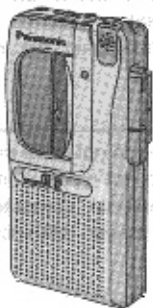


Panasonic

Microcassette Recorder Operating Instructions

Model No. **RN-405**
RN-305
RN-202



This manual was printed with soy based ink.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

Panasonic Consumer Electronics Company, (En)
Division of Matsushita Electric Corporation of America

One Panasonic Way Secaucus, New Jersey 07094
<http://www.panasonic.com>

Panasonic Sales Company, Division of
Matsushita Electric of Puerto Rico, Inc. ("PSC")
Ave. 65 de Infanteria, Km. 9.5 San Gabriel Industrial
Park, Carolina, Puerto Rico 00985

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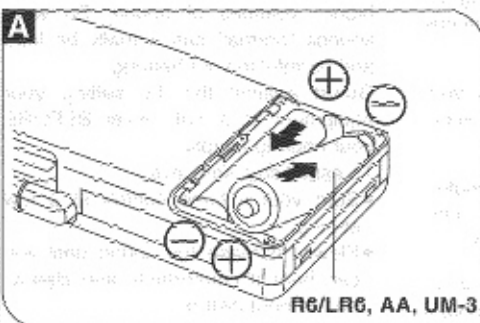
Printed in Japan

RQT5405-P
F0100KB0

The illustrations show **RN-405**.

P

Power source



R6/LR6, AA, UM-3

Dry cell batteries **A**

Use two R6/LR6, AA UM-3 (not included) batteries.

Press in and down towards the minus end.

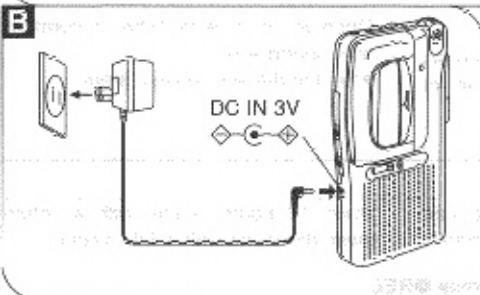
Battery removal

Press the ⊕ side towards the ⊖ battery terminal and lift up.

AC power operation **B**

Use Panasonic AC adaptor RP-AC31 (not included).

•When not in use, disconnect the AC adaptor from the AC power outlet.



Specifications

Power requirement

Battery: DC 3 V
(two R6/LR6, AA, UM-3 batteries)
AC: DC IN 3 V with
Panasonic AC adaptor
RP-AC31 (not included)

Frequency response

Speaker: 3.6 cm (1 1/2")
Tape speed 1.2 cm/s (1/2 ips)
2.4 cm/s (1 1/2 ips)

Track system

2 track monaural
recording and playback
(**RN-405** only)

Jack: Input:

MIC: 0.25 mV (200-600 Ω)

Output: MONIT (8 Ω)

Dimensions (W×H×D) 58.0×117.0×23.7 mm
(2 3/16"×4 5/8"×1 1/2")

Mass (without batteries) **RN-202** ; 130 g (4.6 oz.)

RN-305 ; 130 g (4.6 oz.)

RN-405 ; 134 g (4.7 oz.)

Play time:

(When used in hold mode, at 25°C (77°F) and on a flat and stable surface)

Panasonic alkaline dry cell batteries;

