## LR-4200-IR Intelligent DSP IR Receiver





#### **Configuration:**

LR-4200-IR Intelligent DSP IR Receiver

#### **Product Overview:**

The LR-4200-IR receiver is one of Listen Technologies' new generation of personal listening products, iDSP or Intelligent Digital Signal Processing.

The LR-4200-IR is a high performance IR receiver with extreme sensitivity providing the best pickup and range of any device of its kind. iDSP is the smallest device of its kind, making it easy for the end user to wear and operate and easier for the venues to dispense, store and maintain. The integrated neck loop/lanyard with DSP loop driver, improves the listening experience for T-coil users. The advanced green battery technology dramatically reduces costs of ownership and hassles while reducing the number of batteries in landfills. A field replaceable Lithium-ion battery is included with the unit.

The LR-4200-IR has an OLED display which shows unique channel names, battery status, channel status, volume status and charge activation. Connect the iDSP neck loop/lanyard or ear phones via two 3.5 mm output jacks (receivers can be shared). The Micro USB connection is used with the free iDSP software suite for set up, programming, inventory management, firmware updates and charging via any standard USB port. The LR-4200-IR is compatible with all iDSP accessories.

The result is an exceptional listening experience in small-to-medium places where it's difficult to hear, like: theaters, boardrooms, classrooms, courtrooms, houses of worship, and more.

#### Highlights:

- · High performance IR receiver with extreme sensitivity providing the best pickup and range of any device of its kind
- · Integrated neck loop/lanyard with DSP loop driver improves the listening experience for T-coil users
- Smallest device of its kind makes it easier to wear and use and for venues to dispense, store and maintain
- OLED display which shows unique channel names, battery status, channel status, volume status and charge activation
- · Limited Lifetime Warranty with hassle-free support
- Can be worn around the neck or with the belt clip, making it the most discreet listening device on the market
- Advanced green battery technology dramatically reduces costs of ownership and hassles while reducing the number of batteries in the landfill
- Use for single channel applications

#### Includes:

One (1) LR-4200-IR Intelligent DSP IR Receiver\*

One (1) Quick Start Guide

\*The LR-4200-IR comes with a non-proprietary, field replaceable Lithium-ion battery.

Architectural Specification:

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### LR-4200-IR

**Intelligent DSP IR Receiver** 



The IR receiver shall be capable of receiving on four (4) wide band channels (carriers), Channel 1 (2.3 MHz), Channel 2 (2.8 MHz), Channel 3 (3.3 MHz) and Channel 4 (3.8 MHz). The receiver shall be tuned to a single channel and users shall not be able to change the channel. The receiver shall have the option of being lanyard or belt clip worn and the lanyard shall incorporate an integrated neck loop for compatibility with T-coil hearing aids. The receiver shall be intelligent and provide customized audio to either earphones or the integrated neck loop based upon which is connected. The receiver shall have two (2) 3.5 mm (TRRS) connectors to drive the integrated neck loop lanyard or up to two (2) mono or stereo earphones. The receiver shall incorporate a multi-functional display (OLED) that indicates battery status, inventory number, volume level and a customizable channel name. The receiver shall employ a unique iDSP<sup>TM</sup> noise reduction technology. The receiver shall be fully programmable via PC software. The receiver shall have a micro USB connector used for programming/setup, inventory control, charging and firmware upgrades. The receiver shall incorporate automatic battery charging circuitry and use a non-proprietary lithium ion battery. The receiver shall automatically turn on when removed from the charging device and automatically turn off when returned to the charging device. The receiver shall have additional charging contacts to allow for multiple charging options. The receiver shall have a signal-to-noise ratio of 60 dB or greater, THD less than 2% and shall have an audio frequency response of 63 Hz - 15 kHz (±3 dB). The receiver shall be capable of receiving a stereo signal on each of the four (4) carriers. The receiver shall be covered by a hassle free limited lifetime warranty. The Listen LR-4200-IR is specified.

Product Specification:Intelligent DSP IR Receiver		
Audio		
System Frequency Response	63 Hz - 15 kHz (±3 dB)	
System Signal to Noise Ratio	Mono: >60 dB, Stereo: >52 dB	
System Distortion	<2% total harmonic distortion (THD) at 80% deviation	
Audio Output Jacks	Two (2) 3.5 mm (0.14 in.) connectors, unbalanced, 0 dBu nominal output level, 16 mW maximum, impedance 32 ohm, accepts mono or stereo phone plug or LA-430 Intelligent Ear Phone/Neck Loop Lanyard	
Controls		
User Controls	Power on/off and volume up/down	
Set-up Controls	Press and hold up/down volume buttons for 5 seconds to enter channel adjust, use up/down to select channel	
Programming	Via software and USB port	
Indicators		
LED	Flashes when batteries are low or to indicate charging, solid when fully charged	
Display	OLED - Channel designation, battery level, unit number, charging status, volume status	
	RF	
Carrier Frequencies	2.3 MHz, 2.8 MHz, 3.3 MHz, 3.8 MHz	
Number of Channels	Four (4) selectable channels	
Frequency Accuracy	± .005% stability 32 to 122 °F (0 to 50 °C)	
Modulation	FM Wideband, ±50 kHz deviation max, 50 uS de-emphasis	

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# LR-4200-IR Intelligent DSP IR Receiver



IR		
Sensitivity	Better than one (1) nW/cm2 @40 dB SNR	
Squelch	Programmable in 20 steps, automatic on loss of IR signal	
Power Save Mode	Turns unit off after a specified time of no IR signal, default is 30 minutes	
Coverage Area	30,000 ft² (2787 m²) single channel with LT-84/LA-141 or 40,000 ft² (3716 m²) single channel with LT-82/LA-140	
Power		
Battery Type	Lithium Ion	
Battery Life	8 Hours of typical use	
Battery Charging Time	Fully charged in 2.5 Hours	
Power Supply	Micro USB connector, 5 V, 500 mA	
Physical		
Dimensions (H x W x D)	3.75 x 2.0 x 0.64 in. (9.6 x 5.0 x 1.7 cm)	
Dimensions with Belt Clip	3.75 x 2.0 x 0.80 in. (9.6 x 5.0 x 2.1 cm)	
Unit Weight	1.9 oz. (53.9 g)	
Unit Weight with Batteries	2.8 oz. (79.4 g)	
Shipping Weight	3.5 oz. (99.2 g) with a 1 lbs. (0.45 kg) minimum	
Color	Flat Black	
Environmental		
Temperature - Operation	14 to 104 °F (-10 to 40 °C)	
Temperature - Storage	(-)4 to 122 °F (-20 to 50 °C)	
Relative Humidity	0 to 95% relative humidity, non-condensing	
Compliance		
Standards	FCC Part 15, ICS-03, CE, RoHS, WEEE	