LEVITON ®

Decora® Wall Switch PIR Occupancy Sensor with LED NightLight

NightLight Off   NightLight High Level

OSSNL

BASIC OPERATION

The Passive Infrared (PIR) sensor detects motion from a heat-emitting source within its field-of-view to automatically switch lights ON and OFF, offering the same performance features as the ODS family of occupancy sensors. The Decora® Wall Switch PIR Occupancy Sensor with LED NightLight (OSSNL) has the ability to reduce (dim) and turn off the "Guide Light" function with a simple dial setting. The OSSNL consumes less than 1/2 Watt providing energy savings and guide lighting when room lights are off.

APPLICATIONS

The OSSNL is perfect for use in hospitality and health care facilities with either auto-ON or manual-ON settings with adjustable time delay settings of 30 seconds to 2 hours.

The OSSNL can be used to provide automatic lighting control for energy savings and convenience in a variety of commercial applications, including:

- Hotel restrooms
- Conference rooms
- Small offices
- Storage areas
- Hospital restrooms
- Classrooms
- Lounges
- Bathrooms

LED READY

FEATURES

- Fits in standard wallbox and replaces single-pole wall switch; ground and neutral connection required. Gangable with other units.
- Low-profile design eliminates obtrusive "scanning-device" look. Elegant Decora® wallplates complement any interior for sleek aesthetics; uses Decora wallplates and coordinates with Leviton's popular line of Decora wiring devices.
- 180° field-of-view provides approximately 2,100 SF of coverage
- Convenient pushbutton provides manual-ON/OFF light switching at any time
- Two dual element PIR sensors used to widen detection range
- Segmented Fresnel lens provides optimum sensitivity and performance. Designed with an extensive "minor motion" area where even slight body movements will be detected.
- Vandal resistant PIR lens
- Patented blinders—horizontal field-of-view may be adjusted between 180° and 60° of arc by using integral blinders located on either side of the lens
  No masking tape required
- Manual-ON/auto-OFF mode for installations where manual-ON switching is required but auto-OFF switching is still desired
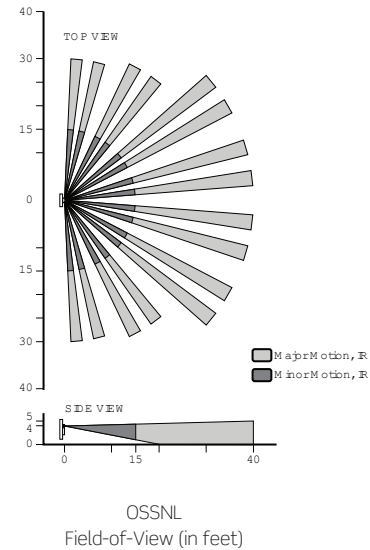
PRODUCT DATA

FEATURES CONT.

- Red LED indicator light flashes when sensor detects motion to verify detection is active
- Time delay adjustment for delayed-OFF time settings of 30 seconds (for walking test), 10 minutes, 20 minutes and 30 minutes. Allows customized adjustments to maximize energy savings.
- Light sensor adjustable ambient light override ranges from approximately 2 foot-candles (20 lux) to 500+ foot-candles (5000+ lux) to prevent lights from turning ON automatically during periods of ample natural light, increasing energy savings.
- Light sensor enables the load hold-OFF feature once level has been set
- Vacancy confirmation—when the time out expires and the relays turn OFF, a 30 second vacancy confirmation exists to turn the relays back ON
- False detection circuitry
- Presentation Mode— feature for slide or film presentations allows push buttons to turn lights OFF and keep them OFF while the room is occupied
- LED NightLight offers "Guide Light" functionality
- Adjustable NightLight illumination setting for continuous or dimmed NightLight
- NightLight Mode—the factory default setting for the NightLight Mode is Dimmed Mode. This means the NightLight will automatically dim to 5% of full brightness after 2 minutes of no occupancy when activated by the internal light sensor.
- One unit can be used for 120V through 277V lighting. Compatible with both electronic and magnetic ballasts.
- Relay switches at the zero crossing point of the AC power curve to ensure maximum contact life and compatibility with electronic ballasts.
- Exclusive Levition High Inrush Stability (H.I.S.) circuitry specifically designed to handle today's high inrush electronic ballast loads and offer unmatched durability and service
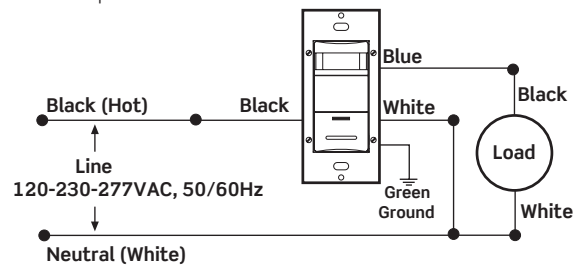
FIELD OF VIEW

