

Wireless Microphone
WX-RP300

Operating Instructions



Panasonic®

Before attempting to connect or operate this product,
please read these instructions completely.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



SA 1965

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



SA 1966

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The serial number of this product may be found on 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 identification in the event of theft.

Model No. _____

Serial No. _____

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

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READ THE FOLLOWING INSTRUCTIONS BEFORE USE

Use of the Panasonic Wireless devices is regulated by the Federal Communications Commission as described in Part 74 subpart H of the FCC regulations, and users authorized there by are required to obtain an appropriate license.

CAUTION:

It is a violation of Federal Law to begin operating this system prior to obtaining an FCC Radio License. The FCC ID number for this radio equipment is listed below.

FCC ID : ACK9TAWX-RP300

PREFACE

The Wireless Microphone WX-RP300 is designed to be used with the Diversity Receivers WX-RP810/WX-RP800 and ENG Wireless Receiver WX-RP700. Reliable, time proven, LSI technology makes it possible to achieve the compact size and low weight that enhances mobility.

A PLL synthesizer system provides stable transmission throughout the production area.

FEATURES

- The freedom of movement and performance of wired microphone is now achieved by the simple operation of the new PLL wireless transmitter.
- The PLL synthesized oscillator makes it simple to change the operating frequency to insure interference-free operation anywhere.
- The space diversity reception is least susceptible to multipath reflection dropouts.
- The battery charge condition is indicated by the Battery Status Indicator.
- Superb audio quality.
- Possible to cover the 49 usable channels solely by this model.
- It goes anywhere with the "Miniature Condenser Microphones for Wireless Transmitter" or your choice of wired microphones.
- The Built-in Audio Input Level Trim and Audio Peak Level Indicator make input level control easy.
- A maximum of 6 microphones can be used in the same area.

PRECAUTIONS

- Do not expose the wireless microphone to water or moisture.
- Do not operate the wireless microphone if it becomes wet. Do take immediate action if the transmitter does become wet. Turn power off and consult with qualified service personnel. Moisture can damage the transmitter and also create the danger of electric shock.
- Do not use the wireless microphone beyond its temperature, humidity or power source range.
 - (a) Ambient temperature range must not exceed 32°F - 122°F (0°C - +50°C).
 - (b) Avoid using the wireless microphone when humidity is above 90%.
- For cleaning the body case, wipe with dry cloth. If necessary, use a damp cloth with mild detergent. Do not use chemicals such as benzene, alcohol or thinner for cleaning.
- If intermittent audio sound occurs during operation, turn off the power and consult with qualified service personnel.
- Do not subject the microphone to shock.

- Do not use this wireless microphone in places affected by strong electrical or magnetic fields, such as near AC power lines, motors, transformers or generators.

When operating the wireless system under these conditions, the wireless microphone and antennas should be between 6.7ft (2m) and 33ft (10m) apart from each other to avoid interference.

- Do place the wireless microphone at least 6.56ft (2m) apart from the receiving antenna when more than one wireless microphone is used in different frequencies to minimize interference.
- Before turning the wireless microphone off, turn down the faders of the mixer or any other equipment which is connected to the LINE OUTPUT of diversity receiver. Otherwise noise will be generated by the power on/off operation of the wireless microphone.

SUGGESTIONS

Microphone position

- Attach the microphone unit to your necktie or lapel using the clip provided, preferably close to your mouth to obtain better tone quality.
- Speaking loudly into the microphone may cause distortion. Refer to the adjustment of the Audio Input Level Trim.

Feedback (Howling)

If this unit is used in a small room with the loud-speaker, and is close to the speaker, feedback may occur.

To eliminate the feedback, turn down the volume control of your loud-speaker or change the position of the microphone.

Factors such as speaker position and room structure affect feedback. Feedback is most likely to occur when the microphone directly faces the speaker. So it is advisable to speaker position accordingly.

Handling the wireless microphone

During operation, wear this unit on your body. Do not place any metallic objects in the same pocket as this can weaken signal strength and cause noise.

When not using, be sure to set the power switch to

"OFF" position. If this unit is not to be used for a long time, remove the battery from this unit.

Noise-free sound

This unit will typically transmit over a range of approximately 100ft (30meters). When the noise is occurred, observe the following points.

- The distance between the wireless microphone and the wireless antenna should be as short as possible.
- The wireless antenna should be far as possible from the window and any other devices which generate electrical noise, such as fluorescent lights and electric motors.

