

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



## Greengate

### ONW-D-1001 Wall Switch Sensor with Neutral Required

Dual Tech Single Pole 120/277 VAC Wall Switch Occupancy Sensor (Neutral Required)

#### Typical Applications

Private Offices • Small Conference Rooms • Lunch/Break Rooms • Small Classrooms • Small Restrooms (1-2 stalls) • Small Lounges • Small Waiting Rooms • Small Closets • Small Storage Areas

#### Interactive Menu

- Order Information [page 2](#)
- Additional Resources [page 2](#)
- Wiring Diagrams [page 3](#)
- Product Warranty

#### Product Certification



#### Product Features



## Overview

The Dual Technology Single Level Occupancy Sensing Wall Switch is a motion sensing lighting control and conventional wall switch all-in-one that is used for energy savings and convenience.

The ONW-D-1001-MV-N combines Ultrasonic 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 applications 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. In Automatic On Mode, the lights turn ON when a person enters the room. In Manual On Mode, the lights are turned ON by pressing the universally recognized light icon pushbutton. The sensor includes self-adaptive technology that continuously self-adjusts sensitivity and time delay in real-time, maximizing the potential energy savings that are available in the particular application. The EcoMeter provides a visual indicator of energy usage, increasing end user awareness and reminding individuals to take control of their lighting to maximize energy savings.

## Top Product Features

- Air-gap switch ensures no leakage current to load
- Selectable built-in light level sensor
- NEMA WD7 Guide robotic method utilized to verify coverage patterns

## Order Information

SAMPLE ORDER NUMBER: **ONW-D-1001-MV-N-W**

One single gang wallplate included.

### Catalog Number

| Catalog Number                           | Ratings                                                                                                     | Coverage           | Voltage               | Color                                                                                                      |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------|-----------------------|------------------------------------------------------------------------------------------------------------|
| ONW-D-1001-MV-N- * (*-W, V, LA, G, B, R) | Incandescent: 0-800W @ 120V<br>Fluorescent: 0-1200W @ 120V<br>Fluorescent: 0-2700W @ 277V<br>Max Load/Relay | 180°; 1000 sq. ft. | 120/277 VAC, 50/60 Hz | W=White, V=Ivory, LA=Light Almond, G=Gray, B=Black, R=Red                                                  |
|                                          |                                                                                                             |                    |                       | <b>Notes</b><br>Not all colors are available in stock and some color options may have extended lead times. |

## Product Specifications

### Technology

- Passive Infrared (PIR) and Ultrasonic (US) technology

### Mechanical

**Mounting Plate/Strap Dimensions:** 4.195" H x 1.732" W (106.55mm x 44mm)

**Mounting Plate/Strap Dimensions: ONW-D-1001-347:** 4.35" H x 1.732" W (110.49mm x 44mm)

**Product Housing Dimensions:** 2.618" H x 1.752" W x 1.9" D (66.5mm x 44.5mm x 48.26mm)

### Environment:

- Operating temperature:** 32°F to 104°F (0°C to 40°C)
- Relative humidity operating:** 20% to 90% non-condensing
- For indoor use only

**Housing:** Durable, injection molded housing. ABS resin complies with UL 94V-0

**Mounting:** Fits in a standard 3.5" deep back box Can be mounted in multiple gang back box. Refer to NEC box calculation for properly sized mounting box

### Electrical

#### Electrical ratings (per relay):

- 120 VAC
  - Incandescent / Tungsten max load: 6.7 amps, 800W, 50/60 Hz
  - Fluorescent / Ballast max load: 10 amps, 1200W, 50/60 Hz
  - Motor Load: 1/4 HP @ 125 VAC
- 230/277VAC
  - Fluorescent / Ballast max load: 9.8 amps, 2700W, 50/60 Hz

#### Ballast compatibility:

- Magnetic and Electronic ballasts

### Hardware Specifications

#### LED Indicators:

- Red LED = PIR detection
- LED = Ultrasonic detection
- Green LED = Acts as EcoMeter or nightlight locator

### Controls and Performance

#### Time delays:

- Self adjusting 15 seconds/test (10 min. Auto)
- Selectable 5, 15, 30 minutes

#### Coverage:

- Major motion: 36' x 30'
- Minor motion: 20' x 16'

