

# RC2401

## Professional Wireless Audio Guide System

Engineered for global compatibility, the RC2401 operates on the unlicensed 2.4G ISM band, ensuring reliable performance worldwide. Its advanced digital signal processing eliminates interference, delivering crystal-clear audio for professional tours, conferences, and simultaneous interpretation.

Global Frequency

Hi-Fi Audio

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# PRODUCT INTRODUCTION

## OVERVIEW

The RC2401 is a state-of-the-art 2.4GHz wireless audio guide system built for reliability. It delivers interference-free sound to meet the rigorous demands of tour operators, conference planners, and educators across the globe.

## CORE ADVANTAGES

### Global Compatibility

License-free 2.4G ISM band ensures seamless use in any country without regulatory barriers.

### Hassle-free Sync

One-key synchronization technology allows instant pairing between transmitters and receivers.

### All-day Battery

Up to 20 hours of continuous operation eliminates mid-event recharging interruptions.

### Crystal Clear Audio

Advanced noise reduction ensures high-fidelity sound even in crowded environments.



## RC2401 System Applications & Specs

Demonstrating real-world use cases and technical specifications for versatile professional deployment.

## SCENARIOS

Ideal for museum/city tours, factory inspections, corporate training sessions, international conferences, and religious gatherings.

# VERSATILE APPLICATION SCENARIOS

## Guided Tours & Cultural Experiences

**Immersive Site Interpretation:** Perfect for museums, historical landmarks, and city sightseeing tours. Delivers crystal-clear audio to enhance visitor engagement without disturbing the quiet ambiance of cultural spaces.

## Corporate & Industrial Operations

**Professional On-Site Communication:** Ideal for factory walkthroughs, executive VIP visits, and internal team training sessions. Ensures seamless knowledge transfer in complex industrial or corporate environments.

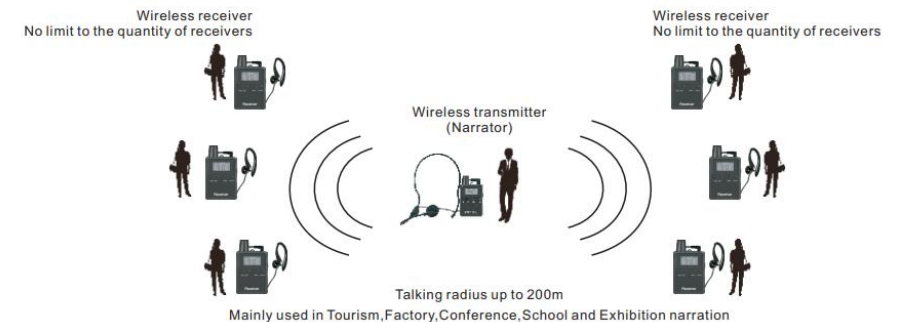
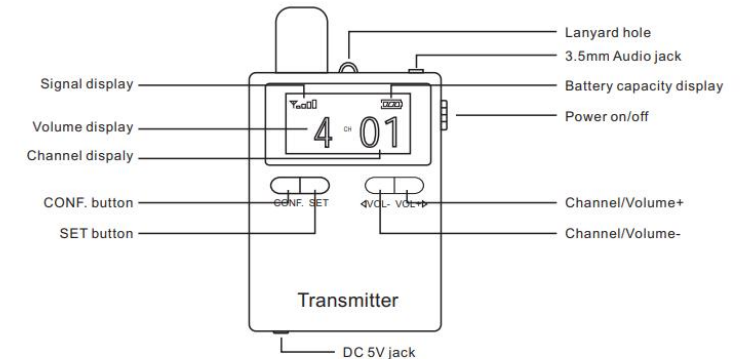
## Global Conferences & Live Events

**Multilingual Event Support:** Enables simultaneous interpretation for international summits, keynote speeches, and panel discussions, breaking language barriers for a diverse audience.

**Model No.: RC2401/2406**  
(with 50/80 channels)

### 1. Buttons and Functions

This product permits one person to speak to hundreds of or thousands of people at one time without noise. It means one Transmitter can work with thousands of Receivers together with long distance.



The RC2401's robust build and flexible audio configuration make it the go-to solution for professional communication across diverse sectors. From silent cultural tours to high-stakes corporate events, it guarantees reliable performance in any setting.

# CORE TECHNOLOGY: UNMATCHED WIRELESS PERFORMANCE

## Frequency Band

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### 2.4GHz ISM Global Standard

Operating within 2403-2483 MHz, this unlicensed band ensures worldwide compatibility and avoids regulatory restrictions for seamless deployment.

