

# Dialog Ceiling Occ\_Vac Sensor (DualTech, Network)

Project Name: _____
Part Numbers: _____ Date: _____

## Features

- Dual Technology (PIR & ADI-Voice)
  - Occupancy/ Vacancy modes
  - 360° coverage pattern
  - Integrated photocell for daylight harvesting
  - Dialog 2-Wire low voltage power and data network
  - Programmable through IR Setting Unit
- ASHRAE 90.1 Compliant

The Dialog® Ceiling Occupancy Sensor is a part of a Dialog centralized control system as it provides occupancy / vacancy detection via a dual technology recessed ceiling mounted sensor. The Ceiling Occupancy Sensor only requires connection to the 2-wire (18/2 AWG) Dialog® power and data network. The Dialog occupancy sensor uses PIR and ADI-Voice technologies to determine the presence of people and perform the control actions when occupancy / vacancy is detected. 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 energy savings. Smart Sense allows for immediate return to occupied mode in the event of a false off being triggered.

**Typical Applications:** Programming is done by using the IR setting Unit. The WOR sensor will fit in a standard octagon box with conduit entering from opposite sides. The recessed sensor provides 360° of coverage and has a tilting lens to direct the sensor to specific areas.

The Dialog Lighting Control Unit is part of the Dialog System which includes relay panels, control cards and peripheral devices (Occupancy Sensor, Daylight Sensor, Wall Station Switches). Systems are built project specific, then factory programmed and tested before shipping to site. On-site support for commissioning is provided as needed.

PART NUMBER	DESCRIPTION
WORSDG1-P-N	Dialog standard range ceiling mount recessed occupancy sensor
WORXDG1-P-N	Dialog extended range ceiling mount recessed occupancy sensor
WORBDG1-P-N	Dialog high-bay range ceiling mount recessed occupancy sensor

## Sensor Modes and Settings

### Programming – IR

Programming is done with the WIR-3110 setting unit. For more details and additional options please see the “IR Setting Unit 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.

### Timeout

Timeout can be set in steps between 3s and 40m. There is also an AUTO mode which will adjust the timeout in order to realize maximum energy savings and convenience. The default timeout is 3s for testing purposes during install.

### Vacancy

The sensor can be configured as a vacancy (Off only) sensor. This provides additional energy savings by forcing the user to turn the lights on manually.

### Smart Sense

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 the 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.

### Walk-Thru

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 in the first 30 seconds after initial turn on.

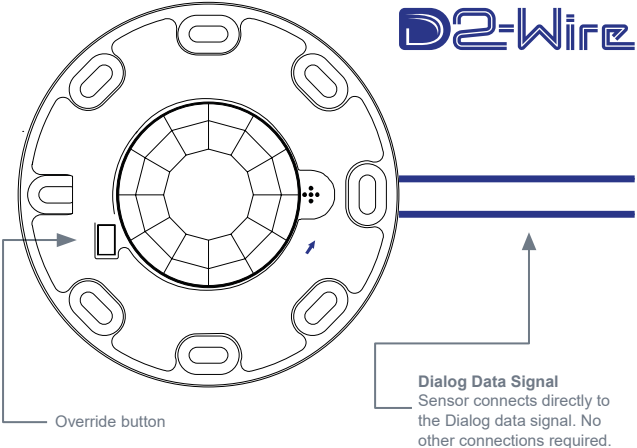
### Photo Cell

The built-in photo sensor reports the light level in the space to the Lighting Control Unit in order to enable daylight harvesting in a zone or area. Please see the WLC-4150 Dialog Lighting Control Unit Manual for instructions.

