



Stereo Radio Cassette Recorder

Operating Instructions

Model No. **RQ-A220**



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



The serial number of this product can be found on the back of the cassette compartment cover or inside the battery compartment. Please note it in the space provided below and keep as a permanent record of your purchase to aid identification in the event of theft.

MODEL NUMBER **RQ-A220**

SERIAL NUMBER

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 Infantería, Km. 9.5 San Gabriel Industrial
Park, Carolina, Puerto Rico 00985

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Printed in Taiwan.

RQTT0521-P
F0203TT0

Supplied Accessories

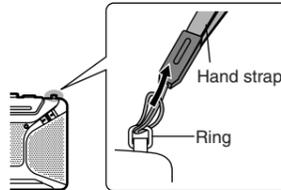
- ① Stereo headphones RFEV705P-KY
- ② Hand strap RKHT0009-K

• To order accessories contact 1-800-332-5368 or the website (<http://www.panasonic.com>).

• Use numbers indicated when asking for replacement parts.

Attaching a hand strap (included)

The unit is easier to carry around if you attach a hand strap as shown below.



CAUTION:

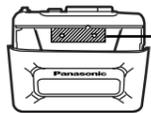
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

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 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.

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

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.



Before operation
Remove the head spacer.

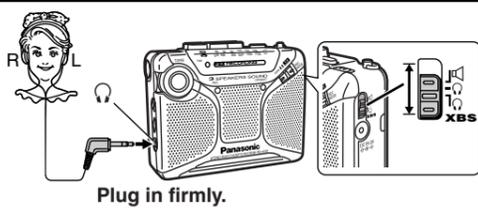
Before use

■ Listening through stereo headphones

Plug stereo headphones (included) into [Ω], and set [Ω], [Ω], [ΩXBS] to [Ω].
Plug type: 3.5 mm (1/8 in.) stereo

■ Listening through the speaker

Set [Ω], [Ω], [ΩXBS] to [Ω].



Plug in firmly.

