**General Information**

- Read all instructions on both sides of this sheet first.
- Install in accordance with ALL local codes.
- For indoor use only

**Specifications**

- **Technology**: Passive Infrared (PIR) and Ultrasonic (US)
- **Electrical Ratings**:
  - 120 VAC: Incandescent/Tungsten – Max. load: 6.7 amps, 600W, 50/60Hz
  - Fluorescent/Ballast – Max. load: 10 amperes, 120/277V, 50/60Hz
  - Motor Load: 1 HP @ 125 VAC 277 VAC
- **Fluorescent/Ballast – Max. load**: 9.8 amperes, 277VAC, 50/60 Hz
- **Bus Compatibility**: Compatible with magnetic and electronic ballasts
- **No Minimum Load Requirement**

**Time Delays**

- **Self-Adjusting**: 15 seconds to 360 minutes
- **Selectable**: 5, 15, 30 minutes
- **20 seconds following the initial activation**, it will automatically go to shorter 2 minute time delay.

**Description**

The ONW-D-1001-MV Occupancy Sensing Wall Switch is a Passive Infrared (PIR) and Ultrasonic (US) motion sensing lighting control and conventional wall switch all-in-one, used for energy savings and convenience.

The sensor combines PIR and US technologies to monitor for room occupancy.

**PIR Technology**

- The sensor’s segmented lens divides the field of view into sensor zones, and detects the changes in temperature that are created when a person, or part of a person as small as a hand, passes into or out of a sensor zone.

**US Technology**

- The sensor produces a low intensity, inaudible sound. It detects occupancy from changes in the acoustic waves caused by motion, such as reaching for a telephone, turning a page in a book, walking into a room, turning in a swivel chair, etc. The sensor does not respond to audible sound.

**Advanced Detection Capabilities**

- **Dual Technology sensors ensure the greatest sensitivity and coverage for tough applications thus saving additional energy.**
- **PIR is used to turn the lights ON and then either or both technologies are used to keep the lights ON.**
- **The ONW-D-1001-MV allows the control of one load with one occupancy sensor switch.**
- **The sensor can be configured to enhance energy savings by setting the unit for Manual ON operation.**
- **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 turn-on button.**
- **In either mode, the lights stay ON as long as the sensor detects motion in the room.**
- **When the room is vacated, the lights turn OFF automatically after a preset time delay interval.**

**Location**

- When installing the ONW-D-1001-MV in a new junction box, choose the switch location carefully to provide optimum coverage of the occupied area. When replacing an existing wall switch, bear in mind that there must be a clear line-of-sight between the sensor and the area to be covered. Avoid painting the ONW-D-1001-MV directly into the hallway where it may detect passers-by.

**Coverage**

- **Major motion – 1000 sq. ft.**
- **Minor motion – 300 sq. ft.**

**Light Level Sensing**

- **Operating Environment**:
  - **Temperature**: 32°F – 104°F (0°C – 40°C)
  - **Relative Humidity**: 20% to 90% non-condensing

**Housing**

- **Durable, Injection Molded Housing**: ABS Resin

**Size**

- **Mounting Plate/Strap Dimensions**: 4.186” H x 1.752” W (106.553 mm x 44 mm)
- **Product Housing Dimensions**: 2.618” H x 1.752” W x 1.8” D (66.5 mm x 44.5 mm x 48.26 mm)

**LED Indicators**

- **Red LED indicates PIR detection**
- **Green LED indicates Ultrasonic detection**

**Wiring**

1. Make sure power is turned OFF at the branch circuit breaker.
2. Wire units as shown in wiring diagrams for applicable voltage requirements. (Use twist-on wire connectors for all connections.)
3. Mount unit to wall box.
4. Turn power back ON at the branch circuit breaker and wait 2 minutes for the unit to stabilize.
5. Make necessary adjustments. (See Checklist and Adjustments section)
6. Install wall switch plate.

**Installation**

The ONW-D-1001-MV can be installed in any standard single gang box. It may be installed in the same manner as an ordinary wall switch.

- Wire the ONW-D-1001-MV as described in the wiring section
- Mount the ONW-D-1001-MV in the junction box

**Model # ONW-D-1001-MV-W
Model # ONW-D-1001-MV-V
Model # ONW-D-1001-MV-LA
Model # ONW-D-1001-MV-G
Model # ONW-D-1001-MV-B**

**Electrical Ratings**

- **120 VAC**: 6.7 amps, 600W, 50/60Hz
- **Fluorescent/Ballast**: Max. load: 10 amperes, 120/277V, 50/60Hz
- **Motor Load**: 1 HP @ 125 VAC 277 VAC

**Lighting Controls**

- **Automatic ON/OFF Button Disable Option** – When selected this option disables the ON/OFF button(s) and sensor becomes automatically disabled.

