Установите ленту стороной для начала записи, обращенной к крышке кассетного отсека. Для записи на одну сторону Установите ленту стороной для записи, обращенной к аппарату.

- 3 Выберите стороны для записи. Для записи на обе стороны Установите переключатель DIR в положение FWD. Запись начнется со стороны, направленной к окну кассетодержателя (верхняя сторона) и автоматически переключится на обратную сторону в конце верхней стороны (Автореверс).

**Для записи только на одну сторону**  
Установите переключатель DIR в положение REV. Запись начнется со стороны, направленной к аппарату (обратная сторона).

- 4 Установите переключатель REC TIME в нужный режим. NORMAL (4,8 см/с): для оптимального звука. DOUBLE (2,4 см/с): для удвоенного времени записи (например, 120 минут при использовании обеих сторон 60-минутной кассеты).

Подходит для записи конференций, диктантов и т.п. Не рекомендуется для записи музыки.

- 5 Установите переключатель MIC SENS для выбора чувствительности микрофона в одно из положений: H (высокая) для записи на собраниях или записи отдаленных или неотчетливых звуков. L (низкая) для записи под диктовку или для записи близкого и громкого звука.

**Примечание**  
Если звук, который Вы собираетесь записать, недостаточно громкий, установите переключатель VOR в положение OFF, в противном случае аппарат может не начать запись.

- 6 Установите переключатель VOR в положение: ON для автоматического начала и паузы записи по звуку. OFF для начала и остановок записи вручную.

**Примечание**  
Если звук, который Вы собираетесь записать, недостаточно громкий, установите переключатель VOR в положение OFF, в противном случае аппарат может не начать запись.

- 7 Нажмите кнопку REC. Одновременно с ней будет нажата кнопка PLAY, и начнется запись. Во время движения ленты лампочка REC загорается и мигает в зависимости от силы звука.

В конце обратной стороны запись остановится, а аппарат автоматически выключится.

Для Остановки записи	Нажмите Кнопку  STOP
Паузы записи	Кнопку  PAUSE Для освобождения паузы нажмите кнопку  PAUSE снова*.

Обзора только что записанного участка

Нажмите и удерживайте кнопку REV/REVIEW во время записи. Отпустите кнопку в точке старта.

Извлечения кассеты

Нажмите кнопку STOP и откройте ручку крышку кассетного отсека.

\* Кнопка PAUSE будет отпущена автоматически при нажатии кнопки STOP (функция отмены паузы при остановке)

**Для контроля звука**  
Надежно подведите телефонные провода к гнезду на пульте дистанционного управления. Затем надежно подсоедините пульт дистанционного управления к гнезду EAR на кассетном магнитофоне. Отрегулируйте громкость контролируемого звука с помощью регулятора VOL на пульте дистанционного управления. Это не повлияет на уровень записи.

**Примечания**

- Не используйте ленту с высокой характеристикой (TYPE II) или ленту на металлической основе (TYPE IV). В противном случае при воспроизведении ленты звук может быть искажен, или же предыдущая запись может быть не полностью стерта.
- Переключатель SPEED CONTROL работает только в режиме воспроизведения. Запись будет выполнена вне зависимости от положения этого переключателя.

**Примечания о сторонах для записи**

- При записи на обеих сторонах запись не будет производиться в течение нескольких секунд, пока стороны ленты будут переключаться.
- При открытии кассетодержателя направление ленты переустанавливается на верхнюю сторону.
- Во время записи нельзя пользоваться переключателем DIR.

**Примечания о системе VOR (Записи, управляемой голосом)**

- Если Вы используете систему VOR в шумном месте, аппарат будет оставаться в режиме записи. Если звук, напротив, слишком тихий, аппарат не начнет запись. Установите переключатель MIC SENS в положение H (высокая) или L (низкая) в зависимости от условий эксплуатации для записи только нужных звуков.
- Система VOR зависит от условий окружающей среды. Если Вы не можете получить нужных результатов даже после регулировки переключателя MIC SENS, установите переключатель VOR в положение OFF.

**Для предотвращения случайной перезаписи ленты (см. рис. B-Ⓒ)**  
Выломайте и удалите лепестки на кассете. Для повторного использования ленты для записи закройте отверстие лепестка липкой лентой.

(См. на обороте)

This warranty is valid only in the United States.

Данная гарантия действительна только в Соединенных Штатах.

