Project		Catalog #		Type	
Prepared by		Notes		Date	

Greengate

ONW-D-1001 Wall Switch Sensor with Ground Required

Dual Tech, Single Pole, 120/277/347 VAC
Wall Switch Occupancy Sensor
(Ground Required)

Typical Applications

Office • Small Conference Rooms • Lunch/Break Rooms • Classrooms • Restrooms (1-2 Stalls) • Lounges • Waiting Rooms • Closets • Storage Areas

📌 Interactive Menu

Product Certification

UL LISTED · RoHS COMPLIANT · FC

Product Features

PIR Activated · Ultrasonic Activated · Self-Adjusting · California Title 20 Compliant

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 to for energy savings and convenience. It does not require a neutral wire for installation making it ideal for retrofit applications.

The ONW-D-1001-MV 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 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 automatically 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.

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
- LED Rated

Order Information

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

One single gang wallplate included.

Catalog Number

Catalog Number	Ratings	Coverage	Voltage	Color
ONW-D-1001-MV- * (*-W, V, LA, G, B, R)	Incandescent: 0-800W @ 120V Fluorescent: 0-1200W @ 120V Fluorescent: 0-2700W @ 277V 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
				Notes Not all colors are available in stock and some color options may have extended lead times.

SAMPLE ORDER NUMBER: **ONW-D-1001-347-W**

One single gang wallplate included. Wallplate not included with 347 VAC Model.

Catalog Number

Catalog Number	Ratings	Coverage	Voltage	Color
ONW-D-1001-347- * (*-W, V, LA, G, B, R)	Incandescent: 0-1500W @ 347V Fluorescent: 0-1500W @ 347V Max Load/Relay	180°; 1000 sq. ft.	347 VAC, 50/60 Hz	W=White, V=Ivory, LA=Light Almond, G=Gray, B=Black, R=Red
				Notes 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
  - Electronic Ballast (LED): 3A
  - Motor Load: 1/4 HP @ 125 VAC
- 277VAC
  - Fluorescent / Ballast max load: 9.8 amps, 2700W, 50/60 Hz
  - Electronic Ballast (LED): 3A
- 347VAC
  - Fluorescent / Ballast max load: 4.3 amps, 1500W, 50/60 Hz
  - Electronic Ballast (LED): 3A

Ballast compatibilty:
- LED loads
- Magnetic and Electronic ballasts

Hardware Specifications
LED Indicators:
- Red LED = PIR detection
- Green LED = Ultrasonic detection

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'
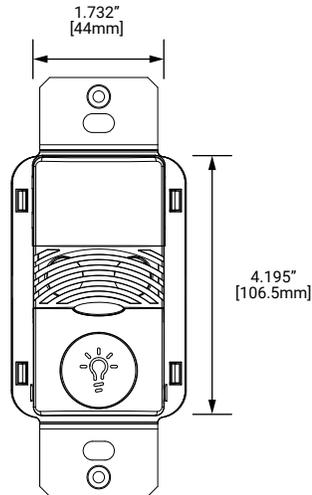**Light sensing level:**
- 0 to 200 foot candles

Standards/Ratings
- cULus Listed - Energy Management Equipment (UL916)
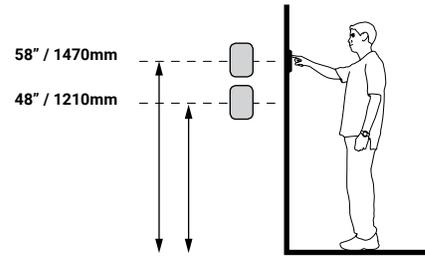- FCC Compliant
- RoHS Compliant

