LMBGM AR9 Pro-1

LMBGM AR9 Pro-1 UHF Mono Wireless In-Ear Monitor System User Manual

Model: AR9 Pro-1

1. Introduction

The LMBGM AR9 Pro-1 is a professional UHF Mono Wireless In-Ear Monitor System designed for studio, band rehearsal, and live performance environments. It provides precise and synchronized stage monitoring with advanced anti-interference technology and low latency.


CH:009
580.500
MHz
AF MIC-IN
MIC
CH
POWER
RF
ON
CH01
572.500MHz
RF AF MUTE
LMBGM®

Figure 1: LMBGM AR9 Pro-1 System Components
This image displays the main components of the AR9 Pro-1 system, including the compact transmitter unit, the beltpack receiver with an antenna, and a pair of in-ear earbuds connected to the receiver.

2. Package Contents

Please verify that all items are present in your package:

- AR9 Pro-1 UHF Transmitter
- AR9 Pro-1 Beltpack Receiver
- In-Ear Earbuds (Ear Cushions included)
- USB Charging Cable (A2C dual USB charging cables)
- User Manual (this document)

3. Product Features

- **Professional Mono Transmission:** Wide frequency range of 50Hz-20kHz with less than 5ms delay for precise monitoring.
- **Intelligent Dynamic Limiting:** Automatically suppresses overload signals and eliminates pop distortion for pure sound quality.
- **TFT Color Display:** High-quality display panel on the receiver shows battery indicator, signal strength, and channel information.
- **Durable Construction:** Lightweight and sturdy metal aluminum case, resistant to drops and shocks.
- **Extended Wireless Range:** Stable operating range of 250 to 350 feet (up to 300 feet nominal).
- **Advanced Anti-Interference:** Ensures pure sound without delay or distortion.
- **UHF Band PLL System:** Frequency range 550 MHz-580 Mhz with 16 switchable frequencies. Improves overall performance, anti-frequency dropout, and anti-crosstalk.
- **Dynamic Expansion Circuit:** Significantly improves signal-to-noise ratio.

Figure 2: TFT Color Display on Receiver

This image highlights the receiver's TFT color display, which provides real-time information such as the selected channel (CH01, CH16), frequency (572.500MHz, 573.500MHz), RF and AF signal levels, mute status, and battery life. It also shows the indicator lights and metal bezel design.

Figure 3: UHF Transmission and Charging

This image illustrates the UHF transmission technology and the charging capability of the AR9 Pro-1 system. It shows both the transmitter and receiver connected to a power source via A2C dual USB charging cables, indicating a working time of 5-8 hours and a charging time of 3-4 hours.

Figure 4: Extended Transmission Range and Low Latency

This image demonstrates the AR9 Pro-1's capability for a 50-meter transmission distance, highlighting its UHF technology for anti-interference and broad frequency range, along with its impressive less than 5ms latency for real-time monitoring.