Type Cassette Player/Recorder/CD Player/Mini Disc Data/Radio/Head Phone Speaker/MC/Personals

Portable Audio

**SONY LIMITED WARRANTY** (U.S. Only)

Sony Electronics Inc. ("Sony") warrants this product against defects in material or workmanship for the time periods and as set forth below. Pursuant to this Limited Warranty, Sony will, at its option: (i) repair the product using new or refurbished parts or (ii) replace the product with a new or refurbished product. For purposes of this Limited Warranty, "refurbished" means a product or part that has been returned to its original specifications. In the event of a defect, these are your exclusive remedies.

Labor: For a period of ninety (90) days from the original date of purchase of the product ("Labor Warranty"), Sony will, at its option, repair or replace with new or refurbished product, product determined to be defective. If Sony elects to replace the product after this Labor Warranty has expired but while the Parts Warranty below is still in effect, it will do so for the applicable labor charge.

Parts: For a period of one (1) year from the original date of purchase of product ("Parts Warranty"), Sony will supply new or refurbished replacement parts in exchange for parts determined to be defective.

This Limited Warranty covers only the hardware components packaged with the Product. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the Product; any such software is provided "AS IS" unless expressly provided for in any enclosed software Limited Warranty. Please refer to the End User License Agreements included with the Product for your rights and obligations with respect to the software.

Instructions: To obtain warranty service, you must deliver the product, freight prepaid, in either its original packaging or packaging affording an equal degree of protection to the Sony authorized service facility specified. It is your responsibility to backup any data, software or other materials you may have stored or preserved on your unit. It is likely that such data, software, or other materials will be lost or reformatted during service and Sony will not be responsible for any such damage or loss. A dated purchase receipt is required. For specific instructions on how to obtain warranty service for your product.

Visit Sony's Web Site: [www.sony.com/americas](http://www.sony.com/americas)

Or call the Sony Customer Information Service Center 1-800-222-SONY (7669)

For an accessory or part not available from your authorized dealer, call 1-800-488-SONY (7669)

Repair / Replacement Warranty: This Limited Warranty shall apply to any repair, replacement part or replacement product for the remainder of the original Limited Warranty period or for ninety (90) days, whichever is longer. Any parts or product replaced under this Limited Warranty will become the property of Sony.

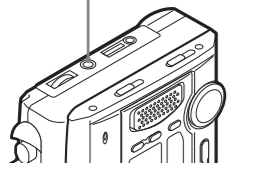
This Limited Warranty only covers product issues caused by defects in material or workmanship during ordinary consumer use. It does not cover product issues caused by any other reason, including but not limited to product issues due to commercial use, acts of God, misuse, limitations of technology, or modification of or to any part of the Sony product. This Limited Warranty does not cover Sony products sold AS IS or WITH ALL FAULTS or consumables such as tapes or batteries. This Limited Warranty is invalid if the factory-issued serial number has been altered or removed from the product. This Limited Warranty is valid only in the United States.

LIMITATION ON DAMAGES: SONY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT.

DURATION OF IMPLIED WARRANTIES, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE DURATION OF THE WARRANTY.

**C**

MIC (PLUG IN POWER)

**Recording from Various Sound Sources (see Fig. C)**

Set VOR and MIC SENS to suit the recording condition before recording.

