



## OSL Occupancy Sensor For Direct Damper Control

## Installation Instructions Model OSL

Made in USA



### Applications

- Automatically lowers airflow and saves energy when a conference room, office or other space is not occupied.

### Features

- Automatically detects when lights are turned on and sets the airflow for best comfort.
- Automatically detects when lights are turned off and reduces the airflow to reduce energy consumption.
- Adjustments for setting the Occupied airflow level for best comfort and the Vacant level to save energy.
- Switch selects Automatic, Occupied or Vacant operation.
- Requires 3 wires from the VPD damper. All low voltage wiring allows installation directly on a wall or in a switch box.
- LED is red when occupied and green when vacant and airflow is automatically reduced to save energy.

### Occupancy Sensor

Operating Modes	Occupied, Vacant or Automatic
Occupied Mode	Sets airflow to the OCC dial setting to eliminate overheating and overcooling.
Vacant Mode	Sets airflow to the VAC dial setting to reduce energy usage when a room or office is vacant.
Automatic Mode	Detects when an office or room is occupied or vacant and adjusts airflow to the proper setting.
Occupancy Detection	Photo detector monitors light level and detects when an office light is turned on or off. Not affected by increasing or decreasing sunlight levels.
LED Indicator	LED is red when the room is occupied and green when the room is vacant.
Dampers	VPD-XXX variable position.
Housing	Fits in Euro-style switch cover plate. Can be installed directly to wall or in a switch box.
Electrical	Three terminals wired to VPD Damper.
Multiple Dampers	One OSL can control up to 4 dampers.

# Operation

The OSL Occupancy Sensor automatically controls a VPD variable position damper to provide a comfortable airflow level when a space is occupied and a reduced airflow level when the space is vacant.

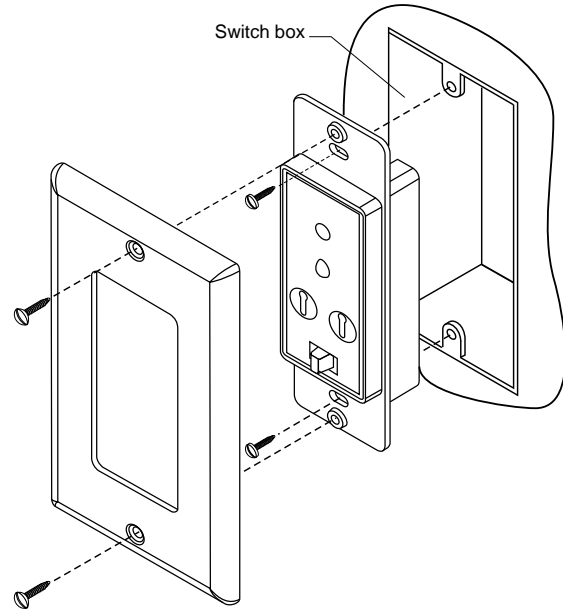
# Comfort Improvement

Overheating and overcooling of work spaces are common to many facilities and can be eliminated by setting the Occupied airflow to a lower level. The Occupied level can be easily adjusted with a coin or screw driver.

# Saves Energy

The OSL automatically detects when the lights are turned off and adjusts the airflow to the Vacant level. The lower airflow level reduces energy consumption. It's like having a setback thermostat in each space.

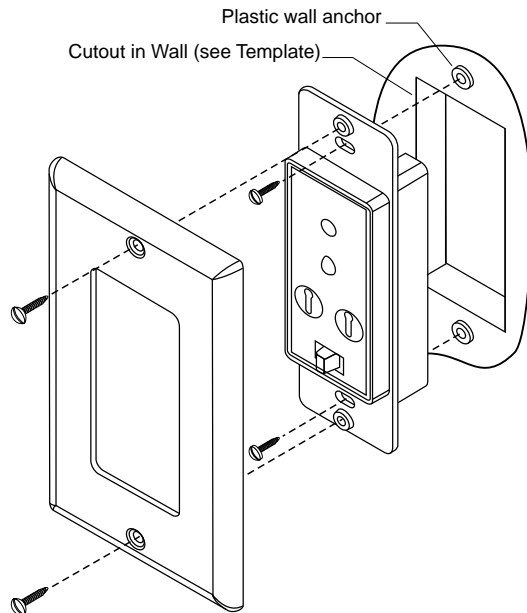
The OSL can also be installed in a switch box. All wiring is low voltage and does not require conduit.



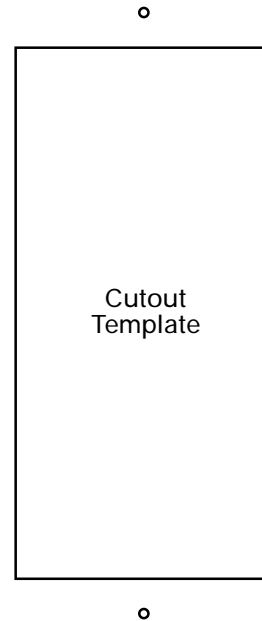
Installation in Switch Box

# 1 Mechanical Installation

The OSL can be installed in the wall by making a cutout using the template. All wiring is low voltage and does not require conduit.

