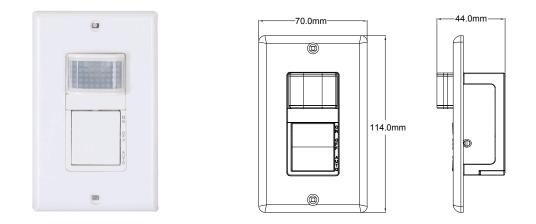
# pdlux®



#### **SUMMARY**

PD-PIR123 is a wall mounted, infrared automatic sensor switch, it is a broad range of applications, can be used for:

Small offices 
Conference rooms 
Lounges 
Iving rooms

It can be used to control incandescent lamps. The product is also a manual switch, when you need conference rooms or other places when a slide or film programs can use this switch to turn off the lights. This product should be installed in a standard wall box to replace a single pole switch. This product requires grounding.

# **OPERATION**

The PD-PIR123 uses passive infrared (PIR) detection technology to monitor a room. When a person passes into or out of a sensor zone, the sensor detects motion and switches the lights ON. The lights will remain ON as long as there is an occupant moving through the sensor zones.

A delayed-OFF time adjustment prevents the lights from switching OFF when the space is occupied. In order to keep the lights ON, a person must pass through a sensor zone at least once during the selected delayed-OFF time interval. An LED indicator blinks each time the unit detects activity in the sensor zones. When the space being monitored by the sensor is unoccupied for the length of time chosen as the delayed-OFF interval, the unit will switch the lights OFF.

### Push-button Manual Override Control:

For manual control, the PD-PIR123 features a convenient push-button switch. Press the press-button to "ON", the sensor will turn lights ON. Press the press-button to "OFF", the sensor will shut lights OFF and keep them OFF even if the room is occupied. This feature is particularly useful for slide or film presentations. The lights can be turned back ON by simply pressing the button to "ON". Press the press-button to "AUTO", the unit will then return to normal operation. When a person passes into or out of a sensor zone, the sensor detects motion and switches the lights ON.

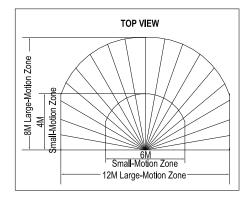
### Auto Mode:

In this mode, the unit will turn lights ON automatically when motion is detected. The lights will remain ON as long as the unit detects activity in the sensor zones. The unit will shut lights OFF automatically after the space becomes unoccupied and the delayed-OFF time expires. Lights can also be turned OFF manually at any time by pressing the push-button to "OFF". This mode is desired for energy savings.



## FIELD OF VIEW

The PD-PIR123 provides a 180° field of view with a maximum coverage area of approximately 90 square meters. The maximum sensing distance in front of the sensor is 8M, and at each side is 6M. A "small-motion" zone detects relatively small body movements and allows the lights to stay ON even though a person may not be moving widely around the room. The remainder of the field of view is the "large-motion" zone, exhibits a lesser degree of sensitivity and requires larger movements.



# ENHANCED ADJUSRMENT OPTIONS

The PD-PIR123 will deliver optimum performance in a wide variety of commercial applications. There are optional adjustments for ambient light override capabilities, and delayed-OFF time. These adjustments will customize the performance to meet the needs of a specific installation. To avoid tampering, all adjustments can only be accessed by removing the control panel cover. A small flat-head screwdriver can be used to adjust the control knobs. Controls are labeled as follows:

#### Time:

The delayed-OFF time is preset at 8±2seconds. A choice delayed-OFF time settings is available: 8±2 seconds to 20±3minutes.

#### Light:

To maximize energy savings in some installations, the ambient light override feature will prevent the sensor from switching lights ON when there is ample natural sunlight, regardless of occupancy. This adjustment should be made when the ambient light is at the level where no artificial light is needed.

The PD-PIR123 is factory preset without any ambient light override in effect. This means the unit will switch lights ON when it detects occupancy, regardless of the amount of natural sunlight present.

### **SPECIFICATIONS**

The device listed herein shall be Lexing Commercial Specification Grade Wall Switch Passive Infrared (PIR) Sensor, capable of detecting infrared emissions from human presence and responding by switching incandescent loads on. If this unit does not detect movement after a present period of time, it will respond by switching its assigned load off.

