

Advanced Intelligent DSP IR Receiver



Configuration:

LR-5200-IR Advanced Intelligent DSP IR
Receiver

Product Overview:

The LR-5200-IR receiver is one of Listen Technologies' new generation of personal listening products, iDSP or Intelligent Digital Signal Processing.

The LR-5200-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 end users 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-5200-IR has an OLED display which shows unique channel names, battery status, channel status, volume status and charge activation. Listen's programmable channel select button allows users to cycle through active channels, seek to or lock to a channel. 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-5200-IR is compatible with all iDSP accessories.

The result is an exceptional listening experience in places where it's difficult to hear, like: theaters, lecture halls, concert venues, 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
- Listen's programmable channel select button allows user to cycle through active channels, seek to or lock to a channel
- 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 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 multi-channel applications where the users need the convenience of changing the channels themselves

Includes:

One (1) LR-5200-IR Advanced Intelligent DSP IR Receiver*
One (1) Quick Start Guide

Advanced Intelligent DSP IR Receiver

*The LR-5200-IR comes with a field replaceable Lithium-ion battery.

Architectural Specification:

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 device shall have a programmable multi-function Listen button that can be tuned for the venues desired channels and electronically lock out any unused channels. 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™ 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 multiply 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-5200-IR is specified.

Product Specification:Advanced 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, volume up/down, Listen button for end user channel selection
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

Advanced Intelligent DSP IR Receiver

Frequency Accuracy	± .005% stability 32 to 122 °F (0 to 50 °C)
Modulation	FM Wideband, ±50 kHz deviation max, 50 uS de-emphasis
IR	
Sensitivity	Better than one (1) nW/cm ² @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 ft ² (2787 m ²) single channel with LT-84/LA-141 or 40,000 ft ² (3716 m ²) 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