LT-82-01

Stationary IR Transmitter

Configuration:

LT-82-01 Stationary IR Transmitter (North America)*

LT-82-02 Stationary IR Transmitter (Asia, UK)*

LT-82-03 Stationary IR Transmitter (Euro)*

LT-82-04 Stationary IR Transmitter (Australia)*

*01, 02, 03, and 04 designation refers to international plug type (type B, G, C, and I) for the power supply.

Product Overview:

The Listen LT-82 is the heart of a stationary IR listening system. It takes the desired audio signal and transmits the signal via coaxial cable to one (1) or more IR radiator-emitters (LA-140). The LT-82 can be operated in mono or stereo on one (1) of four (4) different carriers; up to four (4) LT-82 units may be connected to provide up to four (4) mono or stereo carriers to the radiator(s). The LT-82 generates DC power to power up to two (2) LA-140 radiator-emitters. Two (2) LT-82 units can be rack mounted in a single rack space using the LA-326 rack mounting kit. The LT-82 is used for government compliance (such as ADA), assistive listening, language interpretation, live theatre, houses of worship, courtrooms, secure rooms and for auditory description.

Highlights:

- Secure wireless communication - ideal for applications where isolation of the signal is important
- Up to four (4) channels mono, or four (4) channels stereo - no need to sacrifice multiple channels to achieve stereo transmissions (one LT-82 is required for each channel)
- Transmitter can power two (2) radiator/emitters (LA-140) using CAT-5 cabling
- Easy to specify, install and use
- Outstanding performance - ensures crystal clear sound for listeners
- Limited Lifetime Warranty
- True stereo audio (left and right) is transmitted on a single carrier frequency

Includes:

One (1) LT-82 Stationary IR Transmitter
One (1) LA-205 30 VDC Extension/Replacement Power Supply for LA-140/LT-82
One (1) LA-89 Interconnection Coaxial Cable
One (1) Quick Reference Card

Architectural Specification:

The Stationary IR Transmitter shall be capable of broadcasting on four (4) mono or stereo carriers; 2.3, 2.8, 3.3 and 3.8 MHz. Channel Selection shall be capable of being locked. Multiple transmitters shall be capable of being daisy-chained together to transmit up to four (4) channels simultaneously. The transmitter shall have a timer that shuts off the carriers after 30 minutes when no audio is present at the transmitter. The transmitter shall have a SNR of 60 dB or better. The device shall have an audio frequency response of 63 Hz to 15 kHz, +/- 3db. It shall have two (2) mixing audio inputs, one (1) balanced XLR/phone input and one (1) unbalanced RCA input. The device shall have the following audio controls:input level, transmit level, contour level and stereo on/off control. The device shall have an audio processor that is capable of automatic gain control and limiting. The transmitter shall provide power for up to two (2) radiators over

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CAT-5 cable. The LT-82 is specified.

Product Specification:Stationary IR Transmitter	
Audio	
Frequency Response	63 Hz - 15 kHz (+/- 3 dB)
System Distortion	<2% total harmonic distortion (THD)
Audio Input 1	Mono Input (Rear Panel). Female-XLR and 1/4 in. combo connector, balanced, 0/-55 dBu (line/mic) nominal input level adjustable; +21/-30 dBu (line/mic) maximum input level; impedance 20k/1k ohms (line/mic); phantom power +12 VDC
Audio Input 2	Stereo or Mono Input (Rear Panel). Two (2) Phono connectors, unbalanced, -10/+10 dBu nominal input level adjustable, +30 dBu maximum, impedance 100k
Audio Processing	Compression can be turned on/off.
Contour	Cuts and boosts frequencies above 5 kHz
Monitor Output	Front panel. One (1) 3.5 mm (0.14 in.) connector, unbalanced, adjustable output level, +7 dBu maximum, impedance 10 ohms. 100 mW, 32 ohms
Signal-to-Noise Ratio	Mono: >60 dB Stereo: >52 dB
Output/s	Input 1 and Input 2 Mixed Output (Rear panel). Two (2) Phono connectors, unbalanced, -10 dBu nominal output level, +19 dBu maximum, impedance 10 ohms
Controls	
Front Panel	Power, Test Tone on/off, Channel up/down, Input Level, Transmit Level, Contour, Monitor Level
Rear Panel	Input 1 Level (Line, Mic, Mic-Phantom Power), Input 2 Level (-10/+10 dBu)
Internal Adjustments	Compression ratio for audio processor. Slope adjustable from 1:1 to 4:1. Default 2:1
Programming	Stereo on/off, Processing on/off
Indicators	
Unit Power	Red LED illuminates when the unit is powered up (front panel)
Input 1, Input 2, Transmit Level	Indicates Input 1, Input 2, and Transmit audio levels. 10 segment LED's (8 green, 2 red)
Stereo	Indicated by a green LED when on (front panel)
Processing	Indicated by a green LED when on (front panel)
RF Carrier	Indicates carrier is active on the LCD Display (front panel)
LCD	Channel designation, lock status, RF Carrier, programming (front panel)

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Test Tone	Red LED illuminates when test tone enabled (front panel)
RF	
Carrier Frequencies	2.3 MHz, 2.8 MHz, 3.3 MHz, 3.8 MHz
Number of Channels	Four (4) channels. Selectable one (1) channel per transmitter (mono or stereo)
Carrier Shut Off	Carrier will shut off when no audio is present for 30 minutes to preserve radiator life.
Frequency Accuracy	+/- .005% stability 0 to 50 °C
Transmitter Stability	50 PPM
Output/s	Two (2) BNC connectors, for connection to radiator(s) and/or additional transmitter(s). 50 mV, 50 ohm, -15 dBm
Input/s	One (1) BNC connector, for connection from additional transmitter(s). 50 mV, 50 ohm, -15 dBm
Power	
Power Supply	In-line switching mode power supply, Listen part number LA-205
Power Supply Input	100-240 VAC, 47-63 Hz
Power Supply Output	30 VDC, 1.5 A
Power Supply Connector	RJ-45
Power Output	Two (2) RJ-45 jacks. For remote powering up to two (2) radiators
Physical	
Color	Dark Grey
Rack Mounting	One (1) rack space high (1U), 1/2 rack space wide. One (1) or two (2) transmitters can be mounted in a single rack space. Optional Rack mount (LA-326) not included.
Power Line Cord	North America, Type B, (LT-82-01) Asia, UK, Type G, (LT-82-02) Euro Type J, (LT-82-03)
Weight	2.6 lbs. (1.18 kg)
Height	1.75 in. (4.5 cm)
Unit Weight with Power Supply	3.8 lbs. (1.72 kg)
Shipping Weight	6.0 lbs. (2.7 kg)
Width	8.50 in. (21.5 cm)
Depth	9.13 in. (23 cm)
Environmental	

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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
Compliance	
Standards	FCC Part 15, Industry Canada, CE, RoHS, UL

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