LBS-701 series

Line Voltage Wall Switch Sensor

WALLSENZR

OVERVIEW

The LBS-701 is a member of IR-TEC's WALLSENZR family of line voltage wall switch sensor designed to fit in a standard NEMA wall box. The sensors combine state-of-the-art passive infrared sensing technology with décor aesthetics to provide optimal energy-saving for all applications.

The sensor will turn ON the load automatically when it detects the presence of an occupant, and will turn OFF automatically if no motion is detected before the delay time elapses. To meet compliance of specific energy code, such as CA Title 24, the LBS-701 series can be easily programmed as a Vacancy sensor. In Vacancy mode the sensor will only turn ON the load by pressing the push-button manually and will turn OFF the load automatically per the sensor time delay. The LBS-701 allows for the push-button operation to be programmed with different manual control options.

The model LBS-701S comes with an ambient light sensor (ALS) to inhibit the lighting if ambient light levels are higher than required. The Accu-Set digital potentiometers make delay time (TIME) and ambient light level (LUX) settings fast, easy and accurate. Zero-crossing relay switching control allows the LBS-701 series to control various types of lighting and loads safely and effectively.

FEATURES

- Occupancy-Vacancy sensor changeable control
- Available with or without ambient light sensor
- Low profile, optimal décor sensor aesthetics
- 180° F. O. V. with coverage exceeds 1,200 sq. ft.
- Specialized lens provides vandalism protection
- Zero-crossing single pole relay contact switching
- Accu-Set digital potentiometer sensor settings
- Screwless wall plate offers high end appearance
- Low cut back cover provides more wiring space

APPLICATIONS

IR-TEC's WALLSENZR family can be used for occupancy /vacancy sensing based lighting, or load controls, in a variety of spaces:

Bathrooms	Laundry rooms
Classrooms	Offices
Closets	Playrooms
Conference rooms	Restrooms
Entrances	Self-storage facilities
Exit halls	Showrooms
Garages	Storage rooms
Gymnasiums	Utility rooms
Hallways	Workshops

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Specializing in Building Sensors

OPERATION

The LBS-701 series wall switch sensor employs passive infrared (PIR) sensing technology to monitor the occupancy status through an exclusive lens with 180° field of view. The sensor can be easily programmed as an Occupancy or Vacancy Sensor to comply with energy codes.

1. Occupancy Sensor (Auto-ON, Auto-OFF)

Occupancy sensor switches the light ON automatically when it detects the presence of an occupant. The sensor will switch the light OFF automatically if no occupant activity has been detected before the time delay elapses.
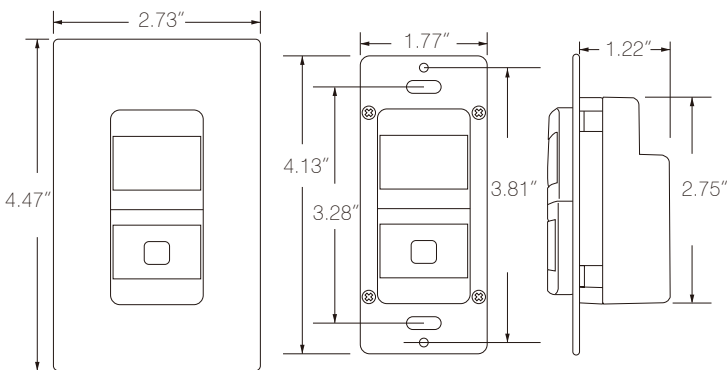
2. Vacancy Sensor (Manual-ON, Auto-OFF)

Vacancy sensor requires the user to manually press the push-button to turn ON the light. The sensor will switch the light OFF automatically if no occupant activity has been detected before the time delay elapses. The sensor will automatically turn ON the light if it detects occupant activity within 30 seconds after time delay elapsed.
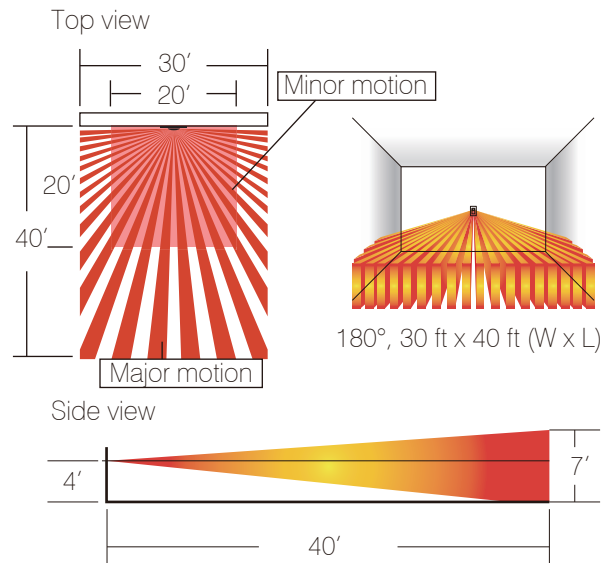
Push-button

The push-button operation can be programmed by DIP switch setting to turn the light ON and OFF manually or in Presentation Mode (PM) for specific application.

DIMENSIONS

DETECTION COVERAGE

Top view

Minor motion

Major motion

180°, 30 ft x 40 ft (W x L)

Side view

SPECIFICATIONS

Power supply	120VAC, 60Hz
Maximum load	CFL/Ballast Electronic (LED) – 500W
	Incandescent/Halogen – 600W
	Fluorescent Ballast – 700W,
	Motor – 1/4 HP
Infrared sensor	Dual element pyroelectric
Zero crossing	Automatic frequency detection
Detectable speed	1~10 ft./sec. (0.3~3 m/sec)
Mounting height	3 ~ 5 ft. (90~150 cm) above the floor
Detection coverage	Major motion - 30 ft x 40 ft (W x L) @4 ft H
	Minor motion - 20 ft x 20 ft (W x L) @4 ft H
Ambient light level	7 levels, from dark to 24Hr, LBS-701S only
Delay time setting	T/1'/3'/5'/10'/20'/30', T=10 sec. for testing
Op. humidity	Max. 95% RH
Op. temperature	-40°F ~ 131°F (-40°C ~ 55°C)
Dimensions	4.13"H x 1.77"W x 1.65"D (w/mounting plate)

ORDERING INFORMATION

LBS-701N – Line Voltage Occupancy Sensor, 120 VAC
LBS-701S – Line Voltage Occupancy Sensor, 120 VAC, w/ALS