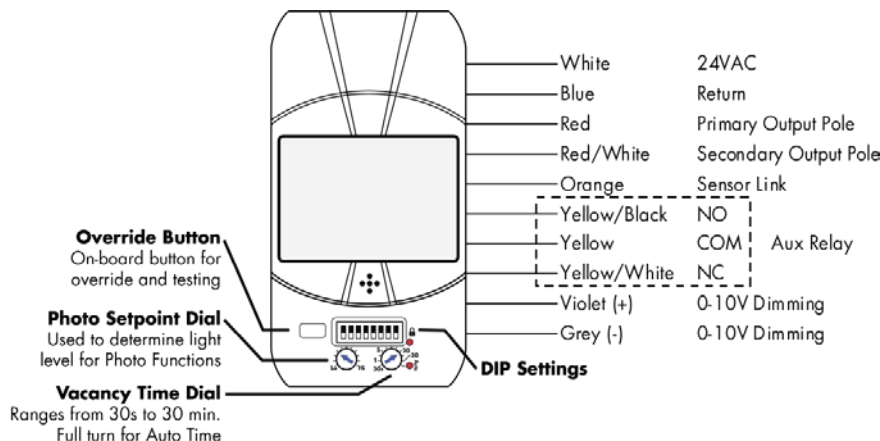
	PART No. WOWCDD2-DPR-N WOWCDD2-R-N WOWLDD2-R-N	FEATURES <ul style="list-style-type: none"> The Diversa occupancy sensors use PIR and ADI-Voice technologies to determine the presence of people and perform the control actions when occupancy (or vacancy) is detected. The WOW Series of sensors are designed to surface mount on a wall giving either a 90° or 130° coverage pattern. The low voltage edition of this sensor gives the capability of operating and controlling the WP-PP20-D Power Pack and/or diode pulse relays. 	SPECIFICATION <p>Inputs</p> <ul style="list-style-type: none"> 24 VAC ±25% Class 2 Low Voltage Source 60 Hz Use #18AWG wire <p>Outputs</p> <ul style="list-style-type: none"> <i>Diode Pulse:</i> Each output is capable of driving up to four Diode Pulse relays. <i>0-10V Dimming:</i> Use to control up to 50 Ballasts. Connections are polarity sensitive. 25mA of LED Drivers. <i>Aux Relay:</i> SPDT Form-C contact rated for 1A at 30VDC. <p>Power consumption</p> <ul style="list-style-type: none"> 9.5 mA Standard 14.0 mA with Auxiliary Relay
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Features

- Wall mounted occupancy sensor provides 90° or 130° coverage. Has the ability to rotate in both the horizontal and vertical axis to optimize the sensing area.
- The dual-tech sensor utilizes ADI-Voice Technology, which has advanced digital signal processing for accurate detection of human speech.
- 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.
- The photo sensor option is available to provide a 0-10VDC dimming ballast output for Daylight Harvesting, or up to 25mA of LED driver sink.
- Can be programmed by on-board DIP switches and dials or an IR Setting Unit for added convenience, especially during commissioning.

Operation

Low voltage sensors are powered by 24VAC from either the WP-PP Series Power Pack or a 24VAC transformer. When in operation, the sensor will detect initial motion using PIR; once motion is detected the internal contact will close. The ADI-Voice is then activated to work alongside the PIR to detect occupancy.



Approvals

- FCC

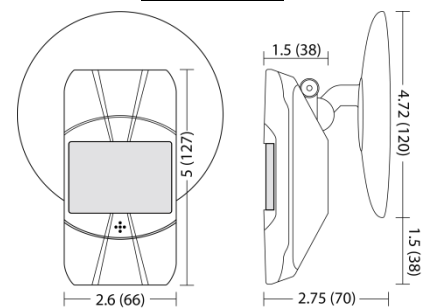
Environment

- Indoors, stationary, non-vibrating, non-corrosive atmosphere and non-condensing humidity
- Ambient Operating Temperature: 14°F to 140°F (-10°C to 60°C)
- Storage Temperature: -14°F to 140°F (-25°C to 60°C)

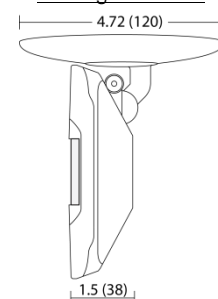
DIMENSIONS & MOUNTING

- Unit mounts into an octagon box.