RN-202 **RN-305** Recording: About 14.5 hours
Playback: About 9 hours

RN-405 Recording: About 13.5 hours
Playback: About 9 hours

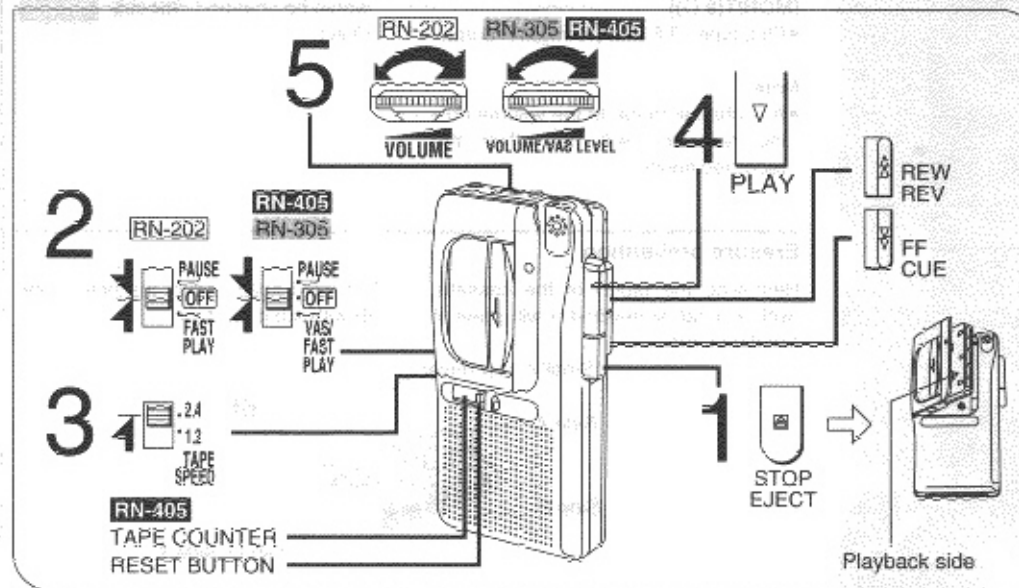
•The play time may be less depending on the operating conditions.

Note:

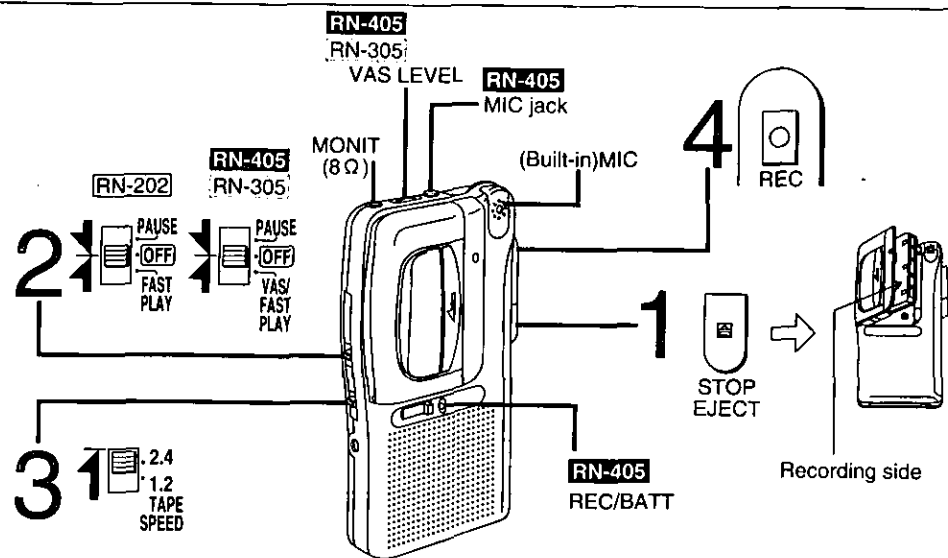
Specifications are subject to change without notice.

Mass and dimensions are approximate.

To playback tapes



Recording



Basic operation

Function	Operation
Stop	Press [STOP, EJECT].
Temporary stop	Set [PAUSE] to PAUSE. To resume recording set it to [OFF].
Recording for a long time	Set [TAPE SPEED] to [1.2].

Program time (with RT-60 MC microcassette tape)

- t [1.2]: 1 hour on one side
- t [2.4]: 30 minutes on one side

Note:

- Use a tape with tabs in place.
- The recording level is automatically adjusted.
- The built-in microphone is omnidirectional, so that recording is available in every direction.

Basic operation

Function	Operation
Stop	During playback, press [STOP, EJECT].
Fast forward or rewind	In the stop mode, press [FF, CUE] (Fast forward) or [REW, REV] (Rewind).
Temporary stop	Set [PAUSE] to PAUSE. To resume playback set it to [OFF].
To play faster than usual	Set [FAST PLAY] to FAST PLAY.

