

# Operating Instructions

Microcassette™ Transcriber

MODEL NO. **RR-930**



**Panasonic®**

Read these instructions completely before operating this unit.

Thank you for purchasing this unit.  
For optimum performance, follow these operating instructions carefully.

**WARNING:**  
TO REDUCE THE RISK OF FIRE OR  
ELECTRIC SHOCK, DO NOT EXPOSE  
THIS APPLIANCE TO RAIN OR MOIS-  
TURE.

The serial number of this product may be found on the label affixed to the bottom of the unit. You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid in identification in the event of theft.

**MODEL NUMBER:** RR-930 \_\_\_\_\_

**SERIAL NUMBER:** \_\_\_\_\_

### PRECAUTIONS

- Keep the set away from heating appliances and electrical noise generating devices such as fluorescent lamps and motors.

### HELPFUL HINTS

- The set should be kept free from dust, moisture and vibration, and should not be exposed to direct sunlight.
- Do not use benzine, thinner, or the like, or any abrasive powder to clean the cabinet. Wipe it with a soft cloth moistened with a mild soap and water solution.

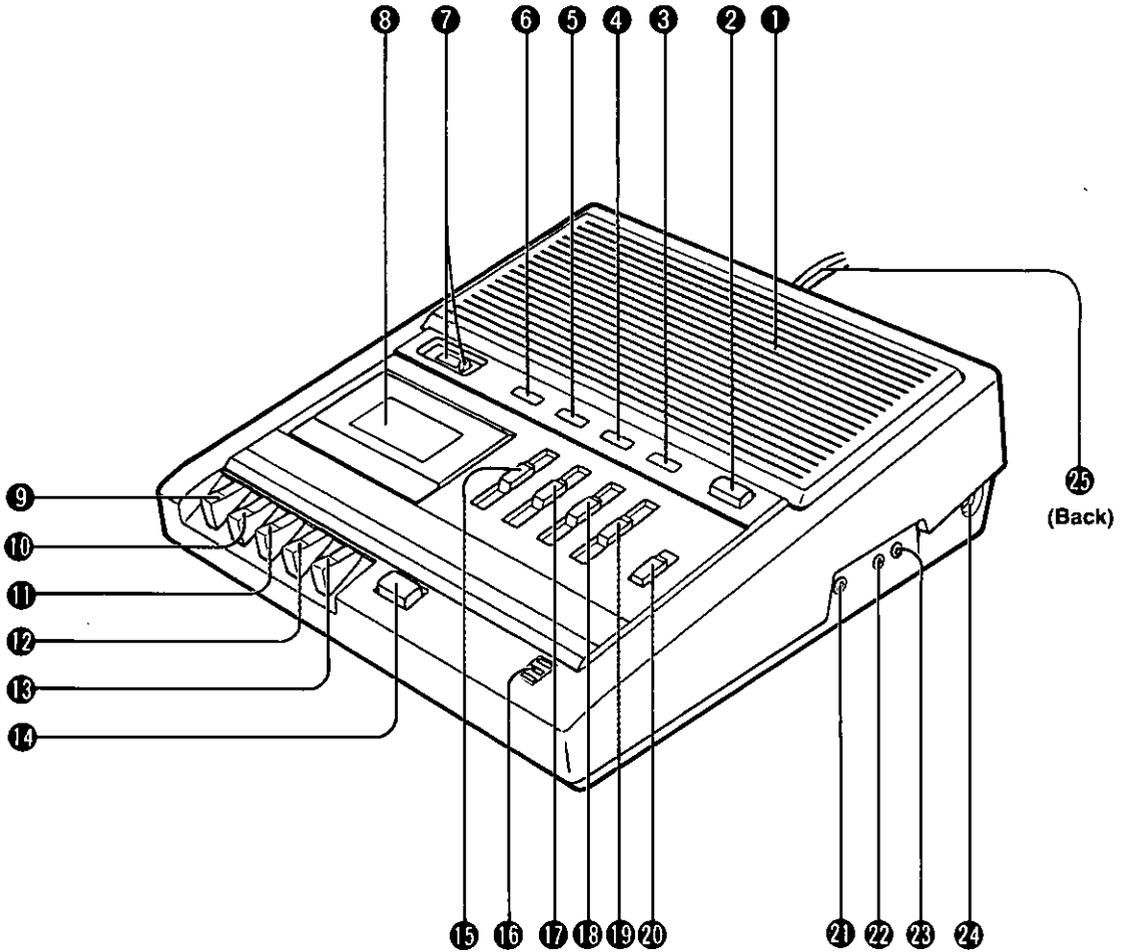
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# IMPORTANT SAFETY INSTRUCTIONS