Power source

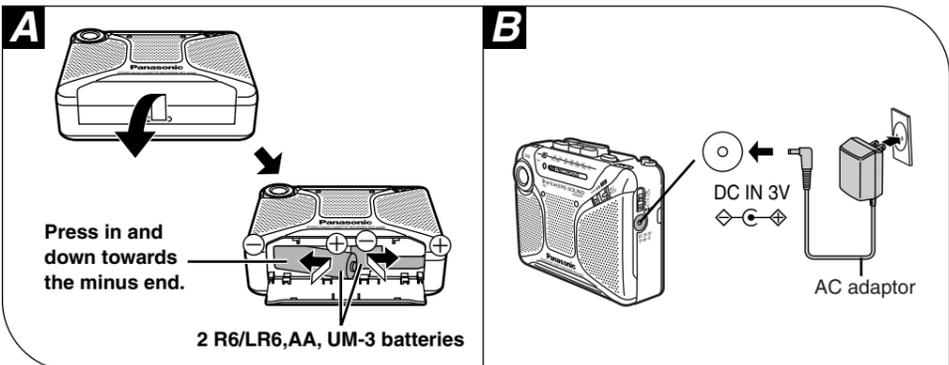
■ Dry cell batteries **A**

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

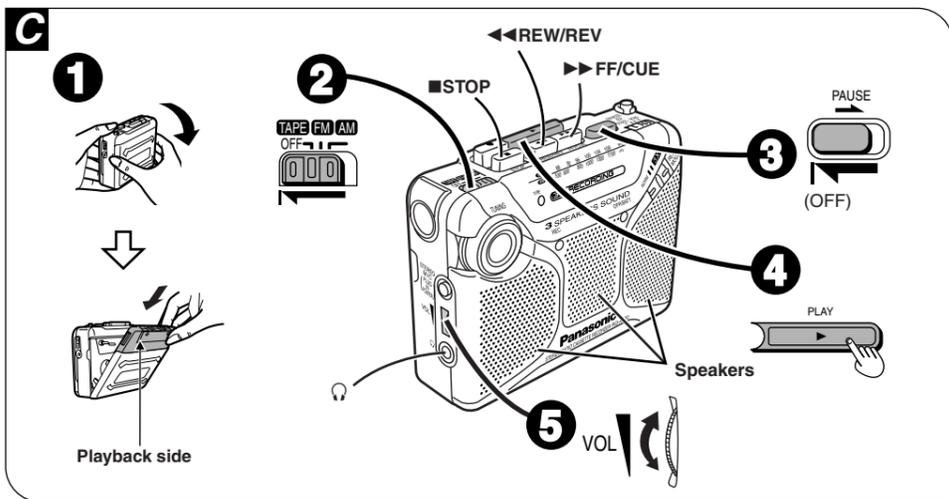
■ AC power operation **B**

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

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



To playback tapes **C**



Basic operation

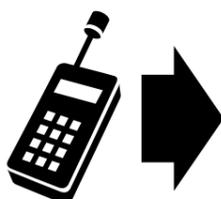
You can use normal position type tapes only.

Function	Operation
Stop	During playback, press [■, STOP].
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 position.

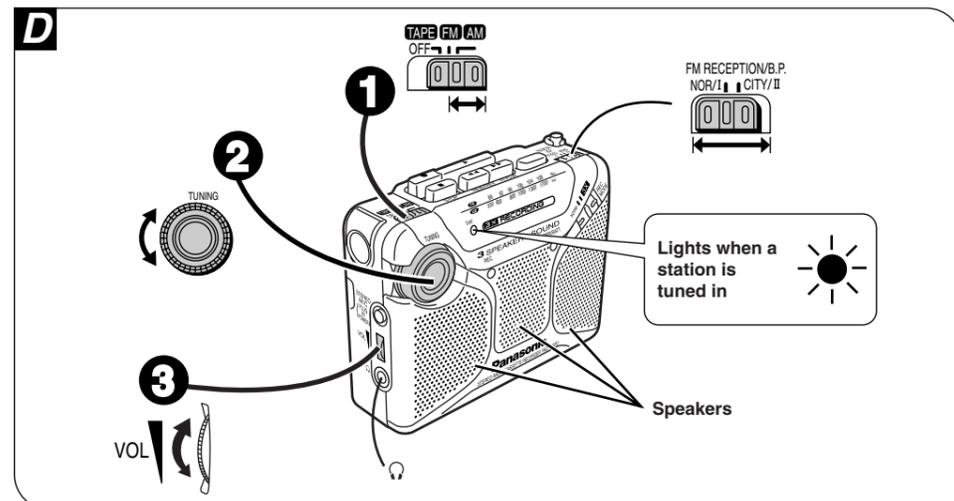
Troubleshooting Guide

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail consumerproducts@panasonic.com, or the website (<http://www.panasonic.com>).

BEFORE CALLING



Listening to the radio **D**



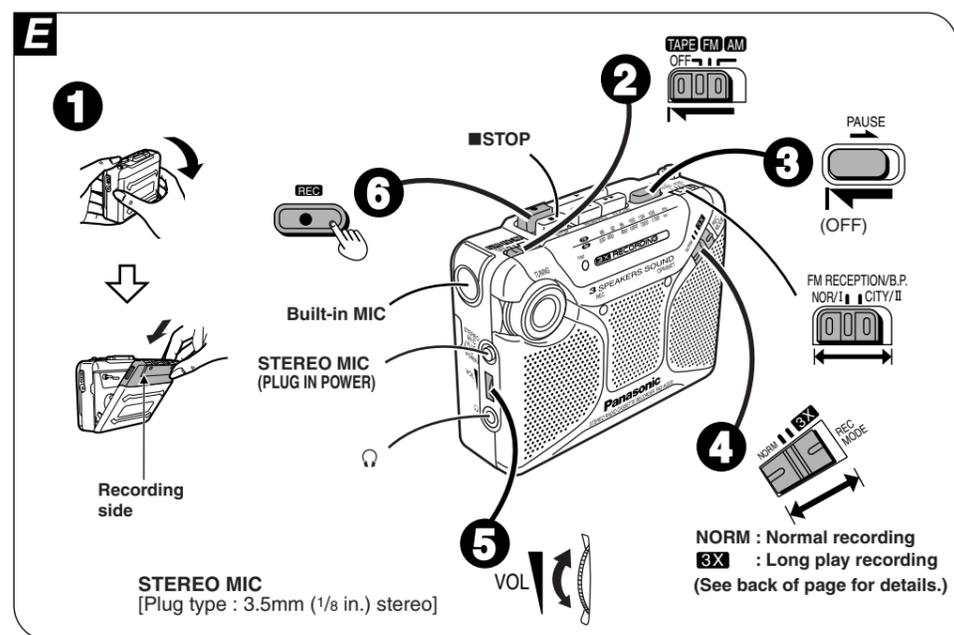
Basic operation

Function	Operation
Off	Set [TAPB (OFF), FM, AM] to [TAPB (OFF)].