**Recording with an External Microphone**

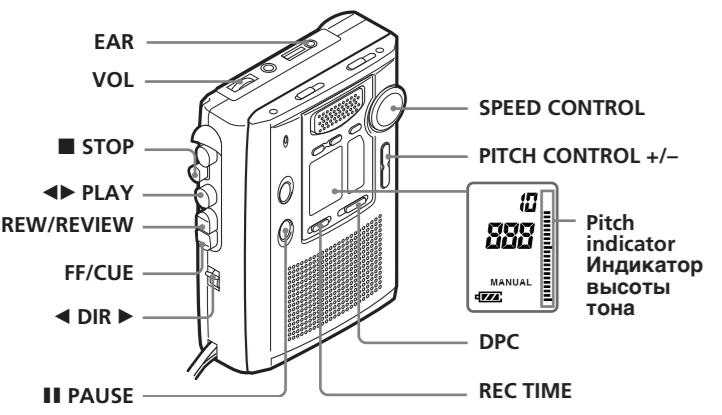
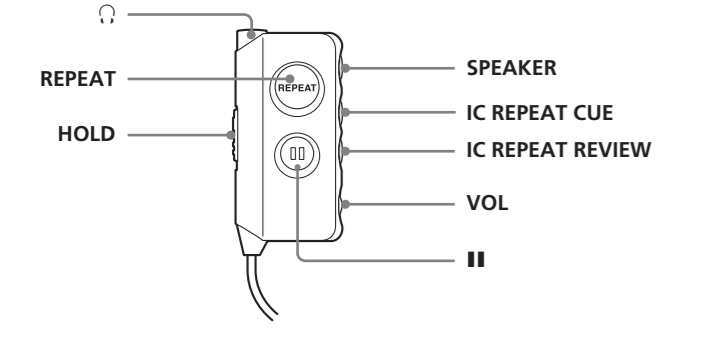
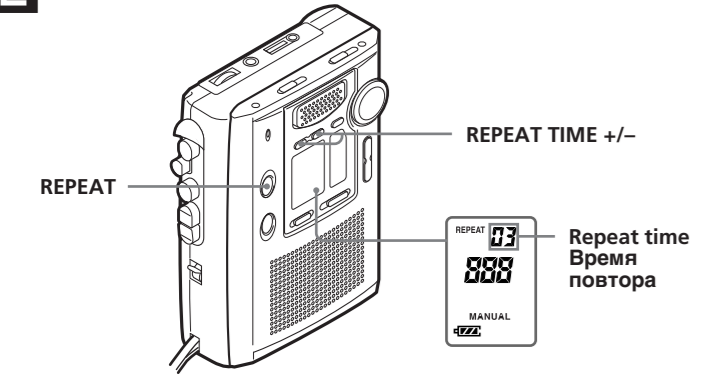
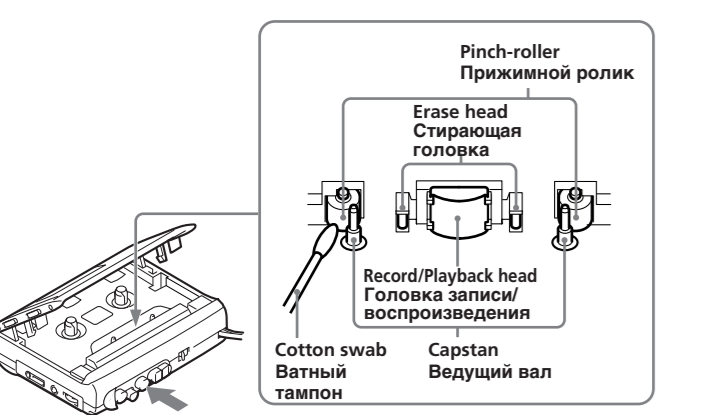
Connect a microphone to the MIC jack. Use a microphone of low impedance (less than 3 kilohms) such as ECM-T6 (not supplied). (For Sony World Model: for Japan, use ECM-T15, not supplied.)

When using a plug-in-power system microphone, the power to the microphone is supplied from this unit.

**Note** When recording with an external microphone, the VOR system may not work properly due to difference in sensitivity.

**Recording from Another Equipment**

Connect another equipment to the MIC jack using the RK-G64HG connecting cord (not supplied). (For "Sony World Model": for Japan, use RK-G64, not supplied.)

**D****E****F**

To	Press or slide
Stop playback/stop fast forward or rewind	■ STOP
Pause playback	■ PAUSE To release pause playback, press ■ PAUSE again.*

Search forward during playback (CUE)	Press and hold FF/CUE and release it at the point you want
Search backward during playback (REVIEW)	Press and hold REW/REVIEW and release it at the point you want
Fast forward**	FF/CUE during stop
Rewind**	REW/REVIEW during stop
Switch playback side	◀ DIR ▶
Start recording during playback	● REC
Take out a cassette	Press ■ STOP and open the cassette compartment lid by hand.

\* ■ PAUSE will be automatically released when ■ STOP is pressed (stop-pause-release function).

\*\* After winding the tape by either fast forward or rewind, press ■ STOP. If you don't press ■ STOP, the battery will discharge rapidly.

**Note on CUE/REVIEW** The unit may not return to playback after searching forward/backward during playback (CUE/REVIEW) as described below. In this case, first press ■ STOP and then press ▶ PLAY to start playback.

• If the tape is completely wound or rewound after CUE/REVIEW, playback does not start, even when you release FF/CUE or REW/REVIEW.

• When using the unit with batteries, if you release FF/CUE or REW/REVIEW after CUE/REVIEW, the cassette flashes and playback does not start.

**Notes on DPC (Digital Pitch Control)**

- If you set DPC to MANUAL in step 3, adjust pitch using PITCH CONTROL.
- If DPC is switched during playback, the sound will cut off momentarily.
- When the DPC function is used, the pitch will not be the same as that from the original sound. Sound quality will also differ slightly.

• When batteries are weak, rapid movement of the SPEED CONTROL dial will stop the tape. Either move the dial slowly or replace the batteries.