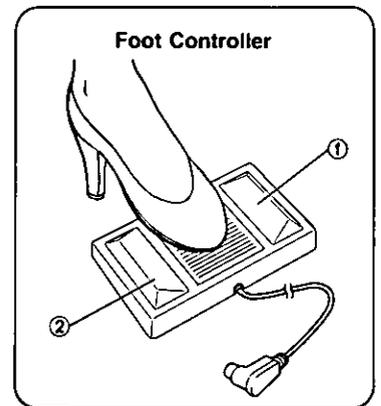
1. Read all of these instructions.
2. Save these instructions for later use.
3. Follow all warnings and instructions marked on the product.
4. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
5. Do not use this product near water.
6. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
7. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
8. This product should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
9. This product is equipped with a 3-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.
10. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
11. If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating. Also, make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
12. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
13. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to service personnel.
14. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - A. When the power cord or plug is damaged or frayed.
  - B. If liquid has been spilled into product.
  - C. If the product has been exposed to rain or water.
  - D. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
  - E. If the product has been dropped or the cabinet has been damaged.
  - F. If the product exhibits a distinct change in performance, indicating a need for service.

# LOCATION OF CONTROLS



- ① Speaker
- ② Power Switch (POWER)
- ③ Power Indicator (POWER)
- ④ Recording Indicator (REC)
- ⑤ Quick Erase Indicator (QUICK ERASE)
- ⑥ Tape Running Indicator (TAPE RUN)
- ⑦ Tape Counter and Reset Button (COUNTER)
- ⑧ Cassette Holder
- ⑨ Stop/Eject Button (■ STOP/▲ EJECT)
- ⑩ Fast Forward/Cue Button (◀◀ FF/CUE)
- ⑪ Playback Button (◀ PLAY)
- ⑫ Rewind/Review Button (REW/REV ▶▶)

- ⑬ Record Button (● RECORD)
- ⑭ Pause Button (|| PAUSE)
- ⑮ Volume Control (VOLUME)
- ⑯ Built-in Microphone (MIC)
- ⑰ Tone Control (TONE)
- ⑱ Auto Back Space Control (BACK SPACE CONTROL)
- ⑲ Tape Speed Control (SPEED CONTROL)
- ⑳ Tape Speed Selector (TAPE SPEED)
- ㉑ Monitor Jack (MONITOR (8 Ω))
- ㉒ External Microphone Jack (MIC)
- ㉓ Remote Jack (REMOTE)
- ㉔ Foot Controller Jack (REMOTE/REVIEW)
- ㉕ AC Power Cord



- Foot Controller**
- ① Back Space Pedal (BACK SPACE)
  - ② Start Pedal (START)

## POWER SOURCE

### ■ For Use with Household Power (AC Power)

Connect the AC power cord into the electrical outlet. (Grounding-type power outlet only.) (120 V/60 Hz)

