

## Advanced Intelligent DSP RF Receiver (72 MHz)



### Configuration:

LR-5200-072 Advanced Intelligent DSP RF Receiver (72 MHz)

### Product Overview:

The LR-5200-072 is Listen Technologies' advanced new generation of personal listening products, iDSP or Intelligent Digital Signal Processing.

With Listen's unique DSP SQ™ noise reduction technology, users experience 20 dB less noise and hiss than any other listening device. 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 integrated neck loop / lanyard with DSP loop driver, improves the listening experience for T-coil users. iDSP is the smallest device of its kind, making it easier to wear and easier for venues to dispense, store and maintain.

The LR-5200-072 has an OLED display to program channel names, monitor battery status, channel status, and charge activation. Programmable channel select button allows user 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 (ear phones could be shared). The Micro USB connection is used with included iDSP software for charging, set up, programming, inventory management and firmware updates.

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:

- Advanced DSP SQ™ noise reduction technology delivers 20 dB less noise and hiss than any other listening device
- 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
- Limited Lifetime Warranty with hassle-free support
- Can be worn around the neck, with the belt clip, or concealed in a pocket, 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-5200-072 Advanced Intelligent DSP RF Receiver (72 MHz)\*  
One (1) Quick Start Guide

\*The LR-5200-072 comes with a field replaceable Lithium-ion battery.

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### Architectural Specification:

The RF receiver shall be capable of receiving on 57 wide and narrow band channels. 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 a signal-to-noise ratio of 80 dB or greater and shall have an audio frequency response of 50 Hz - 15 kHz ( $\pm 3$  dB). The device shall employ a unique DSP SQ™ noise reduction technology. The unit shall have a programmable squelch circuit. The unit shall incorporate a multi-functional display that indicates battery status, inventory number and channel. The device shall have the option of being lanyard or belt clip worn and the lanyard shall have the option of an integrated neck loop. The device shall have a USB connector used for inventory control, set up, charging and firmware upgrades. The device shall incorporate automatic battery charging circuitry and use a non-proprietary lithium ion battery. The device shall have additional charging contacts to allow multiply charging options. The Listen LR-5200-072 is specified.

Product Specification: Advanced Intelligent DSP RF Receiver (72 MHz)	
<b>Audio</b>	
Frequency Response	50 Hz - 15 kHz ( $\pm 3$ dB)
System Signal to Noise Ratio	SQ enabled 80 dB, SQ disabled 60 dB
System Distortion	<2% total harmonic distortion (THD) at 80% deviation
Output/s	Two (2) 3.5 mm (0.14 in.) connectors, unbalanced, 0 dBu nominal output level, 16 mW maximum, impedance 32 ohm
<b>Controls</b>	
User Controls	Power, up/down volume, 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
<b>Indicators</b>	
Display	Channel designation, battery level, unit number, charging status
LEDs	Flashes when batteries are low or to indicate charging, solid when fully charged
<b>RF</b>	
Frequency Range	72.025 - 75.950 MHz
Number of Channels	17 wide band, 40 narrow band
Sensitivity	.6uV typical, 1 uV maximum for 12 dB sinad
Frequency Accuracy	$\pm .005\%$ stability 32 to 122 °F (0 to 50 °C)
Antenna Type	Uses ear phone/neck loop lanyard and short ear phone cable or standard earphone cable
Squelch	Programmable in 20 steps, automatic on loss of RF signal
<b>Power</b>	
Battery Life	8 Hours of continuous use

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Power Supply	Micro USB connector, 5 V, 500 mA
Battery Type	Lithium Ion 3.7 Vdc, 1200 mAh
Battery Charging Time	Fully charged in 2.5 Hours
<b>Physical</b>	
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)
Color	Black
Unit Weight	1.60 oz. (45 g)
Unit Weight with Batteries	2.40 oz. (68 g)
Shipping Weight	3.20 oz. (91 g) with 1.0 lbs. (454 g) minimum
<b>Environmental</b>	
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
<b>Compliance</b>	
Standards	FCC Part 15, Part 90, Industry Canada, RoHS