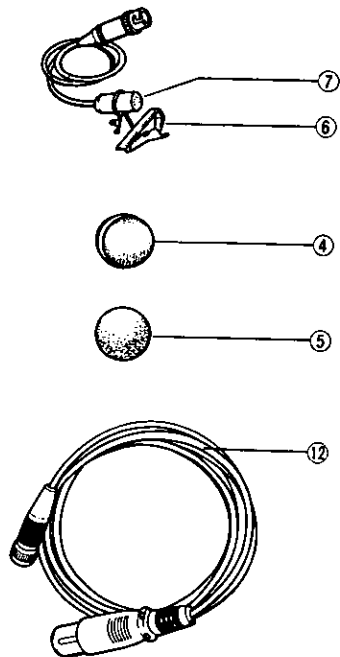
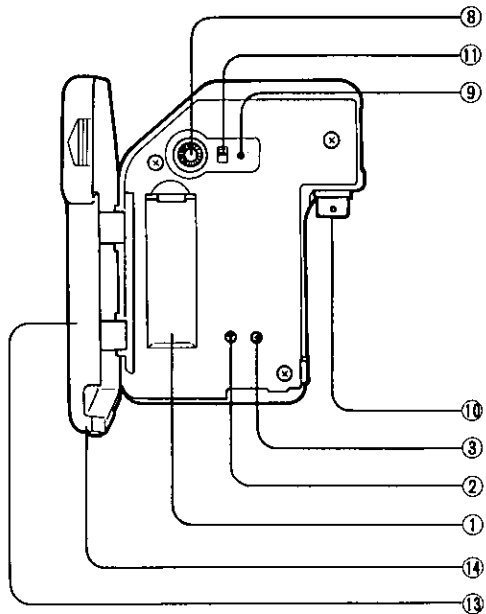
Use of two microphones

When using two wireless microphones, each must be of a different transmission frequency. Do not use 2 wireless microphones with the same transmission frequency simultaneously.

Outdoor operation

A Windscren is provided to reduce rumble and pop noises.

MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS



(1) Battery Holder

(2) Group Selection Switch (GROUP)

Refer to pages 10 and 11

(3) Channel Selection Switch (CH)

Refer to pages 10 and 11

(4) Windscreen (Metal)

(5) Windscreen (Foamed Urethane)

(6) Microphone Holder Clip

(7) Condenser Microphone

(8) Audio Input Level Control

(9) Battery Status/Audio Peak Level Indicator (BATT/PEAK)

This indicator light changes to red from green to indicate the need for battery replacement.

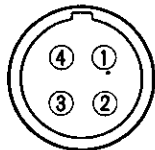
This indicator light changes to red momentarily from green when the audio level is high.

Adjust the audio input level control when the indicator lights to red at high audio level.

(10) Audio Input Connector

The pin configuration is shown below

1. Hot 1 (for Condenser Microphone)
2. Hot 2 (for Dynamic Microphone)
3. Phantom Power Supply(+1.5V)
4. Ground



(11) Power On/Off Switch(POWER)

(12) Microphone Cable

(13) Cover

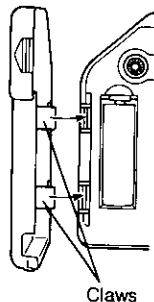
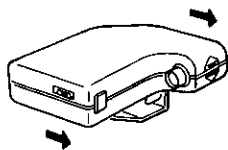
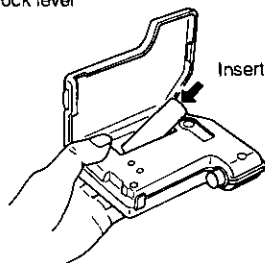
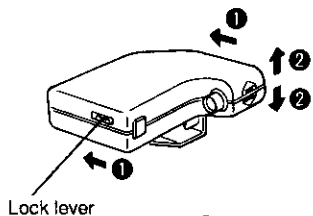
(14) Lock lever(LOCK)

BATTERY INSTALLATION

Caution:

- Set the Power On/Off Switch(POWER) to OFF position before battery replacement.
- Use the Panasonic Alkaline Dry Battery of AA type.

1. Release the both lock lever(LOCK).
2. Open the cover and insert new battery.



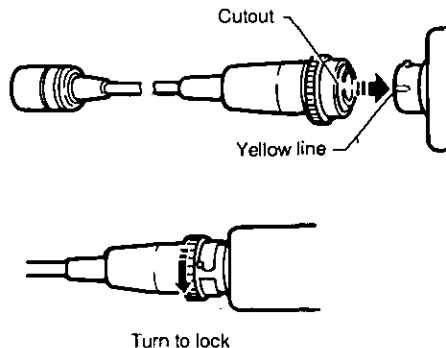
Note :

1. Confirm correct polarity of the battery. Improper battery installation can damage the unit.
2. Remove the battery if the wireless microphone is not to be used for an extended period of time.
3. Do not recharge the dry battery. The dry battery is not rechargeable.
4. Do not make a short circuit between + and - polarities of the battery.
5. when the cover comes off from the unit, replace it to the unit.

