



#### 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 new LT-84 ListenIR 2-Channel Transmitter-Radiator is the only product of its kind that provides complete coverage in a wide variety of venue spaces. This advanced IR product is simple to use, cost-effective, designed to blend in to any environment, and offers twice the amount of IR power of similar products, and up to six times the coverage area.

A single unit provides up to 2,787 m<sup>2</sup> (30,000 ft<sup>2</sup>) coverage area with LR-4200-IR/LR-5200-IR receivers or 697 m<sup>2</sup> (7,500 ft<sup>2</sup>) with LR-42/LR-44 receivers in single channel mode, ensuring that the entire room has coverage without gaps or null spots.

The LT-84 is the first IR system with Expansion Radiators (LA-141) that implement delay compensation—no signal cancellation drop outs.

It is the only two channel Transmitter-Radiator with up to four frequencies; 2.3 MHz, 2.8 MHz, 3.3 MHz, or 3.8 MHz, providing flexibility in the field and eliminating the need to purchase a specific frequency based transmitter-radiator.

In addition four (4) Expansion Radiators (LA-141) can be added for additional coverage, when mounted within 30.48 m (100 ft.) cable length from the LT-84.

A single CAT-5e cable carries both power and signal to the LA-141 Expansion Radiators making it a true one-cable connection.

Easy installation includes mounting hardware for wall, ceiling, or table mounting and a multi-lingual legislative compliance sign. Flexible frequency selection and input connectivity minimizes on-site installation hassles.

#### Highlights:

- The best, most cost-effective solution for secure assistive listening in smaller spaces such as; classrooms, courtrooms, corporate meeting rooms, and theaters.
- The only product of its kind that provides complete, gap-less coverage in small-to-medium spaces.
- This advanced IR product is simple to use, cost-effective, designed to blend in to any environment, and offers more coverage than similar products.
- The LT-84 with one channel covers up to 2,787 m<sup>2</sup> (30,000 ft<sup>2</sup>) with LR-4200-IR/LR-5200-IR receivers or 697 m<sup>2</sup> (7,500 ft<sup>2</sup>) with LR-42/LR-44 receivers.
- Add up to (4) four expansion radiators (LA-141) for additional coverage, when mounted within 30.48 m (100 ft.) cable length from the LT-84.
- Flexible frequency selection of 2.3, 2.8, 3.3, 3.8 MHz in a single unit.
- True one-cable connection via single CAT-5e cable which carries both power and signal to the LA-141 expansion radiators.
- Flexible input connectivity of Mic, RCA stereo sum, and Phoenix line level summed on each input channel simplifies installation.

**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	
<b>Audio</b>	
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)
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 µs 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

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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
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