

WOR_WVR - Diversa Ceiling Occ_Vac Sensor (DualTech 347VAC)



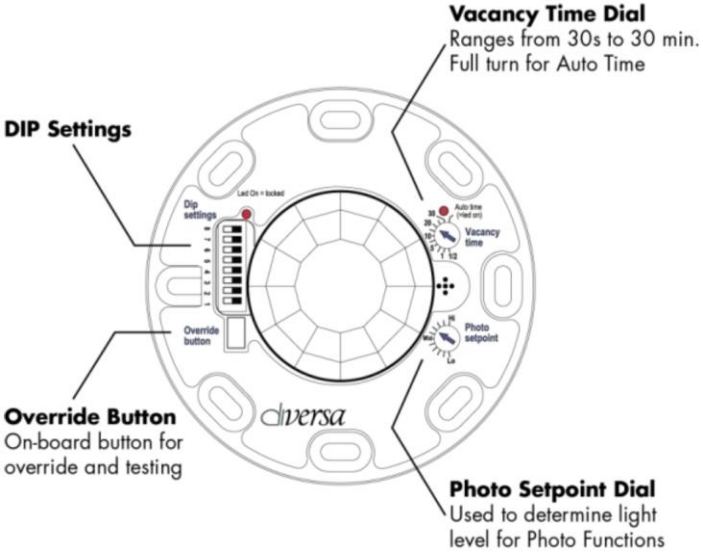
Project Name: _____
Part Numbers: _____ Date: _____

Features

- 347VAC line voltage, dual technology (PIR & ADI-Voice) Occupancy/Vacancy sensor
- Highly configurable through on-board switches and Infrared Setting Unit
- 360° coverage with tilting lens for directional sensing
- A self-adapting mode can be set to use both Passive Infrared (PIR) & Accurate Detection Intelligence (ADI) Voice technologies to automatically track occupancy tendencies for continuous maximizing of energy savings.
- Smart Sensing allows for an immediate return to occupied mode in the event of a false off being triggered.

Typical Applications: Line voltage sensors draw control power directly from the lighting circuit they are intended to control. When in operation the sensor will detect initial motion using PIR; once motion is detected, the internal contact will close. ADI-Voice is then activated to work alongside PIR to maintain the occupied condition as long as people are within the sensing range.

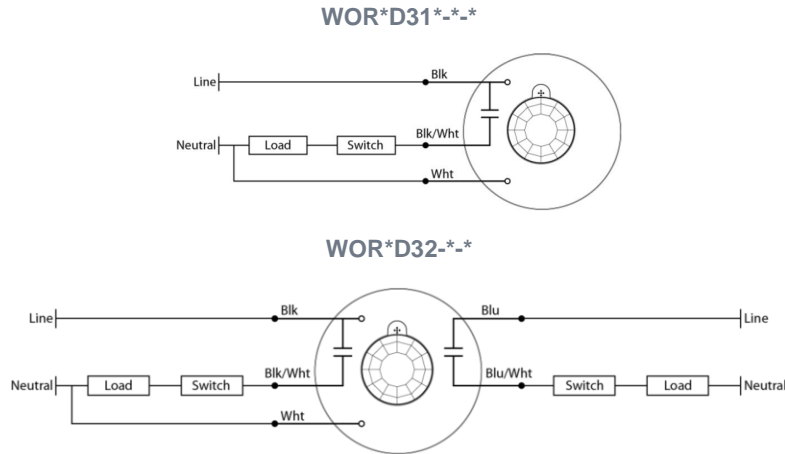
PART NUMBER	DESCRIPTION
WORSD31-P-N	Standard lens, DualTech, 347Vac, 1-pole, photo sensor
WORSD32-P-N	Standard lens, DualTech, 347Vac, 2-pole, photo sensor
WORXD32-P-N	Extended range lens, DualTech, 347Vac, 2-pole



Wiring Instructions

The WOR Series Line Voltage sensors are equipped with #14 AWG leads. Use appropriate sized wire-nuts to connect the wires to the incoming load terminations.

Electrical Connections



Sensor Settings

Programming - IR / Manual Setting

Programming can be done either with the DIP switches and dials on-board the device or with the WIR-3110 setting unit. For more details and additional options please see the "WIR-3110 Manual"

Detection (Dual or PIR Only)

When in operation, the sensor will detect initial motion using Passive Infrared; once motion is detected the ADI-Voice is then is activated to work alongside the PIR to maintain occupancy. The ADI-Voice can be disabled on any dual tech sensors.

