**Cut Sheet**  
Vacancy Sensor Wall Switch DualTech 120/277Vac

<table>
<thead>
<tr>
<th>PART No.</th>
<th>DESCRIPTION</th>
<th>SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>WVSSDU1-P-VW</td>
<td>DualTech, 120/277Vac, 1-pole, photo, white</td>
<td>Power</td>
</tr>
<tr>
<td>WVSSDU2-P-VW</td>
<td>DualTech, 120/277Vac, 2-pole, photo, white</td>
<td>• 120/277Vac</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 60Hz</td>
</tr>
</tbody>
</table>

**Contact Ratings**

- 120Vac - 800W
- 277Vac - 1200W

**Power Consumption**

- 400 micro amps

**Approvals**

- Certified to UL 508, UL244A, CSA C22.2 #14

**Environment**

- Indoors, stationary, non-vibrating, non-corrosive atmosphere and non-condensing humidity
- Ambient Operation Temperature: 32°F to 104°F (0°C to 40°C)
- Storage Temperature: -14°F to 140°F (-25°C to 60°C)

**DIMENSIONS & MOUNTING**

- Mount in a standard gang box.

**Features**

- Factory set to Vacancy (Manual ON)
- 180° coverage
- The Dual Technology sensor utilize ADI-Voice Technology, which has advanced digital signal processing for accurate detection of human speech.
- A 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 of energy savings.
- Smart Sensing allows for an immediate return to occupied mode in the event of a false off being triggered.
- Photo sensor
- Can be programmed by on-board switches and dials or a handheld Infrared Setting Unit (WIR-3110) for added convenience during commissioning.

**Operation**

Line voltage sensors draw control power directly from the lighting circuit they are intended to control. When in operation the sensor will maintain room status by PIR and ADI-Voice as long as people are within the sensing range.

**Vacancy Time Dial**

Ranges from 30s to 30 min. Full turn for Auto Time

**DIP Settings**

**Photo Setpoint Dial**

Used to determine light level for Photo Functions

**Override Button**

On-board button for override and testing

*faceplate not included*
Wiring Instructions

The WOS Series Line Voltage sensors are equipped with #14 AWG leads. Use appropriate sized wire-nuts to connect the wires to the incoming load terminations.

Electrical Connections

Sensor Settings

Programming - IR / Manual Setting
Programming can be done either with the DIP switches and dials on-board the device or with the WIR-3110 setting unit. For more details and additional options, please see the “WIR-3110 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 is activated to work alongside the PIR to maintain occupancy. The ADI-Voice can be disabled on any dual tech sensors.

Automatic Timeout
By setting the timeout dial to maximum, the sensor will be put into automatic mode which will adjust the time out automatically to maximize energy savings and occupant comfort.

Smart Sensing
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 this 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.

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 after the first 30 seconds after initial turn on.

Photo Sensing (-P)
When enabled, occupancy alone will not trigger the output state to on. If occupancy is detected AND there is a deficiency of natural light, the output is triggered on. An increase in natural light will not force the lights off but as the ambient light level drops the lights will turn on automatically.

Multi-Level Photo Sensing (2-Pole w/ Photo Option)
Photo sensing on a 2-pole sensor can be configured to either restrict both poles or the secondary pole only; if set to “Secondary Pole Only”, the primary pole will trigger based on occupancy, regardless of the photo setting.
INSTALLATION

- Mount the WOS Series sensor on the wall about 4’ above floor level near the midline of the room so its PIR detection zones cover the room area and any obstructions are within range of the ADI-Voice detector.
- There should be no obstructions between the sensor and the room entrance. This ensures that the sensor’s PIR lens will be activated when a person enters the room, which will subsequently trigger the ADI-Voice.

Installing in Offices
- Sensor effective in obstructed spaces.
- Voice sound re-activation prevents lights out condition.

Installing in Washrooms
- Sensor effective in partitioned spaces.
- Voice sound re-activation prevents lights out condition.

Standard Lens
- Optimal usage is to detect small motions such as hand movements
- Designed for a mounting height of up to 4ft
- ADI-Voice can detect around corners that PIR cannot to maintain occupancy.

Typical Office

Top View

Side View
INSTALLATION & WIRING DIRECTIONS

Installation
Mounting of the device requires a standard gang box. Install by recessing the device into the standard gang box; lining up the mounting holes and securing it using the screws provided.

Wiring

TURN POWER OFF AT THE CIRCUIT BREAKER BEFORE WORKING WITH OR NEAR HIGH VOLTAGE

The WOS Series Line Voltage sensors are equipped with #14 AWG stranded leads. Use appropriate sized wire-nuts to connect the wires to the incoming load terminations; for installation with field-installed conductors of 60ºC minimum rating.

DIP Switches
A bank of eight DIP switches and two rotating controls can be used to manually setup and configure the sensor.

<table>
<thead>
<tr>
<th>DIP #</th>
<th>Function</th>
<th>On</th>
<th>Off</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Voice Detection</td>
<td>Disabled</td>
<td>Enabled</td>
<td>OFF</td>
</tr>
<tr>
<td>2</td>
<td>Motion Detection Sensitivity</td>
<td>High</td>
<td>Normal</td>
<td>OFF</td>
</tr>
<tr>
<td>3</td>
<td>Detection LED</td>
<td>Disabled</td>
<td>Enabled</td>
<td>OFF</td>
</tr>
<tr>
<td>4</td>
<td>Auto or Manual ON</td>
<td>Occupancy (Auto-On)</td>
<td>Vacancy (Manual On)</td>
<td>ON</td>
</tr>
<tr>
<td>5</td>
<td>Photocell Inhibit</td>
<td>Disabled</td>
<td>Enabled</td>
<td>OFF</td>
</tr>
<tr>
<td>6*</td>
<td>Photocell Control</td>
<td>Inhibit Primary Pole Only</td>
<td>Inhibit Both Poles</td>
<td>OFF</td>
</tr>
<tr>
<td>7</td>
<td>Manual Override Button</td>
<td>Disabled</td>
<td>Enabled</td>
<td>OFF</td>
</tr>
<tr>
<td>8</td>
<td>Settings Input</td>
<td>IR Handheld (WR-3110)</td>
<td>Manual Dips/Dials</td>
<td>ON</td>
</tr>
</tbody>
</table>

2-Pole models only

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