



### Configuration:

LW-215-04-09

### Product Overview:

The ListenWIFI Audio Server LW-215-04-09 delivers four channels of audio to up to 500 users, seamlessly integrating with your existing Wi-Fi network for streaming directly to guests' smartphones via the free ListenWIFI mobile app or to dedicated LWR-1050 Wi-Fi Audio Receivers within the venue. This server is perfect for ensuring compliance with assistive listening needs or overcoming challenging audio environments, providing crystal-clear audio to your guests.

ListenWIFI servers are scalable and flexible, easily expanded by adding more servers to accommodate larger audiences and more channels. They also feature automated channel selection, which connects listeners to the correct audio channel based on their location when used with LA-490 beacons.

The user-friendly ListenWIFI Windows® software allows for comprehensive management of ListenWIFI servers and other products, including mobile apps, receivers, and beacons. It enables customization of mobile apps to align with your venue's branding, including tailoring welcome messages, incorporating sliding banners, and promoting special offers, all integrated smoothly through the ListenWIFI Manager software.

Ideal for diverse settings such as classrooms, places of worship, and theaters, the ListenWIFI Audio Server offers superior audio quality and low latency, making it an outstanding choice for enhancing auditory experiences across various venues.

### Highlights:

- **Supports local assistive listening requirements** - with compliant receivers and neck loops
- **Flexible listening options** - Dedicated receivers or guests' own smartphone
- **Uses existing wireless network (Wi-Fi)** - provides broad venue-wide coverage
- **Scalable solution**- seamlessly add more servers for additional channels/users
- **Up to 500 users** - scalable with more servers
- **4 channels per server** - scalable with more servers
- **Analog inputs** - professional balanced terminal block inputs
- **Superior audio performance** - Industry-leading latency
- **Network flexibility** - supports small networks to large enterprises
- **Supports triggered audio** - using LA-490 Beacons
- **QR code channel access** - mobile apps scan QR codes for channel selection
- **Public Address override** - venue wide broadcasts for public announcements
- **LW Manager software** - Complete setup and management system (Windows®)

### Includes:

One (1) LW-215-04-09 ListenWIFI 4 Channel Wi-Fi Audio Server One (1) Power Supply One (1) Set of Rack Mount Ears One (1) 1.83M (6 ft.) CAT6 Cable One (1) Quick Start Guide

| Product Specification: ListenWIFI 4 Channel Wi-Fi Audio Server (NEW) |   |
|--|---|
| Physical   |   |
| Dimensions -H x W x D  | 45mm x 483mm x 117mm (1.77in x 19.02in x 4.6in) |
| Unit Weight  | 1.6 kg (3.5 lbs)                                |
| Shipping Weight  | 2.6 kg (5.8 lbs)                                |
| Rack Space   | 1 RU (rack ears included)                       |

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| Enclosure material   | Powder Coated Stainless Steel   |
| Color  | Dark Grey   |
| Power Button w/LED   | Chrome-plated steel with built in LED   |
| <b>Audio</b>   |   |
| Audio Output Method  | RJ-45 Ethernet Port   |
| Frequency Response (system)  | 20 Hz - 20 kHz $\pm$ 1dB (at nominal level)   |
| Distortion (system)  | < 1% Total Harmonic Distortion (at nominal level)   |
| Signal to Noise Ratio (system)                                       | > 74 dB (at nominal level)  |
| Dynamic Range (system)   | 86 dB (at maximum level)  |
| Latency (system)   | 40-60 ms, dependent on network, traffic, QOS, and listening device  |
| <b>Interconnections</b>  |   |
| Balanced Audio Inputs  | Terminal Blocks: Four analog inputs, rear panel, one terminal block connector per input, balanced, +4 dBu (line) nominal input level, +16 dBu maximum input level, impedance 100k ohm |
|  | *Stereo operation requires the use of two inputs  |
| Public Address (PA) input trigger level                              | Channel override occurs when audio is detected 23 dB below nominal input. Terminal Blocks: -19 dBu (nominal +4 dBu)   |
| Ethernet   | RJ-45 supports 10/100/1000 Mbps speed. LED indicators: LEFT LED = Amber (Link), RIGHT LED = Green (Activity) regardless of speed. Maximum 100m (328') CAT5/6 cable length             |
| <b>Communications</b>  |   |
| IP Address   | DHCP, Static, Reserved  |
| Prioritization   | QoS/ToS   |
| Users  | 500 per server - Multiple servers may be used to increase the number of users.  |
| Max Channels   | 4 mono (2 stereo) - Multiple servers may be used to increase the number of channels.  |
| WAP Support  | 802.11n or better with WMM (Wireless Multi-Media) enabled   |
| Bandwidth (audio)  | 125 kbps per listening device   |
| Bit depth  | 16 bits   |
| Sampling Rate  | 48 kHz  |
| Transport Protocols  | Unicast RTP, UDP, HTTPS   |
| Discovery Protocols  | mDNS, DNS-SD, DNS   |
| Security   | TLS 1.2 (AES 128 bit)   |
| Latency (system)   | 40-60 mS, dependent on network, traffic, QOS, and listening device  |
| Supported Listening Devices  | iOS and Android personal smartphones supported with the ListenWIFI mobile app installed. Free download from the Google Play and Apple App stores.                                     |
|  | LWR-1050 Wi-Fi Audio Receivers - for dedicated applications, for compliance, for use as backup devices, for accessibility requirements, etc.  |
| <b>Controls and Indicators</b>                                       |   |
| User Controls  | Power button (front), Reset button (rear)   |
| Power Button LED   | Flashing blue - server is booting up establishing network connection; Solid blue  |

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|--|---|
|  | - server is fully booted with valid network connection ; Rapid flash blue - server firmware is being updated or reset to defaults   |
| Setup/Programming  | Free software available for on-premise central management of all Wi-Fi audio servers on the network. The ListenWIFI Manager software provides central management of the entire ListenWIFI system, including Servers, Beacons, Receivers, and Mobile Apps. Software also facilitates checkout / check-in of receivers, as well as mobile app customizations to support venue branding. |
| <b>Power Supply</b>  |   |
| Connector  | USB-C   |
| Input Voltage  | 100-240 VAC, 50-60Hz  |
| Output Voltage   | 5 VDC   |
| Current  | 2.4 A   |
| Power  | 12 W  |
| <b>Environmental</b>   |   |
| Temperature - Operation  | -10 °C (14 °F) to +40 °C (104 °F)   |
| Temperature - Storage  | -20 °C (-4 °F) to +50 °C (122 °F)   |
| Relative Humidity  | 0 to 95% relative humidity, non condensing  |
| <b>Compliance</b>  |   |
| Regulatory Standards   | UL, FCC, CE, ROHS, UKCA   |
| <b>Warranty</b>  |   |
| Server Warranty  | 2 years   |
| *Specifications are subject to change without notice                 |   |