

User Manual

LA-490 Bluetooth/IR Beacon





Dear Valued Customer,

Thank you for choosing Listen! We are dedicated to providing you with the highest quality products available and take pride in delivering outstanding performance to ensure you are completely satisfied. We independently certify each of our products to the highest quality standards and back them with a limited lifetime guarantee. We are available to answer any questions you might have during installation or in the operation of our products. At Listen, it's all about you, should you have any comments or suggestions we're here to listen.

Here's how to reach us:

+1.801.233.8992 +1.800.330.0891 North America

+1.801.233.8995 fax support@listentech.com www.listentech.com

Thank you and enjoy your listening experience!

Best regards,

Russell Gentner and the Listen Team

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Introduction

The LA-490 Listen Bluetooth/IR Beacon (the 'Beacon') is a small, battery-powered or USB powered device that transmits a Bluetooth™ low-energy (BLE) and/or Infrared (IR) signal that can be detected by other devices (e.g., receivers, smartphones or other devices capable of receiving the signal) to trigger audio or events by the receiving device in a variety of applications. This includes applications such as Training and Collaboration, Assistive Listening, Guided Tour Groups, Language Interpretation/Translation, Event Production and Intercom.

The Beacon works by periodically waking up, transmitting this signal via short-range radio (BLE and/or IR) and then returning to a low-power state. The Beacon has no user interface (UI), cellular or GPS capabilities. The Beacon's identity is encoded within the signal it transmits and includes a sub-segment device type.

This product can be used for residential or commercial purposes. It is considered improper use when used for any application not named above. Listen Technologies does not accept liability for damage arising from improper use or misuse of this product and its attachments/accessories. Before putting the products into operation, please observe the respective country-specific regulations.

Important Information

Read the following Information before you use your Listen LA-490 Beacon.

This device is a proximity Beacon operating in the 2.4 GHz frequency band from 2.400 GHz to 2.482 GHz at a maximum power of -1.5 dBm. The usage of this device is generally allowed in the United States, Canada, all EU countries, Australia, New Zealand, Singapore, and Hong Kong. Product labeling information such as serial number, manufacturer, and additional regulatory information is found on the product label on the back of the device or in the battery compartment. To view, remove device from the mounting bracket.

Recycling

Help Listen Technologies protect the environment! Please take the time to dispose of your equipment properly.



Product Recycling Instructions

Please do NOT dispose of your Listen Technologies equipment in the household trash. Please take the equipment to an electronics recycling center; OR, return the product to the factory for proper disposal.



Battery Recycling Instructions

Please do NOT dispose of batteries in the household trash. Please take the batteries to a retail or community collection point for recycling.

Important Safety Instructions

Read the following Information before you use your Listen LA-490 Beacon.

Important Safety Instructions



Caution

1. Read safety instructions and the instruction manual of the product.
2. Keep safety instructions and the instruction manual of the product. Always include all instructions when passing the product on to third parties.
3. Heed all warnings and follow all instructions.
4. Do not expose to direct sunlight for long periods of time.
5. Do not store near heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
6. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, when the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Safety Instructions for Alkaline Batteries



Warning

This product uses (2) AA Alkaline Batteries.
Always take care to insert batteries correctly according to the designation of polarity ($\oplus$ and $\ominus$) on the batteries and the equipment.
Do not short-circuit batteries.
Do not charge batteries.
Discard and replace any leaking batteries.
Exhausted batteries should be immediately removed from the equipment and disposed of properly.
Do not dispose of batteries in fire.
Keep batteries out of the reach of children.

LA-490 Beacon Quick Reference



1. **Status LED:** Flashes blue under normal operation, flashes red when batteries need to be replaced. Alternates between flashing red and amber when in programming mode.
2. **USB Power/Programming Connector:** Powers the device via a USB power supply or allows programming while connected to a PC.
3. **Battery Access:** Powers the device with 2 AA Alkaline batteries.
4. **Cable Trough:** Route and retain power supply cable.
5. **Mounting Holes:** Allows mounting to wall or standard electrical box.
6. **Retaining Tab:** Retains the Beacon in the mounting bracket.
7. **Cable Access:** Allows cable access from the electrical box through the mounting bracket.
8. **Locking Screw:** Locks Beacon into the mounting bracket to resist tampering.

Unpackage

Unpack all contents from the box:

- (Qty 1) LA-490 Bluetooth/IR Beacon
- (Qty 2) AA Alkaline Batteries
- (Qty 1) Optional USB Power Supply
- (Qty 1) Mounting Hardware
- (Qty 1) Quick Start Guide

Installation

1. Choose a mounting location with an unobstructed line of sight view of the desired trigger area.
2. Attach the mounting bracket using the provided hardware/mounting holes or use other mounting alternatives.
3. Insert 2 AA Alkaline batteries or power the device with the optional USB power supply.
4. Insert LA-490 Beacon into the mounting bracket and secure the device with the locking screw.

