

LVS-508 series

Line Voltage Vacancy Sensor



OVERVIEW

The LVS-508 series member of the TRANS family is a line voltage vacancy sensor designed to achieve "manual-on, auto-off" absence detection lighting control. The controlled lighting will be turned on when someone presses a connected AC power-thru push button, and the sensor will automatically shut off the light after the area is vacated for a period of time. In addition to typical single sensor and button control for smaller areas like personal offices, multiple sensors and buttons can also be wired together to control area lighting of wide space like open office.

The sensor employs a cutting edge quad element passive infrared (PIR) sensor with interchangeable lens to provide omni-directional motion detection performance. A variety of mounting brackets allow the sensor to be applied from typical office ceiling to high bay installations. An Accu-Set digital potentiometer makes vacancy time setting easier, faster and accurate. The exclusive Hybrid Switching technology makes the LVS-508 ideal to control the capacitive load with exceptionally high inrush current (HIC) while switching on, such as multiple LED drivers connected in parallel.

Like all other sensors in the TRANS family, the LVS-508 vacancy sensor is also available with multiple mounting and lens options. This provides a second-to-none design and complete installation flexibility. The sensor can be operating in cold environment with temperature down to -40°C. With LVS-508 sensor and manual push button, you can achieve absence detection lighting control with ease.

FEATURES

- Omni-directional infrared sensor
- Hybrid switching technology for loads with HIC
- Accu-Set potentiometer for quick time setting
- Works with AC power-thru manual push button
- One 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

Absence Detection Control

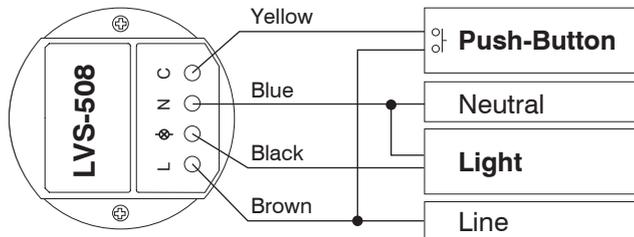
The LVS-508 series vacancy sensor can be used to turn on the light by pressing a push-button, and shut off the connected light or other loads automatically after the area is vacated for a period of time. Wiring diagrams for single and multiple sensor controls are shown on the back page.

LVS-508 series

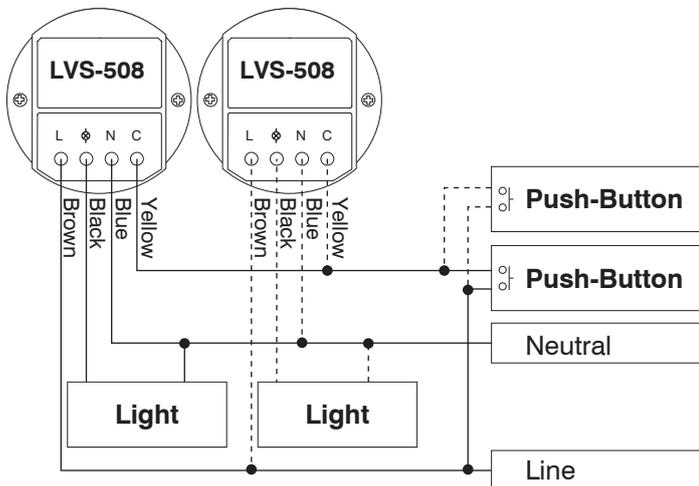
Line Voltage Vacancy Sensor

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.

Mounting Options

The LVS-508N \times 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 LVS-508N \times 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. 2.4~3.0m	6X height

Example LVS-508NLD

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.

SPECIFICATIONS

Power supply	220~240 VAC, 50/60 Hz
Maximum load	Ballast Electronic (LED) - 1200VA
Infrared sensor	Omni-directional 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
Delay time setting	T/1'/3'/5'/10'/20'/30', T=10 sec. for testing
Op. humidity	Max. 95% RH
Op. temperature	-40°C~70°C (-40°F~158°F)
Dimensions	Ø60 x H37mm (Ø2.36"x H1.45")