## MICROCASSETTE INSERTION AND REMOVAL

### ■ Cassette Insertion

1. Press the Stop/Eject Button to open the Cassette Holder.
2. Carefully insert the tape in the Cassette Holder.

#### Note:

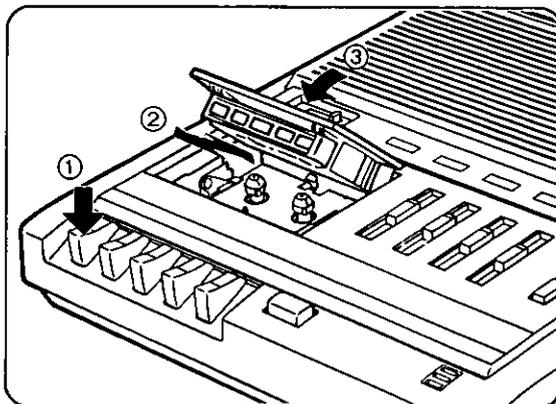
The microcassette cannot be inserted backwards. Do not force.

3. Close the Cassette Holder.

### ■ Cassette Removal

- Before removing, press the stop/Eject Button to stop the tape.

1. Press the Stop/Eject Button to open the Cassette Holder.
2. Remove the cassette.
3. Close the Cassette Holder.



## TAPE-SPEED SELECTOR

### ■ Standard Play (2.4)

When the Tape-Speed Selector is set to the "SP (2.4)" position, it is possible to record on both side of an MC-60 tape for a total of 60 minutes.

This speed is suggested for best recorded sound quality.

### ■ Long Play (1.2)

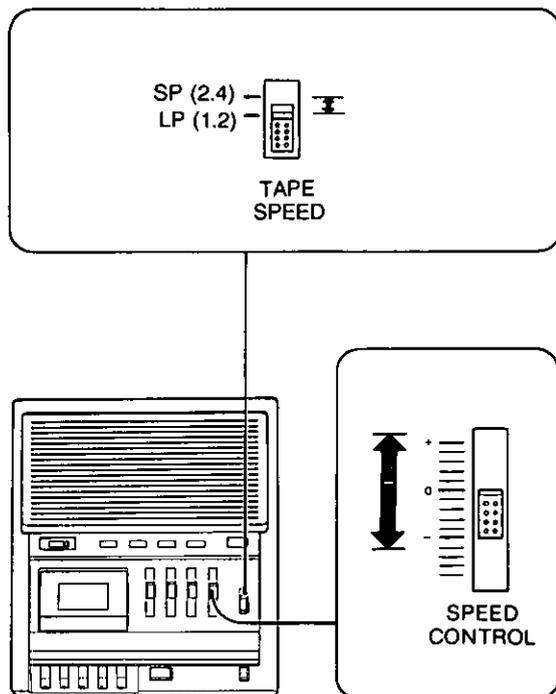
To record a meeting or conference, where long recording time is required, set the Tape-Speed Selector to the "LP (1.2)" position.

This will make it possible to record on both sides of an MC-60 tape for a total of 120 minutes.

If the tape is to be played back on a different unit, it is suggested that the Standard Play (2.4 cm/s) speed be used whenever possible. This will insure the best possible sound quality upon playback.

### ■ Tape Speed Control

When the Tape Speed Control is moved in the "+" direction as far as it will go during playback, the tape speed is increased by about 20%. Conversely, when it is moved in the "-" direction as far as it will go, the tape speed is reduced by about 20%. Set this control to the center click-stop position for listening to tapes at the standard speed. The tape speed cannot be varied during recording.



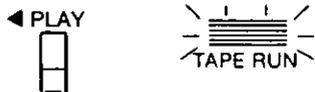
## PLAYBACK

- Set the Tape Speed Selector to the same position as when the tape was originally recorded.
- Insert a microcassette tape (Refer to "MICROCASSETTE INSERTION AND REMOVAL" on page 5.)
- Follow the numbered order.