**Repeat playback (see Fig. D)**

- Insert a cassette with the side to start playing facing the cassette holder.
- Set REC TIME to the same position as that used for recording. To playback commercially sold tapes, select NORMAL.
- Set DPC to: OFF to playback at normal speed. AUTO to adjust pitch automatically according to play speed. MANUAL to adjust playback sound pitch (tone) and play speed independently.
- Press ▶ PLAY and then adjust the volume. Playback will start from the forward side and switches automatically to the reverse side at the end of the side (Auto Reverse).
- Adjust the tape playback speed. Turn SPEED CONTROL to: SLOW (slow) to play back at a slower speed. Center position to play back at normal speed. FAST (fast) to play back at a faster speed.

**Repeat playback (see Fig. E)**

You can listen to the specific section repeatedly by using IC repeat function. The length of the repeat (repeat time) can be from 1 to 48 seconds.

- Look at the display window and use REPEAT TIME +/- to determine repeat time (1-48 seconds). Each press of +/- will increase/decrease repeat time by 1 second.
- Press ▶ PLAY to start playback.

To	Press
Return to standard playback	REPEAT
Pause repeat playback	■ PAUSE ■ appears in the display window and REPEAT flashes on and off.
Change repeat time	REPEAT TIME + or - during stop

**Notes**

- Sound quality will differ slightly between repeat playback and standard playback.
- Press REPEAT while the tape is playing. Repeat playback will not work during pause.
- If you press REPEAT TIME during repeat playback, the unit returns to standard playback.
- If the time from the start of standard playback to the pressing of REPEAT is shorter than designated repeat time, only the portion played will repeat.
- The paused sections during standard playback will be repeat-played as blanks and the cued/reviewed sections will be repeat-played as fast-played sound.

**Repeat playback by remote control**

Repeat operations can be simplified by connecting the supplied remote control to the EAR jack.

- Connect the supplied remote control to the EAR jack.
- Slide HOLD on the remote control in the opposite direction of the arrow.
- To listen to the speaker, press and hold SPEAKER on the remote control for at least 2 seconds, and the sound will come out of the speaker.
- Start playback.
- Press REPEAT on the remote control at the end of the section you want to repeat.

To	Press
Return to standard playback	REPEAT
Pause repeat playback	■ PAUSE To release pause playback, press ■ again.
Go forward the repeated section (IC repeat cue)	Press and hold IC REPEAT CUE. You will hear beeps during cue. Pressing the button for one second forwards the section by about three seconds.
Go backwards the repeated section (IC repeat review)	Press and hold IC REPEAT REVIEW. You will hear beeps during review. Pressing the button for one second puts back the section by about three seconds.
Hear the sound from the speaker.	Press and hold SPEAKER for at least 2 seconds.
Cut off the sound from the speaker.	Press shortly SPEAKER.

**3** At the end of the section you want to repeat, press REPEAT. The designated section will be played repeatedly.

**To listen with the supplied headphones**

Securely insert the supplied headphones into the remote control's jack and set VOL on the unit to about 7. Adjust the volume using VOL of the remote control. Connecting the remote control to the Cassette-Corder automatically cuts off the sound from the speaker.

**Notes**

If the remote control is removed from the EAR jack while sound is coming from the speaker during playback, the sound will not come out of the speaker when the remote control is inserted again. If you want to hear the sound from the speaker, press and hold SPEAKER for at least 2 seconds.

**Additional Information**

**Precautions**

**On power**

- Operate the unit only on 3V 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 R6 (AA) batteries.

**On the unit**

- 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.
- 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 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 tape.

**On tapes longer than 90 minutes**

We do not recommend the use of tapes longer than 90 minutes except for a long continuous recording or playback. They are very thin and tend to be stretched easily. If you have any questions or problems concerning your unit, please consult your nearest Sony dealer.

To	Press
Return to standard playback	REPEAT
Pause repeat playback	■ PAUSE To release pause playback, press ■ again.
Go forward the repeated section (IC repeat cue)	Press and hold IC REPEAT CUE. You will hear beeps during cue. Pressing the button for one second forwards the section by about three seconds.
Go backwards the repeated section (IC repeat review)	Press and hold IC REPEAT REVIEW. You will hear beeps during review. Pressing the button for one second puts back the section by about three seconds.
Hear the sound from the speaker.	Press and hold SPEAKER for at least 2 seconds.
Cut off the sound from the speaker.	Press shortly SPEAKER.

**Maintenance (see Fig. F)**

**To clean the tape heads and path**

Wipe the heads, pinch roller, and the capstan with a cotton swab moistened with alcohol after every 10 hours of use.

**To clean the exterior**

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

**Troubleshooting**

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

**The cassette cannot be inserted. The cassette compartment lid cannot be closed.**

- The cassette is inserted in the wrong direction.

