



**Configuration:**

- LT-84-01 ListenIR Transmitter/Radiator Combo (North America)
- LT-84-02 ListenIR Transmitter/Radiator Combo (Asia, UK)
- LT-84-03 ListenIR Transmitter/Radiator Combo (Euro)
- LT-84-04 ListenIR Transmitter/Radiator Combo (Australia)

**Product Overview:**

The LT-84 ListenIR 2-channel transmitter-radiator (Pat. 9,712,246) from Listen Technologies provides venues, businesses, government agencies, and more with an affordable and easy-to-use assistive listening solution.

Offering twice the IR power and up to six times the coverage area of similar products, the LT-84 can transmit a clear, reliable signal across 2,787 square meters (30,000 square feet). This signal range ensures that users in any mid-sized space, from the boardroom to the courtroom and beyond, enjoy an uninterrupted audio performance.

The LT-84 is also the first infrared assistive listening system to feature expansion radiators (LA-141), which provide delay compensation to ensure that there are no signal cancellation dropouts. Up to four (4) expansion radiators (LA-141) can be added to the system to offer additional coverage (when mounted within 30.48 m [100 ft.] from the unit).

In addition, the LT-84 is the only two-channel transmitter-radiator that can transmit on up to four different frequencies (2.3 MHz, 2.8 MHz, 3.3 MHz, or 3.8 MHz). This flexibility in the field makes setup and operation even easier, while also eliminating the need to purchase separate, frequency-specific transmitter-radiator units.

With the included mounting hardware, and the flexible frequency selection and input connectivity, the LT-84 is an ideal way to add infrared assistive listening capabilities and ADA compliance to your business or venue.

**Highlights:**

- Affordable, effective, and expandable solution ideal for small to mid-size spaces such as classrooms, courtrooms, boardrooms, and more
- Multiple frequency options offer additional flexibility and simplicity during installation and setup
- Offers gapless coverage up to 2,787 square meters (30,000 square feet)
- Can be expanded with up to four (4) LA-141 expansion radiators for additional coverage area
- One-cable design utilizes a single CAT-5e to carry both power and signal to LA-141 expansion radiators
- Multiple input options for easier setup and operation

**Includes:**

- One (1) LT-84 ListenIR 2-Channel Transmitter/Radiator Combo
- One (1) LA-210 12 VDC Universal Power Supply/Power Cord
- One (1) LA-344 Flexible Mounting Hardware
- Two (2) Phoenix Type Connectors
- One (1) LA-303 Multi-Lingual Assistive Listening Notification Sign
- One (1) Quick Start Guide

Product Specification: ListenIR 2-Channel Transmitter/Radiator Combo	
Audio	
Frequency Response	20 Hz - 20 kHz (+/- 1 dB) Line Input 63 Hz - 15 kHz (+/- 3 dB) System Specification (wireless end-to-end with LR-44)

Product Specification: ListenIR 2-Channel Transmitter/Radiator Combo	
Signal-to-Noise Ratio	> 70 dB (SNR) Line Input > 60 dB (SNR) System Specification (wireless end-to-end with LR-44)
Microphone Input	Two (2) 3.5 mm (0.14 in.) Tip/Sleeve connector, -30 dBu nominal input, +14 dB headroom, impedance 4.4k Ohms, 5 VDC bias supply
Total Harmonic Distortion	< 0.1% (THD) Line Input < 2% (THD) System Specification (wireless end-to-end with LR-44)
Unbalanced Line Input	Stereo/Mono Input. Two (2) Dual (RCA) Phono connectors, unbalanced, -10 dBu nominal input, +14 dB headroom, impedance 10k Ohms
Balanced Line Input	Mono Input. Two (2) Phoenix Type connector, balanced, + 4 dBu nominal input, +14 dB headroom, impedance 100k Ohms
<b>Controls</b>	
Power Switch	Three (3) position switch - Power OFF, Power ON-Indicator Lights OFF, Power ON-Indicator Lights ON
Carrier Frequency Selection	Two (2), four (4) position rotary switches (2.3 MHz, 2.8 MHz, 3.3 MHz, 3.8 MHz)
Level Control Knob	Two (2) audio taper rotary potentiometer, counter-clockwise decreases input mix level, clockwise increases input mix level
<b>Indicators</b>	
Power Supply LED	Green LED on in-line power supply indicates AC power is applied
Audio Level Indicators	Two (2) Green LEDs, two (2) Red LEDs, Green LED indicates Audio presence and Red LED indicates peaks in the audio
RJ-45 Amber LED	Solid Amber indicates carrier is present and IR is being transmitted
RJ-45 Green LED	Solid Green indicates power is applied to unit, flashing indicates unit has entered power save mode
<b>RF</b>	
Carrier Frequencies	2.3 MHz, 2.8 MHz, 3.3 MHz, 3.8 MHz, Selectable
Number of Channels	Two (2) channels, Selectable carrier frequency
Frequency Accuracy	+/- .005% stability 0 to 50 °C
Transmitter Stability	50 PPM
Modulation	FM Wideband, ±50kHz deviation max, 50 %S pre-emphasis
Power Save Mode	Carrier will shut off when no audio is present for 15 minutes on both channels to preserve radiator life
Expansion Link Output	Two (2) RJ-45 connectors - Provides RF Signal and Power, CAT-5e cable 24 AWG, 100 ft. maximum cable length, two (2) LA-141s per output connector
<b>IR</b>	
Coverage Area	2,787 m <sup>2</sup> (30,000 ft <sup>2</sup> ) single channel with LR-4200-IR/LR-5200-IR receivers or 697 m <sup>2</sup> (7,500 ft <sup>2</sup> ) single channel with LR-42/LR-44 receivers
IR Emitter Power	1.49 W
<b>Power</b>	
Power Supply Input	100-240 VAC, 50-60 Hz
Power Supply Output	12 VDC, 4 A, 48 W
Power Supply Connector	2.5 mm ID barrel connector, center positive
Power Output	Two (2) RJ-45 connectors. providing Power and RF signal for up to two (2) LA-141 expansion radiators on each output

Product Specification: ListenIR 2-Channel Transmitter/Radiator Combo	
Power Supply Type	In-line switching mode power supply, Listen part number LA-210
Power Supply Line Cord	IEC line cord, North America Type B (LT-84-01), Asia and UK Type G (LT-84-02), Euro Type C (LT-84-03), Australia Type I (LT-84-04)
<b>Physical</b>	
Color	Black with White Silk Screening
Unit Weight with Power Supply	1.8 lbs. (0.8 kg)
Shipping Weight	3.4 lbs. (1.54 kg)
Mounting	Can be mounted on a wall, ceiling, or table with provided hardware (screws and hollow wall anchors not provided). Optional LA-347 Wall Box Mounting Plate is available for mounting to a standard single gang electrical box.
Dimensions (H x W x D)	1.5 x 10.7 x 4.1 in. (3.81 x 27.2 x 10.5 cm)
Unit Weight	0.8 lbs. (0.4 kg)
<b>Environmental</b>	
Temperature - Operation	14 °F (-10 °C) to +104 °F (40 °C)
Temperature - Storage	-4 °F (-20 °C) to +122 °F (50 °C)
Relative Humidity	0 to 95% relative humidity, non-condensing
<b>Compliance</b>	
Standards	FCC part 15, ICS-03, CE, UL, CUL, C-Tick, CCC, PSE, KC, GS, RoHS, WEEE
Power Supply Compliance Marks	CUL, UL, CE, CCC, C-Tick, KC, PSE, GS, FCC, RoHS