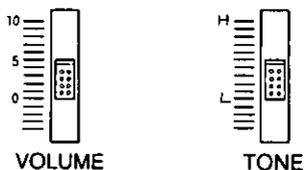
- 1** Press the Power Switch.  
The Power Indicator will light up.



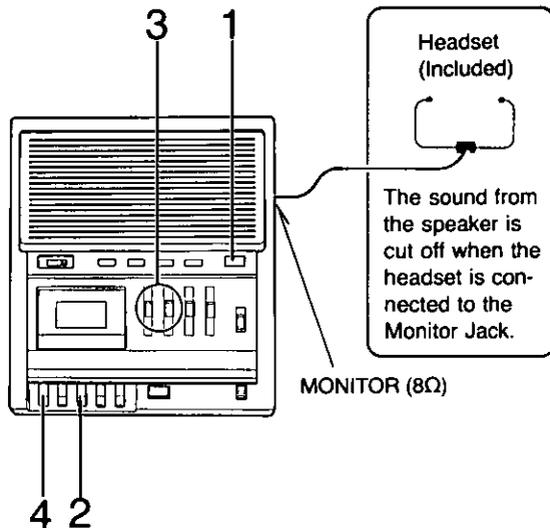
- 2** Press the Playback Button.  
The Tape Running Indicator will light up.



- 3** Adjust the Volume and Tone Controls.



Listen to the playback sound through the speaker.



- 4** Press the Stop/Eject Button to stop the tape.



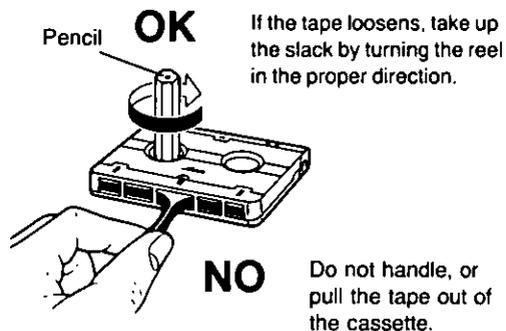
### ■ Cassette Tapes

Only cassette tapes bearing the "MICROCASSETTE™" logo.

- Use cassette tapes designated as NORMAL. Other types of cassette tapes will not yield optimum performance.

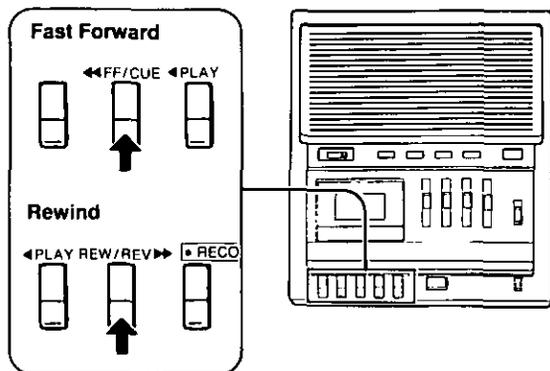
#### Note:

Cassettes, both recorded and unrecorded, should not be stored in locations with high temperature, high humidity or direct sunlight. Never place a recorded cassette near a magnetic source, such as a magnet or a TV set as this may affect tape performance.



### ■ Fast Forward and Rewind

When the unit is in the stop mode, (Tape Running Indicator light off), pressing the Fast Forward/Cue Button or the Rewind/Review Button will cause the tape to run quickly towards the end or beginning of the tape respectively, without monitoring the sounds recorded on the tape.

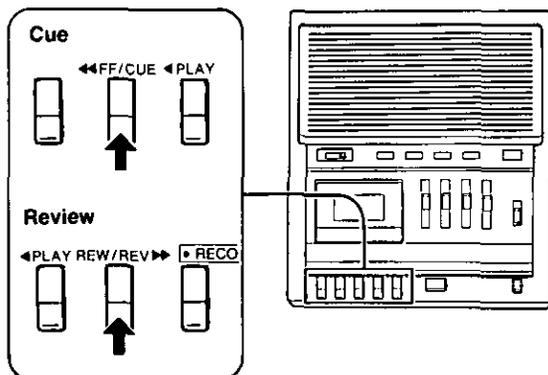


#### Note:

Always press the Stop/Eject button first, during Fast Forward or Rewind operation, before pressing PLAY, RECORD, or changing the tape operation.