### Interference Resistance

Adaptive frequency hopping and advanced modulation techniques minimize signal degradation from other wireless devices in dense environments.

The 2.4GHz band offers the best balance of range and data throughput for industrial and commercial use.

## Transmission Range

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### 1 to 200 Meters Coverage

Delivers reliable connectivity across large venues, from expansive conference halls to sprawling outdoor exhibition areas without signal dropouts.

### Dynamic Power Adjustment

Automatically optimizes transmit power based on distance, extending battery life while maintaining stable long-range communication links.

Ideal for applications requiring wide-area wireless access without the need for expensive repeaters.

## Signal Penetration

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### Obstacle-Ignoring Stability

Engineered to maintain signal integrity through concrete walls, metal structures, and dense foliage, ensuring indoor/outdoor continuity.

### Multi-Path Signal Rejection

Advanced algorithms filter out reflected signals to eliminate ghosting and maintain a strong, clear connection in complex environments.

Experience seamless communication even in the most challenging physical layouts.

# MULTI-FREQUENCY

# STABILITY

## SYSTEM CAPABILITY

Equipped with 50 independent channels, the system creates interference-free wireless communication zones. This eliminates signal conflicts and ensures audio clarity even in the most RF-congested environments.

## KEY PERFORMANCE

### Ample Channel Capacity

50 selectable channels support parallel sessions for large-scale events.

### PLL Synthesized Tech

Precision frequency control eliminates drift and ensures rock-solid stability.

### Intelligent Encryption

Digital scrambling prevents eavesdropping and cross-talk between groups.

### Zero Cross-Interference

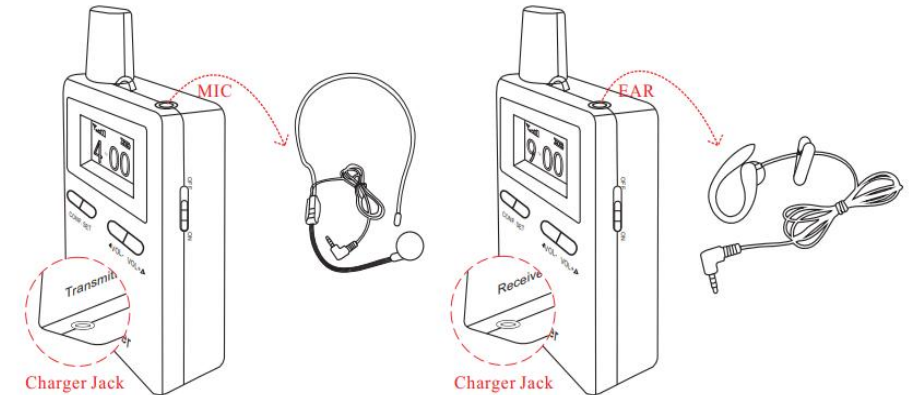
Isolated signal bands allow multiple groups to operate in the same area.

## IDEAL APPLICATIONS

Optimized for large-scale international conferences, simultaneous interpretation services, and complex multi-group tour operations.

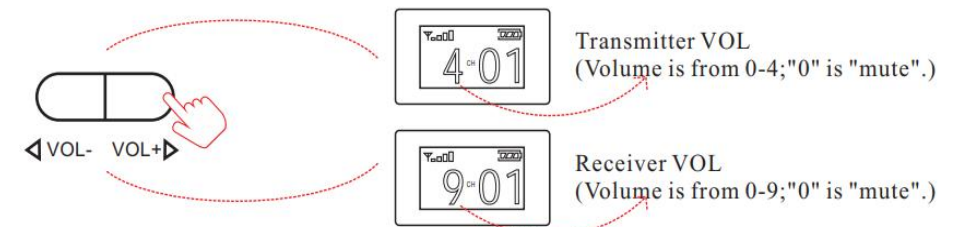
### Step 2: Insert microphone/earphone

Insert MIC into "MIC" jack in transmitter and earphone into "EAR" jack in receiver TIGHTLY. DO NOT put Microphone/Earphone wrongly into charge jack harshly to avoid damage the charging pin inside.



### Step 3: Adjust Volume

Press "Vol-" button to turn down the volume. Press "Vol+" button to turn up the volume. Max volume of transmitter is 4 and max volume of receiver is 9.



## Diverse Usage Scenarios

Suitable for outdoor education, religious gatherings, and professional training.