**The unit does not operate.**

- The batteries have been inserted with incorrect polarity.
- The batteries are weak.
- The AC power adaptor is not firmly connected.
- When trying to run on dry batteries, the AC power adaptor has been left plugged in to the DC IN 3V jack, but not to the power source.

**Speed does not change when SPEED CONTROL is turned.**

- DPC is OFF.

**Pitch does not change when PITCH CONTROL + or - is pressed.**

- DPC is either on OFF or on AUTO.

**The tone quality reproduced by REPEAT is inferior.**

- The repeated section is the reproduction of what was recorded on IC, and therefore the tonal quality is somewhat inferior.

**The remote control does not operate.**

- Remote control's HOLD is moved in direction of the arrow.

**You cannot press ● REC.**

- The cassette is not inserted.
- The tab on the tape has been removed.

**Recording is interrupted.**

- VOR is set to ON. When you do not use VOR, set it to OFF.

**Recording cannot be erased completely.**

- The erase head is contaminated.
- You are using a Hi-position (TYPE II) or metal (TYPE IV) tape.

**Playback cannot be made.**

- The tape has reached the end of the reverse side. Set ◀ DIR ▶ to FWD.

**No sound comes from the speaker.**

- The headphones are plugged in.
- The volume is turned down completely.

**No sound comes from the headphones.**

- The volume of the remote control is turned down completely.
- The volume of the unit is turned down completely.

**The sound drops out or comes with excessive noise.**

- The volume is turned down completely.
- The heads are contaminated. See "Maintenance."
- Adjusting the pitch will change the sound slightly (you hear sound of howl or echo etc.), but that is not a malfunction.
- Direct placement of the cassette tape on the speaker resulted in magnetization and deteriorated tonal quality.
- You are using a Hi-position (TYPE II) or metal (TYPE IV) tape.

**Specifications**

**Recording system**  
2-track 1 channel monaural

**Tape speed**  
4.8 cm/s or 2.4 cm/s

**Frequency range**  
150 - 6 300 Hz using normal (TYPE I) cassette (with REC TIME switch at "NORMAL")

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

**Power output**  
250 mW (at 10% harmonic distortion)

**Input**  
Microphone input jack (minijack) sensitivity 0.12 mV for 3 kilohms or lower impedance microphone

**Output**  
Earphone jack (minijack) for 8 - 300 ohms earphone

**Variable range of the tape speed**  
From approx. +100% to -50% (with REC TIME switch at "NORMAL")  
From approx. +100% to -30% (with REC TIME switch at "DOUBLE")

**Variable range of pitch control variation**  
Approx. +1 octave to -1 octave

**Power requirements**  
3 V DC batteries R6 (AA) x 2  
External DC 3 V power sources

**Dimensions (w/h/d) (incl. projecting parts and controls)**  
Approx. 86.7 x 112.8 x 35.7 mm (3 1/2 x 4 1/2 x 1 7/16 in.)

**Mass**  
Approx. 200g (7.1 oz.)

**Supplied accessories**  
Headphones with remote control (1)  
R6 (size AA) batteries (2)  
("Sony World Model" only)  
Carrying pouch (1)

Design and specifications are subject to change without notice.

Sometimes, the unit reproduces unstable sound and suddenly goes out of tune.

- The batteries are weak.
- The capstan and pinch-roller are contaminated.

**Tape speed is too fast or too slow in the playback mode.**

- Improper setting of the REC TIME switch. Set it to the same speed as that used for recording.
- DPC is set to AUTO or MANUAL, and SPEED CONTROL is set at a point other than the center.
- The batteries are weak.

**Speed does not change when SPEED CONTROL is turned.**

- DPC is OFF.

**Pitch does not change when PITCH CONTROL + or - is pressed.**

- DPC is either on OFF or on AUTO.

**The tone quality reproduced by REPEAT is inferior.**

- The repeated section is the reproduction of what was recorded on IC, and therefore the tonal quality is somewhat inferior.

**Specifications**

**Recording system**  
2-track 1 channel monaural

**Tape speed**  
4.8 cm/s or 2.4 cm/s

**Frequency range**  
150 - 6 300 Hz using normal (TYPE I) cassette (with REC TIME switch at "NORMAL")

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

**Power output**  
250 mW (at 10% harmonic distortion)

**Input**  
Microphone input jack (minijack) sensitivity 0.12 mV for 3 kilohms or lower impedance microphone

**Output**  
Earphone jack (minijack) for 8 - 300 ohms earphone

**Variable range of the tape speed**  
From approx. +100% to -50% (with REC TIME switch at "NORMAL")  
From approx. +100% to -30% (with REC TIME switch at "DOUBLE")

**Variable range of pitch control variation**  
Approx. +1 octave to -1 octave

**Power requirements**  
3 V DC batteries R6 (AA) x 2  
External DC 3 V power sources

**Dimensions (w/h/d) (incl. projecting parts and controls)**  
Approx. 86.7 x 112.8 x 35.7 mm (3 1/2 x 4 1/2 x 1 7/16 in.)