Warranty
Five year warranty standard
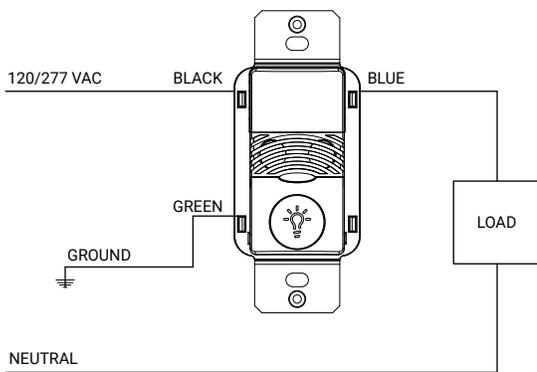
Dimensional and Mounting Details
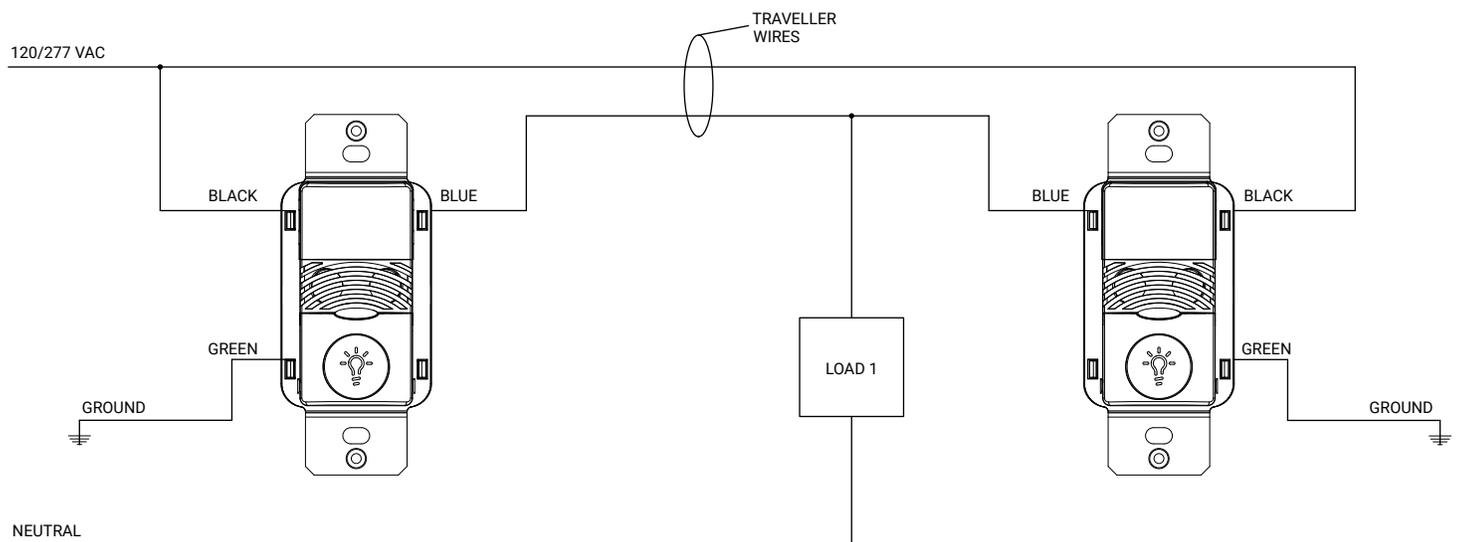
Scale or Mounting Height

1.732"
[44mm]

4.195"
[106.5mm]

58" / 1470mm

48" / 1210mm

Wiring Diagrams

Single Level Switching - Single Circuit
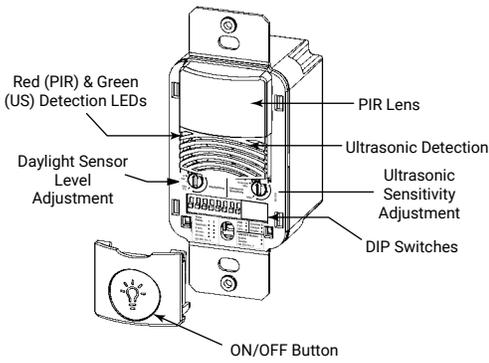

120/277 VAC   BLACK   BLUE

GREEN

GROUND

LOAD

NEUTRAL

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

TRAVELLER WIRES

120/277 VAC

BLACK   BLUE   BLUE   BLACK

GREEN   LOAD 1   GREEN

GROUND   GROUND

NEUTRAL

* For 347 VAC wiring diagrams refer to Installation Instructions

COOPER
Lighting Solutions

Controls

Red (PIR) & Green (US) Detection LEDs
Daylight Sensor Level Adjustment
PIR Lens
Ultrasonic Detection
Ultrasonic Sensitivity Adjustment
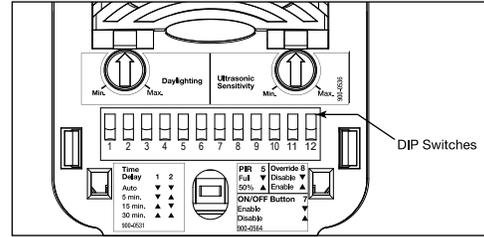DIP Switches
ON/OFF Button