#### Light sensing level:

- 0 to 200 foot candles

### Standards/Ratings

- cULus Listed
- FCC Compliant
- RoHS Compliant

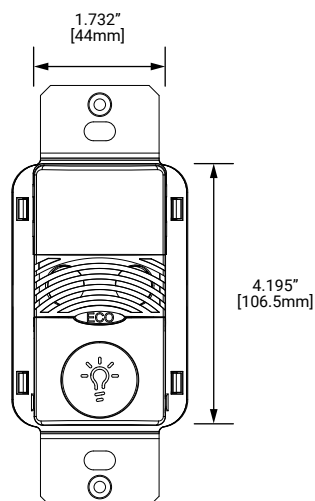
### Warning

- This product is not intended to be used in applications involving the use of ammonia-based or VOC cleaners.
- Use of ammonia-based or VOC cleaners on this device must be avoided. Prolonged use may cause loss of integrity and expose electrified components. If this occurs, turn OFF power to the unit and replace.
- For detailed cleaning guidelines please refer to: Controls Care and Maintenance instructions at the end of this document.

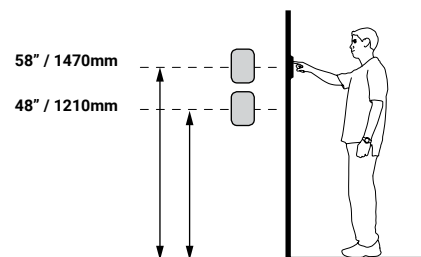
### Warranty

Five year warranty standard

## Dimensional and Mounting Details

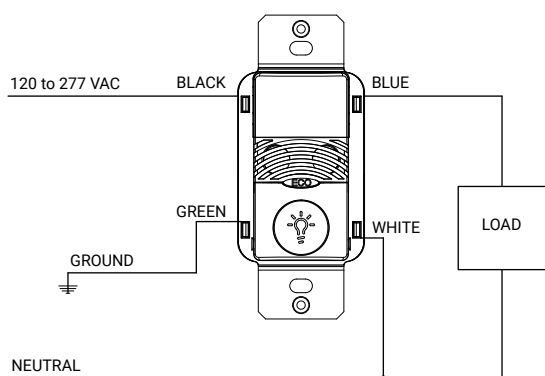


## Scale or Mounting Height

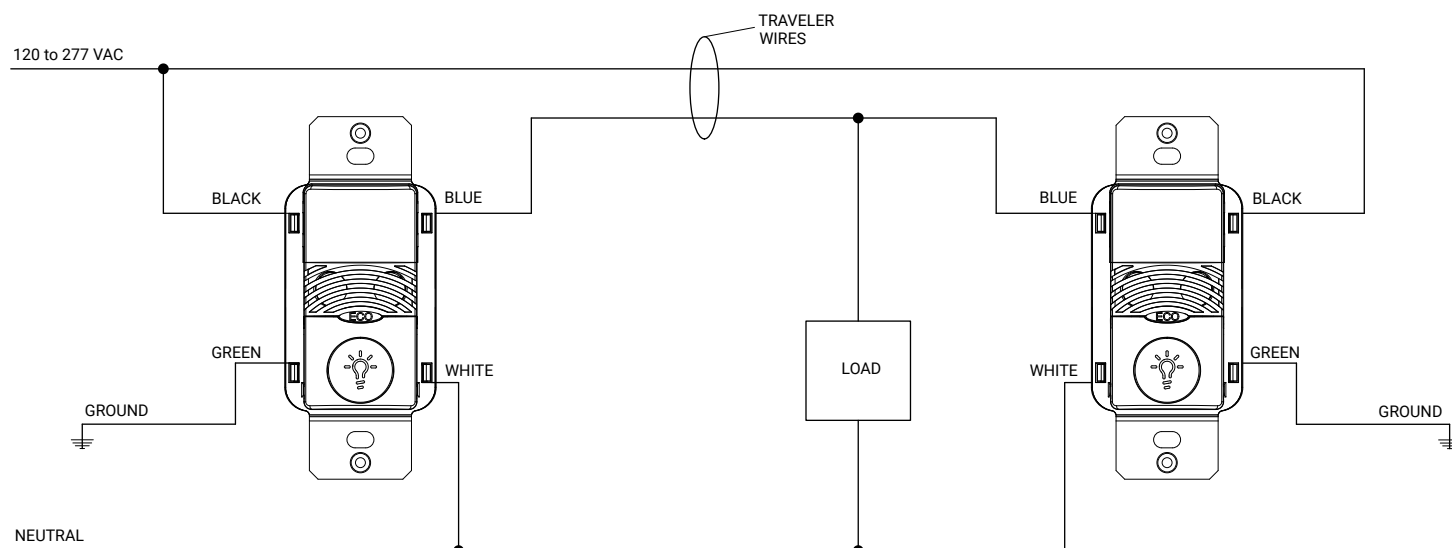


## Wiring Diagrams

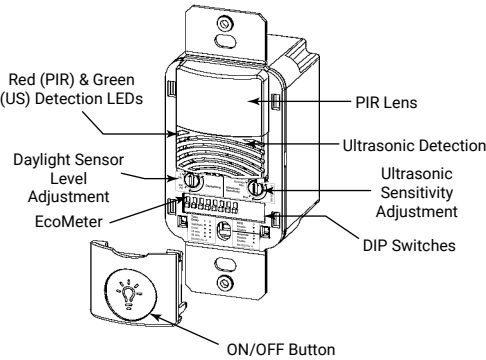
### Single Level Switching - Single Circuit



**Three-way wiring diagram: Lights will turn OFF automatically when sensor that detected motion last, times out.**



Controls



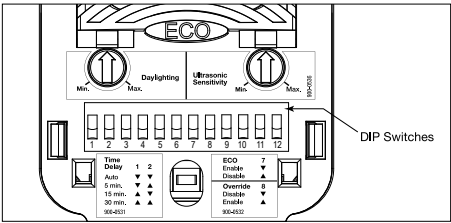
DIP Switch Legend

| DIP Switch | Time Delay |   | Activation |   | Not Used | PIR Sensitivity | Walk-Through Mode |         | EcoMeter | Override | Not Used | Maintain Lights On |   | Not Used |        |   |   |    |    |
|------------|------------|---|------------|---|----------|-----------------|-------------------|---------|----------|----------|----------|--------------------|---|----------|--------|---|---|----|----|
|            | 1          | 2 | Relay 1    |   |          |                 | 3                 | 4       |          |          |          | 5                  | 6 |          | 7      | 8 | 9 | 10 | 11 |
| Auto*      | ▼          | ▼ | Auto       | ▼ |          | Full            | ▼                 | Disable | ▼        | Enable   | ▼        | Disable            | ▼ |          | Either | ▼ |   |    |    |
| 5 Minutes  | ▼          | ▲ | Manual     | ▲ |          | 50%             | ▲                 | Enable  | ▲        | Disable  | ▲        | Enable             | ▲ |          | Both   | ▲ |   |    |    |
| 15 Minutes | ▲          | ▼ |            |   |          |                 |                   |         |          |          |          |                    |   |          |        |   |   |    |    |
| 30 Minutes | ▲          | ▲ |            |   |          |                 |                   |         |          |          |          |                    |   |          |        |   |   |    |    |