Automatic Timeout

By setting the timeout dial to maximum, the sensor will be put into automatic mode which will adjust the time out automatically to maximize energy savings and occupant comfort.

Smart Sensing

When vacancy occurs, sensitivity of the ADI-Voice technology transitions from maximum to zero over an adaptively determined time period, based on occupancy tendencies. During this period, ADI-Voice can turn the lights back on immediately, even with no line-of-sight to the sensor, assuring the best combination of user convenience and energy savings.

Energy consumption due to false triggers is minimized by the automatic walk-through mode. This feature turns the lights off after 3 minutes if no occupancy detection occurs after the first 30 seconds after initial turn on.

Photo Sensing (-P)

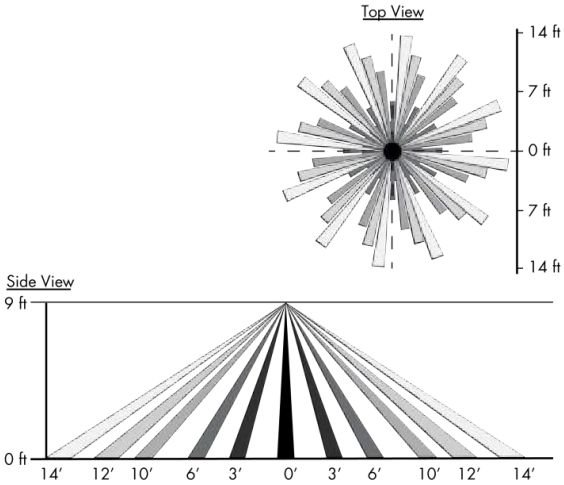
When enabled, occupancy alone will not trigger the output state to on. If occupancy is detected AND there is a deficiency of natural light, the output is triggered on. An increase in natural light will not force the lights off but as the ambient light level drops the lights will turn on automatically.

Multi-Level Photo Sensing (2-Pole w/ Photo Option)

Photo sensing on a 2-pole sensor can be configured to either restrict both poles or the primary pole only; if set to "Secondary Pole Only", the primary pole will trigger based on occupancy, regardless of the photo setting.

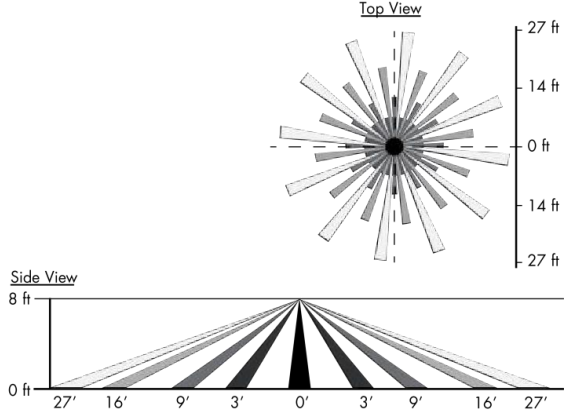
Standard Lens (S)

- Optimal usage is to detect small motions such as hand movements
- Designed for a mounting height of 7-15ft
- ADI-Voice can detect around corners that PIR cannot to maintain occupancy



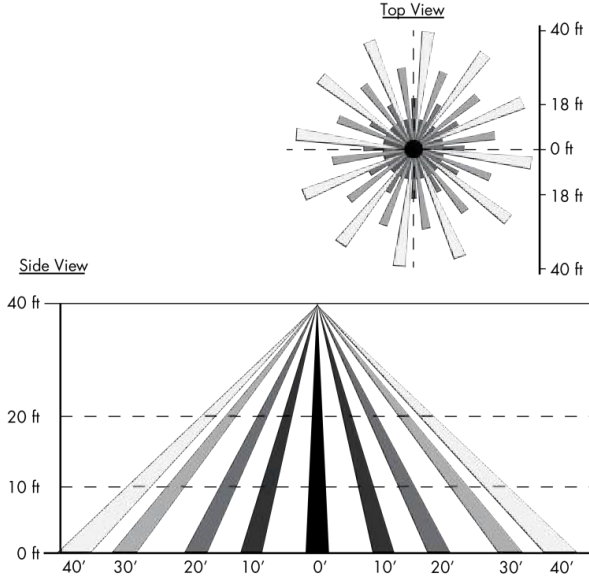
Extended Lens (X)

- Optimal usage is to detect large motions such as walking
- Designed for a mounting height of 7-15ft
- ADI-Voice can detect around corners that PIR cannot to maintain occupancy



Hi – Bay Lens (B)

