## LBS-700 series

# Line Voltage Wall Switch Sensor







### **OVERVIEW**

The LBS-700 is a member of IR-TEC's WALLSENZR family of line voltage wall switch sensor designed to fit in a standard NEMA wall box with no neutral connection required. 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-700 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-700 allows for the push-button operation to be programmed with different manual control options.

The model LBS-700S 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. Patent pending Hybrid-Switching control allows the LBS-700 series to control the lighting with high inrush current (HIC) while switching ON, such as multiple LED or CFL lightings connected in parallel.

### **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
- Hybrid-Switching for controlling loads with HIC
- Accu-Set digital potentiometer sensor settings
- Screwless wall plate offers high end appearanceLow cut back cover provides more wiring space
- 120/277VAC operation without neutral connected

#### **APPLICATIONS**

IR-TEC's WALLSENZR family can be used for occupancy 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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#### **OPERATION**

The LBS-700 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 Occupancy or Vacancy Sensor to comply with energy codes as needed.

### 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.

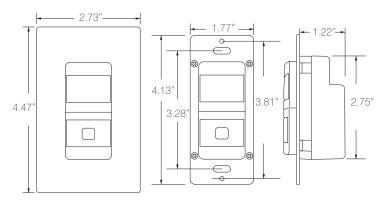
#### 2. Vacancy Sensor (Manual-ON, Auto-OFF)

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.

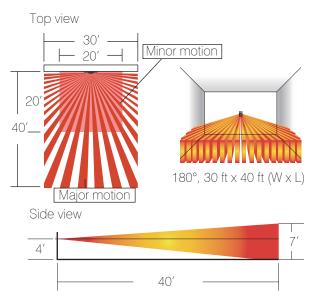
#### Push-button

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**



#### **SPECIFICATIONS**

Power supply	120/277VAC, 60Hz
Maximum load	Incandescent/Halogen – 800W(VA)
	Fluorescent Ballast/CFL - 800W(VA)
	Ballast Electronic (LED) – 500/800VA,@120/277V
	Motor – 1/6 HP
Infrared sensor	Dual element pyroelectric
Switching control	Zero-cross Hybrid-Switching
Inrush current	Max. 80A, 20 mS
Detectable speed	1~10 ft./sec. (0.3~3 m/sec)
Mounting height	$3 \sim 5$ ft. (90 $\sim$ 150 cm) above the floor
Detection coverage	Major motion - 30 ft x 40 ft (W x L) @4 ft high
	Minor motion - 20 ft $\times$ 20 ft (W $\times$ L) @4 ft high
Ambient light level	7 levels, from dark to 24 Hr., LBS-700S only
Delay time setting	T/1'/3'/5'/10'/20'/30', T=10 sec. for testing
Op. humidity	Max. 95% RH, non-condensate
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-700N – Line Voltage Wall Switch Sensor, 120/277 VAC LBS-700S – Line Voltage Wall Switch Sensor, 120/277 VAC, w/ALS