The OSSNL provides a 180° field of view with a maximum coverage area of approximately 2100 square feet. The maximum sensing distance in front of the sensor is 40 feet, and at each side is 30 feet. A "minor-motion" zone detects relatively small body movements and allows the lights to stay ON even though a person may not be moving or walking around the room. The remainder of the field of view, the "major-motion" zone, exhibits a lesser degree of sensitivity and requires larger movements.
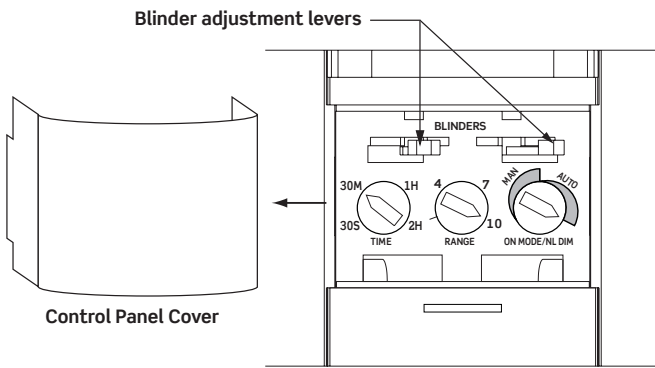
OSSNL
Field-of-View (in feet)

INSTALLATION

The OSSNL is preset to deliver optimum performance in a wide variety of applications without requiring any adjustments during installation. The unit may replace a single-pole wall switch mounted in a standard wall box. The unit must have a neutral and be properly grounded in order to operate. The unit's integral blinders may be used to restrict the field-of-view to prevent unwanted detection of hallway traffic. It should be positioned at least 6 feet away from HVAC registers. Note that whenever the unit is powered up, it will take approximately 1 minute to begin normal operation.
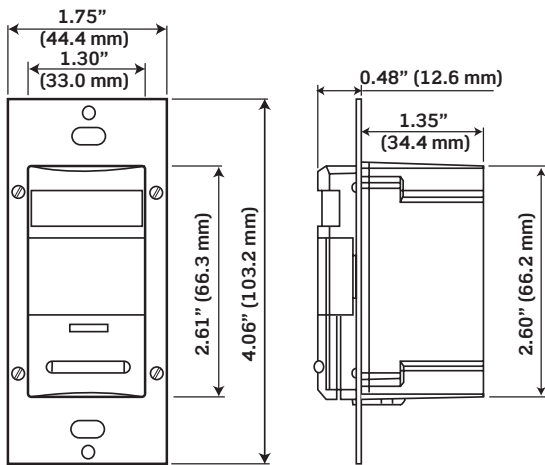
OSSNL Wall Switch Occupancy Sensor Wiring Diagram,
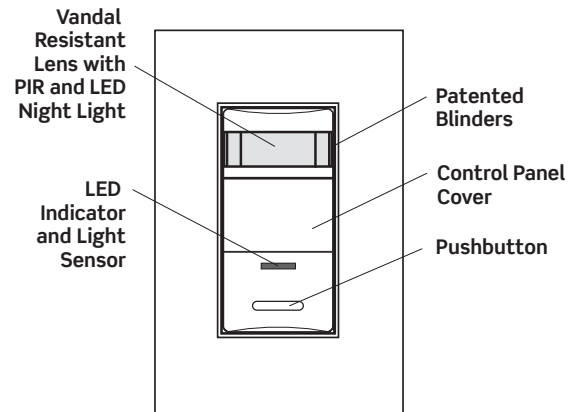Single Location Control

DIAGRAMS

Blinder adjustment levers

BLINDERS

30M 1H 4 7 MAN AUTO
30S 2H 10
TIME RANGE ON MODE/NL DIM

Control Panel Cover

OSSNL Sensor Features

1.75"
(44.4 mm)
1.30"
(33.0 mm)

0.48" (12.6 mm)

1.35"
(34.4 mm)

2.61" (66.3 mm)
4.06" (103.2 mm)

2.60" (66.2 mm)

Dimensions Night Light

Vandal
Resistant
Lens with
PIR and LED
Night Light

Patented
Blinders

LED
Indicator
and Light
Sensor

Control Panel
Cover

Pushbutton

OSSNL

PRODUCT DATA

SPECIFICATIONS

OSSNL

ELECTRICAL

Line Voltage	120-230-277VAC
Power Consumption	120V, Nightlight OFF - 190mW 120V, Nightlight ON max - 50mW 277V, Nightlight OFF - 250mW 277V, Nightlight ON max - 410mW
Operational Frequency	50/60 Hz
Wire Designation	Line - Black Load - Blue Ground - Green Neutral - White
Load Rating	Fluorescent: 1200VA @ 120V, 2700VA @ 277V Incandescent: 800W @ 120V, Motor: 1/8 HP @ 120V

ENVIRONMENTAL

Operating Temperature Range	32-122°F (0-50°C)
Storage Temperature Range	14-85°F (-10-85°C)
Relative Humidity	20-90% non-condensing

OTHER

Listings	CUL/US Certified, NOM, can be used to comply with 2016 Title 24, Part 6 occupancy sensing requirements, FCC compliant
Warranty	Limited Five-Year Warranty

ORDERING INFORMATION

CAT. NO. *	DESCRIPTION
OSSNL-IDx	Occupancy Sensor Wall Switch with NightLight

To indicate color, add suffix to the end of the catalog number.
White (-W) , Ivory (-I), Light Almond (-T), Gray (-G), Black (-E) and Red (-R).
*NAFTA compliant and Made in USA models available.

G-7543C/K17-aa
REV NOV 2017