DIP Switch Legend

	Time Delay		Activation		PIR Sensitivity	Walk-Through Mode	ON/OFF Button	Override	Not Used	Maintain Lights On		Not Used	
			Relay 1	Not Used									
DIP Switch	1	2	3	4	5	6	7	8	9	10		11	12
15 Sec Test/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 =

DIP Switches

Field of View

36'
20'
15'
8'
8'
10'
15
20'

Minor Motion, IR
Major Motion, IR
Minor Motion, Ultrasonic
Major Motion, Ultrasonic

Maximum coverage area may vary somewhat according to room shape and the presence of obstacles.
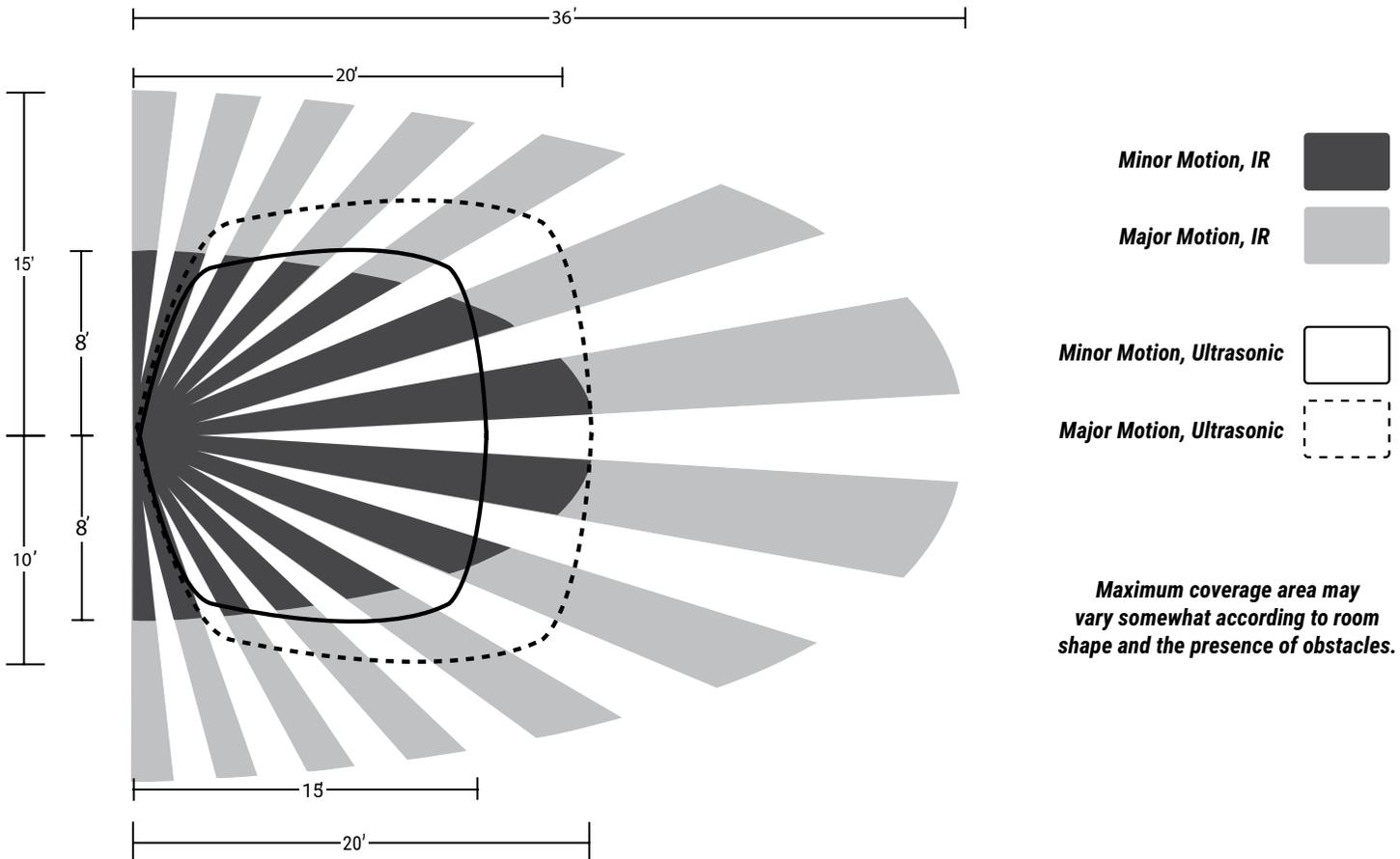
Control Systems
- Greengate

COOPER Lighting Solutions