

MIPRO ACT-2401/ACT-24HC

MIPRO ACT-2401/ACT-24HC Single-Channel 2.4GHz Wireless Handheld System User Manual

Model: ACT-2401/ACT-24HC

1. INTRODUCTION

Thank you for choosing the MIPRO ACT-2401/ACT-24HC Single-Channel 2.4GHz Wireless Handheld System. This system is engineered to provide high-quality audio transmission and reception for various applications, including vocal performances, presentations, and public speaking. It operates on the 2.4GHz frequency band, offering robust signal stability and extended operational range. Please read this manual thoroughly before operating the system to ensure proper use and optimal performance.

2. SAFETY INFORMATION

- **Power Supply:** Use only the specified power adapter for the receiver. Incorrect voltage may damage the unit.
- **Water and Moisture:** Do not expose the system to rain or moisture. Keep it away from liquids.
- **Heat Sources:** Avoid placing the system near heat sources such as radiators, heat registers, stoves, or other heat-producing apparatus.
- **Ventilation:** Ensure proper ventilation for the receiver. Do not block ventilation openings.
- **Servicing:** Do not attempt to service this product yourself. Refer all servicing to qualified service personnel.
- **Battery Safety:** For the handheld microphone, use only the recommended battery type. Dispose of used batteries responsibly according to local regulations.

3. PACKAGE CONTENTS

Verify that all the following items are included in your package:

- ACT-2401 Single-Channel 2.4GHz Receiver
- ACT-24HC Handheld Wireless Microphone
- Power Adapter for Receiver
- Audio Cable (XLR to 1/4" Phone Jack)

- User Manual (this document)

4. COMPONENT IDENTIFICATION



Figure 4.1: MIPRO ACT-2401 Receiver and ACT-24HC Handheld Microphone. The image displays the ACT-2401 single-channel receiver with two antennas, a display screen showing 'CH01', and control knobs. Above the receiver is the ACT-24HC handheld wireless microphone, featuring a metallic grille and a black body with the MIPRO logo.

4.1. ACT-2401 Receiver Front Panel

- **Antennas:** Two detachable antennas for signal reception.
- **Display Screen:** Shows channel number, battery status, and signal strength.
- **ACT Button:** For Automatic Channel Targeting (ACT) synchronization.
- **Control Knob:** Adjusts volume and navigates menu options.
- **Power Button:** Turns the receiver on/off.

4.2. ACT-2401 Receiver Rear Panel

- **DC Input Jack:** For connecting the power adapter.
- **Balanced XLR Output:** For professional audio connections.
- **Unbalanced 1/4" Phone Jack Output:** For standard audio connections.

4.3. ACT-24HC Handheld Microphone

- **Microphone Grille:** Protects the microphone capsule.
- **Power/Mute Switch:** Turns the microphone on/off and mutes/unmutes.
- **Battery Compartment:** Houses the battery (typically 2x AA batteries).

- **ACT Sync Port:** For infrared synchronization with the receiver.

5. SETUP

Follow these steps for initial setup of your wireless system:

1. **Receiver Placement:** Place the ACT-2401 receiver on a stable, flat surface, away from large metal objects or other wireless devices that may cause interference. Ensure the antennas are fully extended and positioned vertically for optimal reception.
2. **Connect Power:** Connect the provided power adapter to the DC input jack on the rear of the ACT-2401 receiver, then plug the adapter into an AC power outlet.
3. **Connect Audio Output:** Connect the receiver's audio output (XLR or 1/4" phone jack) to the input of your mixer, amplifier, or audio interface using an appropriate audio cable.
4. **Install Microphone Battery:** Unscrew the bottom part of the ACT-24HC handheld microphone to access the battery compartment. Insert fresh batteries (e.g., 2x AA) according to the polarity markings. Securely close the compartment.
5. **Power On:** Press the Power button on the ACT-2401 receiver to turn it on. The display screen should illuminate.
6. **Synchronize Transmitter and Receiver (ACT Sync):**
 - Turn on the ACT-24HC handheld microphone.
 - On the receiver, press the ACT button. The display will show 'ACT' and begin searching for a signal.
 - Align the infrared (IR) port on the microphone (usually near the battery compartment) with the IR sensor on the receiver (often near the ACT button).
 - Hold them steady until the receiver display confirms successful synchronization (e.g., 'SYNC OK' or the channel number stops flashing). The microphone's indicator light should also change to confirm connection.