Wall Mounted



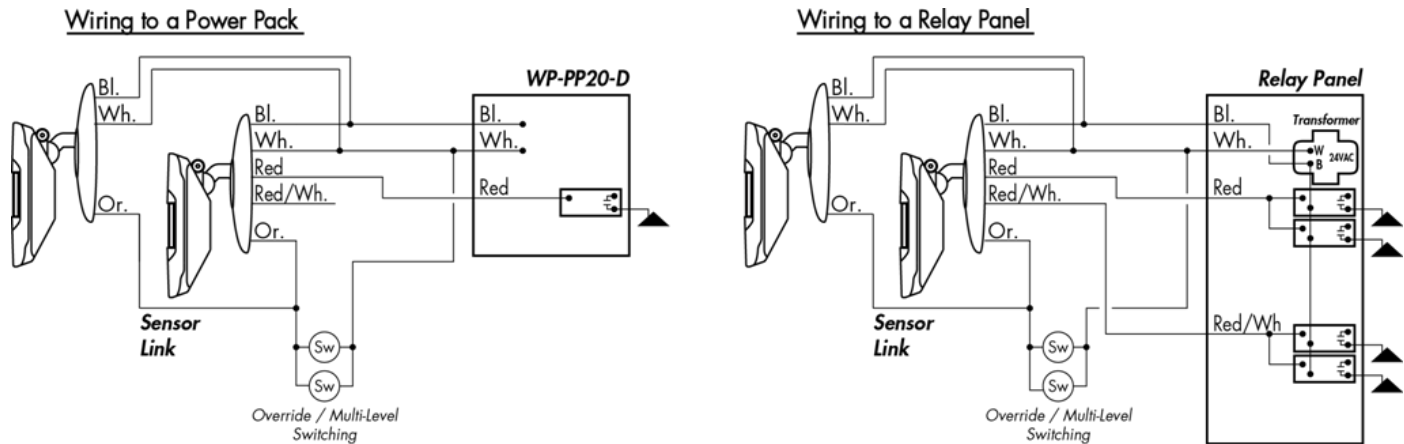
Ceiling Mounted



Wiring Instructions

The WOW Series Low Voltage sensors are equipped with #22 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 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.

Vacancy Sensor

The low voltage sensor can be selected as a vacancy (Off only) sensor. This provides additional energy savings by forcing the user to turn the lights on manually. The low voltage sensor has a built-in override input; allowing for the sensor to be operated as a vacancy sensor. For two pole sensors, it provides multi-level control capability.

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. This feature will also limit the manual switching, ensuring the lights are not turned on if adequate light is present.

Daylight Harvest Dimming (0-10V Output) (-D)

The 0-10V output can operate up to 25mA sink for LED drivers/Dimming Ballasts. This output can be used for full range daylight harvesting. When set for photo dimming the dial is used to select the maximum light level.

Multi-Level Switching (2-Pole w/o Photo Sensing option)

A switch on the sensor link can be used to either trigger both poles simultaneously or step through a multi-level sequence as described in the manual.

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 secondary pole only; if set to "Secondary Pole Only", the primary pole will trigger based on occupancy, regardless of the photo setting. This feature will also limit the manual switching. Please see the manual for sequences.

Sensor Link

The low voltage sensor is equipped with a connection which facilitates communication between sensors. The sensor link (orange wire) allows multiple sensors to coordinate their signals and act together as a cohesive zone. This connection provides additional control functions as described below.