**Mass**  
Approx. 200g (7.1 oz.)

**Supplied accessories**  
Headphones with remote control (1)  
R6 (size AA) batteries (2)  
("Sony World Model" only)  
Carrying pouch (1)

Design and specifications are subject to change without notice.

**Recording is interrupted.**

- VOR is set to ON. When you do not use VOR, set it to OFF.

**Recording cannot be erased completely.**

- The erase head is contaminated.
- You are using a Hi-position (TYPE II) or metal (TYPE IV) tape.

**Playback cannot be made.**

- The tape has reached the end of the reverse side. Set ◀ DIR ▶ to FWD.

**No sound comes from the speaker.**

- The headphones are plugged in.
- The volume is turned down completely.

**No sound comes from the headphones.**

- The volume of the remote control is turned down completely.
- The volume of the unit is turned down completely.

**The sound drops out or comes with excessive noise.**

- The volume is turned down completely.
- The heads are contaminated. See "Maintenance."
- Adjusting the pitch will change the sound slightly (you hear sound of howl or echo etc.), but that is not a malfunction.
- Direct placement of the cassette tape on the speaker resulted in magnetization and deteriorated tonal quality.
- You are using a Hi-position (TYPE II) or metal (TYPE IV) tape.

**Specifications**

**Recording system**  
2-track 1 channel monaural

**Tape speed**  
4.8 cm/s or 2.4 cm/s

**Frequency range**  
150 - 6 300 Hz using normal (TYPE I) cassette (with REC TIME switch at "NORMAL")

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

**Power output**  
250 mW (at 10% harmonic distortion)

**Input**  
Microphone input jack (minijack) sensitivity 0.12 mV for 3 kilohms or lower impedance microphone

**Output**  
Earphone jack (minijack) for 8 - 300 ohms earphone

**Variable range of the tape speed**  
From approx. +100% to -50% (with REC TIME switch at "NORMAL")  
From approx. +100% to -30% (with REC TIME switch at "DOUBLE")

**Variable range of pitch control variation**  
Approx. +1 octave to -1 octave

**Power requirements**  
3 V DC batteries R6 (AA) x 2  
External DC 3 V power sources

**Dimensions (w/h/d) (incl. projecting parts and controls)**  
Approx. 86.7 x 112.8 x 35.7 mm (3 1/2 x 4 1/2 x 1 7/16 in.)

**Mass**  
Approx. 200g (7.1 oz.)

**Supplied accessories**  
Headphones with remote control (1)  
R6 (size AA) batteries (2)  
("Sony World Model" only)  
Carrying pouch (1)

Design and specifications are subject to change without notice.

**Recording is interrupted.**

- VOR is set to ON. When you do not use VOR, set it to OFF.

**Recording cannot be erased completely.**

- The erase head is contaminated.
- You are using a Hi-position (TYPE II) or metal (TYPE IV) tape.

**Playback cannot be made.**

- The tape has reached the end of the reverse side. Set ◀ DIR ▶ to FWD.

**No sound comes from the speaker.**

- The headphones are plugged in.
- The volume is turned down completely.

**No sound comes from the headphones.**

- The volume of the remote control is turned down completely.
- The volume of the unit is turned down completely.

**Write with different sound sources (see Fig. G)**

Установите переключатели VOR и MIC SENS в соответствии с условиями записи до ее начала.

**Write through external microphone**

Подсоедините микрофон к гнезду MIC. Используйте микрофон с низким полным сопротивлением (менее 3 кОм), такой, как ECM-T6 (не прилагается). (Для всемирной модели Sony: для Японии используйте ECM-T15, не прилагается.)

При использовании микрофона с системой питания VOR может не работать надлежащим образом вследствие разницы в чувствительности.

**Write from another apparatus**

Подсоедините другой аппарат к гнезду MIC с помощью соединительного шнура RK-G64HG (не прилагается). (Для всемирной модели Sony: в Японии используйте RK-G64, не прилагается.)

