

LS-83

4-Channel 48-Listener Stationary IR System



The 4-Channel 48-Listener Stationary IR System delivers clear audio from four (4) audio sources to 48 listeners with consistent great sound and substantial signal coverage. Includes transmitter and radiator mounting hardware, rechargeable batteries and charging stations. It is designed for delivering multi-channel audio in applications such as language interpretation, houses of worship, courtrooms, secure rooms, and for auditory description. It includes four (4) Stationary IR Transmitters, 48 stetho receivers, NiMH rechargeable battery packs and six (6) charging stations. The system can operate between one (1) and four (4) channels of audio and can cover up to 80,000 ft² (7,432 m²). Listen's IR systems are designed for applications that require the audio signal to be isolated for security or other reasons, such as assistive listening, sound-field, language interpretation, live theater, houses of worship, courtrooms, secure rooms, and for auditory description. Custom systems available.

Configuration

LS-83-01-GY (Grey Radiators - North America)
 LS-83-02-GY (Grey Radiators - Asia, UK)
 LS-83-03-GY (Grey Radiators - Euro)
 LS-83-01-WH (White Radiators - North America)
 LS-83-02-WH (White Radiators - Asia, UK)
 LS-83-03-WH (White Radiators - Euro)

Highlights

- Accommodates up to 48 listeners – great for applications to accommodate large groups
- Outstanding coverage – 80,000 ft² (7,432 m²)
- Secure wireless communication – ideal for applications where isolation of the signal is important
- Up to four (4) channels mono, or four channels stereo – no need to sacrifice multiple channels to achieve stereo transmissions
- Easy to specify, install and use
- Outstanding performance ensures crystal clear sound for listeners

Architectural Specification

The LS-83 4-Channel 48 Listener Stationary IR System shall use infrared (IR) light to transmit audio from IR emitting radiators to portable IR receivers. The system shall use IR modulating frequencies above 2.0 MHz. The system transmitter shall have a timer that shuts off the carriers after 30 minutes when no audio is present at the transmitter. Channel selection shall be capable of being locked. The system shall be capable of transmitting on four (4) carriers and each of the four (4) carriers shall be capable of transmitting a mono or stereo signal. The system shall have a frequency response of 100 to 15 KHz (+/-3 dB), less than 2% distortion and shall have signal to ratio of greater than 60 dB. A single emitting radiator shall have a transmitting area of no less than 10,000 ft² (929 m²) (one carrier) or greater for each radiator specified. The radiator shall be powered via CAT-5 cabling and the RF from the transmitter shall be carried by 50 ohm coaxial cable. The receivers will be powered by NiMH rechargeable battery packs and include a compact charging station.

Includes

- (4) LT-82 Stationary IR Transmitter
- (2) LA-326 Universal Rack Mounting Kit
- (8) LA-140 Stationary IR Radiator
- (48) LR-42 IR Stethoscope 4-Channel Receiver
- (48) LA-364 NiMH Rechargeable Battery Pack for IR Receivers
- (6) LA-350 8-Unit IR Charging/Storage Station
- (2) LA-304 Assistive Listening Notification Signage Kit

