

# ListenTALK

# USER MANUAL

ENGLISH



Mobile Two-Way  
Communication  
System

## 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*

# LISTENTALK TABLE OF CONTENTS

4	Introduction
5	Important Information
6	Important Safety Instructions
7	ListenTALK Components
8	ListenTALK Definitions
9	LK-1 Quick Reference
11	LKR-11 Quick Reference
13	LKR-12 Quick Reference
15	Docking Station Tray Quick Reference
17	Specifications
23	System Setup
25	Unit – General Operation
26	System Talkback Modes
27	ListenTALK Security
27	Unit Programming
30	Docking Station Operation
31	Advanced Features
31	Software Suite
31	Accessories
32	Applications
36	System Troubleshooting
37	Compliance Information
39	Warranty
39	Contact Information



## INTRODUCTION

ListenTALK (LK-1, LKR-11, LKR-12) and their accessories have been designed as a mobile or stationary, one or two-way, wireless collaboration system designed for group communications in a variety of applications. This includes applications such as Training and Collaboration, Assistive Listening, Guided Tour Groups, Language Interpretation and Translation, Event Production and Intercom. This product can be used for residential or commercial purposes.

## SIMPLE AND VERSATILE

ListenTALK systems are simple to purchase and configure and they are highly versatile. Create a ListenTALK Group with the push of a button in the Docking Station, with the click of a mouse in the ListenTALK Software Suite or on the go using built-in Near Field Communication (NFC) technology. Use up to twenty simultaneous groups in the same area for North America (A0) and Japan (J0) versions and up to thirty groups in the same area for the Europe (E0) version.

ListenTALK Transceivers are simple to operate and leaders can easily designate one of three Participant modes to meet the needs of any venue or application.

## RELIABLE AND SECURE

Instead of the overcrowded 2.4 GHz frequency, ListenTALK operates on the 1.9 GHz band in full duplex and utilizes frequency hopping and spread spectrum technology to increase reliability and reduce interference. Headset styles are available for use in quiet or noisy environments, or simply use your own.

Listen understands that your security matters, so each ListenTALK is equipped with a multilayer security protocol consisting of a 40-bit (pin free) group subscription, 32-bit authentication and a 64-bit encryption scheme assuring secure conversations.

## WELCOME TO LISTENTALK!

ListenTALK is Simple, Versatile, Scalable, Secure and Reliable!



## IMPORTANT INFORMATION

Read the following Information before you use your ListenTALK system.

Product labeling information such as serial number, manufacturer, and additional regulatory information is found in the battery compartment of this device. To view, press in battery compartment access tab and slide battery door down and off and then remove battery. This information may also be viewed via the display when the About menu item is accessed.

This device has been evaluated and found in compliance with RF exposure limits set forth for body worn portable devices in an uncontrolled environment and may be safely worn and operated handheld or next to your body such as on a lanyard or clipped to clothing.

### **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 ListenTALK system.**

### **Caution**

1. Read these safety instructions and the instruction manual of the product.
2. Keep these 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.
4. Follow all instructions.
5. Do not expose to direct sunlight for long periods of time.
6. Do not store near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
7. 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.

### **Caution**

#### ***Hearing Safety***

This product is designed to amplify audio to a high volume level which could potentially cause hearing damage if used improperly. To protect your hearing make sure the volume is turned down before putting on the headset. Then adjust the volume up to the minimum setting required to hear clearly. Do not allow children or other unauthorized individuals to have access to this product without supervision.

### **Caution**

#### ***Medical Device Safety***

Before using this Listen product with an implantable or other medical device, consult your physician or manufacturer of your implantable or other medical device. Always make sure you are using this product in accordance with the safety guidelines established by your physician or the implantable device manufacturer.

### **Warning**

#### ***Safety Instructions for Lithium-ion Battery***

This product uses a Lithium-Ion battery 3.7V, 1200 mAh. Use only the battery that come with your device or replacement NP-60 batteries designed for use in this device.

Do not dismantle, open or shred secondary cells or battery.

Do not expose cells or battery to heat or fire. Avoid storage in direct sunlight.

Do not use any charger other than that specifically provided for use with the equipment.

Defective or exhausted battery should never be disposed of as municipal waste. Return old batteries to the battery supplier, a licensed battery dealer or a designated collection facility. Do not incinerate batteries.

Do not replace the batteries in potentially explosive environments, such as rooms where flammable liquids or gasses are present.

Lithium batteries have limited lifetimes. Any Lithium battery that shows any signs of damage, include swelling, should be properly discarded immediately.

## LISTENTALK COMPONENTS

### **ListenTALK**

The term ListenTALK refers to the system as a whole and a system is made up of different ListenTALK components.



#### ***LK-1 ListenTALK Transceiver***

The term LK-1 ListenTALK Transceiver refers to a ListenTALK hand-held unit that can both transmit audio to and receive audio from a ListenTALK group. The LK-1 Transceiver can be used as a group leader, Sub-leader or Participant unit.



#### ***LKR-11 ListenTALK Receiver Pro***

The term LKR-11 ListenTALK Receiver Pro refers to a ListenTALK hand-held unit that is used as a participant unit that can only receive audio from a ListenTALK group. The LKR-11 is a full featured listen only unit.



#### ***LKR-12 ListenTALK Receiver Basic***

The term LKR-12 Listen TALK Receiver Basic refers to a ListenTALK hand-held unit that is used as a participant unit that can only receive audio from a ListenTALK group. The LKR-12 is a limited featured listen only unit.



#### ***Docking Station Tray 16***

The optional ListenTALK Docking Station 16 serves as convenient storage, programming and charging station for ListenTALK Transceivers. The Docking Station makes it easy to create a ListenTALK Group and perform other tasks.



#### ***Accessories***

ListenTALK accessories include an Intelligent Cable Management Unit for the Docking Station 16 Tray, the Docking Station Case 16, several headsets, headphones, ear speakers, protective case, and alkaline battery compartment. Note that ListenTALK Transceivers may also be used with standard smartphone headsets.



#### ***ListenTALK Software Suite***

Available for Windows PCs, the ListenTALK Software Suite makes it easy to pair ListenTALKs, form ListenTALK Groups, check ListenTALK status, and includes many advanced programming features. (see page 31)



## LISTENTALK DEFINITIONS

### ***ListenTALK Group***

A ListenTALK Group is two or more ListenTALK units which have been Paired.

### ***Pairing***

Pairing is the process whereby ListenTALK units become a group. ListenTALK units may be paired by NFC (Near-Field Communications), with a Docking Station or with the ListenTALK Software Suite.

### ***Leader, Sub-leader and Participant***

A Group consists of one leader, one or more Sub-leaders (optional) and one or more Participants. In a museum tour, the museum guide would be the leader, an assistant guide would be the Sub-leader and the museum guests would be Participants.

### ***ListenTALK Security***

Conversations within a ListenTALK Group are encrypted by a unique Pair Key which separates Groups from one another and ensures secure conversations within each Group. The Pair Key is generated by the Group's leader and shared with each Sub-leader and Participant (see Page 27).



## LK-1 LISTENTALK TRANSCEIVER QUICK REFERENCE

- 1 Internal Microphone**  
 Internal microphone may be used by a Participant. For best results, a leader should use an external microphone-equipped headset. Visit [www.listentech.com/assistive-listening/listentalk/](http://www.listentech.com/assistive-listening/listentalk/) to choose from a wide range of headsets and other accessories.
- 2 Graphic Display**  
 Displays context-sensitive information such as Group Name/Number, Charging Status, Battery Life, Profile Mode, Soft Button Menus, and Volume Level.
- 3 Soft Buttons**  
**Leader:** Left Soft Button scrolls through System Talkback Modes (Off Mode, Leader Mode or Group Mode – See Page 26. Right Soft Button initiates pairing. Both buttons operate for Transceiver programming (see Page 28).  
**Participant:** Soft Buttons are disabled except during Transceiver programming (see Page 28).
- 4 Talk Button & Menu Exit**  
**Leader:** Press Talk Button to toggle between Talk and Mute.  
**Participant:** Press and hold Talk Button to talk; release to mute.
- 5 Light Sensor**  
 Automatically brightens or dims the Graphic Display based on ambient light conditions.
- 6 Removable Belt/Lanyard Clip**  
 To use the Lanyard, snap its metal ring into and up in the slot at the top of the Belt Clip. Then, adjust the Lanyard to a comfortable length and slip it over the user's head. Alternately, simply slip the Belt Clip over a user's belt.
- 7 Rechargeable Battery**  
 Charge ListenTALKs rechargeable battery in the Docking Station or connect a USB charger to the Micro USB port. Alternatively, alkaline batteries (not rechargeable) may be used by installing the optional Alkaline Battery Compartment and three AAA size alkaline batteries.
- 8 Battery Compartment Access**  
 The battery compartment may be accessed by depressing the access button on the back of the unit and while pressing, slide the battery door down and off. To reattach the battery door, align tabs on top while pressing the battery door in and up until it latches in place.
- 9 Nearfield Antenna**  
 Allows a leader to Pair with Sub-leaders or Participants to form a Group as described on Page 24.



