## **Configurations**

LWS-02-A1, 2 Channel Wi-Fi System with 2 Receivers (North America)

LWS-02-E2, 2 Channel Wi-Fi System with 2 Receivers (United Kingdom)

LWS-02-E3, 2 Channel Wi-Fi System with 2 Receivers (European Union)

LWS-02-E4, 2 Channel Wi-Fi System with 2 Receivers (Australia)

## **Architectural Specs**

Furnish and install an audio over Wi-Fi assistive listening system (ALS) for use in hard to hear environments and for the hearing-impaired. The Wi-Fi Audio Server shall be capable of broadcasting live, low latency audio over an existing local area network to listening devices on both the 2.4 GHz and 5.0 GHz unlicensed Wi-Fi bands. The server shall be rack mountable in 1 RU 19" rack space, with no user control interface on the server to prevent tampering and facilitate easy setup and operation via software control. Listening devices shall include smart phones and tablets with the ListenWIFI mobile app installed, as well as dedicated Wi-Fi Audio Receivers for assistive listening compliance or as backup devices. The system shall support 2 audio channels for 500 listening devices and shall be expandable by adding additional servers.

The Wi-Fi Audio Receivers shall be simple to operate with a power, volume up and down buttons, and channel select buttons. The receivers shall have a 3.5mm TRRS CTIA compliant headphone connection, allowing operation with standard headphones, ear speakers, and neck loops. The receivers shall be powered with a replaceable, non-proprietary lithium-ion battery, and incorporate automatic charging circuitry via a USB micro connection.

The ListenWIFI mobile app shall have the ability to be customized via software to meet the venue's branding requirements. These customizations include a welcome screen, app theme title and colors, sliding banners, channel images, URL hyperlinks, and PDF documents with custom categorization.

The system shall employ full encryption of control and data communications, ensuring security and complete confidentiality end to end. The system shall support automatic triggering of audio channels when combined with optional Listen beacons, providing a truly automated experience with automatic channel

selection based on the listening device's location and proximity to beacons. The ALS system shall provide a signal-to-noise ratio of 74 dB or greater to listening devices (end to end) and shall have an audio frequency response of 20 Hz - 20 kHz ( $\pm 1$  dB).

The system shall be set up and managed via the ListenWIFI Manager installed software, which shall not be required during runtime. The software shall support full configuration and management of a venues ListenWIFI audio system, including servers, mobile apps, receivers, and beacons. The Manager software shall have an integrated firmware update tool for all system components.

The LWS-02, 2 Channel Wi-Fi System with 2 receivers is specified.