### ■ Cue and Review

When the unit is in the play mode, (Tape Running Indicator lights on), pressing the Fast Forward/Cue Button or Rewind/Review Button will cause the tape to run quickly towards the end or beginning of the tape respectively, while monitoring the sounds recorded on the tape.



### ■ Silent Auto-Stop

When the tape reaches its end, during playback, record, fast forward, or rewind, the tape travel will automatically stop. Be sure to press the Stop/Eject Button to release the function buttons.

#### Note:

When the tape reaches its end the auto-stop mechanism functions to stop the motor motion and to turn off the Running Indicator.

### ■ Using Foot Controller

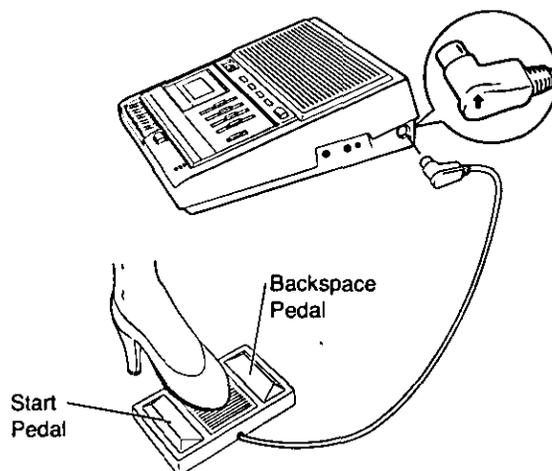
1. Insert the connection cord of the Foot Controller into the Foot Controller Jack.
2. Insert a microcassette in the Cassette Holder.
3. Set this unit to the playback mode.
4. Step on the Start Pedal (right side) and playback will begin.  
Hold down the pedal and playback will continue. The Tape Running Indicator will light up.
5. Remove foot from the Start Pedal and playback will stop.
6. Step on the Backspace Pedal and the tape will be rewound. The Tape Running Indicator will light up.
7. Remove foot from the Backspace Pedal and rewind will stop.

### ■ Auto Back Space Function

When using the Foot Controller it is possible to have Auto Back Space when the Start Pedal is released. The amount of Auto Back Space is controlled by the "Back Space Control" on the main unit.

#### Note:

- The unit is put into pause mode when the Foot Controller pedals are released. Do not leave the machine in this mode for long periods of time. Be sure to press the Stop/Eject Button and Power Switch to turn the unit off.



# RECORDING

- Set the Tape-Speed Selector to the desired position.
- Insert a microcassette tape (Refer to "MICROCASSETTE INSERTION AND REMOVAL" on page 5.)
- Follow the numbered order.

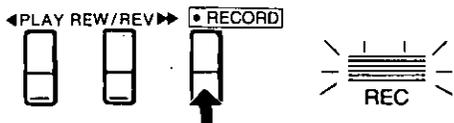
- 1** Press the Power Switch.  
The Power Indicator will light up.



- 2** Reset the Tape Counter.



- 3** Press the Record Button.  
The Recording and Running indicators will light up.



- 4** Speak or sing into the Built-in or external microphone.