Note:

If you set selector to [FM] or [AM] to switch on the radio during tape operation, the button will not be released. In this case, press [■] to release the button.

To record through the built-in microphone (monaural) **E**



Basic operation

You can use normal position type tapes only. The sound may not be recorded properly if high position tapes and metal position tapes are used with this unit.

Function	Operation
Stop	Press [■, STOP].
Temporary stop	Set [PAUSE] to PAUSE. To resume recording set it to OFF position.

Note:

[▶, PLAY] is also depressed with [●, REC].

PROBLEM	CHECKPOINT
No operation.	• Have the batteries been installed with their polarities (⊕, ⊖) reversed?
• No sounds. • A gritty noise is heard.	• Is the headphone plug firmly connected to [Ω]? • Is [Ω], [Ω], [ΩXBS] set correctly? • Is the plug dirty?
Cannot hear music—too noisy.	Move the unit away from any mobile phone.
No recording.	Have the tape's accidental prevention tabs been broken out?

PLAYBACK



Cue and review

Sound can be monitored at a high speed as long as [▶▶, FF/CUE] or [◀◀, REW/REV] is held down during playback.

When the button is released, normal playback will start.

Auto Stop

When the tape reaches the end during play, play will automatically stop.

Note:

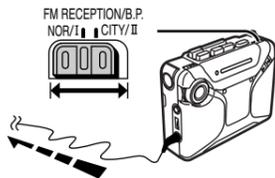
- Do not open the cassette compartment cover during tape operation.
- When the tape reaches the end after fast forward or rewind, press [■, STOP] to release the button.

RADIO



To obtain better reception

FM: Extend the headphone cord.



How to receive an FM broadcast clearly
Set [FM RECEPTION/B.P.] to [NOR/II].
When the FM reception is impaired, or there is interference from another station set it to [CITY/II].

AM:



Recording radio broadcasts

Tune to the desired station, then follow steps 1–6 of "To record through the built-in microphone (monaural)" **E**.
In step 2, set [TAPE (OFF), FM, AM] to [FM] or [AM].

When there is too much interference during AM recording
Set [FM RECEPTION/B.P.] to [NOR/II] or [CITY/II] whichever yields less noise.

Long play recording

NORM : Normal recording
6X : Long play recording
180 minutes worth of material can be recorded onto a 60 minute tape by setting [RECMODE] to [6X].

Play tapes recorded with long play only on cassette decks with the same function.

To record through the external microphone

Plug the external stereo microphone (not included) into [STEREO MIC (PLUG IN POWER)].

The built-in microphone will be automatically disconnected.

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

- You can use a condenser microphone with or without built-in power supply.

Follow up recording

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

Monitoring

The sound can be heard with headphones (included) plugged into [Q].

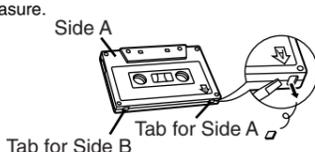
Note:

- 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.



BASS



XBS

Boosts the low frequency range.

To listen with emphasized low sound
Set [□, Q, QXBS] to [QXBS].

- If the sound distortion occurs, turn down the volume.
- You cannot make a recording or listen through the speaker with the XBS effect.

BATT

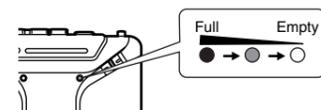


- Align the poles ⊕ and ⊖ properly when inserting the batteries.
- Do not mix old and new batteries or different types of batteries.
- Do not recharge ordinary dry cell batteries.
- Remove batteries if you are not going to use for a long time.
- Do not peel off the covering on batteries and do not use 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.

Battery condition indicator

[OPR/BATT] indicator lights during operation and fades as the battery runs down.
Replace when the battery runs down.



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.

- Do not expose product to liquids.
- Discontinue use if you experience discomfort with the earphones or any other parts that directly contact your skin. Continued use may cause rashes or other allergic reactions.

