PIR MOTION ACTIVATED WALL SWITCH · 54878
INSTALLATION INSTRUCTIONS

PQL
PREMIUM QUALITY LIGHTING®

PLEASE USE A QUALIFIED ELECTRICIAN FOR INSTALLATION. Read the instructions before installing or use.

GENERAL: ALL ELECTRICAL CONNECTIONS MUST BE IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODE (N.E.C.) STANDARDS. IF YOU ARE UNFAMILIAR WITH PROPER ELECTRICAL WIRING CONNECTIONS OBTAIN THE SERVICES OF A QUALIFIED ELECTRICIAN. REMOVE THE TRIM FROM THE BOX AND MAKE SURE THAT NO PARTS ARE MISSING.

WARNING, CAUTIONS AND OPERATING INSTRUCTIONS

- **CAUTION:** To avoid overheating and possible damage to this device and other equipment, DO NOT install it to control a receptacle.
- Install and/or use it in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.
- Use this device with copper or copper-clad wire only.
- Do not use this product to control loads in excess of specified ratings, as it may cause death, injury, or property damage.
- The sensing switch requires an unobstructed view of room occupants to detect motion.
- Hot objects or moving air currents can affect the performance of the sensing switch.

- For indoor use only. Operate between 32° F to 104 °F (0° to 40 °C).
- Clean the sensor with a piece of soft damp cloth only. Do not use any chemical cleaners.

MOUNTING LOCATION

The device responds to temperature changes and care should be taken when mounting the device. Do not mount directly above a heat source in a location where hot or cold drafts will blow directly on the sensor, or where unintended motion (e.g., hallway traffic) will be within the sensor's field-of-view.

TOOLS NEEDED FOR INSTALLATION

Slotted I Phillips Screwdriver	Pliers	Pencil
Electrical Tape	Cutters	Ruler

INSTALLATION

⚠ WARNING DISCONNECT POWER BEFORE INSTALLING OR SERVICING.

PREPARATION BEFORE INSTALLATION

1. Turn OFF power supply at circuit breaker.
2. Remove wall plate and switch mounting screws. Carefully remove the existing switch from wall (do not remove wires).
3. Identify the type of circuit. (Fig. 1) Note: If the wiring doesn't resemble either configuration, consult an electrician.

BEFORE WIRING THE DEVICE

1. Make sure that the ends of wires from the wall box are straight (cut if necessary).
2. Remove 5/8" (1.6 cm) of insulation from each wire in the wall box.
3. Use wire connectors to join one 12 AWG supply wire with one or two 16 AWG or 18 AWG, or to join one 14 AWG supply wire with one to three 16 AWG or 18 AWG.

NOTE: Three wire connectors provided in the product package are suitable for copper or copper clad wire only.

For single location control applications, go to Step 4A.

For two location control applications, go to Step 4B.
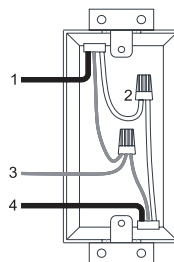
4A - INSTALLATION FOR SINGLE POLE (SINGLE LOCATION)

Connect wires per wiring diagram as follows: Single pole (One location) - Existing switch will be replaced with a sensor switch.

1. Connect the White wire to Neutral line. Connect bare ground wire of the switch to ground wire in the wall box.
2. Connect Hot wire in the wall box to the Black wire of the device.
3. Connect Load wire(s) in the wall box to the Red wire of the device.
4. Blue wire is not used in a single-pole circuit. Cap Blue wire.
5. Restore power at circuit breaker or fuse.
6. Wait 30 seconds for product booting for the first time, the device will turn on the loads automatically when it detects motion. Then keep the space vacant for 30 seconds, the device will turn off the loads automatically until the time delay elapses. Check the wiring again or consult an electrician if the loads do not turn on or off automatically.
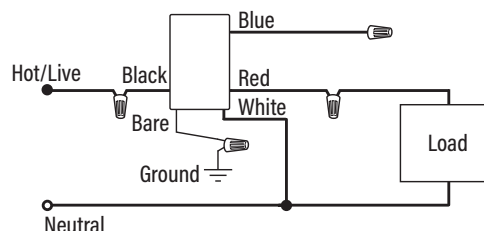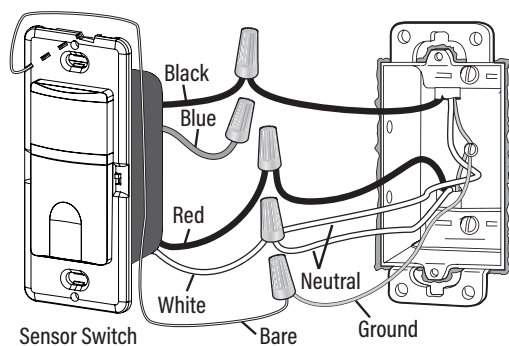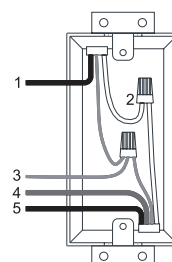
NOTE:
1. The hot (Black wire) and load (Red wire) must be correctly connected as stated above, otherwise the device will not function. If the light never turns on, then try to reverse the hot and load wiring of the sensor.
2. With the default setting, the device will turn on the loads automatically in any ambient light when it detects occupancy. Once the space is vacant and the time delay elapses after 10 seconds, it turns off the load automatically. For different settings, go to section PREPARATION FOR UNIT SETTING (Page 2) before mounting the wall plate.