Wall Switch Passive Infrared (PIR) Sensor shall be equipped with a push-button to provide manual on/off/auto switching. PD-PIR123 Wall Switch Passive Infrared (PIR) Sensor shall feature adjustable delayed-OFF time and ambient light override capabilities.

# FEATURES AND BENEFITS

•New, low-profile design eliminates obtrusive "scanning-device" look.

•180° field-of-view provides approximately 90 square meters of coverage suitable for small offices, conference rooms, class rooms, lounges and a variety of commercial areas.

•Convenient push-button provides manual ON/OFF/AUTO light switching at any time.

•Optional manual adjustment for delayed-OFF time settings of 8±2 seconds to 20±3 minutes. Allows customized adjustments to maximize energy saving.

•Adjustable Ambient Light Override ranges from approximately 2 foot-candles (2lux) to 1000 foot-candles (1000lux) to prevent lights from turning ON automatically during periods of ample natural light, increasing energy savings.

•LED indicator light flashes when sensor detects motion to verify detection is active.

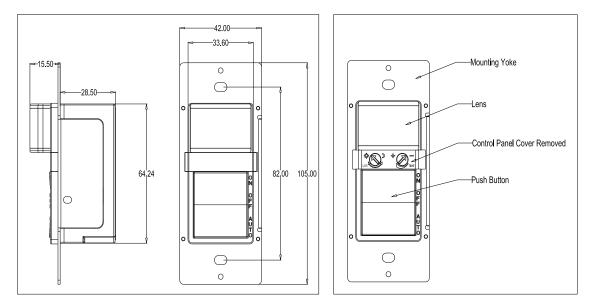
•One unit can be used for either 120V or 277V lighting.

•Fits in standard wall-box and replaces single-pole wall switch.

•Limited Five-Year Warranty.



#### **Dimensional diagrams**

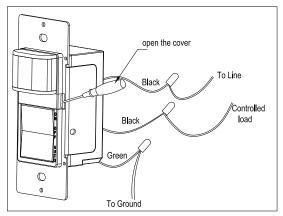


### INSTALLATION

The PD-PIR123 may replace a single-pole wall switch mounted in a standard wall-box. The unit must be properly grounded in order to operate. It should be positioned at least 4 feet away from HVAC registers. Note that whenever the unit is powered up, it will take approximately one minute to begin normal operation.

♦ Caution : Use with copper wire only!

#### WIRING DIAGRAM



# Physical specifications

Working temperature range:  $-10^{\circ}$ C to  $40^{\circ}$ C Storage temperature range:  $-10^{\circ}$ C to  $85^{\circ}$ C Working humidity: 20% to 90% non-condensing

### **Electrical rerquirements**

Power source: 120V/AC-277 V/AC Power frequency: 50/60Hz Wire designation: Line—Black Load—Black Ground—Green Rated load: 500W Max.tungsten

#### SOME PROBLEM AND SOLVED WAY

#### 1. The load do not work:

- a: Please check if the connection-wiring of power and load is correct;
- b: Please check if the load is good ;
- c: Please check if the working light set correspond to light-control.
- 2. The sensitivity is poor:
  - a: Please check if there has hinder in front of the detection window to effect to receive the signal;
  - b: Please check if the ambient temperature is too high;
  - c: Please check if the induction signal source is in the detection fields;
  - d: Please check if the installation height corresponds to the height showed in the instruction;
  - e: Please check if the moving orientation is correct.



- 3、 The sensor can not shut off the load automatically:
  - a: Please check if there is continual signal in the detection field;
  - b: Please check if the time setting is the longest;
  - c: Please check if the power correspond to the instruction;



- Please confirm with prefessional installation.
- Please cut off power supply before installation and removal operations.
- Make sure that you have cut off the power for safety purposes.
- Improper operation caused losses, the manufacturer does not undertake any responsibility.

We are committed to promoting the product quality and reliability, however, all the electronic components have certain probabilities to become ineffective, which will cause some troubles. When designing, we have paid attention to redundant designs and adopted safety quota to avoid any troubles.

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