# OAWC-DT – Dual Technology Wall/Corner Sensor

| | |
|---|---|
| Catalog# | Prepared by |
| Project | Date |
| Comments | Type |


PIR Activated | Ultraasonic Activated | Self-Adjusting

## Overview

The Dual Technology sensor's combination of Ultrasonic and Passive Infrared technologies offers the most complete sensing equipment available today. Self-adjusting Dual Technology sensors drastically simplify and reduce a contractor's installation and adjustment time period.

## Features

- MicroSet self-adjusting time delay and sensitivity
- Optional built-in light level sensor
- Optional BAS/HVAC isolated relay
- NEMA WD7 Guide robotic method utilized to verify coverage patterns
- Manual On feature for use with 1 or 2 momentary switches controlling 1 or more Switchpacks
- Selectable Walk-Through Mode

## Specifications

| | |
|---|---|
| **Technology** | Passive Infrared (PIR) and Ultrasonic (US) |
| **Power Requirements** | **Input** |
| | 0-30 VDC from Greengate Switchpack or Greengate System |
| | Maximum current needed is 25 mA per sensor |
| | **Output** |
| | Open collector output to switch up to ten Greengate Switchpacks |
| | Isolated Form C Relay in (-R models) |
| | Isolated Form C Relay Ratings: 1A 30 VDC/VAC |
| **Time Delays** | Self-Adjusting, 15 seconds/test, 5, 10, 15, 30 minutes |
| **Light Level Sensing (-R Models)** | 0 to 300 foot-candles |
| **Operating Environment** | Temperature: 32°F - 104°F (0°C - 40°C) |
| | Relative humidity: 20% to 90% Non-condensing |
| | For indoor use only |
| **Housing** | Durable, injection molded housing. Polycarbonate resin complies with UL 94V-0 |
| **Size** | 4.4"H x 3.4"W x 2"D (112mm x 86.4mm x 50.8mm) |
| **Mounting** | Mounts directly to ceiling tile, to a 4" square box and round mud ring or to 4" octagon box |
| **LED Indicators** | Red LED for PIR detection; Green LED for Ultrasonic detection |
| **Standards** | FCC Compliant<br>cULus Listed<br>RoHS Compliant |

## Description/Operation

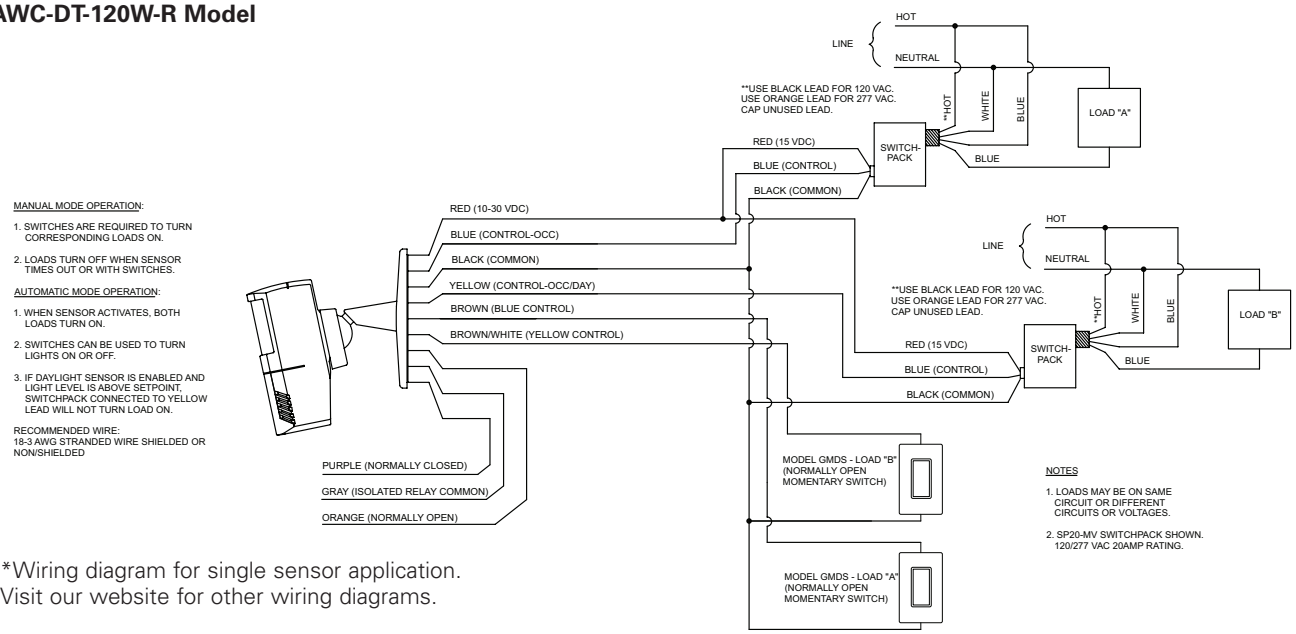
The OAWC-DT combines Ultrasonic (US) and Passive Infrared (PIR) sensor technologies to monitor a room for occupancy to deliver maximum energy savings and ensure the greatest sensitivity and coverage for tough application without the threat of false triggers. PIR is used to turn the lights ON and then either or both technologies are used to keep the lights ON. The sensor includes MicroSet self-adaptive technology that continuously self-adjusts sensitivity and time delay in real-time, maximizing the potential energy savings that are available in particular application. In Automatic On Mode, the lights turn ON when a person enters the room. In Manual-On Mode, the lights are turned ON by activating a momentary switch (model # GMDS-*) that is connected to the sensor. When used with 2 level lighting (-R model only), Bi-level Automatic On can be achieved which allows Zone 1 to come on automatically upon occupancy. Zone 2 does not come on unless the occupant presses the optional momentary switch. When enabled, the daylighting feature (-R models only) prevents lights from turning ON when the room is adequately illuminated by natural light.