CONNECTION OF CONDENSER MICROPHONE TO THE UNIT

Align the slot in the inner ring of the male microphone connector with the yellow mark on the outer ring of the connector on the unit. Push down the outer ring of the microphone connector and turn to counterclockwise to lock the connector.

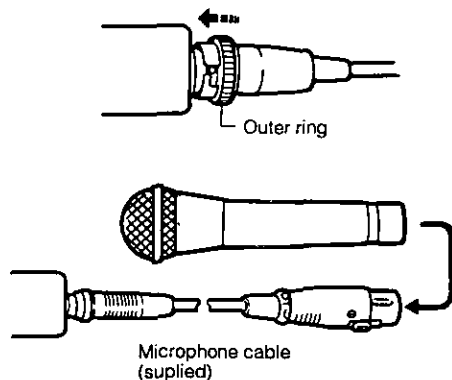
Condenser Microphone connection



Note:

When using a regular microphone(Equipped with a canon connector XLR/3-Pin), first connect the supplied microphone cable, then connect the external microphone.

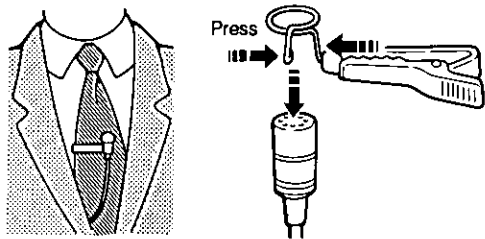
External Microphone connection



USE OF THE SUPPLIED ACCESSORIES

1. Microphone Holder clip

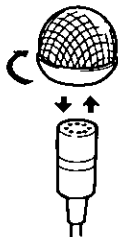
To attach the microphone on a dress, necktie, lapel or etc, use the Microphone Holder Clip as shown below.



The Microphone Holder Clip can be used in a vertical or horizontal.

2. Windscreen

To eliminate the effect of wind noise or breathing, cover the microphone with windscreen.



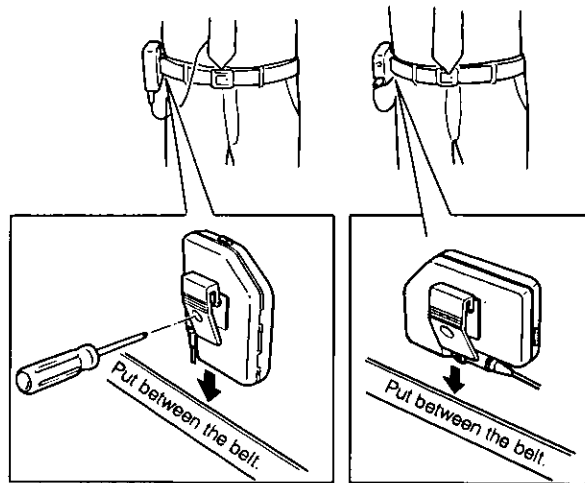
(Installation of wind screen)

Insert the windscreen on to the microphone head while turning the windscreen.

when removing the windscreen, pull out by turning.

3. How to wear this unit of wireless microphone.

Attach the Belt Case onto the belt as shown below.



The Belt Clip can be mounted in a vertical or horizontal position.

Note:Use this wireless microphone after the Battery Status Indicator lights in green.

The sound can not be heard for 2 sec. after turning on the power.

TRANSMITTING CHANNEL AND FREQUENCY

Broadcasting System Description and Cautions for UHF Interference

The WX-RP300 transmits FM modulated signals in the UHF frequency range of 797.000 MHz to 803.000 MHz. Television channels 68 and 69 also fall within this range. Check the local area for these TV stations. Then select groups as follows:

Channel 68 broadcast area : Use Groups 4, 5, 6 or :

Channel 69 broadcast area : Use Groups 1, 2, 3 or •

Note :

In areas which receive both channels 68 and 69, choose the group with least interference. However, be sure to especially avoid using the following channels which are on the exact same broadcast frequencies :

GROUP 2/CHANNEL 6 (CH 68)

GROUP : /CHANNEL 3 (CH69)

FREQUENCY SETTING

Group Description

The channel frequencies available for transmission are arranged into groups. The channels within a group are at non-adjacent frequencies. This reduces the likelihood of interference between transmitters when multiple WX-RP300 are used in close proximity. Therefore, one group should always be selected when using more than one transmitter/receiver system. Each system may then be set to a different channel within that group.

- Groups 1, 2, 4 and 5 each consist of 6 channels.
- Groups 3 and 6 each consist of 5 channels.
- If suitable channels cannot be found in Groups 1 - 6, use the groups designated • and : .
- More than one group may be used if necessary, but be sure to confirm beforehand that there is no adjacent-channel interference between transmitters.

Note:

1. Be sure to use this wireless microphone and the diversity receiver at the same frequency.
2. Diversity receivers which are used in the same area should be set to the same group number and

each channel selection switch set to a different number.