**Specifications**

**Recording system**  
2-track 1 channel monaural

**Tape speed**  
4.8 cm/s or 2.4 cm/s

**Frequency range**  
150 - 6 300 Hz using normal (TYPE I) cassette (with REC TIME switch at "NORMAL")

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

**Power output**  
250 mW (at 10% harmonic distortion)

**Input**  
Microphone input jack (minijack) sensitivity 0.12 mV for 3 kilohms or lower impedance microphone

**Output**  
Earphone jack (minijack) for 8 - 300 ohms earphone

**Variable range of the tape speed**  
From approx. +100% to -50% (with REC TIME switch at "NORMAL")  
From approx. +100% to -30% (with REC TIME switch at "DOUBLE")

**Variable range of pitch control variation**  
Approx. +1 octave to -1 octave

**Power requirements**  
3 V DC batteries R6 (AA) x 2  
External DC 3 V power sources

**Dimensions (w/h/d) (incl. projecting parts and controls)**  
Approx. 86.7 x 112.8 x 35.7 mm (3 1/2 x 4 1/2 x 1 7/16 in.)

**Mass**  
Approx. 200g (7.1 oz.)

**Supplied accessories**  
Headphones with remote control (1)  
R6 (size AA) batteries (2)  
("Sony World Model" only)  
Carrying pouch (1)

Design and specifications are subject to change without notice.

**Write with different sound sources (see Fig. G)**

Установите переключатели VOR и MIC SENS в соответствии с условиями записи до ее начала.

**Write through external microphone**

Подсоедините микрофон к гнезду MIC. Используйте микрофон с низким полным сопротивлением (менее 3 кОм), такой, как ECM-T6 (не прилагается). (Для всемирной модели Sony: для Японии используйте ECM-T15, не прилагается.)

При использовании микрофона с системой питания VOR может не работать надлежащим образом вследствие разницы в чувствительности.

**Write from another apparatus**

Подсоедините другой аппарат к гнезду MIC с помощью соединительного шнура RK-G64HG (не прилагается). (Для всемирной модели Sony: в Японии используйте RK-G64, не прилагается.)

**Specifications**

**Recording system**  
2-track 1 channel monaural

**Tape speed**  
4.8 cm/s or 2.4 cm/s

**Frequency range**  
150 - 6 300 Hz using normal (TYPE I) cassette (with REC TIME switch at "NORMAL")

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

**Power output**  
250 mW (at 10% harmonic distortion)

**Input**  
Microphone input jack (minijack) sensitivity 0.12 mV for 3 kilohms or lower impedance microphone

**Output**  
Earphone jack (minijack) for 8 - 300 ohms earphone

**Variable range of the tape speed**  
From approx. +100% to -50% (with REC TIME switch at "NORMAL")  
From approx. +100% to -30% (with REC TIME switch at "DOUBLE")

**Variable range of pitch control variation**  
Approx. +1 octave to -1 octave

**Power requirements**  
3 V DC batteries R6 (AA) x 2  
External DC 3 V power sources

**Dimensions (w/h/d) (incl. projecting parts and controls)**  
Approx. 86.7 x 112.8 x 35.7 mm (3 1/2 x 4 1/2 x 1 7/16 in.)

**Mass**  
Approx. 200g (7.1 oz.)

**Supplied accessories**  
Headphones with remote control (1)  
R6 (size AA) batteries (2)  
("Sony World Model" only)  
Carrying pouch (1)

Design and specifications are subject to change without notice.

**Write with different sound sources (see Fig. G)**

Установите переключатели VOR и MIC SENS в соответствии с условиями записи до ее начала.

**Write through external microphone**

Подсоедините микрофон к гнезду MIC. Используйте микрофон с низким полным сопротивлением (менее 3 кОм), такой, как ECM-T6 (не прилагается). (Для всемирной модели Sony: для Японии используйте ECM-T15, не прилагается.)

При использовании микрофона с системой питания VOR может не работать надлежащим образом вследствие разницы в чувствительности.

**Write from another apparatus**

Подсоедините другой аппарат к гнезду MIC с помощью соединительного шнура RK-G64HG (не прилагается). (Для всемирной модели Sony: в Японии используйте RK-G64, не прилагается.)

**Specifications**

**Recording system**  
2-track 1 channel monaural

**Tape speed**  
4.8 cm/s or 2.4 cm/s

**Frequency range**  
150 - 6 300 Hz using normal (TYPE I) cassette (with REC TIME switch at "NORMAL")

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

**Power output**  
250 mW (at 10% harmonic distortion)

**Input**  
Microphone input jack (minijack) sensitivity 0.12 mV for 3 kilohms or lower impedance microphone

**Output**  
Earphone jack (minijack) for 8 - 300 ohms earphone

**Variable range of the tape speed**  
From approx. +100% to -50% (with REC TIME switch at "NORMAL")  
From approx. +100% to -30% (with REC TIME switch at "DOUBLE")

**Variable range of pitch control variation**  
Approx. +1 octave to -1 octave

**Power requirements**  
3 V DC batteries R6 (AA) x 2  
External DC 3 V power sources

**Dimensions (w/h/d) (incl. projecting parts and controls)**  
Approx. 86.7 x 112.8 x 35.7 mm (3 1/2 x 4 1/2 x 1 7/16 in.)