# CORE TECHNOLOGY: EFFORTLESS MANAGEMENT

## One-Key Sync Function

**180-Meter Range Sync:** Hold CONF. button for 3-5 seconds to pair all receivers instantly within 180m coverage.

**Setup Efficiency:** Eliminates manual pairing for each device, drastically cutting down preparation time.

## One-Key System Shutdown

**Centralized Power Control:** Long-press VOL+ on the main transmitter for 4s to turn off all vice units simultaneously.

**Streamlined Wrap-up:** Simplifies end-of-day workflow without individually managing each receiver.

## User-Centric Interface

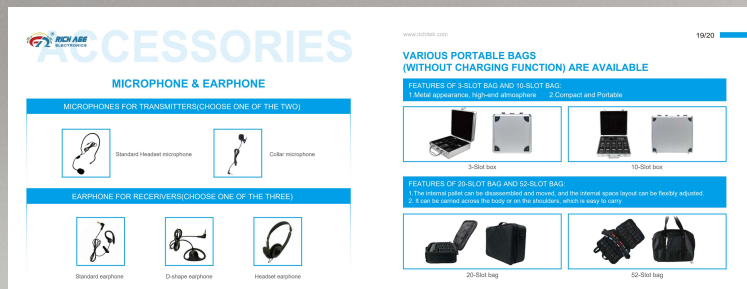
**Low Learning Curve:** Clear button layout and logical menu design enable new users to master operations quickly.

**Operational Ease:** No complex training required, reducing human error during critical events.

## Smart Power Administration

**Unified Power Regime:** Transmitter acts as the hub to control power states of all associated devices.

**Energy Efficiency:** Prevents standby power drain by ensuring all units are powered off together.



## Comprehensive Accessories & Carrying Solutions

A full range of professional accessories, including various microphones, earphones, and portable storage bags, are available to match different usage scenarios. Durable carrying cases in multiple slot configurations ensure safe and convenient transportation of your equipment.

# LONG-LASTING BATTERY LIFE

## OVERVIEW

The RC2401 is built for endurance, delivering reliable power to keep your audio flowing through the longest days. Whether it's a full-day conference or an extended outdoor tour, our battery technology ensures you never miss a beat.

## CORE PERFORMANCE

### 20-Hour Receiver Runtime

Single charge powers full-day tours; 50g compact build for fatigue-free wear.

### Smart Power Management

Optimized circuitry minimizes idle drain for maximum operational efficiency.

### 10-Hour Transmitter Power

Plenty of juice for back-to-back speaking sessions and extended guiding shifts.

### Rapid Recharge Design

Quick top-ups between events ensure minimal downtime during busy schedules.

## IDEAL SCENARIOS

Ideal for all-day international conferences, multi-stop city tours, factory inspections, and outdoor events requiring uncompromised reliability.



RC2401 Specification

Transmitter	
Operating frequency range	2403-2483 MHz
Channel	50
Transmission distance	1-200m
Output Power	10mW
Control mode	PLL synthesized Frequency Synthesis Technology
Channel bandwidth	2MHz
Frequency Range	50HZ--200KHz
Battery	Built-in 3.7V 1500mAh Lithium battery
Working current	120-140mA
Working time	Full charged 10 hours
Color	Black, Iron grey, Silver grey, Red, Orange, Blue
Weight	59g

Receiver	
Operating frequency range	2403-2483 MHz
Channel	50
Transmission distance	1-200m
Output Power	10mW
Control mode	PLL synthesized Frequency Synthesis Technology
Channel bandwidth	200KHZ
Frequency Range	50HZ--12KHz
Battery	Built-in 3.7V 1000mAh Lithium battery
Working current	40-50mA
Working time	Full charged 20 hours
Color	Black, Iron grey, Silver grey, Red, Orange, Blue
Weight	50g

## Field-Tested Reliability

From educational excursions to large-scale gatherings, the RC2401 keeps up.

# TECHNICAL SPECIFICATIONS: TRANSMITTER

Parameter	Specification (Transmitter)	Note
Operating Frequency Range	2403 - 2483 MHz	ISM Band Operation
Number of Channels	50 Channels	Auto-scan supported
Transmission Distance	1 - 200 meters (Line of Sight)	Varies in complex environments
RF Output Power	10 mW (Max)	FCC/CE Compliant
Microphone Compatibility	Headset MIC / Collar MIC (3.5mm)	Optional accessories available
Battery Specification	3.7V 1500mAh Rechargeable Li-ion	Over-charge protection
Continuous Working Time	Approximately 10 Hours	At 50% volume level
Net Weight	~59 Grams	Battery included
Available Colors	Black, Iron Grey	Matte finish

Specifications are subject to change for product improvement. Please confirm with the latest user manual for details.