3. In case that radio interference is encountered, change the frequency immediately.
4. The distance between groups may be changed by various conditions.

How to set the frequency

1. Turn off the power on both the receiver and transmitter.
2. Set the group selection switch of this wireless microphone to the same number as the one of the tuner unit of diversity receiver.
- 3 Set the channel selection switch of this wireless microphone to the same number as the one of the tuner unit of diversity receiver.

Note: Use the Miniature screw driver to set the above switches.

4. Turn on the power of diversity receiver side only.
Set the diversity receiver to the desired frequency.
Confirm that the receiving indicator on the receiver lights off.

Note:

If the receiving level indicator lights with turning on the power of the diversity receiver and turning off the power of wireless microphone, this diversity receiver will be interfered by the external radio wave.

Do not set the wireless microphone to out of transmission frequency before batter installation. Otherwise Battery indicator will not lights up.

However, battery will consume even above condition.

SPECIFICATIONS

Carrier Frequency	: 797MHz to 803MHz (49 channels)
Type of Emission	: 140KF3E
Oscillator	: Crystal-controlled PLL Synthesizer
RF Output Power	: 5.0mW
Frequency Stability	: $\pm 0.005\%$
Reference Deviation	: $\pm 4\text{KHz}$ FM at 1KHz, (Audio Input Level Control : -40dB)
Frequency Response	: 40Hz - 15KHz
Maximum Input level	: +10dBV ($\pm 40\text{KHz}$ at 1KHz, Audio Input Level Control : -40dB)
Dynamic Range	: 100dB (A-Weighted)
Signal to Noise Ratio	: More than 60dB
Battery Size	: AA size or Equivalent 1.5V x 1pc
Battery Life	: Approx. 4hours (Panasonic Alkaline Dry Battery of AA type is used at 77°F(25°C))
Current Consumption	: 190mA(Typ.)
Ambient Operating Temperature	: 32°F - 122°F(0°C - +50°C)
Dimensions	: 3" (W) x 3-7/8" (H) x 7/8" (L) 77.5mm (W) x 98.5mm (H) x 22mm (L)
Weight (Including Battery)	: 0.31lbs (140g)

Condenser Microphone

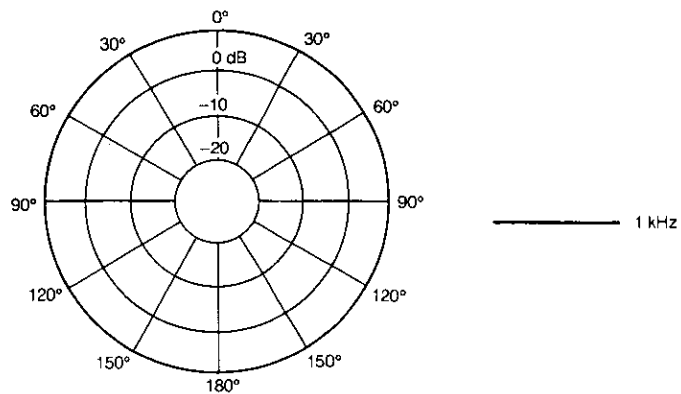
Type	: Back-electret Condenser
Directivity	: Omni-directional
Sensitivity	: -66dBV \pm 3dB
Maximum SPL	: More than 134dB SPL (Audio Input Level Control : -70dB)
Dimensions	: 3/16" (Diameter) x 7/16" (L) 5mm (diameter) x12mm (L)

Weight and dimensions indicated are approximate.
Specifications are subject to change without notice.

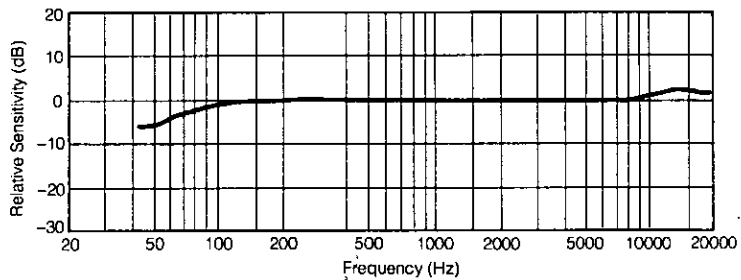
STANDARD ACCESSORIES

Miniature Condenser Microphone	1 pc
Microphone Holder Clip (Vertical and Horizontal type)	1 pc each
Windscreen (Metal and Foamed Urethane Type).....	1 pc each
Microphone Cable	1 pc
Miniature Screw Driver	1 pc
Frequency Label	1 pc

DIRECTIONAL CHARACTERISTICS



FREQUENCY RESPONSE



Panasonic

Broadcast & Television Systems Company

Division of Matsushita Electric Corporation of America

RAMSA/Professional Audio Systems

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6550 Katella Ave. Cypress, CA 90630 (714) 373-7277

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