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.

MAINTENANCE

If the surfaces are dirty

To clean this unit, wipe with a soft, dry cloth.

- Never use the alcohol, paint thinner or benzene to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

For a cleaner crisper sound

Clean the heads regularly to ensure good quality playback and recording. Use a cleaning tape (not included).

Product Service

- Damage requiring service**—The unit should be serviced by qualified service personnel if:
 - The AC power supply cord or AC adaptor has been damaged; or
 - Objects or liquids have gotten into the unit; or
 - The unit has been exposed to rain; or
 - The unit does not operate normally or exhibits a marked change in performance; or
 - The unit has been dropped or the cabinet damaged.

- Servicing**—Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- Replacement parts**—When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- Safety check**—After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

Product information

For product information or assistance with product operation: Contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail consumerproducts@panasonic.com, or the website (<http://www.panasonic.com>).

User memo:

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

Specifications

Radio frequency range:

FM: 87.5–108.0 MHz
AM: 525–1710 kHz

Power requirement:

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

Track system: 4 track, 2 channel, stereo

Recording system: AC bias, magnet erase
Variable

Monitor system:

Frequency range:
Playback: 40–16000 Hz
Rec/Playback: 70–8000 Hz

Tape speed: 4.8 cm/s (1 7/8 ips)/
1.6 cm/s (2/3 ips)

Jack:

Input: STEREO MIC;
0.6 mV (200–600 Ω)

Output: HEADPHONES

Speaker 4.5 cm×2
1.1 cm×1

Power output:

Speaker: 490 mW+490 mW+20 mW
Headphones: 3 mW+3 mW

Dimensions (W×H×D):

113.0×86.6×42.0 mm
(4 1/8"×3 3/8"×1 5/8")

Mass: 211 g (7.4 oz) without batteries

Play time:
[When used at 25 °C (77 °F), on a flat stable surface]

Alkaline dry cell batteries

Recording: About 20 hours (MIC)

Playback: About 24 hours (headphones)

About 14 hours (speakers)

Radio: About 57 hours (headphones)

About 21 hours (speakers)

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

Note: Specifications are subject to change without notice.

Mass and dimensions are approximate.

Panasonic Consumer Electronics Company,
Division of Matsushita Electric Corporation of America
One Panasonic Way Secaucus, New Jersey 07094

Panasonic Sales Company, Division of Matsushita
Electric of Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5
San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic Audio Products Limited Warranty

Limited Warranty Coverage

If your product listed below does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

Product or Part Name	Parts	Labor
Radio, Clock Radio, Radio with Tape Player or Recorder, Portable CD Player, Headphone Stereo, Tape Recorder, Speaker	One (1) Year	One (1) Year
Rechargeable batteries (in exchange for defective item)	Ten (10) Days	Not Applicable
SD Memory Card (in exchange for defective item)	Ninety (90) Days	Not Applicable

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty excludes both parts and labor for batteries, antennas, and cosmetic parts (cabinet). This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

To obtain service in the USA please contact:

Panasonic Services Company, Panasonic Plus Department
20421 84th Avenue South
Kent, WA 98032
Tel: 1-800-833-9626 Fax: 1-800-237-9080

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone number where you can be reached.

Customer Services Directory

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact:
1-800-211-PANA (7262), Monday–Friday 9 am–9 pm;
Saturday–Sunday 9 am–7 pm, EST.

Web Site: <http://www.panasonic.com>
You can purchase parts, accessories or locate your nearest servicer by visiting our Web Site.

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Factory Servicer or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the servicer, loss of or damage to media or images, data or other memory or recorded content. The items listed are not exclusive, but are for illustration only.)
ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.

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 exclusions 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 Servicer. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

Service in Puerto Rico
Matsushita Electric of Puerto Rico, Inc.
Panasonic Sales Company/Factory Servicer:
Ave. 65 de Infantería, Km. 9.5,
San Gabriel Industrial Park, Carolina, Puerto Rico 00985
Phone (787) 750-4300 Fax (787) 768-2910

Accessory Purchases:

1-800-332-5368 (Customer Orders Only)
Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032
(6 am to 5 pm Monday–Friday; 6 am to 10:30 am Saturday; PST)
(Visa, MasterCard, Discover Card, American Express, Check)