## LK-1 LISTENTALK TRANSCIVER QUICK REFERENCE CONTINUED

- 10 Micro USB**  
Connect Micro USB to a standard USB charger to charge the ListenTALK. Connect to a Windows computer to program the ListenTALK using the ListenTALK Software Suite.
- 11 Volume Control & Menu Navigation**  
**Operation:** Controls Headset volume.  
**Programming:** Navigates menus shown in the Graphic Display.
- 12 3.5mm Headset/Microphone Port**  
Use a headset such as those available at [www.listentech.com/assitive-listening/listentalk/transceiver-headsets/](http://www.listentech.com/assitive-listening/listentalk/transceiver-headsets/). Note that ListenTALK Transceivers also accept standard smartphone headsets/earbuds.
- 13 Leader Clip**  
Snap a Leader Clip onto a Transceiver to create a Leader or Sub-leader. Omit from Participant Transceiver.
- 14 Status LED**  
Status LED will flash during charging and turn solid when ListenTALK is fully charged. Leader or sub-leader Status LED turns red to indicate Mute after pressing Talk Button.
- 15 Power Button & Status Screen**  
Press and hold for one second to power on the ListenTALK and display the Status Screen. Press and hold for three seconds to power off. Press momentarily to display the Status Screen during use.
- 16 Charger Contacts**  
Allow ListenTALKs to charge automatically when placed in the Docking Station. Also allow communication with a Windows computer equipped with the ListenTALK Software Suite.





## LKR-11 LISTENTALK RECEIVER PRO QUICK REFERENCE

- 1 Graphic Display**  
 Displays context-sensitive information such as Group Name/Number, Charging Status, Battery Life, Soft Button Menus, and Volume Level.
- 2 Soft Buttons**  
**Participant:** Soft Buttons are disabled except during Transceiver programming (see Page 28).
- 3 Light Sensor**  
 Automatically brightens or dims the Graphic Display based on ambient light conditions.
- 4 Removable Belt/Lanyard Clip**  
 To use the Lanyard, snap its metal ring into and up in the slot at the top of the Belt Clip. Then, adjust the Lanyard to a comfortable length and slip it over the user's head. Alternately, simply slip the Belt Clip over a user's belt.
- 5 Rechargeable Battery**  
 Charge ListenTALKs in Docking Station or connect a USB charger to the Micro USB port. Access the battery compartment by depressing the button on the battery door. Alkaline batteries (not rechargeable) may be used by installing the optional Alkaline Battery Compartment and three AAA size alkaline batteries.
- 6 Battery Compartment Access**  
 The battery compartment may be accessed by depressing the access button on the back of the unit and while pressing, slide the battery door down and off. To reattach the battery door, align tabs on top while pressing the battery door in and up until it latches in place.
- 7 Nearfield Antenna**  
 Allows a Leader to Pair with Sub-leaders or Participants to form a Group as described on Page 24.



## LKR-11 LISTENTALK RECEIVER PRO QUICK REFERENCE CONTINUED

- 8 Micro USB**  
Connect Micro USB to a standard USB charger to charge the ListenTALK. Connect to a Windows computer to program the ListenTALK using the ListenTALK Software Suite.
- 9 Volume Control & Menu Navigation**  
**Operation:** Controls Headset volume.  
**Programming:** Navigates menus shown in the Graphic Display.
- 10 3.5mm Headphone Output**  
Use a ear speaker/headphone such as those available at <https://www.listentech.com/assistive-listening/listentalk/earphones-neckloop-lanyards/>
- 11 Status LED**  
Status LED will flash during charging and turn solid when ListenTALK is fully charged.
- 12 Power Button & Status Screen**  
Press and hold for one second to power on the ListenTALK and display the Status Screen. Press and hold for three seconds to power off. Press momentarily to display the Status Screen during use.
- 13 Charger Contacts**  
ListenTALK units charge automatically when placed in the Docking Station. Also allows communication with a Windows computer equipped with the ListenTALK Software Suite.



## LKR-12 LISTENTALK RECEIVER BASIC QUICK REFERENCE

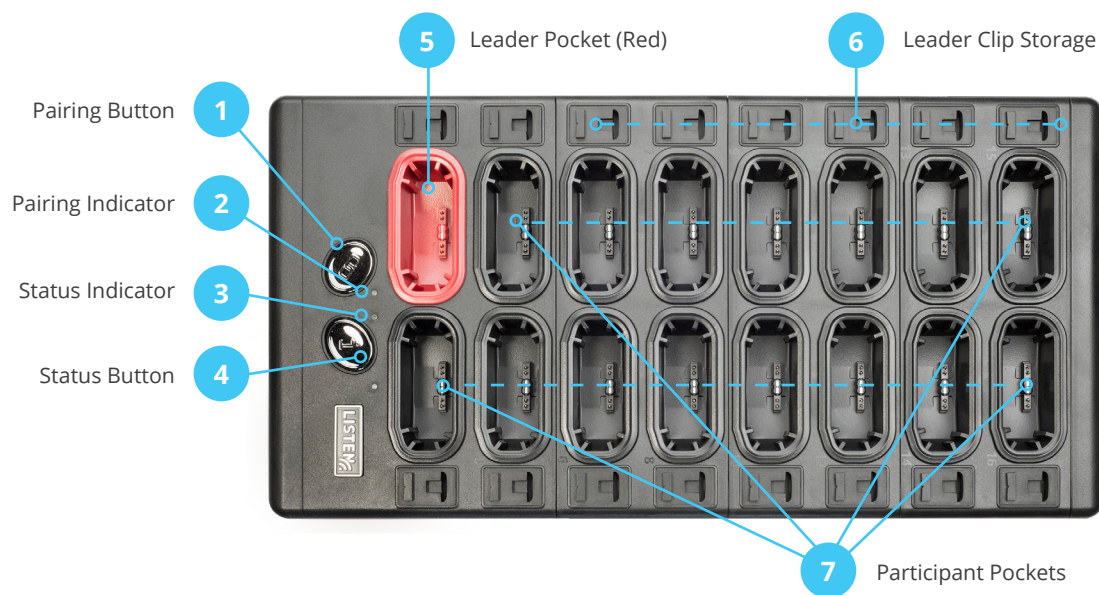
- 1 Removable Belt/Lanyard Clip**  
To use the Lanyard, snap its metal ring into and up in the slot at the top of the Belt Clip. Then, adjust the Lanyard to a comfortable length and slip it over the user's head. Alternately, simply slip the Belt Clip over a user's belt.
- 2 Rechargeable Battery**  
Charge ListenTALKs in Docking Station or connect a USB charger to the Micro USB port. Access the battery compartment by depressing the button on the battery door. Alkaline batteries (not rechargeable) may be used by installing the optional Alkaline Battery Compartment and three AAA size alkaline batteries.
- 3 Battery Compartment Access**  
The battery compartment may be accessed by depressing the access button on the back of the unit and while pressing, slide the battery door down and off. To reattach the battery door, align tabs on top while pressing the battery door in and up until it latches in place.





## LKR-12 LISTENTALK RECEIVER BASIC QUICK REFERENCE CONTINUED

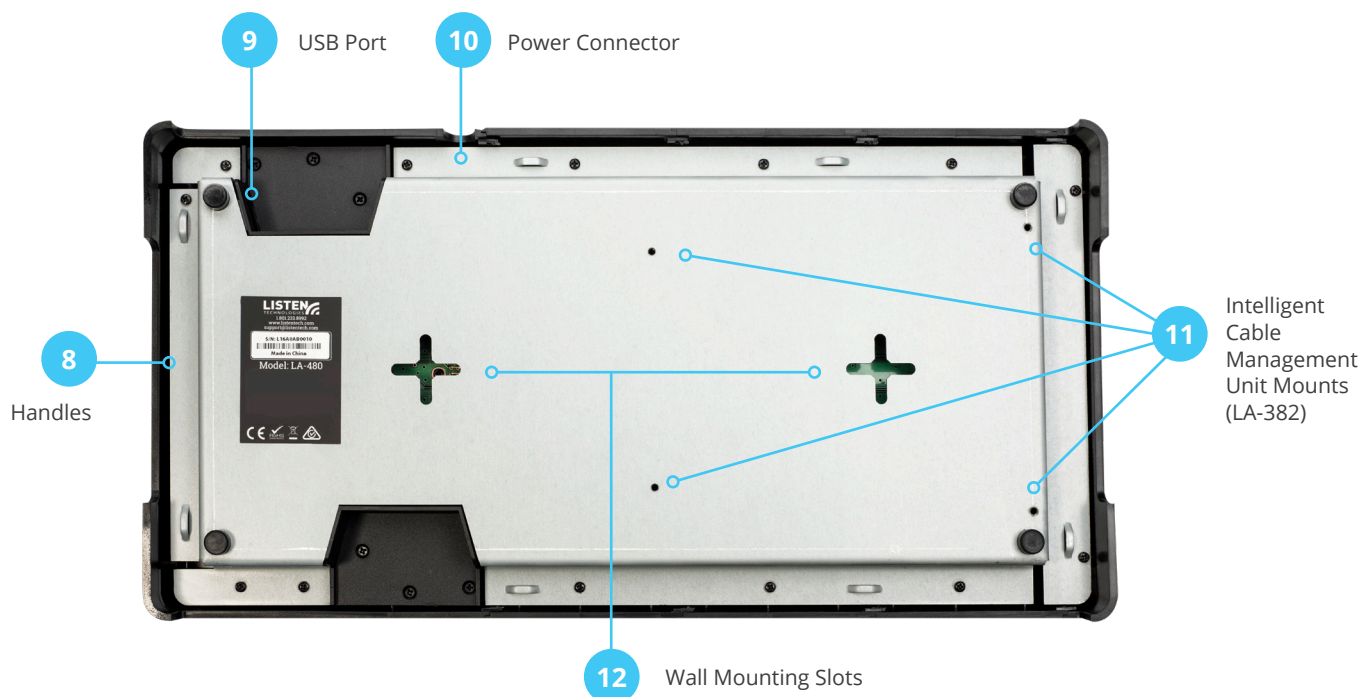
- 4 Micro USB**  
Connect Micro USB to a standard USB charger to charge the ListenTALK. Connect to a Windows computer to program the ListenTALK using the ListenTALK Software Suite.
- 5 Volume Control**  
**Operation:** Controls ear speaker/headphone volume.
- 6 3.5mm Ear Speaker/Headphone**  
Use a ear speaker/headphone such as those available at <https://www.listentech.com/assistive-listening/listentalk/earphones-neckloop-lanyards/>
- 7 Status LED**  
Status LED will flash the white LED during charging and turn solid when ListenTALK is fully charged. While unit is on momentarily press power button to activate the LED status. If unit is paired the status LED will flash green once followed by the white LED Flashing the battery status: 1=1/4, 2=1/2, 3=3/4, and 4=full.  
**Note:** LKR-12 Green LED will continue flashing if receiver is not paired to a group or the Leader unit is not turned on.
- 8 Power Button**  
Press and hold for one second to power on the LKR-12. Press and hold for three seconds to power off.  
Press momentarily to display the Status LED information during use.
- 9 Charger Contacts**  
Allow ListenTALKs to charge automatically when placed in the Docking Station. Also allow communication with a Windows computer equipped with the ListenTALK Software Suite.