## Applications

- Classrooms
- Conference Rooms
- Large Offices
- Common Areas
- Computer Rooms
- Break Rooms

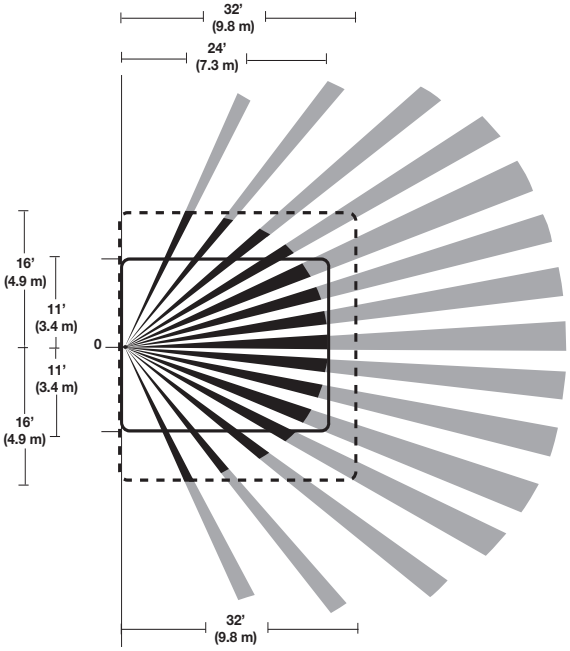
## Wiring Diagrams

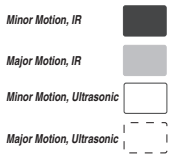
### OAWC-DT-120W-R Model



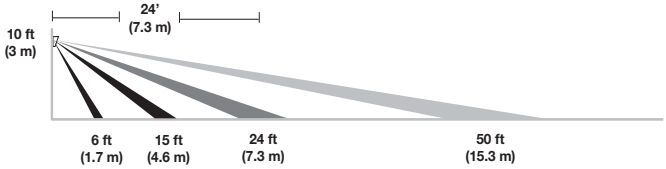

*Wiring diagram for single sensor application.
Visit our website for other wiring diagrams.

## Coverage




*Maximum coverage area may vary somewhat according to room shape and the presence of obstacles.*



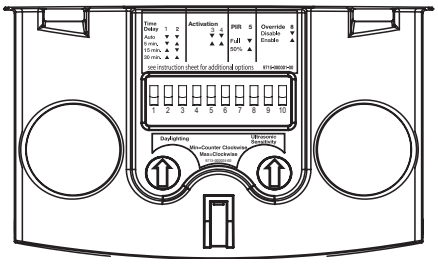
## Controls

**DIP Switch Legend**

| DIP Switch | Time Delay | | Activation | Activation | PIR Sensitivity | Walk-Through Mode | LEDs | Override | Lighting Sweep | Daylighting Mode |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Power Pack One | Power Pack Two | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Auto* | ▼ | ▼ | Auto ▼ | Auto ▼ | Full ▼ | Disable ▼ | Enable ▼ | Disable ▼ | Disable ▼ | Half ▼ |
| 5 Minutes | ▼ | ▲ | Manual ▲ | Manual ▲ | 50% ▲ | Enable ▲ | Disable ▲ | Enable ▲ | Enable ▲ | Full ▲ |
| 15 Minutes | ▲ | ▼ | | (-R model only) | | | | | | (-R model only) |
| 30 Minutes | ▲ | ▲ | | | | | | | | |

*Self-Adjusts to 10 min. user mode*

**Default =**




## Ordering

| Catalog # | Coverage | Field of View | Features |
|---|---|---|---|
| OAWC -DT-120W-R | 1,200 sq. ft. | Wide Angle, 120° | w/ BAS Relay and Daylight Sensor |
| OAWC-DT-120W | 1,200 sq. ft. | Wide Angle, 120° | |

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