Built-in  
Microphone

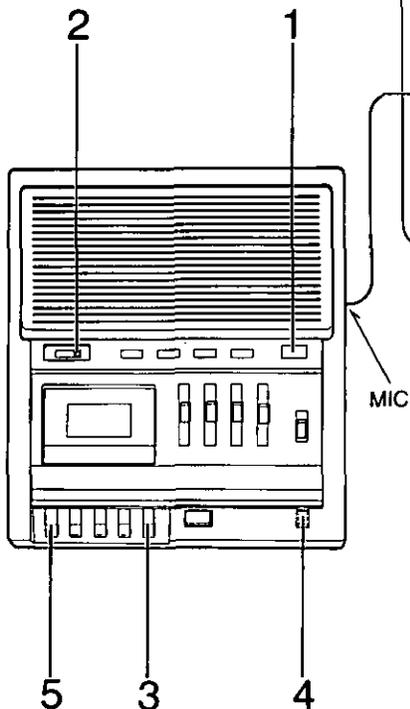
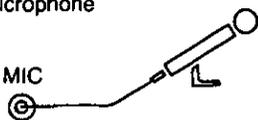
MIC



or

External  
Microphone

MIC



- 5** Press the Stop/Eject Button to stop the recording.

■ STOP/▲ EJECT

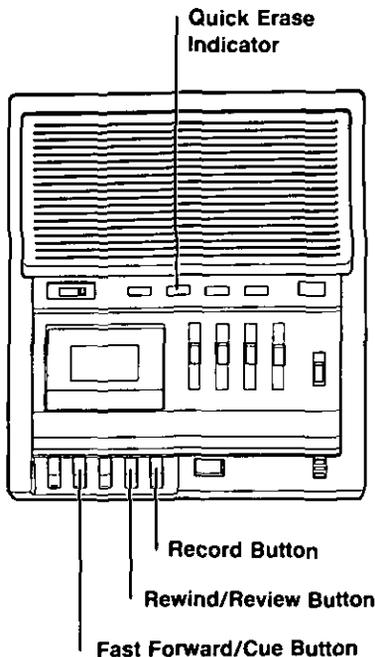


### ■ Quick Erase

1. Press the Pause Button to the "LOCK" position (▲→■).
2. Press the Record Button and the Rewind/Review Button (or Fast Forward/Cue Button) at the same time. (The Quick Erase Indicator will light up.)
3. Press the Pause Button again to the "OFF" position (▲→■) will cause the tape to be rewound (or fast forwarded) at high speed and erased. The Quick Erase Indicator will light up and the Tape Running Indicator will light up.
4. To stop the quick erase, press the Stop/Eject Button on the main unit. The pressed button are released.

#### Note:

Previously recorded material on the tape is automatically erased when a new recording is made over it and only the new recording will remain on the tape.



### ■ Erasing

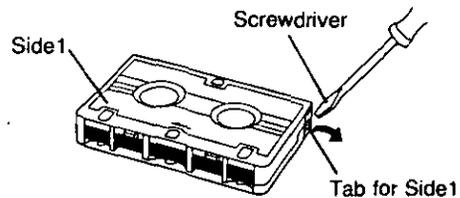
Previously recorded sounds on the tape are automatically erased when a new recording is made and only the new recording remains.

### ■ Monitoring

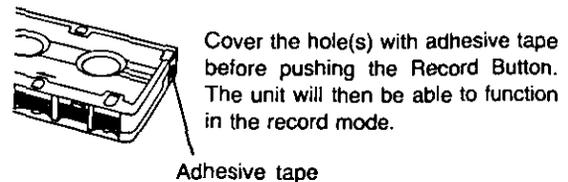
The monitor system enables you to listen through the Head set to the sound as it is being recorded. If it is necessary to adjust the volume level of the sound being monitored, do so by using the Volume Control.

### ■ Record-Prevention System

If the plastic tab(s) are removed with a screwdriver or similar tool, the record-prevention system will function to prevent accidental erasure.



- To record on a cassette from which the tabs have been removed



Recording will not function if the tab for that particular side of the cassette has been removed.

### ■ Quick Review

This sound just recorded can be heard by pressing the Rewind/Review Button to rewind the tape and then releasing the button.

