

LRS-508 series

Line Voltage Occupancy/Vacancy Sensor



OVERVIEW

The LRS-508 series member of the TRANS family is a remote programmable line voltage switching sensor designed to provide occupancy or vacancy sensing based lighting control for commercial, institutional, and industrial applications.

The sensor can be remotely set to control the associated lighting in typical "auto-on, auto-off" presence detection or "manual-on, auto-off" absence detection control together with a connected AC power-thru button switch. In addition to the single sensor and button control for smaller areas like personal offices, multiple sensors and buttons can also be wired together to control lighting for large areas like open offices or classrooms.

The sensor employs a cutting edge quad-element passive infrared (PIR) sensor with multiple lens options to provide omni-directional motion sensing capability. Specific delay time and the ambient light level for daylight inhibition can also be programmed remotely. An exclusive Hybrid Switching technology is employed to protect the sensor from the impact of high inrush current generated by the LED driver while switching on.

Like all other sensors in the TRANS family, the LRS-508 sensor is also available with multiple mounting and lens options which provide second-to-none design and installation flexibility. With LRS-508 sensor, you can effortlessly comply with the requirement of either presence or absence detection control.

FEATURES

- Omni-directional quad element infrared sensor
- Hybrid switching technology for loads with HIC
- Works with AC power-thru manual push button
- 2-way IR remote programmable sensor setting
- Single wire to enable absence detection control
- Walk test and sensor operation LED indicator
- Single and multiple sensors control available
- Available with a variety of mounting brackets
- Available with interchangeable lens selections
- Ideal for new building or renovation projects

APPLICATION

Presence/Absence Detection Control

The LRS-508 series sensor can be used to turn on the light automatically or by pressing a push-button, and shut off the connected light or other loads automatically after the area is vacated for a period of time. Wiring diagrams for single and multiple sensor controls are shown on the back page.

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MOUNTING OPTIONS

The LRS-508Sx series is available with multiple mounting options for different applications. The respective mounting bracket will be shipped with the sensor when ordered with the code (except F and W) as table below.

Code	Mounting Option	Mounting Bracket
F	Fixture Integrated	---
W	IP-66 Fixture Integrated	---
E	Fixture External	EMB-500
P	IP-66 Fixture External	PMB-500
S	Ceiling Surface	SMB-500
C	Junction Box	CMB-500
L	Ceiling Recess	LMB-500

LENS OPTIONS

The LRS-508Sx series is available with following lens options to provide different coverage at different mounting height (H). When ordering with lens code (X), the sensor will be shipped with the respective lens.

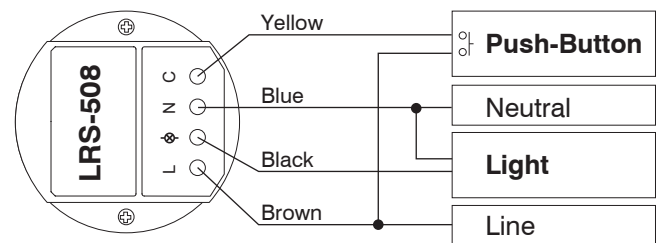
Lens	Shape	Mounting Height	Coverage
A	Standard	Cone 8~15 ft. 2.4~4.5m	2X height
B	Extra wide	Cone 8~10 ft. 2.4~3.0m	6X height
C	High bay	Cone 15~30 ft. 4.5~9.0m	3X height
D	Standard	Round 8~20 ft. 2.4~6.0m	2X height
F	Extra wide	Dome 8~20 ft. 2.4~6.0m	4X height
G	Aisle way	Arch 8~40 ft. 2.4~12.0m	3X height
H	High bay	Dome 30~50 ft. 9.0~15.0m	1X height
L	Long aisle	Arch 8~10 ft. 2.4~3.0 m	6X height

Example: LRS-508SLD

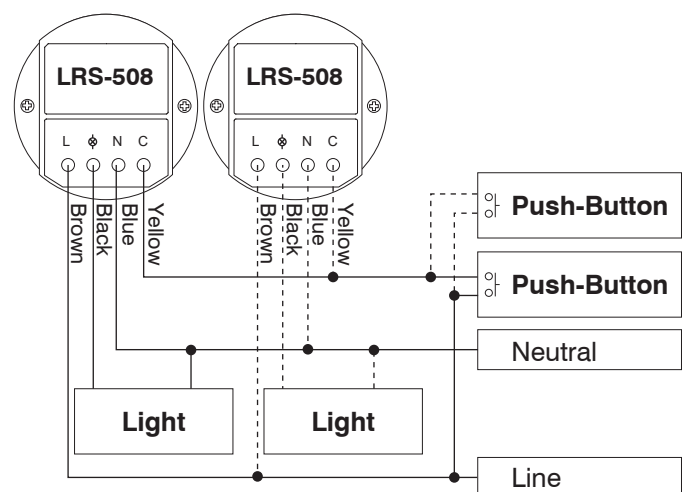
The sensor would come with LMB-500 mounting bracket for ceiling recess mount and lens D. Specific mounting bracket or lens may be ordered separately. For help selecting proper mounting and lens options, please visit www.irtec.com or send your inquiry to support@irtec.com.

WIRING DIAGRAM

1. Single Sensor & Button Control



2. Multiple Sensors & Button(s) Control



NOTE: The button should provide same phased AC mains power-through momentary contact.

SPECIFICATIONS

Power supply	220~240 VAC, 50/60 Hz
Maximum load	Ballast Electronic (LED) - 1200/*750VA
Infrared sensor	Omni-directional quad element pyroelectric
Load switching	Zero-cross Hybrid-Switching
Control input (C)	Momentary AC mains
HIC protection	Max. 80A for 16.7msec.
Detectable speed	0.3~3 m/sec (1~10 ft./sec.)
Mounting height	Subject to the lens type applied.
Detection range	Subject to the lens applied and height
Remote range	> 10m (33 ft.) indoor, no backlight
Op. humidity	Max. 95% RH
Op. temperature	-40°C~70°C (-40°F~158°F)
Dimensions	Ø60 x H37mm (Ø2.36"x H1.45")

*Max load for operating temperature at 55°C~70°C (131°F~158°F)