Cue and review

Sound can be monitored at a high speed as long as [**FF, CUE**] (cue) or [**REW, REV**] (review) is held down during playback.

When the button is released, normal playback will start.

Note:

Set [**TAPE SPEED**] to the same setting as you used for recording.

Troubleshooting Guide

BEFORE CALLING



Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your dealer for instructions.

For detailed instructions, contact an authorized servicenter 1-800-211-7262 or web site (<http://www.panasonic.com>).

PROBLEM	CHECKPOINT
No operations.	• Have the batteries been installed with their polarities (+, -) reversed?
• No sounds. • A gritty noise is heard.	• Is the earphone plug firmly connected to [MONIT (8 Ω)]? • Is the plug dirty? (Wipe away the dirt from the plug.)
Cannot hear sound-too noisy.	Separate the unit from mobile phones.
No recording.	Have the tape's accidental erasure prevention tabs been broken out?

OTHER

To record with the VAS (Voice Activated System) function

(RN-305 RN-405 Only)

The sound is recorded automatically, so there is no tape waste.

To use VAS function, select [VAS] in step 2 of Recording and adjust [VAS LEVEL].

- No sound is recorded at the "0" position.
- After using VAS function, set [VAS] to [OFF].

- 1-3: If you wish to record only the louder sounds.
- 4-7: If you wish to record normal level sounds.
- 8-10: If you wish to record lower levels of sound than usual.

Silent auto-stop (RN-405 Only)

When the tape comes to its end during recording or playback, the tape stops moving and the power is turned off.

After that, be sure to press [STOP EJECT].

To record through the external microphone (RN-405 Only)

Plug the external monaural microphone (not included) into [MIC].

Plug type: 3.5 mm (1/8 in.) monaural

denser microphone without built-in supply.

- The built-in microphone will be automatically disconnected.

Note:

- Use a dynamic microphone or a condenser microphone with built-in power supply. Do not use a con-

Monitoring

The sound can be heard with earphone (not included) plugged into [MONIT(8 Ω)].

- Plug type: 3.5 mm (1/8 in.) monaural

- Do not adjust the volume during with the VAS function, or the VAS level would be change (RN-305 RN-405 Only).

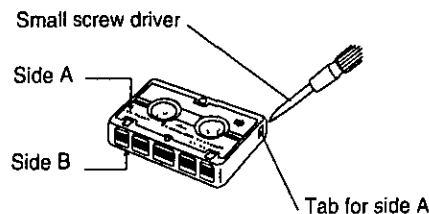
Note:

- Any change made to the volume during recording will not affect the recorded sound.

Erasure prevention

Removing the tab(s) of the cassette (with a small screwdriver) will prevent accidental erasure.

To record again, cover the hole of the tab with adhesive tape.



Follow up recording

Recording can be started during playback by simply pressing [REC].

Quick review

To listen to the sound you have recorded, press and hold [REW, REV].

When the button is released, playback will start.

Tape counter and reset button (RN-405 Only)

The digits return to "000" when the reset button is pressed. The digits advance with the tape to provide a ref-

erence to quickly find a desired portion of tape.

REC/BATT check indicator (RN-405 Only)

[REC/BATT] check indicator will light during recording.

Also the tape speed will slow down, the sound is distorted, and the volume will decrease.

When the batteries are weak

[REC/BATT] check indicator will become dim or turn off during recording.

PRODUCT SERVICE

Do not attempt to remove the cover(s) or repair the unit yourself. Refer ser-

vice to qualified personnel only.

Product information

For product service, product information or assistance with product opera-

tion, refer to the servicenter directory.