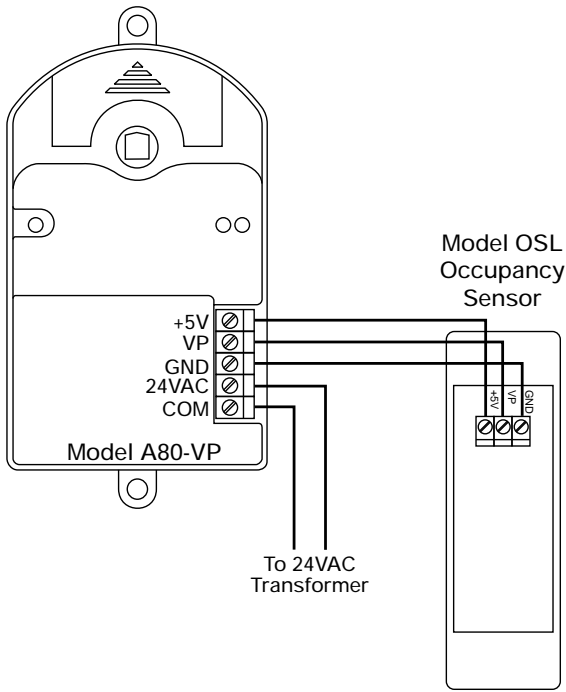


Installation Directly in a Wall



## 2 Wiring OSL to a VPD Damper

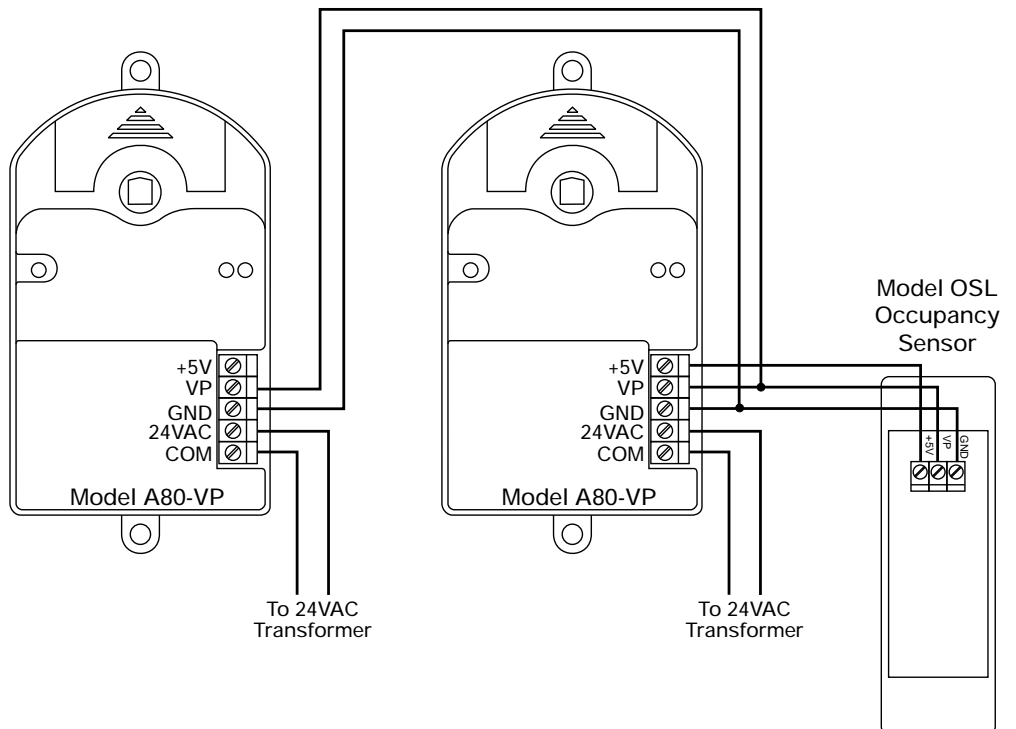
A VPD damper and OSL Occupancy Sensor are connected using the GND, VP and +5V terminals.



## Wiring OSL to Multiple VPD Dampers

An Occupancy Sensor can control multiple VPD dampers using the VP and GND terminals. Up to six VPD dampers can be controlled by an Occupancy Sensor.

**IMPORTANT!** Only the +5V terminal on the first damper is connected to the Occupancy Sensor.



### 3 Mechanical Bypass

When using a large number of variable position dampers on the same HVAC system, adjust the Close position limit on the damper to insure a minimum airflow and eliminate high static pressures that could damage the ducts. See the installation instructions for the VPD damper actuator.

### 4 Adjusting for Dimly Lit Office Spaces

If an office has a low light level when the lights are on, the OSL may not detect the occupied light level when power is first applied to the OSL. In this case, set the sensitivity adjustment on the back to DARK or hold your finger over the light sensor for about 6 seconds to teach the OSL to accept the lower light level.

### 5 Setting the Occupied Airflow Level

If the space has been cold when the air conditioning is on, set the Occupancy airflow to about 80%. Otherwise, start the Occupancy level at 100%.

The graduations on the Occupied and Vacant Airflow dials represent 0 to 100% airflow in 10% increments.

### 6 Setting the Occupied Airflow Level

Set the Vacant airflow to about 50% to save energy when the space is not being used.