## LISTENTALK DOCKING STATION TRAY QUICK REFERENCE

- 1 Pairing Button**  
 Create a ListenTALK Group by inserting LK-1 Transceiver into Leader pocket (red) and other ListenTALK units into Participant Pockets, and then momentarily pressing the Docking Station Pairing Button.
 

**Note:** Momentarily pressing the Docking Station Pairing Button uses the Leader's existing Pairing Key. To create a new Pairing Key, press and hold the Pairing Button for five seconds (also see Page 24). This will generate a new group and eliminate previously paired ListenTALK units from the group.
- 2 Pairing Indicator**  
 Pairing Indicator will flash during pairing, then turn solid momentarily and finally extinguish when the pairing process is completed successfully. The Pairing and Status Indicators will turn solid together and then extinguish during New Pair Key generation (see Page 30).
- 3 Status Indicator**  
 Status Indicator lights during Status Button activation and during new pair key generation.
- 4 Status Button**  
 Press and hold the Status Button to illuminate the ListenTALK Graphic Displays for Group identification and individual ListenTALK information.
- 5 Leader Pocket (Red)**  
 Used for charging, pairing and programming.
- 6 Leader Clip Storage**  
 Snap unused Leader Clips onto these storage tabs.
- 7 Participant Pockets**  
 Used for charging, pairing and programming.



## LISTENTALK DOCKING STATION TRAY QUICK REFERENCE CONTINUED


- 8 Handles**  
Handles for holding the Docking Station Tray.
- 9 USB Port**  
Connect to Windows computer to program, pair and manage inventory of ListenTALK units using the ListenTALK Software Suite.
- 10 Power Connector**  
Connect the Power Supply to this Power Connector and the Power Cord to any standard AC outlet (100/240 VAC, 50/60 Hz).
- 11 Intelligent Cable Management Unit Mounts (LA-382)**  
The Optional Docking Station Intelligent Cable Management Unit fastens to these holes.
- 12 Wall-Mounting Slots**  
Mount two screws with ¼" heads 6-inches apart on a wall. Slip Docking Station 16 onto screw heads.

## LK-1 LISTENTALK TRANSCEIVER SPECIFICATIONS\*

### Physical

<b>Dimensions (H x W x D) with Belt Clip</b>	10 x 5.4 x 2.4 cm (3.93 x 2.13 x 0.93 in.)
<b>Weight</b>	79 g (2.79 oz.)
<b>Ship Weight</b>	206 g (7.20 oz.) with 454 g (1.0 lbs.) minimum
<b>Enclosure Material</b>	PC ABS Plastic
<b>Indicators</b>	Display - 64 x 128 OLED, Variable brightness LED – RED/White multifunction (Mute, Charge Status)
<b>User Controls</b>	Volume Up, Volume Down, Talk, Power/Status, Talk Modes, Pairing
<b>Programming</b>	Via software and USB port on Transceiver or via software and USB port on Docking Station
<b>Connections</b>	Headset – 3.5mm TRRS, CTIA compliant USB – Micro USB, Control and Charging Charger- 4 Contact, Control and Charging

### Audio

Microphone Input	
<b>Compatibility</b>	Electret, external bias
<b>Bias</b>	3 volt, 2 mA Current Maximum
<b>Sensitivity Requirement</b>	-28 to - 50 dBV/Pa
Internal Microphone	
<b>Switching</b>	Auto detect on jack insertion or Manual
<b>Maximum Input Level</b>	109 dB SPL
<b>Gain</b>	Adjustable, 30 dB range
Headset/Microphone Port	
<b>Purpose</b>	Accepts Listen Technologies Headsets or standard smart-phone headsets. Can be used as a Mic/Line input (See “Mic Select” Menu Choices on Page 26)
<b>Connector</b>	 <div> <div>Tip</div> <div>First Ring</div> <div>Second Ring</div> <div>Sleeve</div> </div> <div> <div>Headset Left +</div> <div>Headset Right +</div> <div>Common/Ground/-</div> <div>Mic/Line Input +</div> </div>
<b>Nominal Input Level for Line Source</b>	-10dBu (0.24 volts)
<b>Speaker Load</b>	16 - 32 ohm load
<b>Max Output Power</b>	67 mW, 16-ohm load, Threshold of Clipping
<b>Sidetone</b>	Adjustable
System	
<b>Frequency Response</b>	40 Hz to 15 kHz +/- 3dB, 22kHz low pass filter
<b>SNR</b>	70 dB, A- weighted, Threshold of Clipping
<b>THD</b>	0.5% @ 1kHz, 22kHz low pass enabled

## LK-1 LISTENTALK TRANSCEIVER SPECIFICATIONS CONTINUED

### Radio

<b>Operating Frequency</b>	1920 to 1930 MHz - North America 1880 to 1900 MHz - Europe, Australia 1895 to 1905 MHz - Japan
<b>Average Power</b>	4 mW - North America 10 mW - Europe, Australia 5 mW - Japan
<b>Typical Range</b>	Indoor 100 m, Outdoor 200 m, depending upon conditions - North America, Japan Indoor 150 m, Outdoor 300 m, depending upon conditions - Europe, Australia
<b>Modulation</b>	GFSK – FHSS TDD/TDMA/DCA
<b>Security</b>	Subscription – 40 bit (Pin Free) Authentication – 32 bit Encryption – 64 bit
<b>NFC Frequency</b>	(Near Field Communications) 13.56 MHz

### Power & Battery Management

<b>Battery Type</b>	Lithium – ion, rechargeable non-proprietary removable, 1200 mAh Optional – 3 AAA Battery Compartment
<b>Typical Operate Time</b>	Li-ion – Participant Mode – 12 Hours AAA – Participant Mode – 7 Hours Li-ion – Leader Mode – 7 Hours AAA – Leader Mode – 4 Hours
<b>Typical Charge Time</b>	4 Hours
<b>Power Save Modes</b>	Power down on loss of signal Power down on disconnection of headset (1 min) Power down on charging

### Environmental

<b>Temperature - Operation</b>	-10° C (14° F) to 40° C (104° F)
<b>Temperature - Storage</b>	-20° C (-4° F) to 50° C (122° F)
<b>Relative Humidity</b>	0 to 95% relative humidity, non-condensing

### Compliance

<b>Standards</b>	 ICS-03        
------------------	---

\* Specifications subject to change without notice.




