


## Configuration:

LW-110-02-01 (North America, Plug B)

LW-110-02-02 (United Kingdom, Plug G)

LW-110-02-03 (European Union, Plug F)

LW-110-02-04 (Australia, Plug I)

## Product Overview:

The ListenWIFI Audio Server LW-110-02 is capable of broadcasting 2 channels of analog audio to audiences of up to 500 users. Connect to your existing Wi-Fi network and stream real-time audio directly to your guests' personal smartphones via our free ListenWIFI mobile app. Additionally, it can transmit audio directly to dedicated LWR-1050 Wi-Fi Audio Receivers within the venue. Whether you're ensuring assistive listening compliance or addressing challenging audio environments, rest assured that your guests will receive crystal-clear messages with the use of ListenWIFI.

ListenWIFI servers are scalable and flexible. Additional ListenWIFI servers can seamlessly join the network, enabling higher channel counts and accommodating more users. ListenWIFI servers also support an automated channel selection where listeners are automatically connected to the appropriate audio channel based on their location. Simply integrate LA-490 beacons with the ListenWIFI server.

The ListenWIFI Windows® software provides a user-friendly interface for configuring and overseeing your ListenWIFI servers as well as other ListenWIFI products within your venue. These include servers, mobile apps, receivers, and beacons. With this powerful tool, you can customize mobile apps to align with your venue's branding. Tailor welcome messages, incorporate sliding banners, display channel names and images, promote special offers, and share essential documents—all seamlessly integrated through the ListenWIFI Manager software.

From classrooms to houses of worship, theatres and more, the ListenWIFI Audio Server stands as an exceptional choice for assistive listening. Experience superior audio quality and industry-leading low latency audio at your venue with ListenWIFI.

## Highlights:

- **Global ALS solution** – worldwide compliance (with 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
- **2 channels per server** – scalable with more servers
- **Analog inputs** – consumer and professional
- **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-110-02 ListenWIFI 2 Channel Wi-Fi Audio Server One (1) Power Supply One (1) 1.83M (6 ft.) RCA Cable One (1) 1.83M (6 ft.) CAT6 Cable One (1) Quick Start Guide

Listen Technologies Corporation * 14912 Heritage Crest Way * Bluffdale * Utah 84065-4818 U.S.A.
+1.801.233.8992 * +1.800.330.0891 North America * +1.801.233.8995 Fax
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| Product Specification: ListenWIFI 2 Channel Wi-Fi Audio Server | |
|---|---|
| **Physical** | |
| Dimensions -H x W x D | 45mm x 170mm x 117m (1.77in x 6.69in x 4.6in) |
| Unit Weight | .59 kg (1.3 lbs) |
| Shipping Weight | 1.6 kg (3.6 lbs) |
| Rack Space | 1RU 19" rack (requires LW-327 rack mount kit) |
| Enclosure material | Powder Coated Stainless Steel |
| Color | Dark Grey |
| Power Button w/LED | Chrome-plated steel with built in LED |
| **Audio** | |
| Audio Output Method | RJ-45 Ethernet Port |
| Frequency Response (system) | 20 Hz - 20 kHz ± 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 |
| **Interconnections** | |
| Balanced Audio Inputs | Terminal Blocks: Two 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 |
| RCA Audio Inputs | RCA: Two analog inputs, rear panel, one dual summing RCA connector per input, unbalanced, -10 dBu (line) nominal input level, +2 dBu maximum input level, impedance 100k ohm |
| | *Stereo operation requires the use of both inputs |
| Public Address (PA) input trigger level | Channel override occurs when audio is detected 23 dB below nominal input level. Terminal Blocks: -19 dBu (nominal +4 dBu) RCA Connectors: -33 dBu (nominal -10 dBu) |
| Ethernet | RJ-45 supports 10/100/1000 Mbps speed. Green LED flashes at 100 Mbps, Yellow LED flashes at 1000 Mbps. Maximum 100m (328') CAT5/6 cable length |
| USB | Type A 2.0 (female) - supports reset to defaults USB drive |
| **Communications** | |
| 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 | 2 mono (1 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 |

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| Product Specification: ListenWIFI 2 Channel Wi-Fi Audio Server | |
|---|---|
| Security | TLS 1.2 (AES 128 bit) |
| USB | 2.0 |
| 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. |
| **Controls and Indicators** | |
| User Controls | Power Button |
| Power Button LED | Flashing blue - server is booting up establishing network connection; Solid blue - 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. |
| **Power Supply** | |
| Connector | 5 VDC Barrel (center positive) |
| Input Voltage | 100-240 VAC, 50-60Hz |
| Output Voltage | 5 VDC |
| Current | 6.0 A |
| Power | 30 W |
| Configurations | 01 = North America Plug Type B; 02 = United Kingdom Plug Type G; 03 = European Union Plug Type F; 04 = Australia, Plug Type I |
| **Environmental** | |
| Temperature - Operation | -10 ºC (14 ºF) to +40 ºC (104 ºF) |
| Temperature - Storage | -20 ºC (-4 ºF) to +50 ºC (122 ºF) |
| Relative Humidity | 0 to 95% relative humidity, non condensing |
| **Compliance** | |
| Regulatory Standards | UL, FCC, CE, ROHS, UKCA |
| **Warranty** | |
| Server Warranty | 2 years |
| | |
| *Specifications are subject to change without notice | |

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