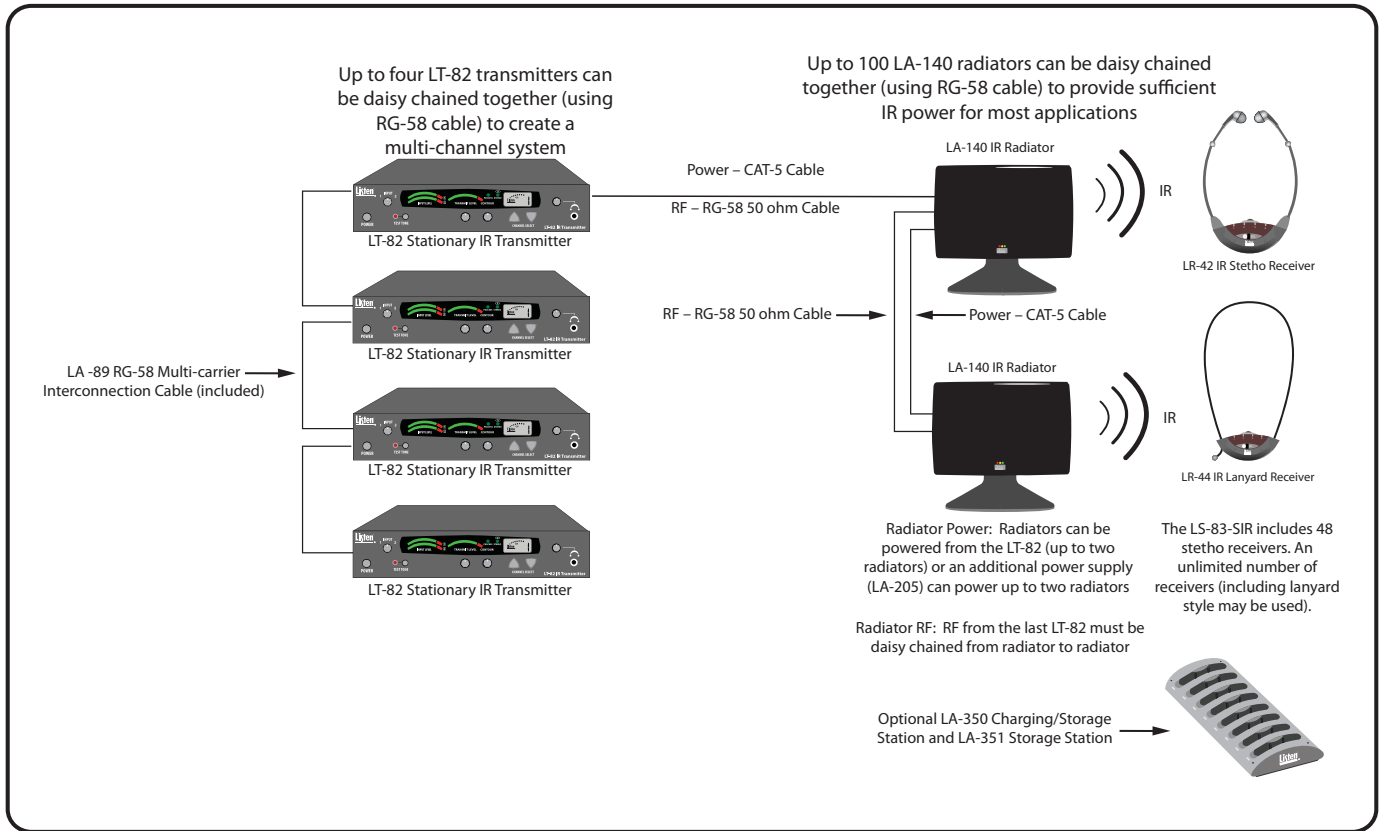
Requires

None

Used With

LR-44 IR Lanyard 4-Channel Receiver

Stationary IR Block Diagram Multi-Channel/Radiator System



Accessories



Cables / Connectors

LA-70 CAT-5e Cable (Per ft.)
 LA-71 RJ-45 CA-5e Connector (10)
 LA-72 RJ-45 CAT-5e Coupler
 LA-89 Interconnection Coaxial Cable
 LA-112 RG-58 50 Ohm Coaxial Cable (Per ft.)
 LA-115 RG-58 BNC Coupler
 LA-127 RG-58 BNC Connector
 LA-391 RG-58 50 Ohm Preassembled Coaxial Cable (Per ft.)
 LA-392 RG-59 75 Ohm Preassembled Coaxial Cable (Per ft.)
 LA-393 NiMH Rechargeable Battery Pack for IR Receivers



Mounting

LA-326 Universal Rack Mounting Kit
 LA-337 IR Radiator Floor Stand
 LA-342 Stationary IR Dual Radiator Mounting Bracket



Power / Charging Supply

LA-152 IR Receiver Battery Compartment (Non-charging)
 LA-205 (01,02,03) 30 VDC Extension/Replacement Power Supply for LA-140/ LT-82
 LA-350 (01,02,03) 8-Unit IR Charging/Storage Station
 LA-351 8-Unit IR Storage Station
 LA-364 NiMH Rechargeable Battery Pack for IR Receivers



Cases

LA-320 Configurable Carrying Case



Headphones

LA-161 Single Ear Bud
 LA-162 Stereo Ear Buds
 LA-164 Ear Speaker
 LA-165 Stereo Headphones
 LA-166 Neck Loop
 LA-170 Behind-the-Head Stereo Headphone



Miscellaneous

LA-150 Replacement Lanyard for LR-44
 LA-151 Replacement Eartips for LR-42 (20)
 LR-44 IR Lanyard 4-Channel Receiver

Related Systems

LS-80 – Basic Stationary IR System

Includes:

- (1) LT-82-01 Stationary IR Transmitter
- (1) LA-140-GY Stationary IR Radiator
- (4) LR-42 Stationary IR Stethoscope 4-Channel Receiver
- (4) LA-363 High Capacity AAA Alkaline Batteries (2)
- (1) LA-304 Assistive Listening Notification Signage Kit