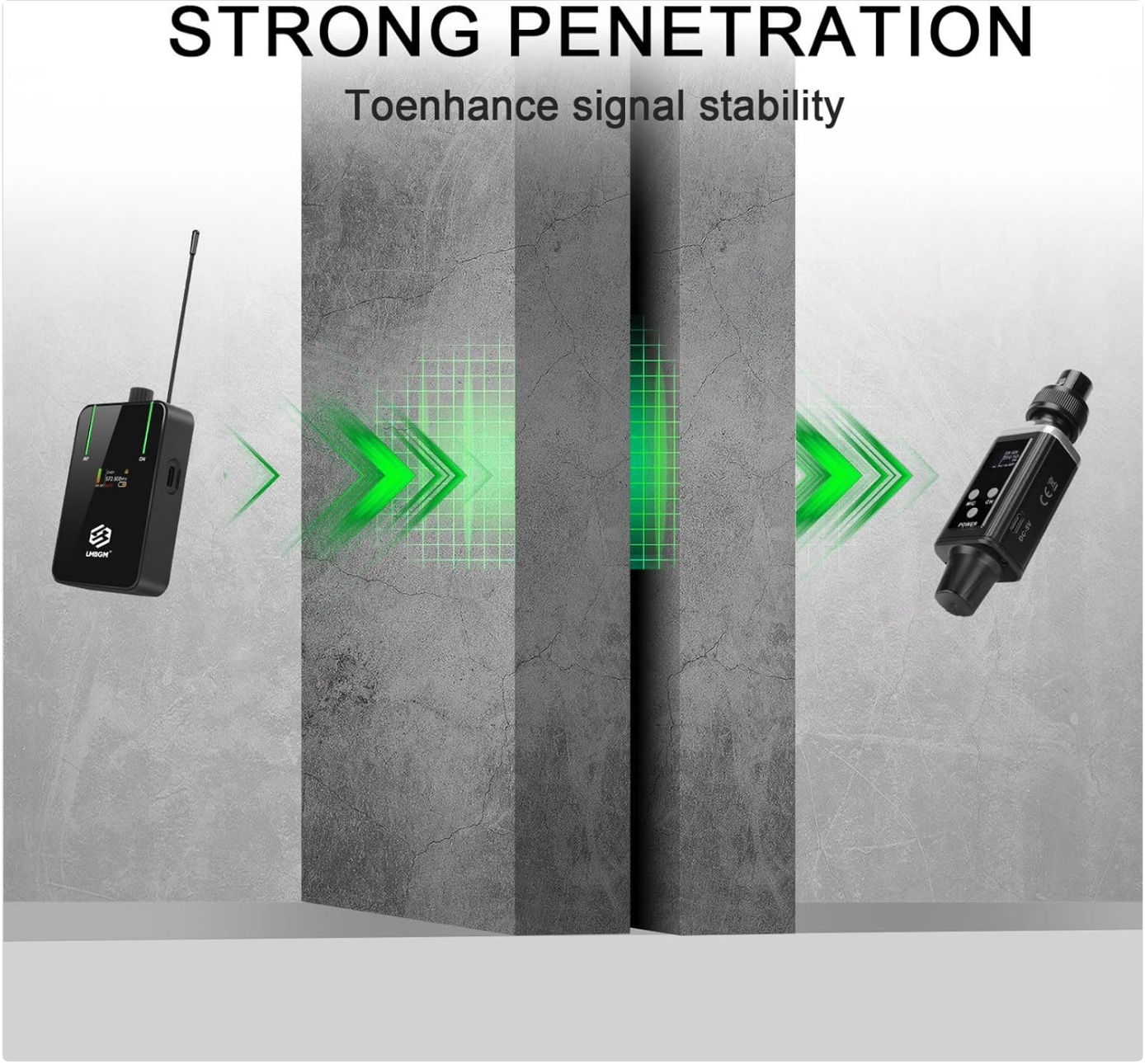

Figure 5: Strong Signal Penetration
This image visually represents the strong signal penetration capability of the AR9 Pro-1 system, showing how its signal can pass through obstacles to enhance signal stability and reliability in various environments.

4. Setup Guide

4.1 Charging the Devices

Before first use, ensure both the transmitter and receiver are fully charged. Use the provided USB charging cable to connect them to a 5V USB power adapter (not included).

- Charging time: Approximately 3-4 hours.
- Working time: Approximately 5-8 hours on a full charge.

4.2 Connecting the Transmitter

The AR9 Pro-1 transmitter can be connected to various audio sources:

1. **Mixing Console:** Insert the transmitter directly into an available XLR or 6.35mm (1/4 inch) output on your mixing console.

2. **Dynamic Wired Microphone:** The transmitter can act as a wireless adapter for a dynamic wired microphone. Connect your microphone to the transmitter's input.
3. **Mixing Soundcard:** Connect the transmitter to the output of your mixing soundcard.

Figure 6: Transmitter Connection Options
This diagram illustrates the versatility of the AR9 Pro-1 transmitter, showing its compatibility with a mixing console, a dynamic wired microphone, and a mixing soundcard via XLR or 6.35mm jack connections.

