LISTEN
TECHNOLOGIES

Configuration:

LW-210-16-01 (North America, Plug B)

LW-210-16-02 (United Kingdom, Plug G)

LW-210-16-03 (European Union, Plug F)

LW-210-16-04 (Australia, Plug I)

Product Overview:

The ListenWIFI Audio Server LW-210-16 is capable of broadcasting 16 channels of 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
- **16 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-210-16 ListenWIFI 16 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 16 Channel Wi-Fi Audio Server (COMING SOON)
Physical

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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 ± 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: Sixteen 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 channels require the use of two inputs
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	16 mono (8 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 app installed. Free download from the Google Play and Apple App stores.
	LWR-1050 Wi-Fi Audio Receivers - for dedicated applications, for compliance,

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	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 Marks	UL, FCC, CE, ROHS, UKCA
Warranty	
Server Warranty	2 years
*Specifications are subject to change without notice	