LS-81 – Performance Stationary IR System

Includes:

- (1) LT-82-01 Stationary IR Transmitter
- (1) LA-326 Universal Rack Mounting Kit
- (2) LA-140-GY Stationary IR Radiator
- (4) LR-42 Stationary IR Stethoscope 4-Channel Receiver
- (4) LA-363 High Capacity AAA Alkaline Batteries (2)
- (1) LA-351 Stationary IR Storage Station
- (1) LA-304 Assistive Listening Notification Signage Kit



LS-82 – Advanced Installed IR System

Includes:

- (1) LT-82-01 Stationary IR Transmitter
- (1) LA-326 Universal Rack Mounting Kit
- (2) LA-140-GY Stationary IR Radiator
- (8) LR-42 Stationary IR Stethoscope 4-Channel Receiver
- (8) LA-364 NiMH Rechargeable Battery Pack for Stationary IR Receivers
- (1) LA-350-01 8-Unit IR Charging/Storage Station
- (1) LA-304 Assistive Listening Notification Signage Kit



LS-84 – Expanded Performance (2-Channel) Stationary IR System

Includes:

- (2) LT-82-01 Stationary IR Transmitter
- (1) LA-326 Universal Rack Mounting Kit
- (1) LA-140-GY Stationary IR Radiator
- (5) LR-42 Stationary IR Stethoscope 4-Channel Receiver
- (5) LA-364 NiMH Rechargeable Battery Pack for Stationary IR Receivers
- (1) LA-350-01 8-Unit IR Charging/Storage Station
- (1) LA-304 Assistive Listening Notification Signage Kit



LS-85 – Expanded Basic Stationary IR System

Includes:

- (1) LT-82-01 Stationary IR Transmitter
- (1) LA-326 Universal Rack Mounting Kit
- (1) LA-140-GY Stationary IR Radiator
- (3) LR-42 Stationary IR Stethoscope 4-Channel Receiver
- (1) LR-44 Stationary IR Lanyard 4-Channel Receiver
- (1) LA-166 Neck Loop
- (1) LA-165 Stereo Headphones
- (4) LA-363 High Capacity AAA Alkaline Batteries (2)
- (1) LA-304 Assistive Listening Notification Signage Kit



Frequently Asked Questions

- Q** How many carriers does the LT-82 Stationary IR Transmitter produce?
A One.
- Q** How many carriers can be produced simultaneously in a room?
A Four. You will need one LT-82 Stationary IR Transmitter per carrier.
- Q** Is there any performance degradation in stereo mode?
A Yes, stereo operation raises the noise floor slightly.
- Q** Can I operate some channels in mono and others in stereo?
A Yes.
- Q** How are radiators connected to the LT-82?
A The carrier (signal) is connected using RG-58 coaxial cable; power is connected using standard CAT-5 cabling.
- Q** Can the LT-82 be operated on 230 VAC?
A Yes, the LT-82 has a universal power supply that can be used anywhere in the world.
- Q** How much coverage is provided with the LA-140 radiator?
A Approximately 10,000 ft² (929 m²).
- Q** Does the number of carriers affect the coverage?
A Yes, for two carriers, the coverage per carrier is halved. For four carriers, the coverage per carrier is one-fourth.
- Q** How is power delivered to the radiator?
A Power is delivered with CAT-5 cables (connected between the radiator and either the LT-82 transmitter or the LA-205 power supply).
- Q** How many radiators can be powered from the LT-82 or LA-205 power supply?
A Two.
- Q** What is the purpose of the delay compensation switch?
A This switch allows you to set up delay timing in a multi-radiator system so that each radiator receives the carrier at exactly the same time. This prevents signal dropouts that can be caused by out-of-phase signals (multi-path). With Listen's delay compensation switch, it is not necessary to cut all of your coaxial cables to the same length - your shorter runs can use shorter cables, keeping your installation clean (and cost-effective).

Frequently Asked Questions

- Q** How do you replace the batteries in the receiver?
- A** For non-rechargeable batteries (AAA alkaline), remove the battery compartment and replace the batteries with fresh AAA alkaline batteries. For rechargeable NiMH batteries, simply replace the sealed battery pack with a freshly charged pack.
- Q** How do I recharge the NiMH batteries?
- A** Use the Listen LA-350 8-Unit Charging/Storage unit. This unit will charge batteries that are in receivers or out of receivers.
- Q** How long will the NiMH batteries last until they need to be recharged?
- A** You should receive 15 hours of use from each charge of the batteries.