4.3 Connecting the Receiver and Earbuds

Connect the provided in-ear earbuds to the 3.5mm headphone jack on the beltpack receiver. Secure the receiver to your belt or clothing using the integrated clip.

5. Operating Instructions

5.1 Powering On/Off

Press and hold the **POWER** button on both the transmitter and receiver to turn them on or off.

5.2 Channel Selection

The system supports 16 switchable frequencies within the 550 MHz-580 Mhz UHF band. To change the channel:

1. On the transmitter, press the **CH** button to cycle through available channels.
2. On the receiver, use the **MENU** and **RET** buttons (or similar navigation buttons) to select the desired channel to match the transmitter.
3. Ensure both devices are set to the same channel for proper operation.

5.3 Volume Control

Adjust the monitoring volume using the volume control knob on the beltpack receiver.

5.4 Monitoring Your Audio

Once connected and powered on, the system will transmit audio from your source to the receiver. You can monitor your vocals or instrument sound directly through the in-ear earbuds.

Figure 7: In-Ear Monitor System in Use

This image shows a singer utilizing the AR9 Pro-1 system. The transmitter is connected to her wired microphone, allowing her to monitor her own vocals without accompaniment, while the receiver is discreetly worn on her belt.

Figure 8: UHF Wireless In-Ear Monitor System for Musicians
This image depicts a musician performing with a keyboard and microphone, benefiting from the AR9 Pro-1 UHF wireless in-ear monitor system for clear and untethered audio monitoring.

Figure 9: Multi-Scenario Use
This image demonstrates the versatility of the AR9 Pro-1 system for multi-scenario use, showing multiple performers (singers and a guitarist) simultaneously utilizing the in-ear monitors for music composition, band rehearsals, and live performances.