Basic Operation

1. Beacon is turned ON and OFF when batteries are inserted/removed, or power is provided or removed via a USB power supply.
2. Status LED flashes blue approximately once a second indicating the Beacon has good batteries and is transmitting Beacon information.
3. Status LED flashes red indicating batteries are low and need to be changed.
4. Status LED flashes alternately between red and amber while Beacon is being programmed.

Setup/Configuration

Download the Listen EVERYWHERE (LE) Software Suite for Windows, available at www.listentech.com/support/software/, to setup and configure your Beacon(s).

Transmission Mode: Bluetooth (default), IR or Both

Transmit Interval: 500 mS (default), range 100 mS – 5 seconds

Output Power: High (default), Medium or Low

Normal battery Status LED: ON (default) or OFF

Low battery Status LED: ON (default) or OFF

Compliance Information

For Users in the US and Canada

Compliance Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) These devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesirable operation.

FCC Statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20 cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

The information in this guide may change without notice. The manufacturer assumes no responsibility for any errors that may appear in this guide.

Changes or modification to this device not expressly approved by Listen Technologies for compliance could void the user's authority to operate this device.

Industry Canada Statement

CAN ICES-3 (B)/NMB-3 (B)

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada. L'exploitation est soumise aux deux conditions suivantes:

1. Cet appareil ne doit pas provoquer d'interférences.
2. Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

ISED

Radiation Exposure Statement: This equipment complies with the IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Énoncé d'exposition aux rayonnements: Cet équipement est conforme aux limites d'exposition aux rayonnements ioniques RSS-102 Pour un environnement incontrôlé. Cet équipement doit être installé et utilisé avec un Distance minimale de 20 cm entre le radiateur et votre corps.

For Users in the European Union

This device is a proximity Beacon operating in the 2.4 GHz frequency band from 2.400 GHz to 2.482 GHz at a maximum power of 2.5 dBm. The usage of this device is generally allowed in all EU countries, Australia, New Zealand, Singapore, and Hong Kong. Product labeling information such as serial number, manufacturer, and additional regulatory information is found on the product label on the back of the device or in the battery compartment. To view, remove device from the mounting bracket.

In compliance with the following requirements

WEEE Directive (2012/19/EU)



Battery Directive (2006/66/EC & 2013/56/EU)



If you wish to discard electrical and electronic equipment (EEE), please contact your dealer or supplier for further information.

Notes on Disposal

The symbol of the crossed-out wheeled bin on the product, the batteries and/or the packaging indicates that these products must be disposed of separately at the end of their operational lifetime in accordance with the national legislation. For packaging disposal, please observe the legal regulations on waste segregation applicable in your country.

The separate collection of waste electrical and electronic equipment, batteries and packaging's is used to promote the reuse and recycling and to prevent negative effects caused by e.g., potentially hazardous substances contained in these products. Herewith you make an important contribution to the protection of the environment and public health.

EU Declaration of Conformity

Radio Equipment Directive 2014/53/EU
RoHS 3 Directive EU 2015/863



Hereby, Listen Technologies declares that the radio equipment type Listen Bluetooth/IR Beacon LA-490 is in compliance with:

Radio Equipment Directive 2014/53/EU
RoHS 3 Directive EU 2015/863

The full text of the EU declaration of conformity is available at the following internet address:
www.listentech.com/support/declaration-conformity-documents/

Warranty

Listen Technologies warrants LA-490 to be free from defects in materials and workmanship under normal use and conditions for 5 Years from the original date of purchase.

For the current warranty conditions, please visit our website at www.listentech.com/support/warranty/ or contact your Listen partner.

FOR AUSTRALIA ONLY

Listen Technologies goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. This warranty is in addition to other rights or remedies under law. Nothing in this warranty excludes, limits or modifies any liability of Listen Technologies which is imposed by law, or limits or modifies any remedy available to the consumer which is granted by law.

To make a claim under this warranty, contact
Listen Technologies Technical Support
14912 Heritage Crest Way
Bluffdale, Utah 84065
Phone: +1.801.233.8992, email: support@listentech.com All expenses of claiming the warranty will be borne by the person making the claim.

Contact information

LISTEN TECHNOLOGIES 14912 Heritage Crest Way, Bluffdale, Utah 84065-4818 USA
Phone: +1.801.233.8992 Toll-Free: 1.800.330.0891 www.listentech.com

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