

Cat. No. 32-1222

**OWNER'S MANUAL**

Please read before using this equipment.

**2-Channel 170MHz Wireless  
FM Microphones System**

RECEIVED 05 JAN 1999

## FEATURES

Your Optimus 2-Channel 170MHz Wireless FM Microphones System is designed for use with public address systems, musical instrument amplifiers, or other audio systems. The system's long range (150 feet), good signal-to-noise ratio (90 dB), and low distortion (1.0%) let you use it anywhere you would use a conventional microphone.



The hand mike's low-battery indicator and three-position switch help you avoid last-minute battery failures.

The receiver has both microphone and line-level outputs for easy connection to any amplifier, mixing board, or recorder, and you can use both outputs at the same time. And, the receiver's volume control lets you easily balance the receiver's output with other sound sources.

Be sure to read this manual completely before you use the system.

**Note:** You need one 9-volt battery (not supplied) to power the system

**Warning:** To prevent fire or shock hazard, do not expose this product to rain or moisture.

	<b>CAUTION</b>	
<small>RISK OF ELECTRIC SHOCK. DO NOT OPEN.</small>		
<b>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.</b>		



This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.



This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

## FCC NOTICE

This wireless audio link system complies with Part 90 of FCC Rules. There are two frequencies available for the system. You must get a license for each frequency you plan to use before you use the system (one license can include both frequencies). Licensability depends on how you will use the system.

Look in your local phone book for the nearest FCC office and contact them to get the necessary application.

© 1998 Tandy Corporation.  
All Rights Reserved.

Optimus is a registered trademark and RadioShack is a trademark used by Tandy Corporation.

## **USING THE SYSTEM**

---

### **CONNECTING THE RECEIVER TO AN AMPLIFIER, MIXER, OR TAPE RECORDER**

Connect the receiver to an amplifier, mixer, or tape recorder using either its **LINE** or **AUDIO** output.

To connect using the **LINE** jack, connect a shielded audio cable's phono plug to the receiver's **LINE** jack. Connect the other end to a line-level input on your amplifier, mixer, or tape recorder.

To connect using the **AUDIO** jack, connect a shielded audio cable's 1/4-inch mono phone plug to the receiver's **AUDIO** jack. Connect the other end to a microphone-level input on your amplifier, mixer, or tape recorder.

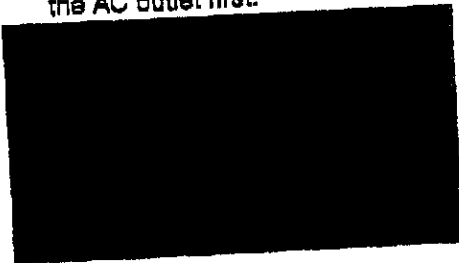
---

## POWERING THE RECEIVER

The receiver operates from the supplied 12-volt AC power adapter.

### Cautions:

- Use only the supplied adapter. If you lose or damage this adapter, order a replacement from your local RadioShack store. Using other adapters could damage the receiver.
- Always plug the adapter into the receiver's DC 12V jack first, and always unplug the adapter from the AC outlet first.



1. Be sure the receiver's **POWER** button is out (off) before you connect the adapter.
2. Plug the adapter's small plug into the receiver's **DC 12V** jack.
3. Plug the other end of the adapter into a standard AC outlet.

## MAINTENANCE

---

Your Optimus 2-Channel 170MHz Wireless FM Microphone System is an example of superior design and craftsmanship. The following suggestions will help you care for the system so you can enjoy it for years.



Keep the system dry. If it gets wet, wipe it dry immediately. Liquid can contain minerals that corrode electronic circuits.



Use and store the system only in normal temperature environments. Temperature extremes can shorten the life of electronic devices and distort or melt plastic parts.



Handle the system gently and carefully. Dropping it can damage circuit boards and cases and can cause the system work improperly.



Keep the system away from dust and dirt, which can cause premature wear of parts.



Use only fresh batteries of the required size and type. Old batteries can leak chemicals that damage your transmitter's electronic parts.



Wipe the system with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean your system.

Modifying or tampering with the system's internal components can cause a malfunction and could invalidate your system's warranty and void your FCC authorization to operate it. If your system is not performing as it should, take it to your local RadioShack store for assistance.

# SPECIFICATIONS

## TRANSMITTER

Sensitivity:  
 MIC Input ..... 5 mV  $\pm$ 5 dB @  $\pm$ 3 kHz FM  
 AUX Input ..... 80 mV  $\pm$ 5 dB @  $\pm$ 3 kHz FM  
 Frequency Response ..... 100-8,000 Hz  
 RF Output Power ..... 50 mW (Max)  
 Current Consumption ..... 38 mA (Average)  
 Battery Life (Alkaline) ..... 8 Hour (Average)  
 Operating Frequencies:

Groups	Mike 1	Mike 2
1	169.445 MHz	171.050 MHz
2	170.305 MHz	171.845 MHz
3	170.245 MHz	171.805 MHz

## RECEIVER

Sensitivity ..... 2  $\mu$ V (with S/N @ 20 dB)  
 S/N Ratio (@ 1mV Input) ..... 90 dB, A Weighted  
 Output Power:  
 LINE ..... 250 mV  
 AUDIO ..... 16 mV  
 Total Harmonic Distortion ..... 1.0% (Typical)  
 Power Requirements ..... 12 Volts DC, 100 mA  
 Operating Frequencies: ..... (See table in Transmitter section)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

**RadioShack Limited Warranty**

This product is warranted against defects for 1 year from date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply bring your RadioShack sales slip as proof of purchase date to any RadioShack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchase.

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

*We Service What We Sell*

10/96

**RadioShack**  
A Division of Tandy Corporation  
Fort Worth, Texas 76102

XXXXXXXXXXA  
Printed in China

XAX