## LKR-11 LISTENTALK RECEIVER PRO SPECIFICATIONS\*

### Physical

<b>Dimensions (H x W x D) with Belt Clip</b>	10 x 5.4 x 2.4 cm (3.93 x 2.13 x 0.93 in.)
<b>Weight</b>	79 g (2.79 oz.)
<b>Ship Weight</b>	206 g (7.20 oz.) with 454 g (1.0 lbs.) minimum
<b>Enclosure Material</b>	PC ABS Plastic
<b>Indicators</b>	Display - 64 x 128 OLED, Variable brightness LED - RED/White multifunction (Mute, Charge Status)
<b>User Controls</b>	Volume Up, Volume Down, Power/Status, Pairing
<b>Programming</b>	Via software and USB port on Transceiver or via software and USB port on Docking Station
<b>Connections</b>	Headset - 3.5mm TRRS, CTIA complaint USB - Micro USB, Control and Charging Charger- 4 Contact, Control and Charging

### Audio

Headphone Output	
<b>Speaker Load</b>	16 - 32 ohm load
<b>Max Output Power</b>	67 mW, 16-ohm load, Threshold of Clipping
<b>Purpose</b>	Accepts standard earspeaker/headphones
<b>Connector</b>	 <div> <div>Tip</div> <div>First Ring</div> <div>Second Ring</div> <div>Sleeve</div> </div> <div> <div>Headset Left +</div> <div>Headset Right +</div> <div>Common/Ground/-</div> <div>Not Connected</div> </div>
System	
<b>Frequency Response</b>	40 Hz to 15 kHz +/- 3dB, 22kHz low pass filter
<b>SNR</b>	70 dB, A- weighted, Threshold of Clipping
<b>THD</b>	0.5% @ 1kHz, 22kHz low pass enabled

## LKR-11 LISTENTALK RECEIVER PRO SPECIFICATIONS CONTINUED

### Radio

<b>Operating Frequency</b>	1920 to 1930 MHz - North America 1880 to 1900 MHz - Europe, Australia 1895 to 1905 MHz - Japan
<b>Average Power</b>	4 mW - North America 10 mW - Europe, Australia 5 mW - Japan
<b>Typical Range</b>	Indoor 100 m, Outdoor 200 m, depending upon conditions - North America, Japan Indoor 150 m, Outdoor 300 m, depending upon conditions - Europe, Australia
<b>Modulation</b>	GFSK – FHSS TDD/TDMA/DCA
<b>Security</b>	Subscription – 40 bit (Pin Free) Authentication – 32 bit Encryption – 64 bit
<b>NFC Frequency</b>	(Near Field Communications) 13.56 MHz

### Power & Battery Management

<b>Battery Type</b>	Lithium – ion, rechargeable non-proprietary removable, 1200 mAh Optional – 3 AAA Battery Compartment
<b>Typical Operate Time</b>	Li-ion – Participant Mode – 12 Hours AAA – Participant Mode – 7 Hours
<b>Typical Charge Time</b>	4 Hours
<b>Power Save Modes</b>	Power down on loss of signal Power down on disconnection of headphone (1 min) Power down on charging

### Environmental

<b>Temperature - Operation</b>	-10° C (14° F) to 40° C (104° F)
<b>Temperature - Storage</b>	-20° C (-4° F) to 50° C (122° F)
<b>Relative Humidity</b>	0 to 95% relative humidity, non-condensing

### Compliance

<b>Standards</b>	 ICS-03        
------------------	---


\* Specifications subject to change without notice.

## LKR-12 LISTENTALK RECEIVER BASIC SPECIFICATIONS\*

### Physical

<b>Dimensions (H x W x D) with Belt Clip</b>	10 x 5.4 x 2.4 cm (3.93 x 2.13 x 0.93 in.)
<b>Weight</b>	79 g (2.79 oz.)
<b>Ship Weight</b>	206 g (7.20 oz.) with 454 g (1.0 lbs.) minimum
<b>Enclosure Material</b>	PC ABS Plastic
<b>Indicators</b>	Variable brightness LED – Green/White multifunction, Charge Status, Battery Status
<b>User Controls</b>	Volume Up, Volume Down, Power/Status
<b>Programming</b>	Via software and USB port on Transceiver or via software and USB port on Docking Station
<b>Connections</b>	Headset – 3.5mm TRRS, CTIA complaint USB – Micro USB, Control and Charging Charger- 4 Contact, Control and Charging

### Audio

Headphone Output	
<b>Speaker Load</b>	16 - 32 ohm load
<b>Max Output Power</b>	67 mW, 16-ohm load, Threshold of Clipping
<b>Purpose</b>	Accepts standard earspeaker/headphones
<b>Connector</b>	 <div> <div>Tip</div> <div>First Ring</div> <div>Second Ring</div> <div>Sleeve</div> </div> <div> <div>Headset Left +</div> <div>Headset Right +</div> <div>Common/Ground/-</div> <div>Not Connected</div> </div>
System	
<b>Frequency Response</b>	40 Hz to 15 kHz +/- 3dB, 22kHz low pass filter
<b>SNR</b>	70 dB, A- weighted, Threshold of Clipping
<b>THD</b>	0.5% @ 1kHz, 22kHz low pass enabled

## LKR-12 LISTENTALK RECEIVER BASIC SPECIFICATIONS CONTINUED

### Radio

<b>Operating Frequency</b>	1920 to 1930 MHz - North America 1880 to 1900 MHz - Europe, Australia 1895 to 1905 MHz - Japan
<b>Average Power</b>	4 mW - North America 10 mW - Europe, Australia 5 mW - Japan
<b>Typical Range</b>	Indoor 100 m, Outdoor 200 m, depending upon conditions - North America, Japan Indoor 150 m, Outdoor 300 m, depending upon conditions - Europe, Australia
<b>Modulation</b>	GFSK - FHSS TDD/TDMA/DCA
<b>Security</b>	Subscription - 40 bit (Pin Free) Authentication - 32 bit Encryption - 64 bit




### Power & Battery Management

<b>Battery Type</b>	Lithium - ion, rechargeable non-proprietary removable, 1200 mAh Optional - 3 AAA Battery Compartment
<b>Typical Operate Time</b>	Li-ion - Participant Mode - 12 Hours AAA - Participant Mode - 7 Hours
<b>Typical Charge Time</b>	4 Hours
<b>Power Save Modes</b>	Power down on loss of signal Power down on disconnection of headphone (1 min) Power down on charging

### Environmental

<b>Temperature - Operation</b>	-10° C (14° F) to 40° C (104° F)
<b>Temperature - Storage</b>	-20° C (-4° F) to 50° C (122° F)
<b>Relative Humidity</b>	0 to 95% relative humidity, non-condensing

### Compliance

<b>Standards</b>	 ICS-03       
------------------	---

\* Specifications subject to change without notice.

## LISTENTALK DOCKING STATION CASE 16 SPECIFICATIONS\*

### Physical

<b>Case Color</b>	Gray & Chrome
<b>Tray Color</b>	Black, Chrome Buttons, Red Leader Pocket
<b>Dimensions (H x W x D)</b>	190 x 350 x 465 mm (7.48 x 13.78 x 18.31 in.)
<b>Unit Capacity</b>	16 Units
<b>Unit Weight</b>	5.13 kg (11.3 lbs.)
<b>Ship Weight</b>	5.95 kg (13.1 lbs.)

### Power

<b>Power Supply Input</b>	100-240 VAC, 50-60 Hz
<b>Power Supply Output</b>	12 VDC, 5.0 A, 60 W
<b>Power Supply Connector</b>	5.5 mm (0.22 in.) OD x 2.3 mm (.09 in.) ID, barrel type
<b>Power Cord</b>	182.9 cm (72 in.) Input Power Cord, 109.3 cm (43 in.) Output Cord

### Interconnections

<b>Connection/s</b>	USB type B
	Power

### Compliance

<b>Power Supply</b>	UL, CE, RCM, RoHS
---------------------	-------------------

\* Specifications subject to change without notice.

## LISTENTALK SYSTEM SETUP



### **Mount and Connect the Docking Station**

ListenTALK Transceivers may be operated with or without a Docking Station. If your system does not have a Docking Station, please proceed to “Prepare and Charge Each ListenTALK Transceiver” (next). Mount the Docking Station on a flat surface. Connect the Power Supply to the Docking Station and to any standard AC outlet (100/240 VAC, 50/60 Hz). To program the Docking Station and its units via computer (USB) install the ListenTALK Software Suite (see Page 31).



## LISTENTALK SYSTEM SETUP CONTINUED



### ***Prepare and Charge the ListenTALK Units***

Remove the protective screen cover and clear plastic battery isolation tab from each unit. Charge units in the Docking Station or connect each unit's Micro USB to a USB charger. When 100% charged, a unit's Status LED is solid. Alternately, insert the optional Alkaline Battery Compartment and three AAA size alkaline batteries.



### ***Create a ListenTALK Leader***

Each LK-1 ListenTALK Transceiver can be a leader or a Participant. The default mode is Participant. To create a leader, turn on any Transceiver and place a red Leader Clip on the Transceiver. To create a Sub-leader, place a Leader Clip on a LK-1 unit and pair to the Leader.

### ***Create a ListenTALK Group by Pairing ListenTALK Units***

A ListenTALK Group consists of at least one Leader and an unlimited number of Participants and Sub-leaders (Sub-leaders are optional). Create a ListenTALK Group by Pairing a Leader with Participants and Sub-leaders.



### ***Pairing With a Docking Station***

Place the Leader into the red Docking Station pocket. Place Participant and Sub-leader units into the black Docking Station pockets (see diagrams on Page 15). Momentarily press the Pairing Button on the Docking Station. Pairing Indicator will flash during pairing, then turn solid momentarily and finally extinguish when the pairing process is completed. To pair more than 15 Participants and Sub-leaders, repeat the process using the same Leader.

**Note:** If the pair button is held down for five seconds the leader will generate a new pair key and eliminate previously paired units from the group.



### ***Pairing Without a Docking Station – Near-Field Communication Method (LK-1 and LKR-11 Only)***

Press and hold the Leader's Right Soft Button to initiate Pairing Mode. Then, Pair Participant and Sub-leader units to the Leader by touching the back of the Leader to the back of each Participant and Sub-leader. Upon successful pairing, the Participant or Sub-leader will beep and display a link symbol on its Graphic Display. Press and hold the Leader's Right Soft Button again to exit Pairing Mode.

### ***Create Additional ListenTALK Groups***

An unlimited number of ListenTALK Groups may be created by repeating these steps. Up to twenty simultaneous groups may be operated in one area for North America (A0) and Japan (J0) versions and up to thirty groups in the same area for the Europe (E0) version.