- Optimal usage is to detect large motions such as walking
- Designed for a mounting height of up to 40ft
- PIR Only



*Patent Pending

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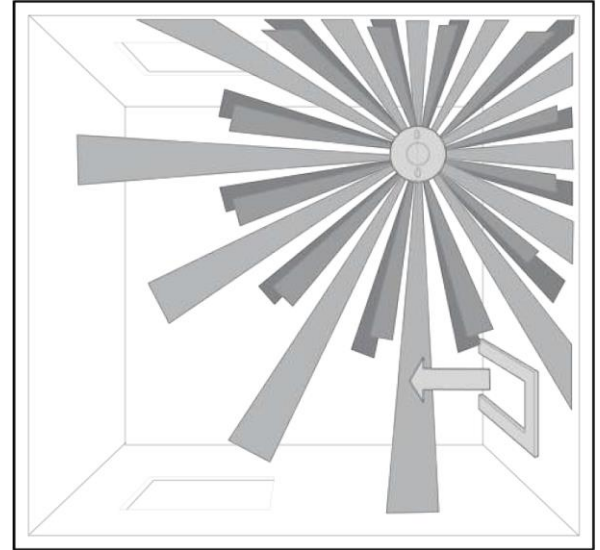
Douglas Lighting Controls

INSTALLATION

Installing in Smaller Room (Standard Lens)

- Locate the sensor near the entrance door wall to prevent it from viewing out into the hallway.
- The lens can rotate, allowing the sensor to be pointed toward the area in front of the entrance door.
- Positioning the sensor in this manner ensures that an occupant moves across the longest detection beam upon entrance, utilizing the sensor's maximum PIR range.

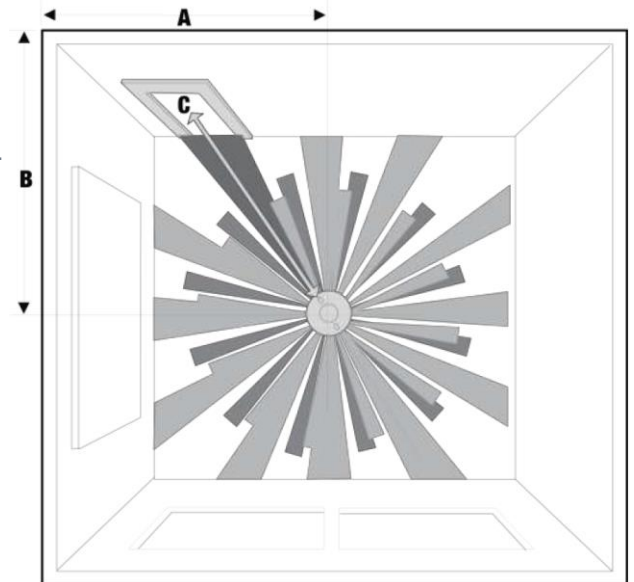
(Typical office shown)



Installing in Larger Room (Extended Lens)

- Place the sensor near the center of the room ceiling. Locate it so the approximate distance of 27ft in and over (A & B) or in dead center of room.
- Tilt the lens to aim the detection zone to the bottom of the door. (C)
- Positioning the sensor in this manner ensures that the beam does not reach outside the room without reducing sensitivity

(Typical office shown)



INSTALLATION & WIRING DIRECTIONS

Installation

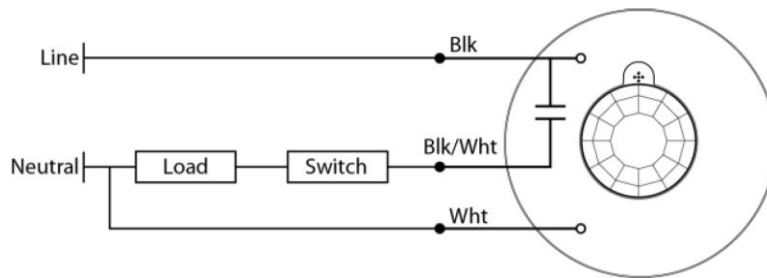
Mounting of the device requires a 2-1/8" deep or more, octagonal junction box. Install by recessing the device into the octagon box; lining up the mounting holes and securing it using the screws provided. If too shallow, use the spacer ring is provided.