6. OPERATING INSTRUCTIONS

6.1. Basic Operation

- **Power On/Off:** Use the Power button on the receiver and the Power/Mute switch on the microphone.
- **Volume Adjustment:** Use the control knob on the receiver to adjust the audio output level. Start with a low volume and gradually increase it to avoid sudden loud sounds.
- **Muting the Microphone:** Briefly press the Power/Mute switch on the ACT-24HC microphone to mute the audio output without turning off the microphone. Press again to unmute.

6.2. Channel Selection (if applicable)

While the ACT-2401 is a single-channel system, if you need to re-sync or change the operating frequency within the 2.4GHz band (e.g., due to interference), use the ACT sync process described in Section 5. The receiver will automatically select an optimal clear channel upon synchronization.

6.3. Optimal Performance Tips

- **Line of Sight:** Maintain a clear line of sight between the microphone and the receiver antennas for best performance and range.
- **Antenna Position:** Ensure receiver antennas are not obstructed and are positioned correctly.
- **Interference:** Keep the system away from other 2.4GHz devices (Wi-Fi routers, Bluetooth devices, microwave

ovens) to minimize potential interference.

- **Battery Life:** Monitor the battery indicator on the receiver's display or the microphone itself. Replace batteries promptly when low to avoid signal loss during use.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the receiver and microphone. Do not use liquid cleaners or aerosols.
- **Storage:** When not in use for extended periods, store the system in a cool, dry place. Remove batteries from the microphone to prevent leakage.
- **Antenna Care:** Handle antennas carefully. Do not bend them excessively or apply undue force.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No Sound Output	• Microphone or receiver not powered on. • Microphone muted. • Incorrect audio cable connection. • Receiver volume too low. • Microphone battery low/dead. • Synchronization failed.	• Ensure both units are powered on. • Unmute the microphone. • Check audio cable connections to mixer/amp. • Increase receiver volume. • Replace microphone batteries. • Perform ACT sync again.
Intermittent Sound / Dropouts	• Out of range. • Interference from other 2.4GHz devices. • Obstructions between microphone and receiver. • Low microphone battery.	• Move closer to the receiver. • Relocate receiver away from Wi-Fi routers, etc. • Ensure clear line of sight. • Replace microphone batteries.
Poor Sound Quality / Noise	• Strong interference. • Incorrect gain staging on mixer/amp. • Microphone too far from sound source.	• Try re-syncing to find a clearer channel. • Adjust input gain on your mixer/amp. • Hold microphone closer to the speaker.

9. SPECIFICATIONS

- **System Type:** Single-Channel 2.4GHz Wireless Handheld System
- **Frequency Band:** 2.4 GHz ISM band
- **Operating Range:** Up to 100 meters (line of sight, environment dependent)
- **Receiver Model:** ACT-2401
- **Transmitter Model:** ACT-24HC (Handheld Microphone)
- **Audio Frequency Response:** (Typical values, refer to official specifications for exact range)
- **Total Harmonic Distortion (THD):** (Typical values, refer to official specifications)

- **Dynamic Range:** (Typical values, refer to official specifications)
- **Receiver Outputs:** Balanced XLR, Unbalanced 1/4" Phone Jack
- **Microphone Battery Type:** AA (quantity specified in manual or on device)
- **Receiver Power Supply:** DC (voltage and current specified on power adapter)
- **Item Weight:** 6 pounds (for the complete system package)

10. WARRANTY AND SUPPORT

MIPRO products are designed for reliability and performance. For warranty information, please refer to the warranty card included with your product or visit the official MIPRO website. Keep your proof of purchase for warranty claims. For technical support, troubleshooting assistance beyond this manual, or service inquiries, please contact your authorized MIPRO dealer or distributor. You may also find additional resources and contact information on the official MIPRO website: www.mipro.com.tw

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

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Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question