### ***Adding Participants to an Existing Group***

With a Docking Station, simply place the existing Leader in leader pocket and new Participant or Sub-leader units into the Docking Station and press the Pairing Button momentarily. To add Participants without a Docking station, place the Leader into Pairing Mode and touch the back of the Leader to each new Participant or Sub-leader. (not available with LKR-12)



### ***Connect Ear Speakers or Headsets***

Connect headsets, ear speakers, or headphones to each unit. Participants may use the LK-1 ListenTALK Transceiver's built-in microphone. Leaders and Sub-leaders should use a microphone-equipped headset in noisy environments.

## LISTENTALK UNITS – GENERAL OPERATION

### **General Operation**

#### **Belt Clip and Lanyard**

To use the Lanyard, snap its metal ring in and up in the slot at the top of the Belt Clip. Then, adjust the Lanyard to a comfortable length and slip it over the user's head. Alternately, simply slide the Belt Clip over a user's belt.

#### **Power Button**

Press and hold the Power Button for one second to turn the unit on. Press and hold the Power Button for three seconds to turn it off. While a unit is powered on, a momentary Power Button press will display the unit's status for three seconds.

#### **Volume Buttons**

Press the Volume Up or Volume Down button to increase or decrease the volume.

#### **LK-1 or LKR-11 Display and Status**

The Display will extinguish automatically after a few seconds. Press the Power Button momentarily to check unit Status. Press any button (i.e. Volume Up/Down) to activate the Display for that function. Function buttons operate normally even when the Display is off.

#### **Battery Status, Charging and Battery Replacement**

The Status LED will flash slowly when the unit needs to be charged. Rechargeable ListenTALK units may be charged in the Docking Station. To charge an individual unit, connect a USB charger to its Micro USB port. To replace batteries on units equipped with the optional Alkaline Battery Compartment, depress the button on the battery door to access the Battery Compartment. Insert three AAA size alkaline batteries.

#### **Internal Microphone (LK-1 Only)**

In quiet environments, both Leader and Participants may use the Transceiver's Internal Microphone. Microphone-equipped headsets are best for noisy environments visit [www.listentech.com/assistive-listening/listentalk/transceiver-headsets/](http://www.listentech.com/assistive-listening/listentalk/transceiver-headsets/)

#### **Participant Buttons (LK-1 Only)**

Press and hold the Talk Button to speak. Release to mute. Participant can speak to the entire Group or only to the Leader depending on the Talkback Mode set by the Leader (see Page 26). The Participant Talk Button does not function when the Leader chooses "Off" mode. Only one Participant can speak at a time. Soft Buttons are disabled on Participant Transceivers.

#### **Leader Buttons (LK-1 Only)**

Press and release the Talk Button to toggle between Talk and Mute. It is not necessary to hold down the Leader's Talk Button. The Leader configures ListenTALK Talkback Modes as described on Page 26. The Leader also controls Group Pairing and passes the Group Name and Pair Key to Sub-leaders and Participants.

#### **Sub-leader Buttons (LK-1 Only)**

The Sub-leader's Talk Button operates like that on a Leader. A Sub-leader can Pair new Sub-leaders and Participants making them members of a Group. In so doing, the Sub-leader passes on the Group Name and Pair Key from the Leader.

### Operation with Leader and Sub-leader

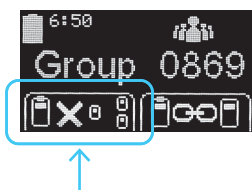
ListenTALK Groups have one Group Leader and an unlimited number of Sub-leaders and Participants. A single Sub-leader is useful for classes with dual instructors or tour groups led by more than one person. A Group with one Leader and multiple Sub-leaders is a versatile wireless intercom for event production, sporting activities and training sessions and it can facilitate workgroup collaboration in warehouses, manufacturing environments or construction sites. Sub-leaders can Pair with new Sub-leaders or Participants, making them members of a Group and passing the Group name and Pair Key from the Leader. Also see Applications on Page 32.

## LISTENTALK SYSTEM TALKBACK MODES

The ListenTALK system allows the Leader to control the flow of conversation based upon the individual needs of the group. Press and release the Leader's Left Soft Button repeatedly to toggle among the three Talkback Modes which are Off/Listen-only Mode, Leader/Respond Mode and Group/Discuss Mode.

These modes function differently based on the Leader's setting of "Sub-leader Always Broadcast" (Default is enabled). The setting of Sub-leader Always Broadcast mode can only be disabled via ListenTALK Software Suite.

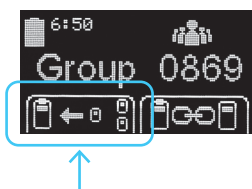
The Leader's Graphic Display indicates Talkback Mode (see below). During Talkback Mode only one Participant or Sub-leader can speak at a time with the Leader.



#### **Off / Listen-only Mode – Leader's Display has an X but No Arrows**

**Sub-leader Always Broadcast Enabled** – Leader and Sub-leaders communicate with one another and broadcast to Participants but Participants cannot respond.

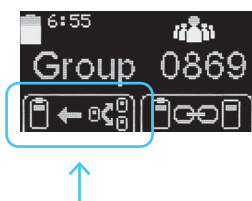
**Sub-leader Always Broadcast Disabled** – Leader can broadcast to Participants and Sub-leaders but participants and Sub-leaders cannot respond.



#### **Leader / Respond Mode – Leader's Display has Left Arrow**

**Sub-leader Always Broadcast Enabled** - Leader and Sub-leaders communicate with one another and broadcast to Participants but Participants can only pose a question to the Leader. If two Sub-leaders are actively speaking one must mute and release the Talkback channel to allow Participants to pose a question.

**Sub-leader Always Broadcast Disabled** – Leader can broadcast to Participants and Sub-leaders but Participants and Sub-leaders can only pose a question to the Leader. If two Sub-leaders are actively speaking one must mute and release the Talkback channel to allow Participants to pose a question.



#### **Group / Discuss Mode – Leader's Display has Left and Right Arrows**

Participants and Sub-leaders can listen and respond to the Leader and other Group members. Group / Discuss Mode functions the same regardless of the setting of "Sub-leader Always Broadcast". If two Sub-leaders are actively speaking one must mute and release the Talkback channel to allow Participants to pose a question.

## LISTENTALK SECURITY

Conversations within a ListenTALK Group are encrypted by a unique Pair Key which separates Groups from one another and ensures secure conversations within each Group. The Pair Key is generated by the Group's Leader and shared with each Sub-leader and Participant. When Sub-leaders add new Transceivers to a Group, they pass the Leader's Pair key to these new group members.

ListenTALK Pair Key security may be configured with the ListenTALK Software Suite or through the Leader's New Pair Key menu choices as described next.

### ***Never – Normal Security (Default)***

By this (default) choice the Pair Key never changes within a Group. This enables secure communication within a Group while allowing unrestricted Group expansion and is a good choice for venues like museums where the number of Participants may vary from tour to tour.

### ***8 Hours, 4 Hours or 1 Hour – High Security***

By this choice, the existing Pair Key is maintained when expanding a Group within the chosen time window. After the time window expires, the Leader will generate a new Pair Key when it Pairs with a Sub-leader or Participant making them part of a new Group. This enables expansion of an existing Group but only within the chosen time window.

### ***Always – Highest Security***

By this choice, the Leader will always generate a new Pair Key when it Pairs with a Sub-leader or Participant making them part of a new Group. This disables the expansion of an existing group and is a good choice for high-security venues.

### ***Resetting a Group's Pair Key***

It is possible to reset a Group's Pair Key without changing the Group Name. This may be useful when a unit is misplaced and you want to exclude that unit from the Group thereby preventing it from listening to or taking part in conversations.

To reset the Pair Key for a ListenTALK Group, place the Leader, Sub-leader(s) and Participants into their respective Docking Station pockets. Then, press and hold the Docking Station Pairing Button for five seconds. The Pairing and Status Indicators will flash momentarily and then turn solid indicating success. The ListenTALK Software Suite can also implement this process.

To reset the Pair Key for a ListenTALK Group without a Docking Station, set the Leader's New Pair Key menu choice to "Always". Then, repeat the Near Field Communication pairing operation for all units in a Group.

Note that the Docking Station and Software Suite can force a New Pair Key without regard to the Leader's New Pair Key menu choice.

## LISTENTALK UNIT PROGRAMMING

ListenTALK units may be programmed by placing them in the Docking Station and connecting the Docking Station USB Port to a Windows computer equipped with the ListenTALK Software Suite. An individual ListenTALK unit may be programmed by connecting its Micro USB to the USB port on a Windows computer equipped with the ListenTALK Software Suite. An individual ListenTALK unit may be programmed by pressing specific buttons on the unit while monitoring its Graphic Display. Programming choices are described in the following topic.

## Programming an Individual ListenTALK Unit Without a Computer

### Accessing the ListenTALK Transceiver Menu

Turn on the unit. Then, simultaneously press and hold the Power Button and Volume Down Button for about three seconds to access the Programming Menu. The Display will say "Main Menu" at the top. The unit will automatically exit the Menu after 20 seconds of inactivity.



### Navigating the Menu

Scroll through Menu Items using the Volume Up and Down Buttons. The Display shows the current Menu Item in large type. The previous and next Menu Items are displayed in smaller type above and below the current Menu Item.