User memo:

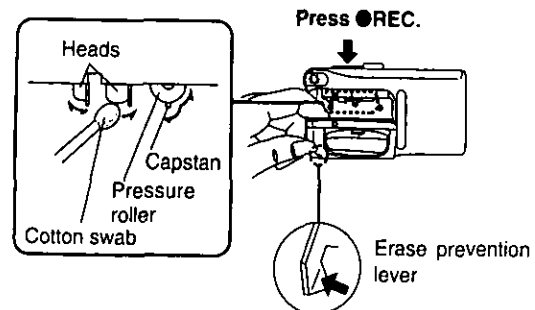
DATE OF PURCHASE _____
DEALER NAME _____
DEALER ADDRESS _____
TELEPHONE NUMBER _____

MAINTENANCE

Head care

To ensure good sound quality, be sure to clean the head after approximately

every 10 hours of use with a cotton swab dampend with a little alcohol.



CAUTION

- Avoid using or placing this unit near sources of heat.
- Do not leave it in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.
- To avoid product damage, do not expose this product to rain, water or other liquids.
- These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.

Listening caution



Do not play your headphones or earphones at a high volume. Hearing experts advise against continuous extended play.

If you experience a ringing in your ears, reduce volume or discontinue use.

Do not use while operating a motorized vehicle. It may create a traffic hazard and is illegal in many areas.

You should use extreme caution or temporarily discontinue use in potentially hazardous situations.

Even if your headphones or earphones are the open-air type designed to let

you hear outside sounds, don't turn up the volume so high that you can't hear what's around you.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing.

Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.

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San Gabriel Industrial Park
Carolina, Puerto Rico 00985

Panasonic Limited Warranty

Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "The warrantor") will repair this product with new or refurbished parts, (free of charge, in the U.S.A. or Puerto Rico from the date of original purchase in the event of a defect in materials or workmanship as follows:

For one (1) year—Radio, Clock Radio, Radio with Tape Player or Recorder, Speaker

For ten (10) days—Batteries—(when applicable)—New rechargeable batteries in exchange for defective rechargeable batteries. Non-rechargeable batteries are not warranted.

For assistance in the U.S.A. in obtaining repairs contact:

**Panasonic Services Company
Panasonic PLUS Department**
20421 84th Avenue South
Kent, WA 98032
Phone: 1-800-833-9626
FAX: 1-800-237-9080

If repair is needed, during the warranty period the purchaser will be required to furnish a sales receipt/proof of purchase indicating date of purchase.

Also, the purchaser will be responsible for shipping the unit to the above address. This warranty is extended only to the original purchaser.

For assistance in Puerto Rico contact, Panasonic Sales Company at the address or telephone number above.

This warranty only covers failures due to defects in materials or workmanship which occur during normal use and does not cover damage which occurs in shipment or failures which are caused by products not supplied by the warrantor or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, faulty installation, set-up adjustments, improper maintenance, alteration, improper antenna, inadequate signal pick-up, maladjustment of consumer controls, modification, line power surge, or commercial use of the product, or damage that is attributable to acts of God, or service by anyone other than a PASC Factory Servicenter.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above. THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

If a problem with this product develops during or after the warranty period, you may contact your dealer or Panasonic PLUS Department. If the problem is not handled to your satisfaction, then write to the Customer Satisfaction Center at the company address above or call toll free 1-800-211-7262.

BATTERIES

- Align the poles (+ and -) properly when inserting the batteries.
- Do not mix old and new batteries or different types of batteries.
- Do not recharge ordinary dry cell batteries.
- Remove the batteries if the unit is not to be used for a long time.
- Do not use the batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.

If electrolyte leaks from the batteries, consult your dealer. Wash thoroughly with water if electrolyte comes in contact with any part of your body.

- If rechargeable batteries are to be used, rechargeable batteries manufactured by Panasonic are recommended.

If you ship the product

Carefully pack and send it prepaid, adequately insured and preferably in the original carton. Attach a letter, detailing the complaint, to the outside of the carton.

Do NOT send the product to the Executive or Regional Sales offices. They are NOT equipped to make repairs.

Customer's Record

Model No. _____	Dealer's Name _____
Serial No. _____	_____
or _____	_____
Code No. _____	Dealer's Address _____
Date of Purchase _____	_____