**Electrical Ratings**

- **Max. load**: 6.7 amps, 800W, 50/60Hz

**Lighting Controls**

- **Read all instructions on both sides of this sheet first.**
- **For indoor use only.**

**Installation Instructions**

- **For indoor use only.**
- **Read all instructions on both sides of this sheet first.**
- **For indoor use only.**

**Electrical Ratings**

- **Max. load**: 6.7 amps, 800W, 50/60Hz

**Lighting Controls**

- **ON/OFF Button Disable Option** – When selected this option disables the ON/OFF button(s) and sensor becomes automatically disabled.

**Electrical Ratings**

- **Max. load**: 6.7 amps, 800W, 50/60Hz

**Lighting Controls**

- **ON/OFF Button Disable Option** – When selected this option disables the ON/OFF button(s) and sensor becomes automatically disabled.

**Electrical Ratings**

- **Max. load**: 6.7 amps, 800W, 50/60Hz

**Lighting Controls**

- **ON/OFF Button Disable Option** – When selected this option disables the ON/OFF button(s) and sensor becomes automatically disabled.

**Electrical Ratings**

- **Max. load**: 6.7 amps, 800W, 50/60Hz

**Lighting Controls**

- **ON/OFF Button Disable Option** – When selected this option disables the ON/OFF button(s) and sensor becomes automatically disabled.

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**Lighting Controls**

- **ON/OFF Button Disable Option** – When selected this option disables the ON/OFF button(s) and sensor becomes automatically disabled.

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**Lighting Controls**

- **ON/OFF Button Disable Option** – When selected this option disables the ON/OFF button(s) and sensor becomes automatically disabled.

**Electrical Ratings**

- **Max. load**: 6.7 amps, 800W, 50/60Hz

**Lighting Controls**

- **ON/OFF Button Disable Option** – When selected this option disables the ON/OFF button(s) and sensor becomes automatically disabled.
Wiring Diagram 3: 120/277 VAC single level single circuit three-way wiring diagram

**Checkout and Adjustment**

Adjustments should be made with the HMC system ON so that the installer will be able to detect the effect of sunlight on the operation of the DW-1001-MC using only installed tools to make adjustments. Immediately after applying power to the lighting circuit, wait approximately two minutes for the switch to power-up and stabilize.

**Self-Adjust**

Sensor is in Self-adjust mode. This applies to time delay, US, and PIR sensitivity. In preparation for the Installer Test, the time delay is set to 15 seconds. After the sensor is installed, power ON and has stabilized, the unit will time-out 15 seconds after the last motion detected. Coverage and sensitivity can be confirmed by watching the green (US) and red (PIR) indicator LEDs on the front of the sensor, while moving around the room.

1. Walk around the room and monitor LEDs.
2. Stand in different parts of the room and wave your hands. LEDs should light up for one second, after the sensor is installed, power ON and has stabilized, the unit will time-out 15 seconds after the last motion detected. Coverage and sensitivity can be confirmed by watching the green (US) and red (PIR) indicator LEDs on the front of the sensor, while moving around the room.
3. Stand still three to four feet away from the sensor for five seconds. LED should not turn ON. (If any LED turns ON, note LED and go to Installation Adjustments – Sensitivity Adjustment Section)
4. Stop the light level to minimum (fully CCW). Any time delay on the self-adjusting feature is enabled, the switch will respond to each pair of false-OFFs with no normal OFF in between, by alternating making slight adjustments to either the delay time (by 3 increment) or sensitivity. When the sensor times out and is OFF with power ON for 5 minutes, the unit will go to a 30 minute delay Time Delay user mode setting.

**Troubleshooting**

- **Possible Causes**
- **Suggestions**
- **Sensor is in Manual ON mode**
- Press pushbutton 7 Auto Mode is desired change Activation Mode to Auto.
- **Lights Will Not Turn ON automatically**
- **Daylighting Feature Enabled**
- If all lights are required to turn ON adjust daylight photometer.
- **Power Interruption**
- Check incoming voltage and/or wiring
- **Power Interruption**
- If all lights are required to turn ON adjust daylight photometer.
- **ON/OFF Button Disabled**
- Move DIP Switch 7 down

If lights will still not turn ON, set sensor to override mode and call Technical Services at 1-800-553-3879

**Warranty and Limitation of Liability**

Please refer to www.coopercontrols.com under the Legal section for our terms and conditions.

**NOTE:** To place into Test Mode, toggle DIP Switch 72 out of its current position, wait 3 seconds, and then back into its original position.