Press and momentarily hold the Right Soft Button to access a Menu Item. Then, scroll through options for this Menu Item using the Volume Up and Down buttons. To choose an option, press and momentarily hold the Right Soft Button again. The Menu Item will display a check mark to confirm your choice. Then, press and momentarily hold the Left Soft Button to exit this Menu Item.

### Exiting the ListenTALK Unit Menu

To exit the Transceiver menu and save your choices, press the Left Soft Button twice. The Display will show "Updated" to confirm that your choices have been saved.

## Unit Menu Choices

### Soft Buttons (LK-1 Only)

**Unlock ALL (default):** Unlocks and allows Leader access to soft button functions.

**Lock ALL:** Locks leader access to soft button functions.

**Lock TB Only:** Locks Talkback soft button and unlocks Pair soft button.

**Lock Pair Only:** Locks Pair soft button and unlocks Talkback soft button.

### Mic/Line Select (LK-1 Only)

**Auto (default):** Automatically selects an external mic, if present, or the ListenTALK's internal mic if no external mic is detected.

**Internal:** Forces use of the ListenTALK's internal microphone.

**External:** Forces use of an external microphone.

**Line:** Allows use of an external, -10dBu line-level source.

### Mic/Line Gain (LK-1 Only)

**Auto (default):** Appropriate for the Transceiver's internal microphone and most external microphones.

**Numeric:** To manually adjust the gain for an external microphone or line-level source, scroll up or down for up to  $\pm 12$ dB of increase/decrease in 3dB increments.

### Brightness

**Auto (default):** Uses the ListenTALK's Light Sensor to adjust Display brightness.

**Bright or Dim:** Permanently adjusts the display brightness.

**Off:** Turns the display off during normal use. (Volume Up & Down, Talk Button remain functional).





### **Auto Power**

**On (default):** The unit will automatically turn off and charge when it is returned to the Docking Station and automatically turn on when it is removed from the Docking Station.

**Off:** Control the unit's on/off status manually.

### **Auto Off**

**30 Minutes (default):** Turns the unit off after 30 minutes of inactivity (no link to Leader).

**20 Minutes or 10 Minutes:** Turns the unit off after 20 or 10 minutes of inactivity.

**Off:** Disables the Auto Off function.

### **Jacksense**

**On (default):** Turns on the unit when a headset is connected to the Headset/Microphone Port; turns off the unit when the headset is disconnected.

**Off:** Control the unit's on/off status manually.

### **Sidetone (LK-1 Only)**

**Normal (default):** A talker hears their own voice at a normal level in their own headset.

**Quiet or Loud:** Decreases or increases the level of a talker's voice in their own headset.

### **New Pair Key (LK-1 Only)**

This menu choice – which only functions on a Leader - controls ListenTALK New Pair Key security. Please see ListenTALK Security on Page 27 for a discussion of this menu choice.

### **Interpreter (LK-1 Only)**

**Off (default):** Disables interpreter. Unit functions as a normal Leader, Sub-leader or Participant.

**On:** Enables interpreter. When enabling this mode on a unit with a leader clip attached, it will become an Interpreter leader unit when paired to the Presenter/Main Floor leader unit (Presenter/Main Floor leader unit initiates pairing mode). When paired as an Interpreter leader the interpreter will hear the main floor leader through the headset speakers and transmit the simultaneous interpretation to its own group via the headset microphone.

### **Mode Select (LK-1 Only)**

**Use Leader Clip (default):** You must insert a Leader Clip to convert a Transceiver into a Leader.

**Force Leader:** Converts a Transceiver into a Leader without a Leader Clip.

### **Language**

**English (default):** The default language for the Menus is English.

**Espanol, Duetsch, Français, Italiano:** Presents Menus in Spanish, German, French or Italian.

### **Reset Device**

**No (default):** Maintains existing menu choices, Group name and Pair Key.

**Yes:** To reset the ListenTALK to all factory default settings, choose Yes.

### **About**

The About menu displays information about the individual unit.

Model • Serial Number • Firmware Version • Region Information • Compliance labeling

## **Software Programming Only Features**

### **Default Volume (Software Programming Only, LK-1 Only)**

#### **35% (Default)**

**Numeric:** Each time ListenTALK is powered on the headset volume level is set to 35% which is the default level. To change the default volume level setting adjust the software slider to the desired level. The slider can be adjusted in 5% increments from 5% to 100%.

**Leader Mute Disabled (Software Programming Only, LK-1 Leader Only)**

☐ **(Default)** With the box unchecked, this feature is disabled, and the unit's Talk Button will mute/unmute the Leader's audio as in normal operation.

☒ With this box checked, this feature is enabled and the unit's Talk Button will be disabled. In this mode, the unit will remain in an unmuted state not allowing the Talk Button to mute the leader's audio.

**Note:** When enabled and the Talk Button is pressed, the unit will show the mic active/lock symbol icon on the display.

**Sub-leaders Always Broadcast (Software Programming Only, LK-1 Only)**

☒ **(Default)** When this feature is enabled (checked), Sub-leaders in the group always broadcast to the group independent of the Leader Talkback Mode selected. This allows the Leader and Sub-leaders to address the group but not allow question from the Participants in the group.

When this feature is disabled Sub-leaders and Participant function the same for a given Talkback Mode.

**Neck Loop Compatibility (Software Programming Only)**

☒ **(Default)** With this box checked, this feature allows the output to drive the connected neck loop out of phase.

☐ With the box unchecked, this feature allows the unit to drive the connected neck loop in phase.

**Sub-leader Do Not Drop (Software Programming Only)**

☐ **(Default)** With the box unchecked, this feature is disabled. With maximum Sub-leaders active, this Sub-leader will be dropped automatically when an additional Sub-leader requests a talk path.

☒ With this box checked, this feature is enabled. With maximum Sub-leaders active, this Sub-leader will not be dropped automatically when an additional Sub-leader requests a talk path. This Sub-leader must use the talk button to mute and remove itself from the maximum Sub-leader count.

**LISTENTALK DOCKING STATION OPERATION (SEE PAGES 15-16)**

The ListenTALK Docking Station operates as a charger and programming station and provides convenient storage for ListenTALK units. Mount the Docking Station on a flat surface. Connect the Power Supply to the Docking Station and to any standard AC outlet (100/240 VAC, 50/60 Hz). Place ListenTALK units into the Leader and Participant Pockets to charge and program the units.

**Creating a ListenTALK Group with the Docking Station**

To create a Leader, or Sub-leader snap a red Leader Clip onto any LK-1 Transceiver. Omit the Leader Clip from Participant ListenTALKs. Place the Leader in the Docking Station's red Leader Pocket. Place Sub-leader(s) and Participants in the Docking Station's black Participant Pockets.

To create a Group, pair the Leader with Sub-leader(s) and Participants by pressing the Pairing Button momentarily on the Docking Station. The Pairing Indicator will flash during pairing, then turn solid and finally extinguish when the pairing process is completed.

**Resetting a Group's Pair Key with the Docking Station**

To reset the Pair Key for a ListenTALK Group, place the Leader, Sub-leader(s) and Participants into their respective Docking Station pockets. Then, press and hold the Docking Station Pairing Button for **five** seconds. The Pairing and Status Indicators will flash momentarily and then turn solid indicating success.

**Checking ListenTALK Status with the Docking Station**

Press the Docking Station Status Button. The Status Indicator will illuminate and the individual ListenTALK Graphic Displays will show ListenTALK unit ID, Group name, Group number, battery status, signal strength and other information.

## LISTENTALK ADVANCED FEATURES

### ***Using Multiple ListenTALK Groups***

Each ListenTALK Group operates on its own communications channel. You may create an unlimited number of ListenTALK Groups and up to twenty simultaneous groups may be operated in same area for North America (A0) and Japan (J0) versions and up to thirty groups in the same area for the Europe (E0) version. ListenTALK Groups have one Group Leader and an unlimited number of Sub-leaders and Participants. Communication within a Group is encrypted by a unique Pair Key making ListenTALK an ideal choice for facilities that need secure communications for simultaneous translation, tour-guide use and other applications. Please see "ListenTALK Security" on Page 27 for more information.

### ***Charging and Battery Replacement***

Rechargeable ListenTALK units may be charged in the Docking Station. To charge an individual unit, connect a USB charger to its Micro USB port.

To replace batteries on a non-rechargeable unit, depress the button on the battery door and slide the battery door downwards. Insert three AAA size alkaline batteries.

### ***Updating ListenTALK Firmware***

ListenTALK unit firmware updates are available through the ListenTALK Software Suite.

## LISTENTALK SOFTWARE SUITE

The ListenTALK Software Suite allows a Windows computer to program a ListenTALK system and check ListenTALK status. After installation, the software will automatically connect to any Docking Station or individual Transceiver connected to the computer's USB port.

ListenTALK Software Suite features include complete setup, inventory management, group creation and naming. The suite includes an extensive help file.

## LISTENTALK ACCESSORIES

A wide variety of accessories enable ListenTALK systems to be configured for many different applications. A complete list and full description of ListenTALK accessories may be found at: [www.listentech.com/assistive-listening/listentalk/](http://www.listentech.com/assistive-listening/listentalk/)

### ***Docking Station Case 16***

The Docking Station Case has the same features as the Docking Station Tray 16 in a convenient portable form.