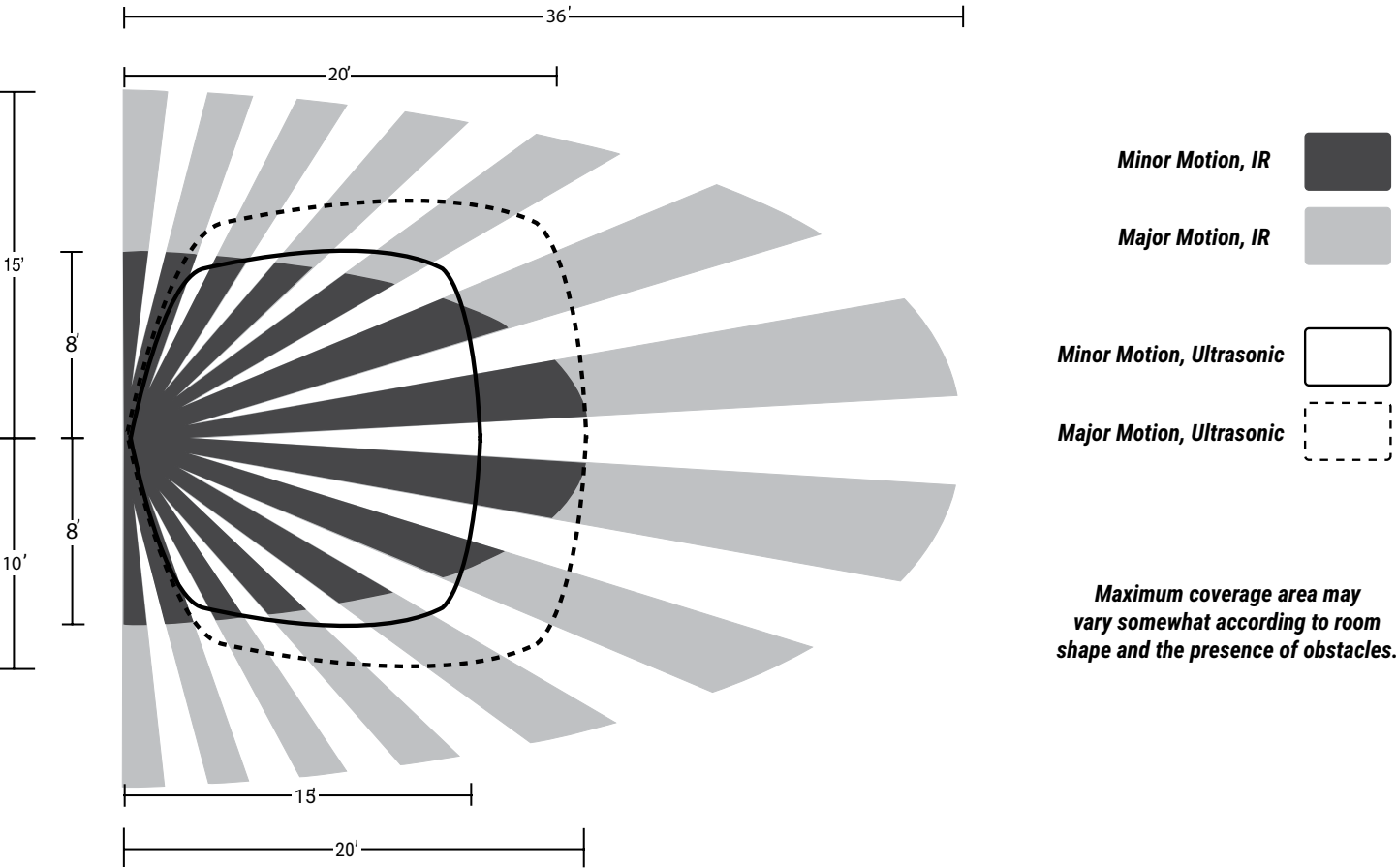
\*Self-Adjusts to 10 min. user mode

Default =





Field of View



**Control Systems**

- Greengate



Cooper Lighting Solutions has developed recommended guidelines for cleaning our products that will not impact the operation or finish of the product.

### Recommended cleaning tips:

- **Never spray any fluids directly into the device.**
- **Use of ammonia-based or VOC cleaners on this device must be avoided.** Prolonged use may cause loss of integrity and expose electrified components. If this occurs, turn OFF power to the unit and replace.
- **Use a damp rag or single-use wipe** to avoid excess liquid penetrating the device.
- Be sure to wipe up remaining excess liquid after cleaning.
- Ensure the cleaning agent used does not have harsh chemicals such as bleach, ammonia, highly alkaline or concentrated acids (such as hydrochloric acid that can be found in household cleaners such as toilet bowl cleaners, bathroom tile and porcelain cleaners) as they could damage the device, causing them to become brittle and discolored.
- Cooper Lighting Solutions recommends the use of a mild liquid detergent and water to clean the devices. Single use wipes (e.g. Lysol brand or equivalent) are acceptable to use for cleaning the devices, however the single-use wipes **cannot contain bleach, ammonia, highly alkaline or concentrated acids.**

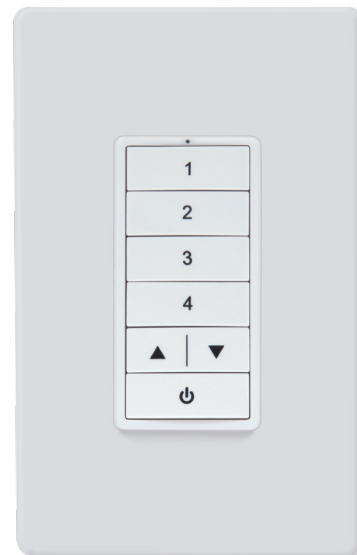


image for  
reference only



### WARNING

*This product is not intended for use in applications involving the use of ammonia-based or VOC cleaners.*

*Prolonged use may cause loss of integrity and expose electrified components.*

*If this occurs, turn OFF power to the unit and replace.*

### Recommended cleaning instructions:

- **Never spray any fluids directly into the device.**
- Apply the mild liquid detergent to a damp cloth or paper towel. Single use wipes (e.g. Lysol brand or equivalent) are acceptable to use for cleaning the devices, however single-use wipes cannot contain bleach, ammonia, highly alkaline or concentrated acids.
- If excess liquid is present, remove by wringing out the cloth or paper towel to avoid liquid penetration into the device.
- Clean the Cooper Lighting Solutions device by wiping over the surface with the damp cloth.
- Remove an excess liquid remaining on the device with a dry cloth or paper towel.