Fig. 1

SINGLE POLE
1. Line (Hot)
2. Neutral
3. Ground
4. Load

TWO LOCATION CONTROL
1. Line (Hot)
2. Neutral
3. Ground
4. Traveler (Blue)
5. Load

Black
Blue
Red
White
Neutral
Bare
Ground
Sensor Switch

Blue
Hot/Live
Black
Red
White
Bare
Ground
Load
Neutral

Specifications subject to change without notice. Photos and line drawings may not be to scale and are for general reference only.

INSTALLATION

WARNING DISCONNECT POWER BEFORE INSTALLING OR SERVICING.

4B-INSTALLATION FOR TWO LOCATION CONTROL

Connect wires per wiring diagram as follows:

1. Connect the White wire to Neutral line. Connect bare ground wire of the device to ground wire in the wall box.
2. Connect Hot wire in the wall box to the Black wire of the device.
3. Connect Hot wire in the wall box to one end of the other mechanical switch.
4. Connect Load wire(s) in the wall box to the Red wire of the device.
5. Connect Traveler wire in the wall box to the Blue wire of the device.
6. Connect the Traveler wire in the wall box to other end of the mechanical switch.
7. Restore power at circuit breaker or fuse.
8. Wait 30 seconds for product booting for the first time, the device will turn on the loads automatically when it detects motion. Then keep the space vacant for 30 seconds, the device will turn off the loads automatically until the time delay elapses. Check the wiring again or consult an electrician if the loads do not turn on or off automatically.
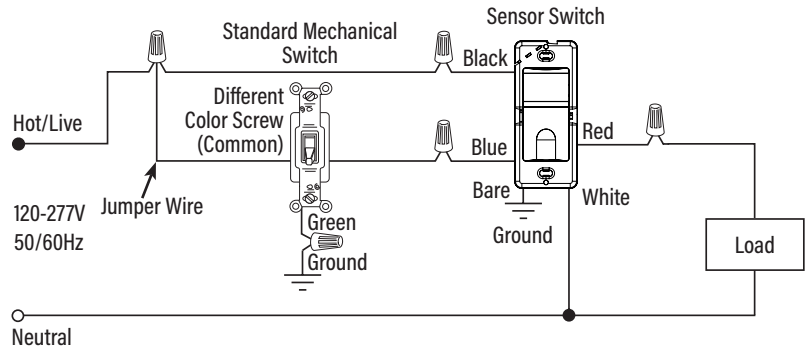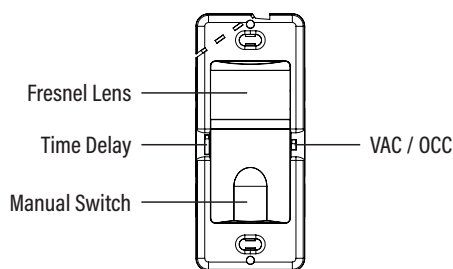

NOTE:

1. Mechanical switch and sensors can turn the light on/off.
2. The hot (Black wire) and load (Red wire) must be correctly connected as stated above, otherwise the device will not function.
3. With the default setting, the device will turn on the loads automatically in any ambient light when it detects occupancy. Once the space is vacant and the time delay elapses after 30 seconds, it turns off the load automatically. For different settings, go to the section PREPARATION FOR UNIT SETTING (below) before mounting the wall plate.

PREPARATION FOR UNIT SETTING AND COVERAGE PATTERN
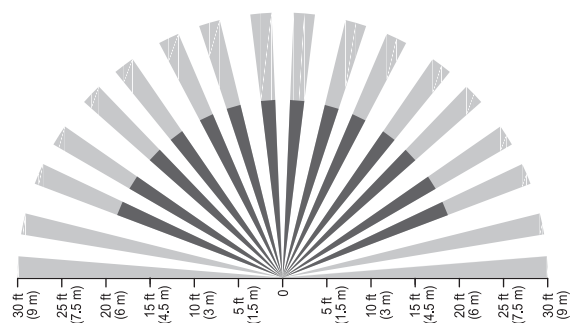
PREPARATION FOR UNIT SETTING

1. Set the time delay by the dip switch on the left.
2. Set Automatic ON/OFF mode (Occupancy) or Manual ON Automatic OFF mode (Vacancy) by dip switch on the right side.
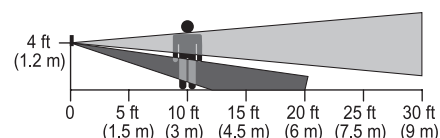

TIME DELAY	NOTE
Test	Test Mode: Automatically turn off the loads after 10 seconds.
3 Min.	Automatically turn off the loads after 3 minutes.
10 Min.	Automatically turn off the loads after 10 minutes.
20 Min.	Automatically turn off the loads after 20 minutes.

VAC/OCC	NOTE
VAC	VAC Mode: Manual ON and Auto OFF when time delay elapses.
OCC	OCC Mode: Automatically turn on the loads in any ambient light, including the bright day.

COVERAGE PATTERN

The sensor detects large motion up to 35 feet from the sensor (areas up to 900 sq. ft.). The sensor detects small amounts of motion in space up to 20 feet away (areas up to 300 sq. ft.). The Fresnel lens on the sensor is a multiple segment viewing lens with a field of view of 180°. The sensor must have a clear view of the people in the space in order to detect occupancy. Obstructions, such as furniture, posts, wall, etc., blocking the sensor's lens, may prevent occupancy detection.

Horizontal Beam Diagram (Over Head View)

Vertical Beam Diagram (Side View)

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