### ***Chargers***

For applications that do not require Docking Station programming features, Listen offers a one-port or four-port USB charger.

### ***Headsets***

Several varieties of headsets are available allowing ListenTALK usage in quiet and noisy environments. ListenTALK Transceivers accept third-party earphones and microphone-equipped earphones through their 3.5mm Headset/Microphone Ports. ListenTALK Transceivers include a built-in microphone which may be used by Participants in quiet environments.

**Other Accessories**

Other accessories include a spare Lithium-Ion Rechargeable Transceiver Battery Pack, a AAA Alkaline Battery Compartment and a Transceiver Protective Case.

**LISTENTALK APPLICATIONS*****Tour Guide System***

A ListenTALK System is ideal for use as a museum, factory or other facility tour-guide system. Create a ListenTALK Group as described on Page 24. Press and release the Leader's Talk Button to toggle between Talk and Mute. Press and hold a Participant Talk Button (LK-1 only) to talk to the Leader or Group as defined by the Leader's choice of Talkback Modes (see Page 26).

***Tour Guide System with Leader and Sub-leaders***

A second ListenTALK Leader, known as a Sub-leader, is useful for two-instructor tours, classrooms or any application where multiple leaders will accompany a group and speak to all Group members. Insert a red Leader Clip onto a Transceiver and Pair it to the Leader (see Page 24) to create a Sub-leader. The leader controls the Group name, Pair Key and Talkback Modes. The Sub-leader Talk Button toggles between Talk and Mute modes. Sub-leaders can Pair with new Sub-leaders or Participants, making them members of the Group and passing the Group name and Pair Key from the Leader.

***Training and Collaboration***

A ListenTALK System with multiple Sub-leaders is ideal for training in a corporate or sports setting. Choose a noise-cancelling, microphone-equipped headset when needed for noisy environments and set the ListenTALK System Talkback Mode as desired to restrict or enable talkback from Sub-leaders and Participants (see Page 26).

***Simultaneous Interpretation***


Due to language barriers, it may be desirable to set up multiple simultaneous Interpretation Groups to facilitate better understanding and communication among similar language speaking individuals.

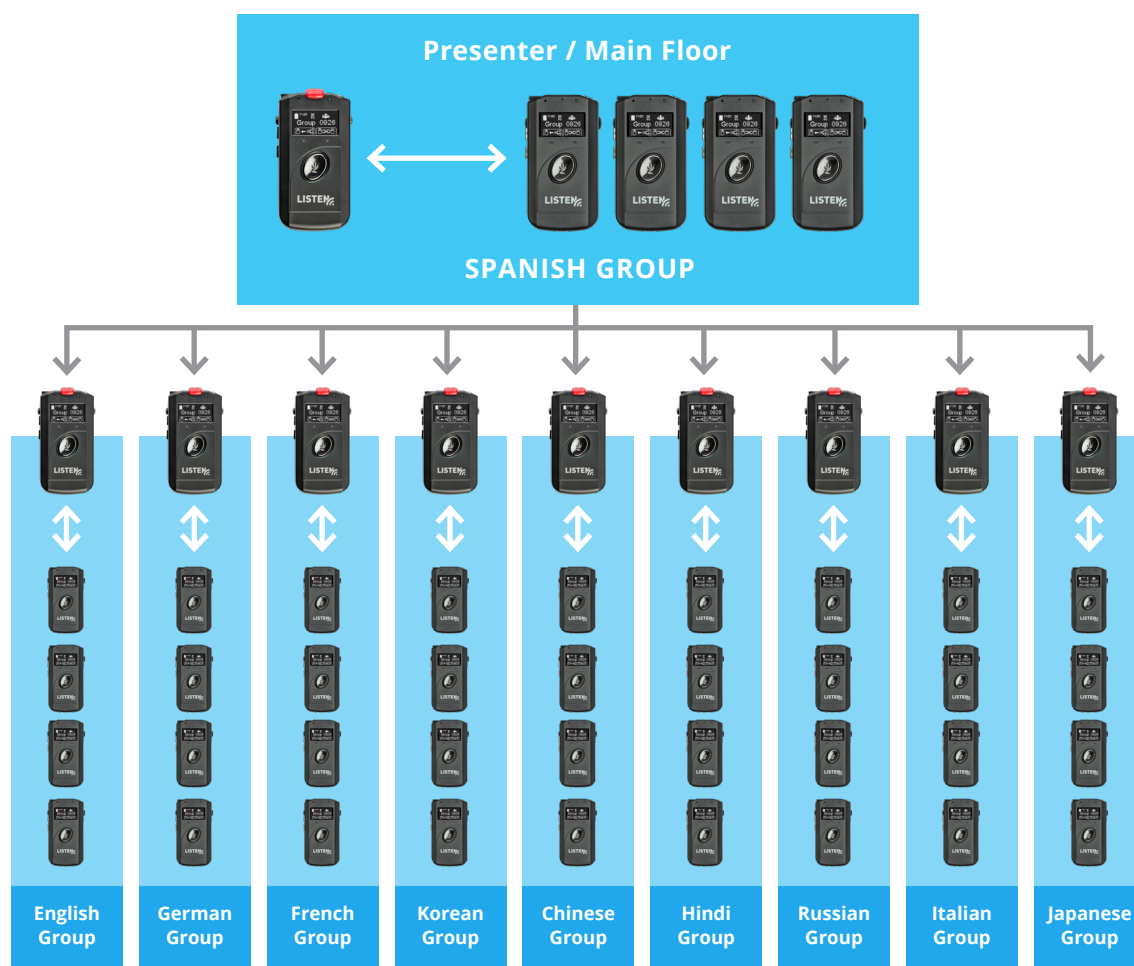
In this application, the maximum number of groups that can exist within the same area is up to twenty (20) for North America (A0) and Japan (J0) and up to thirty (30) for Europe (E0). One (1) Presenter/Main Floor group and up to nineteen (19) different language Interpreter led Groups. See diagram.

When multiple groups are created, the leader units for each Interpreter group will need to be paired to the Presenter/Main Floor leader unit. When this is accomplished the Interpreter leader units will receive the Presenter/Main Floor audio in the headset speakers and will only transmit the interpreted audio to their group via the headset microphone.

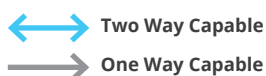
Create separate ListenTALK groups in a normal manner as described on Page 24. The ListenTALK Software Suite allows Groups to have descriptive names such as "Floor", "Spanish", "English", etc.

Steps to create an Interpreter Leader Unit:



1. **Activate Interpreter** on Interpreter leader unit. Activate via main menu (Page 29) or via ListenTALK Software Suite.
2. **Pair Interpreter leader** unit to the Presenter/Main Floor leader unit. Units can be paired manually with NFC pairing (back to back), in a Docking Station (Page 15) or via ListenTALK Software Suite.
  - a. Presenter/Main Floor leader unit initiates the pairing process. Press and hold the Presenter/Main Floor leader's right soft button to initiate pairing mode. Then pair Interpreter leader units to the Presenter/Main Floor leader unit by touching the back of the main leader unit to the back of the intended Interpreter leader units. Upon successful pairing, the Interpreter leader will beep and display the Interpreter icon  on the graphic display.








Total 20 Groups: 1 Presenter Main Floor and up to 19 Interpreter Groups





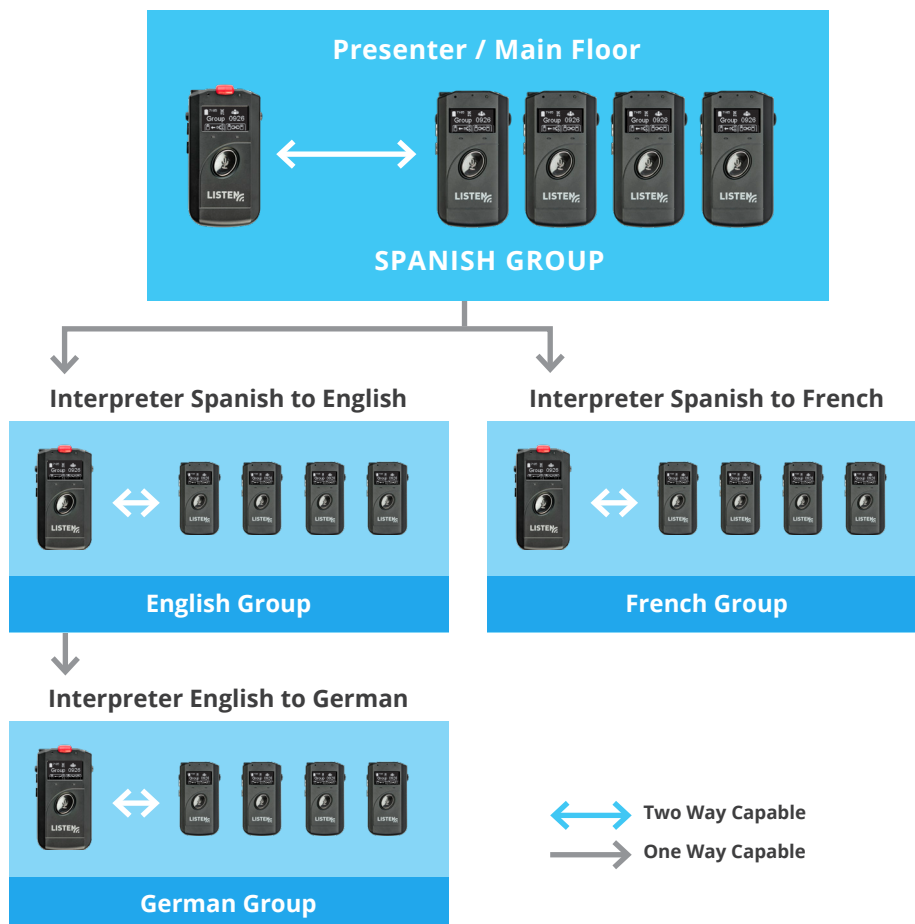
**Note:** If the Interpreter Leader unit ventures outside the radio pickup range of the Presenter / Main Floor unit, it will lose radio contact and the audio from the Presenter / Main Floor unit. When this happens, the following screens   will appear on the Interpreter Leader unit, prompting the Interpreter Leader unit to move back within range and re-sync with the Presenter / Main Floor unit.

