



#### Configuration:

LW-210-04-01 (North America, Plug B)

LW-210-04-02 (United Kingdom, Plug G)

LW-210-04-03 (European Union, Plug F)

LW-210-04-04 (Australia, Plug I)

#### Product Overview:

The ListenWIFI Audio Server LW-210-04 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:

- **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
- **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-210-04 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

##### Physical

Product Specification: ListenWIFI 4 Channel Wi-Fi Audio Server	
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)
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 $\pm$ 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
Interconnections	
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. 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	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)
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

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	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 °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
Compliance	
Regulatory Standards	UL, FCC, CE, ROHS, UKCA
Warranty	
Server Warranty	2 years
*Specifications are subject to change without notice	