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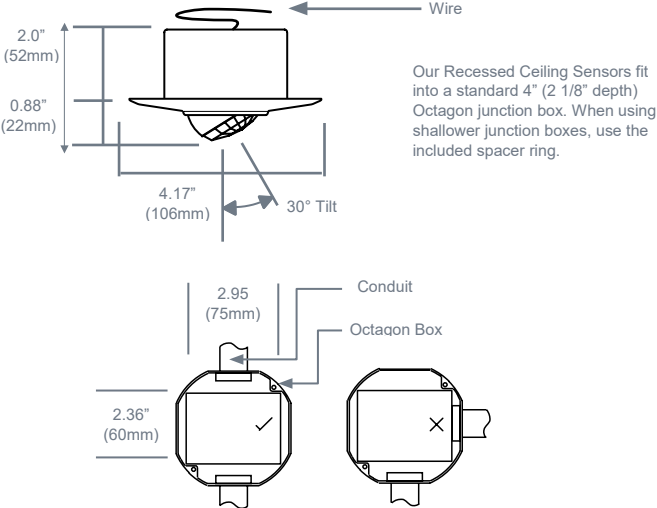
**Wiring**

The WOR Series Low Voltage Sensors are enabled with #18 AWG leads.



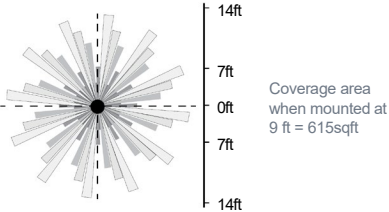
**Dimensions**

Inches [mm]

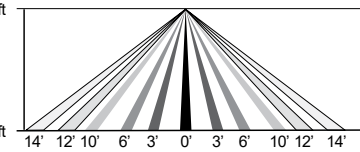


**LENS RANGE AND COVERAGE PATTERNS**

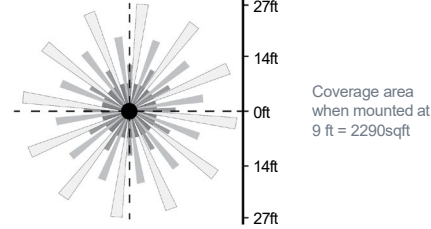
**Standard Range Lens (S)**  
TOP VIEW



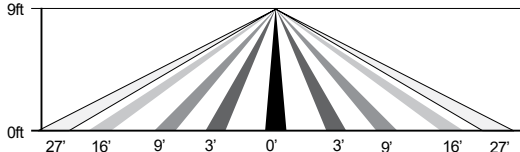
SIDE VIEW



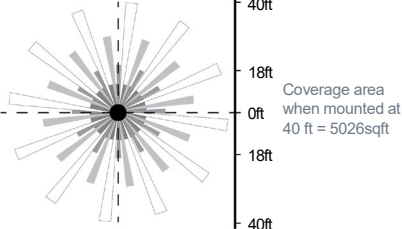
**Extended Range Lens (X)**  
TOP VIEW



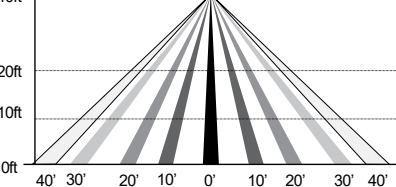
SIDE VIEW



**High Bay (B)**  
TOP VIEW



SIDE VIEW



**Technical Detail**

<b>FUNCTIONALITY</b>	<ul style="list-style-type: none"> <li>Occupancy / Vacancy settings</li> <li>30 degree tilt lens</li> <li>Integrated switch for commissioning override</li> <li>Photocell for daylight harvesting</li> <li>Dual technology PIR and ADI-Voice Technology</li> </ul>
<b>COMMUNICATIONS</b>	<ul style="list-style-type: none"> <li>Dialog 2-wire (18/2 AWG) low voltage, non-polarized, power and data bus</li> </ul>
<b>CURRENT DRAW</b>	<ul style="list-style-type: none"> <li>10 mA</li> </ul>
<b>APPROVALS</b>	<ul style="list-style-type: none"> <li>ASHRAE 90.1 Compliant</li> <li>California Energy Commission Title 24 &amp; NYLL 48 Compliant</li> <li>FCC Compliant</li> </ul>
<b>ENVIRONMENT</b>	<ul style="list-style-type: none"> <li>Indoor, stationary, non-vibrating, non-corrosive atmosphere, and non-condensing humidity</li> <li>Operating temperature: 14°F to 140°F (-10°C to 60°C)</li> <li>Storage temperature: -14° to 140°F (-25° to 60°C)</li> </ul>
<b>WARRANTY</b>	<ul style="list-style-type: none"> <li>Standard 5-years</li> </ul>

\*Patent Pending

Rev 8/24/2022

Douglas Lighting Controls