**Mass**  
Approx. 200g (7.1 oz.)

**Supplied accessories**  
Headphones with remote control (1)  
R6 (size AA) batteries (2)  
("Sony World Model" only)  
Carrying pouch (1)

Design and specifications are subject to change without notice.

**Write with different sound sources (see Fig. G)**

Установите переключатели VOR и MIC SENS в соответствии с условиями записи до ее начала.

**Write through external microphone**

Подсоедините микрофон к гнезду MIC. Используйте микрофон с низким полным сопротивлением (менее 3 кОм), такой, как ECM-T6 (не прилагается). (Для всемирной модели Sony: для Японии используйте ECM-T15, не прилагается.)

При использовании микрофона с системой питания VOR может не работать надлежащим образом вследствие разницы в чувствительности.

**Write from another apparatus**

Подсоедините другой аппарат к гнезду MIC с помощью соединительного шнура RK-G64HG (не прилагается). (Для всемирной модели Sony: в Японии используйте RK-G64, не прилагается.)

**Specifications**

**Recording system**  
2-track 1 channel monaural

**Tape speed**  
4.8 cm/s or 2.4 cm/s

**Frequency range**  
150 - 6 300 Hz using normal (TYPE I) cassette (with REC TIME switch at "NORMAL")

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

**Power output**  
250 mW (at 10% harmonic distortion)

**Input**  
Microphone input jack (minijack) sensitivity 0.12 mV for 3 kilohms or lower impedance microphone

**Output**  
Earphone jack (minijack) for 8 - 300 ohms earphone

**Variable range of the tape speed**  
From approx. +100% to -50% (with REC TIME switch at "NORMAL")  
From approx. +100% to -30% (with REC TIME switch at "DOUBLE")

**Variable range of pitch control variation**  
Approx. +1 octave to -1 octave

**Power requirements**  
3 V DC batteries R6 (AA) x 2  
External DC 3 V power sources

**Dimensions (w/h/d) (incl. projecting parts and controls)**  
Approx. 86.7 x 112.8 x 35.7 mm (3 1/2 x 4 1/2 x 1 7/16 in.)

**Mass**  
Approx. 200g (7.1 oz.)

**Supplied accessories**  
Headphones with remote control (1)  
R6 (size AA) batteries (2)  
("Sony World Model" only)  
Carrying pouch (1)

Design and specifications are subject to change without notice.

**Write with different sound sources (see Fig. G)**

Установите переключатели VOR и MIC SENS в соответствии с условиями записи до ее начала.

**Write through external microphone**

Подсоедините микрофон к гнезду MIC. Используйте микрофон с низким полным сопротивлением (менее 3 кОм), такой, как ECM-T6 (не прилагается). (Для всемирной модели Sony: для Японии используйте ECM-T15, не прилагается.)

При использовании микрофона с системой питания VOR может не работать надлежащим образом вследствие разницы в чувствительности.

**Repeat playback (see Fig. D)**

Вставьте кассету стороной для начала воспроизведения, обращенной к касетодержателю.

**Repeat playback by remote control**

Repeat operations can be simplified by connecting the supplied remote control to the EAR jack.

- Connect the supplied remote control to the EAR jack.
- Slide HOLD on the remote control in the opposite direction of the arrow.
- To listen to the speaker, press and hold SPEAKER on the remote control for at least 2 seconds, and the sound will come out of the speaker.
- Start playback.
- Press REPEAT on the remote control at the end of the section you want to repeat.

**No sound comes from the speaker.**

- The headphones are plugged in.
- The volume is turned down completely.

**No sound comes from the headphones.**

- The volume of the remote control is turned down completely.
- The volume of the unit is turned down completely.

**The sound drops out or comes with excessive noise.**

- The volume is turned down completely.
- The heads are contaminated. See "Maintenance."
- Adjusting the pitch will change the sound slightly (you hear sound of howl or echo etc.), but that is not a malfunction.
- Direct placement of the cassette tape on the speaker resulted in magnetization and deteriorated tonal quality.
- You are using a Hi-position (TYPE II) or metal (TYPE IV) tape.

**Specifications**

**Recording system**  
2-track 1 channel monaural

**Tape speed**  
4.8 cm/s or 2.4 cm/s

**Frequency range**  
150 - 6 300 Hz using normal (TYPE I) cassette (with REC TIME switch at "NORMAL")

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

**Power output**  
250 mW (at 10% harmonic distortion)

**Input**  
Microphone input jack (minij