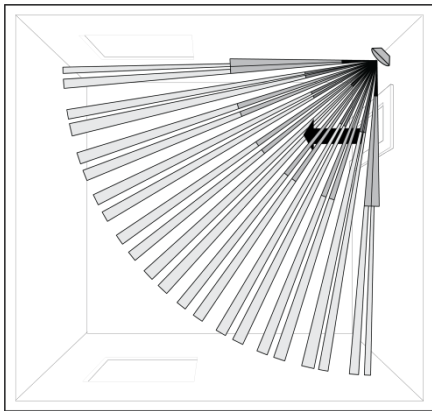
Diode Pulse: When a diode switch is connected to the sensor link it provides manual control. This can be used to toggle the lights ON/OFF. For two pole sensors, it can provide multi-level sequencing.

Maintained AC: If a maintained AC signal is applied to the sensor link by connecting the orange to white wires, the sensors will be in an override mode. By default the sensor will turn the lights ON when disabled by this override (white and red wires). This is settable via the IR setting unit.

INSTALLATION

Installing in Smaller Room (Corner Lens)

- Locate the sensor in the corner, along the entrance door to prevent it from viewing out into the hallway.
- The sensor can be rotated, allowing it to be pointed along the entrance door and slightly downwards.
- 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.

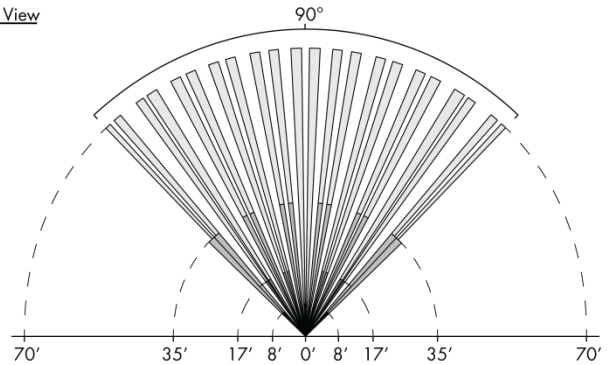


Typical Enclosed Office

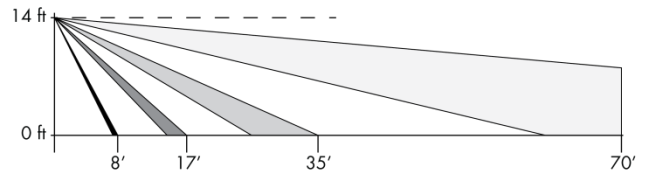
Corner Lens

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

Top View

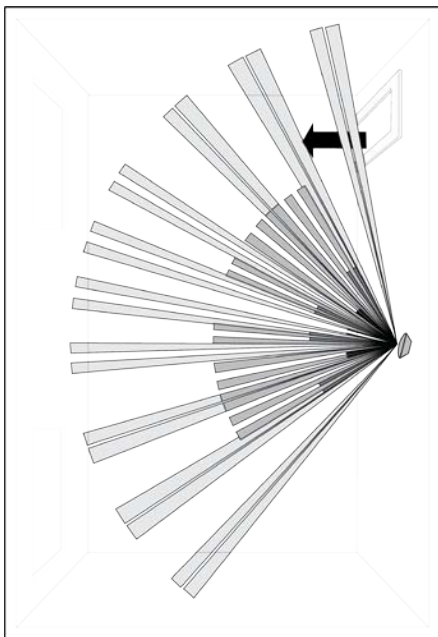


Side View



Installing in Larger Room (Large Area Lens)

- Place the sensor near the center of the wall that is adjacent to the entrance.
- The sensor can be rotated, allowing it to be pointed along the entrance door and slightly downwards.
- Positioning the sensor in this manner ensures that the beam does not reach outside the room without reducing sensitivity.