### ■ Edit Function

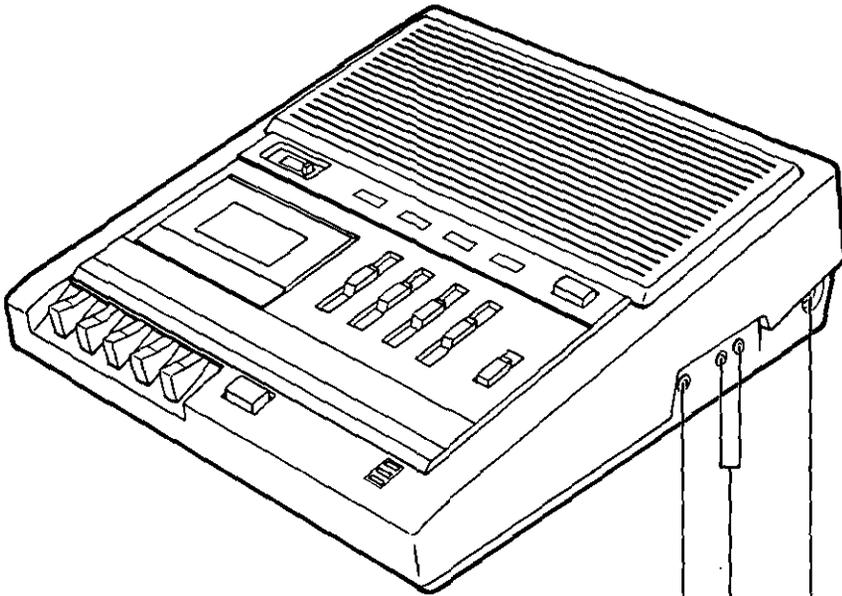
Recording can be started during playback by simply pressing the Record Button.

### ■ Pause Button

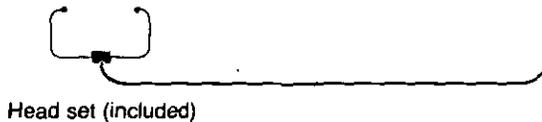
When the Pause Button is pressed to the "LOCK" position (▲→■) during tape running, the tape travel is stopped without releasing the function paused. (Tape running indicator light will turn off.)

To resume the function, press the Pause Button again to the "OFF" position (▲→■).

## CONNECTIONS



### ■ To Monitor Jack



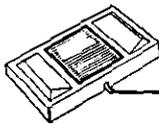
Head set (included)

### ■ To Mic/Remote Jack



External Microphone (WM-2264, Optional)

### ■ To Foot Controller Jack



Foot Controller (included)

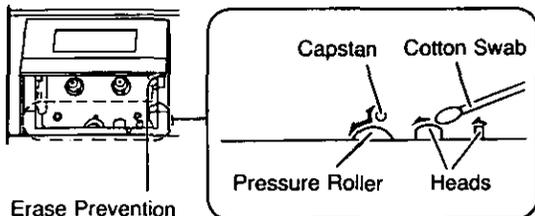
#### Notes:

- Do not connect anything to the MIC Jack when recording with the Built-in Microphone, since this will cut off the Built-in Microphone and make it impossible to record with it.
- Howl may result when monitoring through Headset while recording through the external microphone. In case this occurs, place the external microphone as far as possible from the Headset.
- Do not play your headset at a high volume. Hearing experts advise against continuous extended play.
- When listening with headset, if you experience a ringing in your ears, reduce volume or discontinue use.

## ■ Head Cleaning

While pressing Erase Prevention Lever, press the Record Button.

This allows the Heads to move outward for easier cleaning. When you finish cleaning your unit, be sure to press the Stop/Eject Button.



Erase Prevention Lever

### Notes:

- If the heads are extremely dirty, clean them with a soft cloth dampened with a little alcohol.
- Do not clean the plastic cabinet with benzine or thinner. Clean it with a solution of soap and water.
- Avoid spray-type insecticides. Some insecticides contain chemicals that could cause cabinet deformation.

