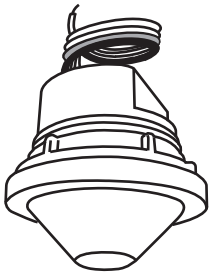
TRANS

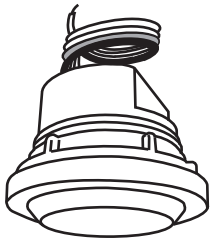
LVS-508N series EU

Line Voltage Vacancy Sensor

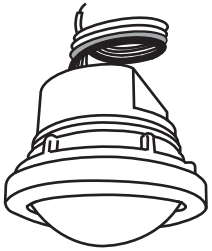
INSTALLATION INSTRUCTIONS



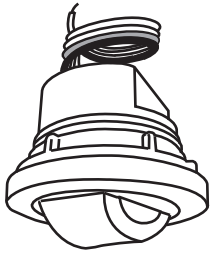
w/Lens A/B/C



w/Lens D



w/Lens F



w/Lens G/L

*More lens options are available for this sensor.
Please refer to the Lens Datasheet for more details.

⚠ WARNING & CAUTION

- **Risk of Electric Shock - Disconnect power supply before servicing.**
- **Do NOT touch the square window of infrared sensor under the lens assembly.**
- **Open Type Photoelectric Switches.**
- **Cycling the power to the sensors will cause failure over time.**

OVERVIEW

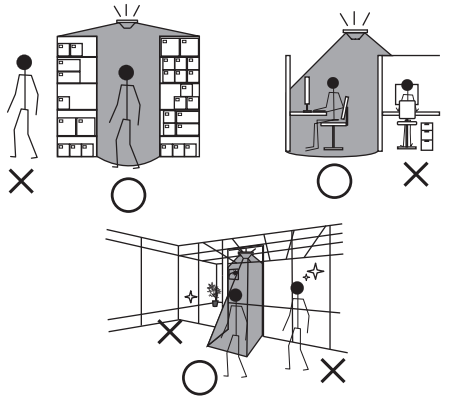
The LVS-508 series member of the TRANS family is a line voltage vacancy sensor designed to achieve “manual-on, auto-off” absence detection lighting control. The controlled lighting will be turned on when someone presses a connected AC power-thru push button, and the sensor will automatically shut off 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.

INSTALLATION NOTES

1. The sensor requires a 230VAC momentary contact to turn on the controlled lighting.
2. The sensor is more sensitive to the movements “crossing” the detection zones than “toward” or “away” the sensor unit. To obtain better sensitivity, avoid placing the sensor in line with occupant path, if possible.
3. The closer the movement is to the sensor, the more sensitive the sensor is. The higher the sensor is installed, the larger movement is required to be detected.
4. Ensure to place the sensor at least at 1.5m (5 ft.) away from air supply ducts as rapid air flow may cause false activations.
5. The sensor cannot “see” the movements behind obstacles, such as furniture, shelf, glass or partitions. As a general rule, each occupant should be able to clearly view the senor unit.
6. For open office areas with partition which could block the sensor view to occupant movements, it is best to place the sensors over the intersection of multiple workstations. For large areas of open office or space, place multiple sensors so that there is overlap coverage with each adjacent sensor



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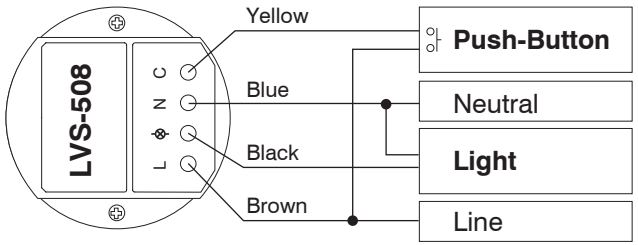
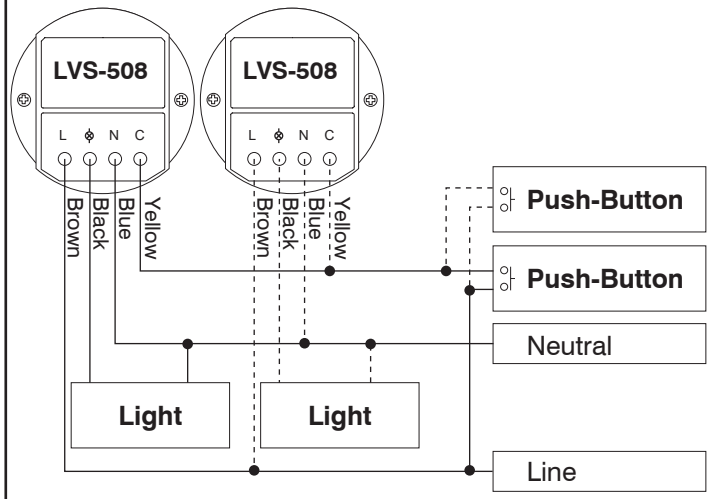
WIRING DIAGRAM

1. Single Sensor & Button Control



2. Multiple Sensors & Button(s) Control



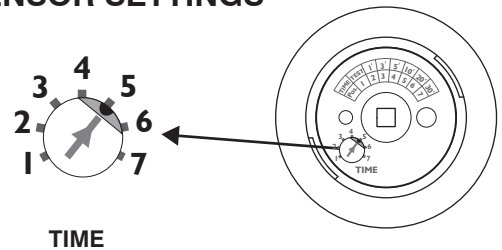
NOTE: The button should provide same phased AC mains power-through momentary contact.

TESTING

1. After the sensor and push-button are installed and wired correctly, apply mains power and wait until light off.
2. Press the button and the light should be on. If not, check the wiring.
   NOTE: Pressing the button when the light is on will turn off the light.
3. Walk within the desired range* at normal speed. The LED behind the lens will blink to indicate when sensor detects movement.

* Depending on the lens type used and mounting height, the sensor could have different sensing coverage as shown on the LENS DATASHEET attached.

SENSOR SETTINGS



TIME

(10 minutes) (Factory set)

SW. POS.	1	2	3	4	5	6	7
TIME	T	1’	3’	5’	10’	20’	30’

Factory Set

*T=10 seconds shorten delay for testing convenience. The sensor will automatically resume to the factory default delay setting after 10 minutes, if the potentiometer has not been adjusted to other position.

TIME - Delay Time

This sensor offers 7 different delay time selection via Accu-Set potentiometers. The light will remain ON if sensor detects occupant's movement before the set delay time expires. Point the arrowhead on the TIME potentiometer to the desired time.

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”)

WARRANTY

IR-TEC International Ltd. warranties this product to be free of defects in materials or workmanship for a period of five years from date of shipment. There are no obligations or liabilities on the part of IR-TEC International Ltd. for consequential damages arising out or in connection with the use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation or reinstallation.

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