BBS-700 series
Low Voltage Wall Switch Sensor

OVERVIEW

The BBS-700 is a member of IR-TEC's WALLSENZR family of low 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 output will be activated to turn ON the load automatically via the connected power pack or BMS 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 BBS-700 series can be easily programmed as a Vacancy sensor. In Vacancy mode the sensor output will only be activated by pressing the push-button manually and will turn OFF the load automatically per the sensor time delay. The BBS-700 allows for the push-button operation to be programmed with different manual control options.

The model BBS-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. Isolated dry contact output allows the BBS-700 series to control the load with IR-TEC Power Packs or BMS.

FEATURES

- Occupancy-Vacancy sensor changeable control
- Low profile, optimal décor sensor aesthetics
- 180° F. O. V. with coverage exceeds 1,200 sq. ft.
- Specialized lens provides vandalism protection
- Dry contact relay output for versatile control
- 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 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

IR-TEC
Specializing in Building Sensors

OPERATION

Sensor Mode

The BBS-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 Mode 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.
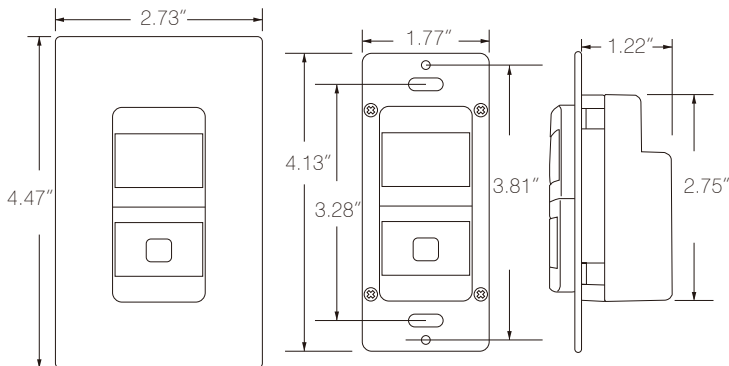
2. Vacancy Sensor (Manual-ON, Auto-OFF)

Vacancy Sensor Mode 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.
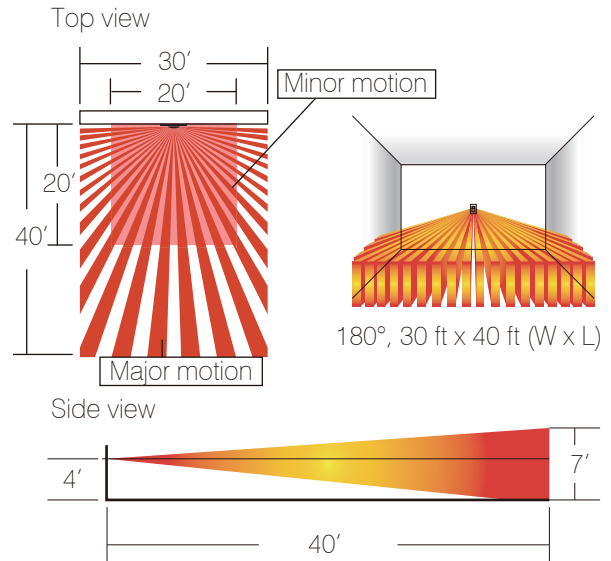
Push-button

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

180°, 30 ft x 40 ft (W x L)

Side view

SPECIFICATIONS

Power input	12~24 VDC ± 5%
Current drain	5/20 mA, 24 VDC @ vacant/occupied
Infrared sensor	Dual element pyroelectric
Control output	Form A relay (NO), isolated dry contact
Contact rating	Max. 2A @ 30 VDC, isolated
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 24 Hr.
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

BBS-700SW– Low Voltage Wall Switch Sensor, 12-24 VDC, 1-pole, White

BBS-700SI – Low Voltage Wall Switch Sensor, 12-24 VDC, 1-pole, Ivory