

LRS-202SP EU

Line Voltage Occupancy Sensor

INSTALLATION INSTRUCTIONS





A WARNING & CAUTION

- Risk of Electric Shock Turn power off at circuit breaker(16A) before power on. Disconnect power supply before servicing.
- Cycling the power to the sensors will cause failure over time.





INTRODUCTION

The LRS-202SP is a low profile, two-way IR remote programmable line voltage switching occupancy sensor designed for all-purposes energy efficient lighting control.

This state-of-the-art occupancy sensor employs a cutting edge quad-element pyroelectric infrared sensor to provide omni-directional sensing capability of occupant's presence and movements. The sensor can be easily programmed with specific delay time and ambient light level as desired, or download the existing settings of installed sensor from the floor via a two-way handheld IR remote programmer (SRP-280).

This IP-65 batten mount sensor can be externally assembled with an OEM luminaire through a 1/2" hole. A low profile flat lens provides excellent low-bay occupancy sensing capability within its coverage of 2X mounting height.

APPLICATION NOTES

- 1. 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.
- 2. 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.
- 3. 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.
- 4. The sensor cannot "see" the movements behind obstacles, such as furniture, shelf, glass or partition. As a general rule, each occupant should be able to clearly view the sensor unit.
- 5. 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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DETECTION COVERAGE



| Mounting He | ight | 2.4 m (8 ft) | 3.0 m (10 ft) | 3.6 m (12 ft) | 6.0 m (20 ft) |
|----------------------|------|---------------|---------------|---------------|---------------|
| Coverage Diameter | M | 1.0 m (3 ft) | 2.0 m (7 ft) | 3.0 m (10 ft) | |
| | T | 3.0 m (10 ft) | 4.0 m (13 ft) | 5.0 m (16 ft) | 6.0 m (20 ft) |
| | A | 5.0 m (16 ft) | 6.0 m (20 ft) | 7.0 m (23 ft) | 9.0 m (30 ft) |

MOUNTING





CONTROL MODE

The LRS-202SP sensor can be programmed by SRP-280 remote programmer to control the lighting in one of the following modes. For more details of specific control mode, please visit <u>www.irtec.com</u> or contact an IR-TEC team member directly.

| Mode | Control | |
|--------|---|--|
| ON/OFF | While ambient lux is higher than the level set, light stays OFF. While ambient lux is lower than the level set, and occupancy detected, switch the light to ON. Turn OFF the light after occupant leave and delay time elapses. | |
| OFF | This is a manual control mode can be used when y need the light to be off for a certain period of time. Once this mode is set, all lighting controlled by the sensor/controller will remain off until another mode selected. | |

SENSOR ACKNOWLEDGMENT

| Acknowledgement | Sensor LED | Beep | Lighting |
|--------------------------------------|------------|-----------------------|-----------|
| Full sensor setting upload completed | - | Long x 1 Short x 2 | Flash x 2 |
| Sensor resume to factory default | - | - | Flash x 2 |
| Single setting ok | - | Short x 2 | - |
| Occupancy detected | Flash x 1 | - | - |

SENSOR SETTINGS

The followings are settings and options available with LRS-202SP that can be configured through the operation of SRP-280 remote programmer. For more details of remote sensor setting, please refer to the operation instruction of SRP-280.

| Settings | Description | Options | Default |
|-------------|---|--------------------------------------|----------|
| CONTROL | The mode that the sensor will control. | ON/OFF, OFF | ON/OFF |
| AMBIENT LUX | The ambient light level that sensor will perform the control. | 10/20/40/60/100/200/400 LUX/DISABLED | DISABLED |
| DELAY | The delay time that sensor is set to turn off the light after the area is vacant. | 30 sec./1/3/5/10/15/20/30/60 min. | 10 min. |
| SENSITIVITY | The sensitivity of occupancy sensor. | HIGH/NORMAL/LOW | HIGH |

WIRING DIAGRAM



SPECIFICATIONS

| Power supply | 100/120/230/277VAC, 50/60 Hz | | | |
|---------------------------|---------------------------------|------------|-----------|--|
| Maximum Load | 100-120VAC | 230VAC | 277VAC | |
| -Incandescent/Halogen | 800W(VA) | 5A | 1200W(VA) | |
| -Fluorescent Ballast/CFL | 800/W(VA) | 5A | 1200W(VA) | |
| -Ballast Electronic (LED) | 540VA | 5A | 1200VA | |
| Infrared sensor | Omni-directional pyroelectric | | | |
| Detectable speed | 0.3~3 m/sec (1~10 ft./sec.) | | | |
| Mounting height | 2.4~6m (8~20 ft) | | | |
| Detection range | Subject to the mounting height | | | |
| Op. humidity | Max. 95% RH | ax. 95% RH | | |
| Op. temperature | -10°C~55°C (14°F~131°F) | | | |
| Dimensions | 140x48x40mm (5.51"x1.89"x1.50") | | | |
| | | | | |

WARRANTY

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