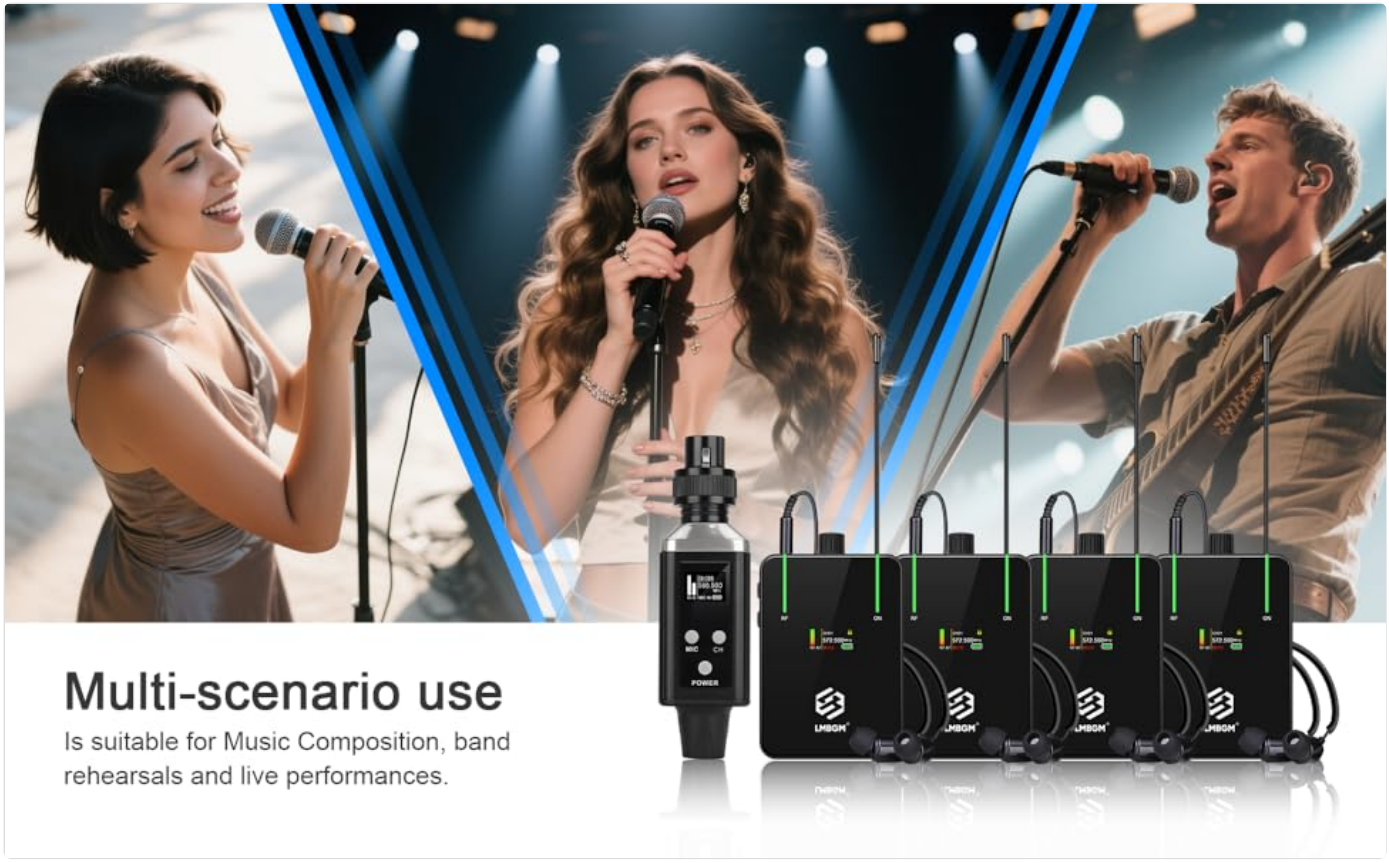

Figure 10: Guitarist Using Wireless In-Ear Monitor System
This image features a guitarist on stage, actively using the LMBGM AR9 Pro-1 UHF wireless in-ear monitor system to receive clear audio feedback during a live performance, emphasizing the system's utility for instrumentalists.

6. Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the surfaces of the transmitter and receiver. Do not use liquid cleaners or solvents.
- **Storage:** Store the system in a cool, dry place away from direct sunlight and extreme temperatures when not in use.
- **Battery Care:** For optimal battery life, avoid fully discharging the batteries frequently. Charge them regularly, even if the system is not in constant use.
- **Earbuds:** Clean ear cushions regularly with a damp cloth. Replace ear cushions if they become worn or damaged.

7. Troubleshooting

Problem	Possible Cause	Solution
No sound from earbuds	Receiver/Transmitter off Low battery Incorrect channel Earbuds not connected or faulty Source device not sending audio	Ensure both units are powered on. Charge both units fully. Verify transmitter and receiver are on the same channel. Check earbud connection; try another pair if available. Confirm audio output from your mixing console/soundcard.
Interference or static	Nearby wireless devices Obstructions Weak signal	Change to a different frequency channel. Reduce distance between transmitter and receiver. Ensure line of sight is clear of major obstructions (e.g., thick walls).
Short battery life	Batteries not fully charged Aging batteries	Ensure full charge cycle (3-4 hours). If batteries are old, performance may degrade over time.

8. Specifications

Feature	Detail
Model Name	AR9 Pro-1
Brand	LMBGM
Connectivity Technology	Wireless (RF)
Wireless Frequency Range	UHF 550 MHz-580 Mhz
Number of Channels	16
Frequency Response	50Hz-20kHz (System), 20.2 Hz (Headphones)
Latency	<5ms
Transmission Distance	Up to 300 feet (250-350 feet stable)
Headphones Jack	3.5 mm Jack

Feature	Detail
Impedance	16 Ohm
Sensitivity	95 dB
Noise Control	Active Noise Cancellation
Material	Metal
Item Weight	13.4 ounces
Power Source	3 Nonstandard Battery batteries (included)
Working Time	5-8 hours
Charging Time	3-4 hours

Figure 11: Product Dimensions

This image provides the physical dimensions of both the AR9 Pro-1 transmitter and the beltpack receiver, showing measurements in both centimeters and inches for various parts of the devices.

9. Warranty and Support

For warranty information and technical support, please refer to the official LMBGM website or contact your retailer. Keep your purchase receipt for warranty claims.

Manufacturer: LMBGM

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