# TECHNICAL SPECIFICATIONS:

## RECEIVER

Parameter	Transmitter (TX)	Receiver (RX)
Operating Frequency	2403-2483 MHz (ISM Band)	2403-2483 MHz (ISM Band)
Channel Count	50 Channels (Auto-Scan)	50 Channels (Sync-Lock)
Transmission Range	1-200m (Line of Sight)	1-200m (Line of Sight)
RF Output Power	10 mW (Max)	N/A (Receiver Only)
Battery Spec	3.7V 1500mAh Li-ion	3.7V 1000mAh Li-ion
Continuous Runtime	~15 Hours	~20 Hours
Net Weight	~60 g	~50 g
Audio Interface	3.5mm TRS Input	Standard / D-Shape / Headset
Color Options	Black, Silver Grey	Black, Iron Grey

Specifications are subject to change for product improvement. Contact support for detailed compatibility list.

# USER MANUAL: QUICK START GUIDE

## Basic Operations

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### Power On / Off

Pull down the **ON/OFF switch** to activate. The screen will display real-time signal strength, battery level, current volume, and channel information.

### Volume Adjustment

Press **VOL+ / VOL-** to adjust audio levels. TX max level is 4, RX max level is 9 (0 indicates mute mode).

Check the screen display to confirm volume and power status after each operation.

## Channel & Synchronization

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### Channel Selection

Press **SET** to enter selection mode. Use **VOL+/-** to navigate channels, then press **CONF.** to save your choice.

### One-key Auto-Sync

Press and hold **CONF.** on TX for 3-5 seconds. All RX units within 180m will automatically sync to the current channel.

Ensure a clear line of sight between TX and RX for successful synchronization.

## Advanced Controls

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### One-key Shutdown

On the Main TX, long press **VOL+** for 4 seconds to remotely turn off all connected RX devices simultaneously.

### Charging Instructions

Turn off the device before charging. A **red LED flash** means charging; solid light or no flash indicates a full battery.

Disconnect the charger once fully charged to maintain battery health.

# IMPORTANT SAFETY NOTES

## Power Source Safety

**Approved Accessories:** Use only manufacturer-certified power adapters, chargers, and batteries to avoid fire or device damage risks.

**Power Integrity:** Ensure stable voltage input; do not mix old and new batteries to maintain optimal performance.

## Temperature Guidelines

**Operating Range:** Maintain ambient temperature between 0°C and 35°C during use to prevent overheating.

**Storage Conditions:** Store device in -20°C to 45°C environment; avoid direct sunlight or extreme cold exposure.

## Hearing Protection

**Volume Control:** Avoid continuous high-volume playback to prevent permanent hearing impairment.

**Environmental Alert:** Stay aware of your surroundings; reduce volume in noisy areas for situational safety.

## Device Maintenance

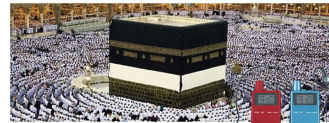
**Repair & Disassembly:** Do not open or repair the device yourself; contact authorized service for technical issues.

**Signal Optimization:** Avoid touching the antenna during operation to maintain stable wireless signal transmission.



RC2401 Specification

RC2401 Specification	
Operating frequency range	2400-2483.5MHz
Channel	16
Transmitting distance	>100m
Class of power	Class 1
Control mode	FM, Infrared, Bluetooth
Channel bandwidth	16KHz
Frequency range	8000-16000Hz
Battery	Rechargeable
Working current	100mA
Working time	Full charge 10 hours
Color	Black, Blue, Red, Green
Weight	15g



RC2406 Specification

RC2406 Specification	
Operating frequency range	2400-2483.5MHz
Channel	16
Transmitting distance	>100m
Class of power	Class 1
Control mode	FM, Infrared, Bluetooth
Channel bandwidth	16KHz
Frequency range	8000-16000Hz
Battery	Rechargeable
Working current	100mA
Working time	Full charge 10 hours
Color	Black, Blue, Red, Green
Weight	15g

## Safety for Longevity

Strict adherence to safety guidelines is essential for the lifespan of your RC2401 system. Proper power management, temperature control, hearing protection, and device care ensure reliable performance and safe operation in all scenarios.

