

BBT-700 series

Low Voltage Wall Switch Sensor

WALLSENZR



OVERVIEW

The BBT-700 is a member of IR-TEC's WALLSENZR family of 2-pole 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 BBT-700 contains two relays, and two push buttons, for controlling two lighting loads or circuits independently together with the connected Power Packs or BMS. To comply with specific energy code, such as CA Title 24, the sensor is factory set to control the primary output (pole 1) in occupancy sensing mode, and the secondary output (pole 2) in vacancy sensing mode. A variety of control options can be programmed via DIP switch settings to meet specific energy code or customer requirements.

The model BBT-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 outputs allow the BBT-700 series to operate with two IR-TEC Power Packs for controlling two separate loads in occupancy and vacancy sensing bases.

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 outputs for versatile controls
- Accu-Set digital potentiometer sensor settings
- Screwless wall plate offers high end appearance
- Low cut back cover provides more wiring space
- 12-24VDC low voltage power supply operation

APPLICATIONS

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

Bathrooms
Classrooms
Closets
Conference rooms
Entrances
Exit halls
Garages
Gymnasiums
Hallways

Laundry rooms
Offices
Playrooms
Restrooms
Self-storage facilities
Showrooms
Storage rooms
Utility rooms
Workshops



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OPERATION

The BBT-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 provides typical occupancy sensing (Auto-ON, Auto-OFF) control on pole 1 and vacancy sensing (Manual-ON, Auto-OFF) control on pole 2. Different control options of each pole can be achieved through DIP switch settings. The followings are brief descriptions of the control modes available.

1. Occupancy Sensing with ALS Control (OSAC)

The sensor operates as occupancy sensing control (Auto-ON, Auto-OFF) on the load of pole-1 connected, but with ALS enabled to inhibit output when ambient light level is higher than the set threshold.

2. Occupancy Sensing with ALS & PM (OSAP)

The sensor operates as above OSAC on pole-1, but with *Presentation Mode (PM) active.

3. Vacancy Sensing Only Control (VSOC)

This requires occupant to press the push-button of pole-2 to turn ON the load controlled, and the sensor will switch OFF the load automatically if no occupant motion 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.

4. Pole One with Extended Delay (POED)

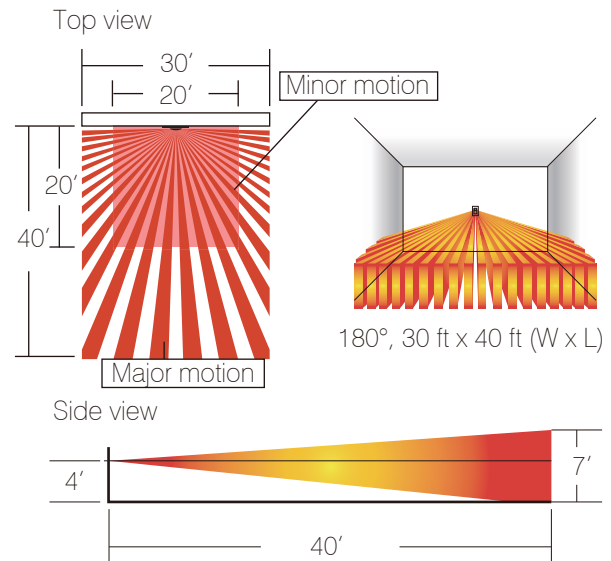
The sensor will control the pole-2 output as per pole-1, but with Extended Delay (ED) for 5 minutes.

5. Ambient Light Sensing Only (ALSO)

The sensor will automatically turn ON the load of pole-2 connected when ambient light is lower than the LUX level set, and turn OFF when ambient light is higher than the set level.

***Presentation Mode** allows the occupant to switch off the load as desired by pressing the relevant push-button. The load will remain off if motion is detected before the time delay elapses. Pressing the push-button again will turn the load back ON and the sensor will operate as per sensor setting. If no motion has been detected and the time delay expires, sensor will return to normal operation and turn on the load with the next sensed motion.

DETECTION COVERAGE



SPECIFICATIONS

Power input	12~24 VDC $\pm$ 5%
Current drain	5/30 mA, 24 VDC @ vacant/occupied
Infrared sensor	Dual element pyroelectric
Control output	2 x Form A relay, 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 Hour
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

BBT-700SW– Low Voltage Wall Switch Sensor,
12-24 VDC, 2-pole, White

BBT-700SI – Low Voltage Wall Switch Sensor,
12-24 VDC, 2-pole, Ivory