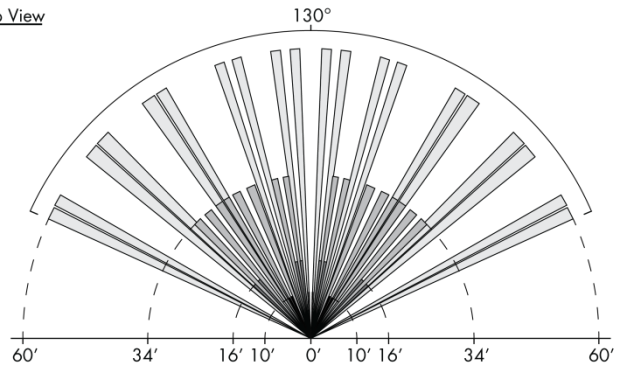


Typical Classroom

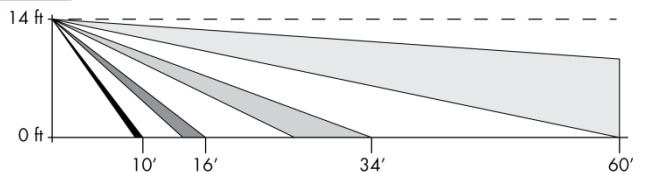
Large Area Lens

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

Top View



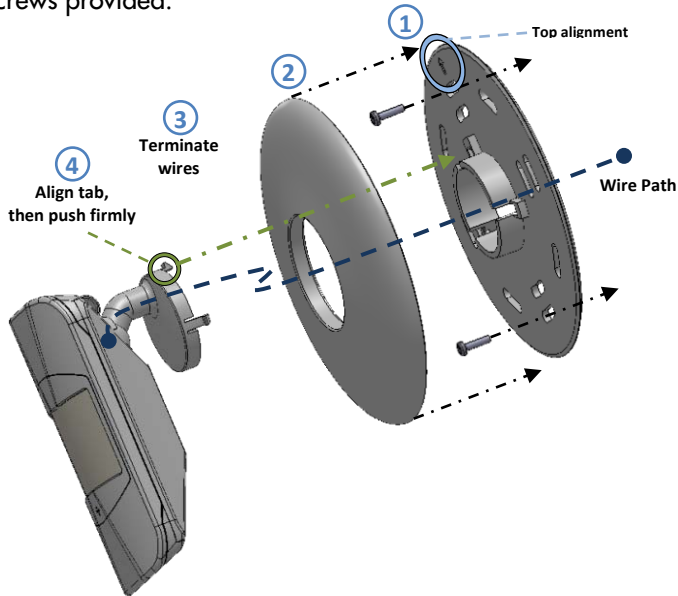
Side View



INSTALLATION & WIRING DIRECTIONS

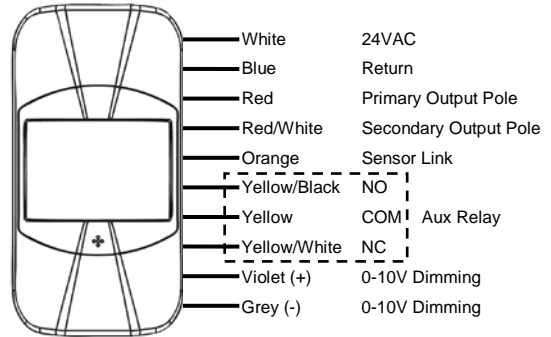
Installation

Mounting of the device requires a 2-1/8" deep, octagonal junction box. Install by recessing the device into the octagon box; lining up the mounting holes and securing it using the screws provided.



Wiring

The WOW Series Low Voltage sensors are equipped with plug-in harness for easy installation. This harness has #20 AWG leads. Use appropriate sized wire-nuts to connect the wires to the incoming load terminations.



DIP Switches

A bank of eight DIP switches and two rotating controls can be used to manually setup and configure the sensor.

WOW - - - - 'R-N'				
DIP #	Function	On	Off	Default
1	Voice Detection	Disabled	Enabled	OFF
2	Motion Detection Sensitivity	High	Normal	OFF
3	Detection LED	Disabled	Enabled	OFF
4	Auto or Manual ON	Occupancy (Auto-On)	Vacancy (Manual On)	ON
5	Not Used	N/A	N/A	OFF
6	Not Used	N/A	N/A	OFF
7	Manual Override Button	Disabled	Enabled	OFF
8	Settings Input	IR Handheld (WR-3110)	Manual Dips/Dials	ON

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