# 5. ACCESSORIES

## Microphones for Transmitters

**Headset Microphone (30g):** Ultra-lightweight design ensures all-day comfort for presenters while delivering crisp, clear voice capture without fatigue.

**Collar Microphone (20g):** Discreet lapel style with optimized sensitivity, perfect for minimizing handling noise in professional speaking scenarios.







## Earphones for Receivers

**In-ear Monitoring Options:** 14g Standard & 17g D-Shape earphones offer ergonomic fit for extended listening; 45g Headset style provides enhanced noise isolation.

**Tailored Comfort:** Select the ideal audio interface to match audience needs, from discreet in-ears to immersive over-head monitoring.

## Complete System Optimization

**Seamless Compatibility:** All accessories are precision-engineered for the RC2401, ensuring zero signal loss and maximum reliability in any environment.

Earphone	Standard		Net weight: 14g;
	Outside D-type earphone		Net weight: 17g
	Headphone		Net weight: 45g
Accessory ②	Type	Picture	Specification
	1 cord		Charging 1 device at a time; N.W.: 0.04kg
	10 cords		Charging 10 devices at a time; N.W.: 0.49kg; Size: 150*65*39mm
			

The RC2401 ecosystem is designed for flexibility. Our comprehensive accessory chart (shown above) details every component, empowering you to build a system tailored to your event's unique requirements, from intimate meetings to large-scale conferences.

# ACCESSORIES: EFFICIENT CHARGING SOLUTIONS

Charger Type	Capacity	Key Features
1-to-1 Charger	Single device charging	Universal voltage compatibility, compact & simple design
1-to-10 Charger	10 devices simultaneously	Space-saving form factor, high-speed concurrent charging
32-Slot Charger Case	32 devices capacity	IP-rated waterproof, portable cross-body suitcase style
40-Slot Charger Case	40 devices capacity	4-wheel mobility, detachable power system, waterproof
50-Slot Charger Case	50 devices capacity	Heavy-duty aluminum frame, rugged waterproof protection
60-Slot Charger Case	60 devices capacity	Dual-wheel transport, massive power bank, waterproof

All products are designed for professional event logistics. Specifications may vary by region.

# ACCESSORIES: PROTECTIVE & PORTABLE STORAGE

Bag Type	Capacity	Key Features
3-Slot Compact Bag	Holds up to 3 devices	Waterproof material, lightweight design for short trips
10-Slot Storage Bag	Holds up to 10 devices	Waterproof, reinforced padding for device protection
20-Slot Carry Bag	Holds up to 20 devices	Waterproof, equipped with cross-body/shoulder strap for mobility
52-Slot Professional Bag	Holds up to 60 devices (max capacity)	Heavy-duty waterproof shoulder bag, ideal for large-scale events

All bag dimensions and capacities are approximate. Contact support for bulk order customization.

# ABOUT US: SHENZHEN RICH AGE ELECTRONICS

## Company Profile

Shenzhen Rich Age Electronics Co., Ltd. is a professional manufacturer specializing in wireless audio equipment, with a focus on delivering high-quality wireless tour guide systems, audio guide equipment, and conference systems. With 12 years of excellence in audio R&D, the company is committed to providing innovative solutions for guided tours, museum guides, factory tours, and simultaneous interpretation. It also offers comprehensive OEM/ODM services to meet customized requirements.

## Key Strengths

- Experience: 12 years of dedicated audio R&D.
- Factory Scale: Spanning an area of 213,000 m<sup>2</sup>.
- Workforce: Over 400 employees, including a dedicated R&D team of more than 30 professionals.
- Intellectual Property: Proud holder of over 60 patent certificates.

## Global Certifications

The company and its products are certified to ISO9001, BSCI, CE, RoHS, 3C, EMC, LVD, and RED standards, ensuring compliance and quality for international markets.



2007

Brand Established

8,500 m<sup>2</sup>

Ssq.m | Smart  
Production Facility

100+

Global Partners

Core tenet: Innovate through technology, deliver premium audio value for global clients.

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01  
Seminar



02  
Guided tour



03  
Major conference



04  
Factory Tour



# 8. CONTACT US

Shenzhen Rich Age Electronics Co., Ltd.

**Website:** [www.richitek.com](http://www.richitek.com)

**Email:** [info@richitek.com](mailto:info@richitek.com)

**Phone:** +86-13825295213 / +86-18922879583

**Address:** 3F, D1 Building, Yiyue Qingchuang Industrial Park, Bao'an District, Shenzhen, China



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