OCCUPANT SENSOR
LOS-SUS
Installation Instructions   *Please Read*

DESCRIPTION
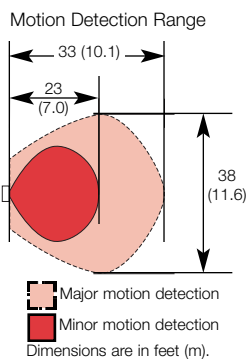The LOS-SUS ultrasonic sensor offers a direct and quick replacement of wall switches for stand-alone 120/277 V∿ line voltage switching of small spaces. The intelligent, continuously adapting technology eliminates the need for manual sensitivity and timer adjustments, both during installation and over the life of the product.

FEATURES
• Intelligent, continually adapting ultrasonic sensor
• 1000 sq.ft. coverage
• Load requirements:
  Low load (black and yellow):
  0.208 - 2.0 A   25-240 W @ 120 V∿   60-550 W @ 277 V∿
  High load (black and red):
  1.3-5 A   160-600 W @ 120 V∿   370-1200 W @ 277 V∿
• Uses decorator-style faceplate (not included)
• For indoor use only

COVERAGE AND PLACEMENT
• Mount the sensor so the grilles face the open portion of the room and are not facing a nearby wall, window, or other obstructing object.
• Keep the occupant sensor away from air flow from ventilation outlets, windows, fans, etc.
• Place the sensor on the same wall as the doorway so that traffic in a hallway will not affect the sensor.
• Closely follow the diagram for major and minor motion coverage.
• Decrease total coverage area by 15% for "soft" rooms (for example, heavy draperies or heavy carpeting).

Motion Detection Range

33 (10.1)
23 (7.0)
38 (11.6)

Major motion detection
Minor motion detection
Dimensions are in feet (m).

PRE-INSTALLATION
1. For installation by a qualified electrician in accordance with national and local codes and the following instructions.
2. For indoor use only.
3. **CAUTION: RISK OF ELECTRIC SHOCK. Disconnect power before installing. Never wire energized electrical components.**
4. **CAUTION: USE COPPER CONDUCTORS ONLY.**
5. Check to see that the device type and rating is suitable for the application.
6. Do not install if product or grille have any visible damage.
7. If moisture or condensation is evident, allow the product to dry completely before installation.

INSTALLATION
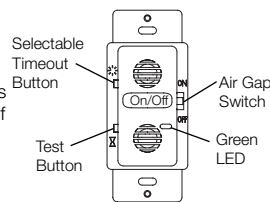Mounts as a direct replacement for a standard wall switch.
1. **Warning: Turn power OFF at circuit breaker or remove fuse.**
2. Remove old switch (if applicable).
3. Turn Air Gap Switch (under front cover) to Off.
4. Wire the switch by referring to the appropriate Wiring Diagram, making sure to connect ground.
5. Mount and align switch. Replace wallplate.
6. Turn Air Gap switch and power ON.
Note: Lights may not come on when first powered up. Allow 60 seconds warm-up after OFF/AUTO switch is placed in AUTO position for device to reach normal operation.

ADJUSTMENTS
Enter Test Mode
1. Momentarily press and release the Test Button (release within 4 seconds).
2. When the Test Button is pressed, the lights are turned off to indicate the depression of the Test Button and entry into Test Mode. (If the lights are off prior to pushing the Test Button, the lights will remain off but the unit will still enter the Test Mode.)
3. After approximately 4 seconds, the first motion sensed will turn on the lights.
4. The lights will remain on for as long as motion is sensed (plus the 8-second timeout period).
5. Once motion is not sensed for approximately 8 seconds, the lights will turn off.

Selectable Timeout Button
Air Gap Switch
Test Button
Green LED
On/Off

Exit Test Mode
Turn the lights from on to off using the On/Off button. (Or, the sensor will automatically exit in 1 hour.)

Automatic/Manual Mode
To identify mode of operation:
• In Automatic Mode, the LED blinks when motion is sensed.
• In Manual Mode, the LED is disabled and will not flash.
• When the unit is in Manual Mode, the lights will remain on for as long as the unit senses motion, plus the 10-minute timeout period. When the lights turn off, there is a 15-second grace period, during which the unit will turn the lights back on if motion is sensed. After the 15-second grace period, the lights will remain off until the On/Off button is pushed.

To toggle from Automatic Mode to Manual Mode:
1. Enter Test Mode (see above).
2. While in Test Mode and with the lights on, push and hold the On/Off Button for 4 seconds. (The lights will turn off, then turn on after 4 seconds, indicating that the mode has changed.)
3. In Manual mode, the unit will require a front panel On/Off button push to turn lights on if unit has not timed out.
4. To toggle back to Automatic Mode, repeat steps 1 through 3.

Manual Timer Adjustments
1. 25-Minute Timeout: Press and hold the Timeout Button for a minimum of 3 seconds. (The initial timeout period is now set for 25 minutes, with the timeout algorithm optimizer enabled.)
2. 4-Minute Fixed Timeout: Press and hold the Timeout Button for a minimum of 10 seconds. (The timeout period is now set for a fixed 4 minutes. Note: This is ideal for small closets.)

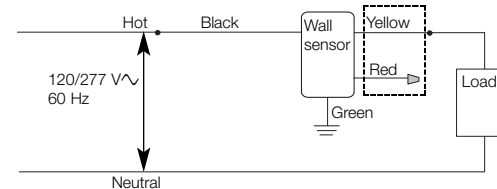#### Reset Sensor to Factory Defaults
1. Ensure Test Mode is disabled by turning the lights off using the On/Off button.)
2. Push and hold the On/Off button. When you initially touch the On/Off button, the lights will turn off.
3. While holding the On/Off button, also push and hold the Test button. The lights will initially turn off once both buttons have been pushed. Approximately 6 seconds later, the lights will turn on. The unit is now reset to default.

Default settings (upon reset):
• Automatic (not Manual) Mode
• Adaptation parameters cleared
• Adaptation and Hallway algorithms enabled

WIRING DIAGRAM

1-Way Wall Switch Sensor

Hot   Black   Wall sensor   Yellow
Red
Load
120/277 V∿
60 Hz
Green
Neutral

Choose wire based on load:
Yellow: 0.208-2.0 A   25-240 W @ 120 V∿   60-550 W @ 277 V∿
Red: 1.3-5.0 A   160-600 W @ 120V∿   370-1200 W @ 277 V∿
Cap off unused wire.