Wiring

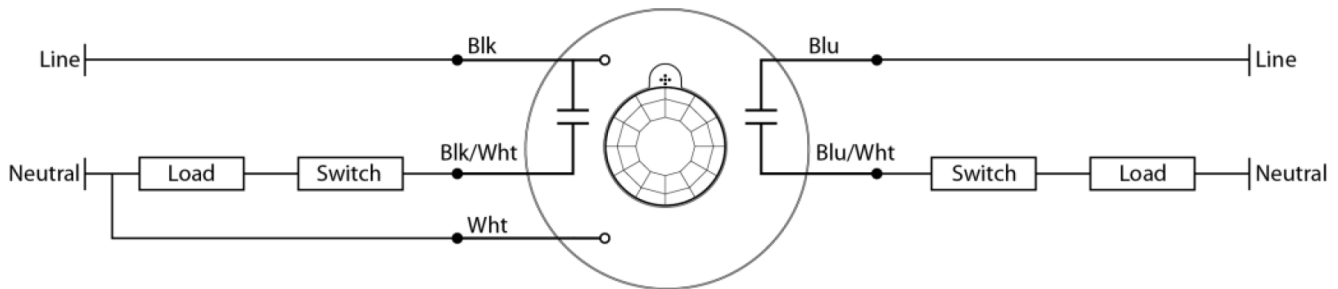
⚡ CAUTION ⚡
TURN POWER OFF AT THE CIRCUIT BREAKER BEFORE WORKING WITH OR NEAR HIGH VOLTAGE

The WOR Series Line Voltage sensors are equipped with #14 AWG stranded leads. Use appropriate sized wire-nuts to connect the wires to the incoming load terminations; for installation with field-installed conductors of 60°C minimum rating.

WOR*D31*-*-*



WOR*D32*-*-*



DIP Switches

A bank of eight DIP switched and two rotating controls can be used to manually set up and configure the sensor.

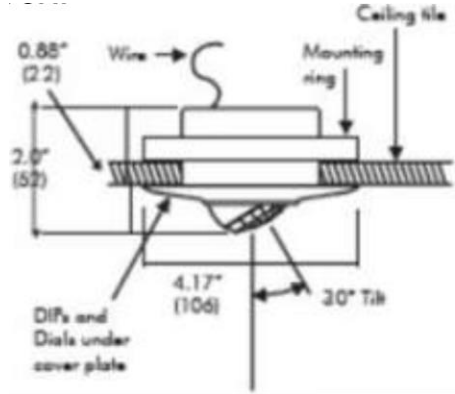
WOR - - - -P'-				
DIP #	Function	On	Off	Default
1	Voice Detection	Disabled	Enabled	OFF
2	Button disabled	High	Normal	OFF
3	Detection LED	Disabled	Enabled	OFF
4	Auto or Manual ON	Occupancy (Auto-On)	Vacancy (Manual On)	ON
5	Photocell Inhibit	Disabled	Enabled	OFF
6*	Photocell Control	Inhibit Primary Pole Only	Inhibit Both Poles	OFF
7	Manual Override Button	Disabled	Enabled	OFF
8	Settings Input	IR Handheld (WIR-3110)	Manual Dips/Dials	ON

*Available in 2-Pole models (-2) only

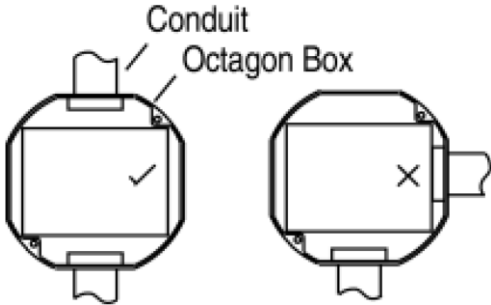
Dimensions

Inches [mm]

Unit attaches to mounting ring with screws or it can be mounted into an octagon box.



- The WOR sensor will fit an octagon box. It is very important that conduits be attached at opposite ends of the box.



- Use a 2-1/8" or more, deep box. If the box is less, use the spacer ring.

Technical Details

POWER	<ul style="list-style-type: none"> • 347VAC • 60Hz
CONTACT RINGS	<ul style="list-style-type: none"> • 347VAC – 1500W
POWER CONSUMPTION	<ul style="list-style-type: none"> • 5.7mA
APPROVALS	<ul style="list-style-type: none"> • Certified to UL 508, UL244A, CSA C22.2 #14
ENVIRONMENT	<ul style="list-style-type: none"> • Indoors, stationary, non-vibrating, non-corrosive atmosphere and non-condensing humidity. • Ambient Operation Temperature: 32°F to 104°F (0°C to 40°C) • Storage Temperature: -14°F to 140°F (-25°C to 60°C)
WARRANTY	<ul style="list-style-type: none"> • Standard 5-years

*Patent Pending

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Douglas Lighting Controls