## HEAD DEMAGNETIZATION

- In order to maintain good sound quality during recording and playback, it is recommended that the head assembly be demagnetized when distortion or poor sound quality persists after cleaning the heads.
- If the head assembly becomes magnetized, it could create noise in the recordings, loss of high end frequency response or erasure of valuable recordings.
- Several types of Head Demagnetizers are available and may be purchased separately at local electronics supply stores. Follow the instructions that are supplied with the device.
- Do not bring any type of metal objects or tools such as magnetic screwdrivers in contact with the head assembly.

## SPECIFICATIONS

Power Requirement:	AC; 120 V, 60 Hz	Track System:	2-track monaural recording and playback
Power Consumption:	12 W	Jacks:	MIC; sensitivity 0.25 mV/applicable microphone impedance
Frequency Range:	200–6000 Hz		200 Ω–600 Ω
Tape Speed:	SP; 2.4 cm/s (15/16 ips) LP; 1.2 cm/s (15/32 ips) Speed Control (at Playback mode); approx. ±20%		REMOTE MONITOR: 8 Ω REMOTE/REVIEW
Program Time:	2 hours with RT-60MC micro-cassette tape (at LP speed) 1 hour with RT-60MC micro-cassette tape (at SP speed)	Speaker:	2-1/2" (6.5 cm) speaker
Fast Forward and Rewind Time:	Approx. 130 seconds with RT-60MC microcassette tape	Dimensions:	7-5/8"×2-7/8"×8-11/16" (W×H×D)
		Weight:	4 lbs. (1.8 kg)
		Accessories:	Foot Controller Headset

Design and Specifications are subject to change without notice.

## Limited Warranty

Panasonic Company or Panasonic Sales Company (collectively referred to as "Panasonic") will repair this product with new or rebuilt parts, free of charge, in the U.S.A. or Puerto Rico for one (1) year from the date of original purchase in the event of a defect in materials or workmanship.

**Accessories**—(when applicable)—For ninety (90) days.

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

**Rechargeable Battery Packs**—(when applicable)—New rechargeable battery packs in exchange for defective rechargeable battery packs for ninety (90) days. Non-rechargeable battery packs are not warranted.

Carry-in or Mail-in service in the continental U.S.A. can be obtained during the warranty period from a Matsushita Services Company (MSC) Factory Servicenter listed in the Servicenter Directory. Or call 1-800-447-4700, toll free, to locate an authorized MSC Servicenter. Carry-in or Mail-in service in Puerto Rico can be obtained during the warranty period by calling the telephone numbers listed in the Servicenter Directory.

This warranty is extended only to the original purchaser. A purchase receipt or other proof of date of original purchase will be required before warranty performance is rendered.

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 Panasonic 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, or modification of the product, line power surge, or service by anyone other than an MSC Factory Servicenter or authorized MSC Servicenter, or damage that is attributable to acts of God.

### LIMITS AND EXCLUSIONS

There are no express warranties except as listed above.

PANASONIC SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF GOODWILL, PROFITS OR REVENUE, LOSS OF USE OF THIS PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF SUBSTITUTE EQUIPMENT, DOWNTIME COSTS, OR CLAIMS OF ANY PARTY DEALING WITH BUYER FOR SUCH DAMAGES, RESULTING FROM THE USE OF THIS PRODUCT OR ARISING FROM BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY 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 Servicenter. If the problem is not handled to your satisfaction, then write to the Consumer Affairs Division at the company address indicated below.

## PRODUCT SERVICE

Should your Panasonic product ever require service, refer to enclosed Directory for an Authorized Servicenter or consult your authorized Panasonic dealer for detailed instructions.

**SERIAL NUMBER:** Located on the label affixed to the bottom of the unit.

Panasonic Company  
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One Panasonic Way  
Secaucus, New Jersey 07094

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