Once the Interpreter Leader has moved back into radio pickup range, the Interpreter Leader presses the soft button for  re-syncing. During re-syncing audio communication will be interrupted for approximately 10 seconds.

If the Interpreter Leader unit intentionally leaves the radio pickup range, the Interpreter Leader unit and its group will continue to communicate with each other as normal. Momentarily pressing the power button will toggle the Interpreter Leader units screen from  to the main screen  where Talkback Modes can be controlled. If the Interpreter Leader Unit desires to re-join the Presenter / Main Floor again as an interpreter, the Interpreter Leader momentarily presses the power button to toggle to the re-sync  screen and then re-joins the group by pressing the soft button  for re-syncing.

**Two Deep Interpreter:** Interpreter leader units may only be two deep, meaning an Interpreter unit may be paired to an Interpreter unit. See the below diagram. This allows flexibility for Interpreters. In the example below the German Interpreter does not understand Spanish and is only able to interpret from English to German.

In the below example the German Interpreter leader unit activates Interpreter and pairs to the English Interpreter leader unit. When accomplished the German Interpreter will receive the English interpretation audio in the headset speakers and will transmit the German interpretation audio to its group via the headset microphone.



### ***Wireless Intercom***

Two or more ListenTALK Transceivers may be used as a versatile wireless intercom for event production, sporting activities and training sessions and it can facilitate workgroup collaboration in warehouses, manufacturing environments or construction sites. Create a ListenTALK Group with one Transceiver as Leader and the other Transceivers as Sub-leaders to enable hands-off, full-duplex conversations.

The Talk Button on a Leader or Sub-leader is a toggle – press once to talk; press again to mute. This allows a Leader and a Sub-leader to hold a hands-off, full-duplex conversation (both in Talk Mode). Sub-leader(s) can join or leave a full-duplex conversation by toggling their Talk Button.

If a second Sub-leader presses their Talk Button, they join the conversation (max 1 Leader and 2 Sub-leaders). If a third sub-leader presses their Talk Button, then the Sub-leader that was most recently speaking will remain in the conversation and the other Sub-leader will automatically mute. This allows the new Sub-Leader to join in the full-duplex conversation. The Sub-leader that automatically mutes will hear a short beep in the headset letting them know they will need to rejoin the conversation by pressing the Talk Button when they choose to speak again. Multiple Sub-leaders can hold a conversation with the Leader in this manner while other Sub-leaders listen.

To enable this capability, the Leader must choose “Group Mode” using their Left Soft Button. Also see “Operation with Leader and Sub-leader” on Page 26.

## LISTENTALK SYSTEM TROUBLESHOOTING

### ***The ListenTALK Has No Power***

Make sure the ListenTALK has a fully charged battery or is connected to a standard USB charger. Make sure the Power Button on the top of the unit has been pressed to turn the unit ON. If this does not work, make sure the battery is installed properly and/or install a replacement battery.

### ***There is No Audio***

Check that the ListenTALK is on the same Group with other Participants and the Leader. Make sure the Volume Control is turned up to at least 25%. Confirm that the headset is plugged in all of the way.

### ***Audio is Distorted***

Verify the audio on the unit is not turned up too loud; this will cause distortion. Insure the headset connectors are pushed all the way into the Headset/Microphone Port on top of the unit. Try a different headset.

### ***I Cannot Pick Up the Signal on My ListenTALK***

Check to make sure the ListenTALK Leader and Participants are members of the same group.

### ***I Can Pick Up the Signal on My ListenTALK, but it Sounds Like it's Not Tuned In***

Check the ListenTALK Leader and Participant and confirm members of the same group and move closer to the Leader.

### ***My Battery is Not Charging (Rechargeable ListenTALK Units)***

Verify the clear plastic pull tab has been removed from the ListenTALK battery door engaging the battery connections. Make sure the battery is installed properly and that the unit is fully inserted into the Docking Station pocket. If using a USB charger, try another USB cable. Check the charging device to verify it is plugged in the proper power outlet and power is available at the outlet. If this does not work, install a replacement battery.

### ***I Want to Run the ListenTALK Unit from a USB Charger***

Simply plug any standard USB charger into the Micro USB connector on the side of the ListenTALK unit.

### ***Dock Communication Error***

If a communication error occurs the Docking Station will display an error message for 5 seconds on the first available ListenTALK unit. The message will display an error code as well as indicate the pocket that is having the communication error. The Docking Station will fast flash the red LED indicating an error followed by the flashing Yellow LED indicating the error code and the pocket number.

If this happens examine the pocket in question for damaged pins, reseal the unit in the pocket and repeat the operation that caused the error. If it continues determine if it is the unit or pocket that is causing the error by placing the unit in another pocket and repeating the operation. For more detail or to fix the issue contact Listen Technical support.

Error 2 (Unit Removed) – unit removed too soon during update.

Error 3 (Pair Failed) – defective or no unit in Leader pocket number 1.

Error 4 (Read Failed) – cannot read from unit.

Error 5 (Write Failed) – cannot write to unit.

## COMPLIANCE INFORMATION

### *For Users in the US and Canada*

#### **FCC Statement**

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.

No user serviceable parts inside. Any changes or modifications not expressly approved by Listen Technologies could void the user's authority to operate this equipment.

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.

#### **FCC and IC Notice**

- FCC ID and IC ISSED certification notice can be found inside the battery compartment or in the product menu.
  - The product menu can be access by simultaneously pressing the volume down and power buttons.
  - The FCC ID and IC ISSED is accessed by pressing the volume down button until the "About" menu is displayed and pressing the check mark soft button.
- FCC ID et avis d'attestation IC ISSED se trouvent à l'intérieur du compartiment des piles ou dans le menu produits.
  - Le menu produit peut être l'accès en appuyant simultanément sur la diminution du volume et le bouton power.
  - l'ID FCC et IC ISSED est accessible en appuyant sur le bouton volume faible jusqu'à ce que le menu « A propos » s'affiche en appuyant sur le bouton doux case à cocher.

#### **RF Exposure Warning**

- This equipment complies with FCC and IC radiation exposure limits set forth for body worn portable devices in an uncontrolled environment.
- This equipment may be safely worn and operated handheld or next to your body such as on a lanyard or clipped to clothing.
- Cet équipement est conforme à la FCC et IC limites d'exposition aux rayonnements définies pour appareils portables corps portés dans un environnement non contrôlé.
- Cet équipement peut être porté et exploité suivante à votre corps comme sur une longe ou ordinateur de poche ou découpé aux vêtements en toute sécurité.

**ICES Statement**

This device complies with ICES-003 class B.

This device complies with Industry Canada's license-exempt RSS Standards. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme à la classe B de l'ICES-003

Cet appareil est conforme avec Industrie Canada RSS standard exempts de licence (s). Son utilisation est soumise aux deux conditions suivantes:

- (1) cet appareil ne peut pas provoquer d'interférences et
- (2) cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

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

**For users in the European Union**

This device is a DECT portable transceiver operating in the frequency band of 1880 MHz to 1900 MHz and outputs a maximum power of < +20dBm EIRP.

This device also utilizes NFC which operates at 13.56MHz and has a maximum field strength of less than -10 dBuA/m.

The usage of this device is generally allowed in all EU countries.

This device has been evaluated and found compliant with RF exposure limits in accordance with the RED directive 2014/53/EU

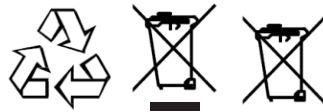
Refer to the product label which is located in the battery compartment, underneath the battery, of the device for serial number, Manufacturer and additional regulatory information.

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

In compliance with the following requirements

WEEE Directive (2012/19/EU)

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

**Notes on Disposal**

The symbol of the crossed-out wheeled bin (imprint available depending on national requirements) on the product, the battery/rechargeable battery (if applicable) 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/rechargeable batteries (if applicable) 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 ListenTALK Transceiver LK-1-E0, ListenTALK Receiver Pro LKR-11-E0 and ListenTALK Receiver Basic LKR-12-E0 are 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/](http://www.listentech.com/support/declaration-conformity-documents/)



## WARRANTY

Listen Technologies warrants LK-1-E0, LKR-11-E0 and LKR-12-E0 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/](http://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](mailto: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](http://www.listentech.com)



**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](http://www.listentech.com)

Copyright © 1998 - 2021 Listen Technologies Corporation. All rights reserved. 20210405