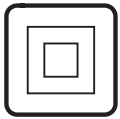


# INSTRUCTION MANUAL



## PIR Recessed White 89431

### ■ POSITIONING THE UNIT

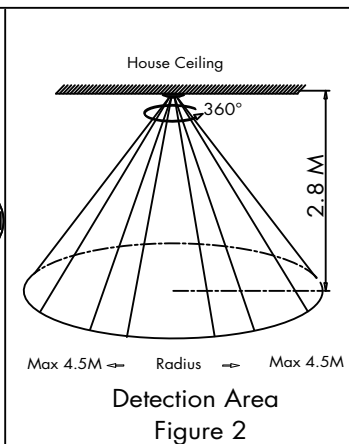
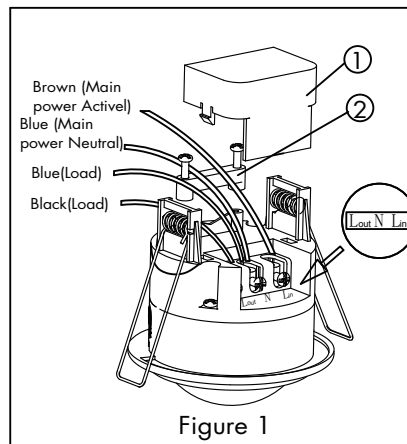
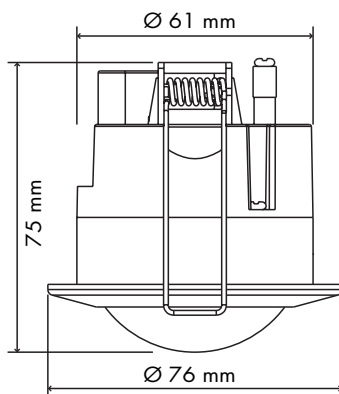
When selecting the mounting position, please take the following points into account:

1. The sensor is designed for optimum performance to be mounted in house ceiling (see Figure 2)
2. Don't pointing at or positioning close to heat sources such as heater or heat extraction units, which may cause false triggering.
3. If you set Lux control level to dark (D), do not pointing sensor at bright light since unit will not act.
4. Don't mounting at strong electromagnetic disturbance environment where false triggering may be caused.

### ■ FITTING THE UNIT

Before any electrical work, ensure mains supply cables are isolated by switching off and removing the relevant fuse. (See Figure 1)

1. Drill a circle hole of around 2.5-inch (63.5mm) diameter in the ceiling where you are to mount the sensor
2. Remove the terminal cover ① and unscrew the wire holder ② (see Figure 1)
3. Connect the main power wires and loading wires to the copper terminals



4. Fix the wires by re-screwing the wire holder's screw. Fix the terminal cover back
  5. Press the side springs up, hold them and mount the sensor into the ceiling hole (see Figure 3)
- After finishing the fitting operation, you can adjust the detection area and working state of PIR sensor

### ■ OPERATION MODE:

#### WALK TESTING:

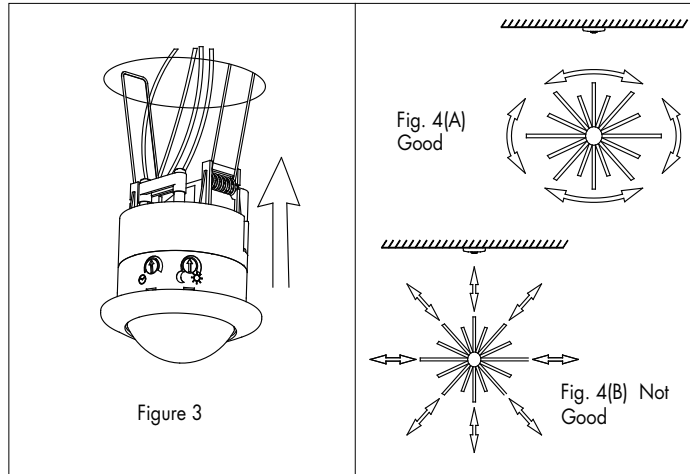
When power is switched on to the 89431, the 89431 sensor will enter into a "WARN-UP" period for about 30 seconds (within 1 minute) and then automatically change into "AUTO MODE". While sensor is in the AUTO MODE, you can then carry out a Walk-Test by placing the LUX control to day position (\*) and the TIME control to minimum (-). Once the 89431 sensor receives a valid trigger signal (such as movement of a human body) within its detection area, the lamp(s) (load) will be turned on for the pre-set period of time. You will be able to determine the detection area by walking slowly.

Please be noted that movement across the scan area is more effective than movement directly toward or away from the sensor. (Refer Fig.4A). If movement is towards or away from the sensor, not across, the detection range will reduce. (Refer Fig. 4B)

# INSTRUCTION MANUAL



## PIR Recessed White 89431



After completing the walk-test, set the LUX KNOB to the night position to ensure 89431 only operates at night and set TIME KNOB to the desired "ON" time.

### ADJUSTING THE LUX CONTROL LEVEL:

The Lux control module has a built-in photocell that detects daylight and darkness.

(\*) position denotes that the lamp(s) (load) will be turned on by PIR during day and night.

(D) position denotes that the lamp(s) (load) will be turned on by PIR only at night.

You can set to operate the unit at the desired level by adjusting the LUX knob

### ADJUSTING THE DURATION TIME:

The duration time is "the length of time that the 89431 switches the load 'on' after activation". The duration time can be adjusted from (10±5) seconds to (4±1) minutes. Rotating the TIME knob from (+) to (-) will reduce the duration time.

Note: Once the lamp(s) (load) has been triggered by the PIR sensor any subsequent detection will start the timed period again from the beginning.

### ■ ATTENTION:

1. Before any electrical work, ensure mains supply cable is isolated by switching off and removing the relative fuse.
2. There are not any servicing parts inside, do not attempt to modify or service the unit.
3. It is normal that the load will delay several seconds to be turned on when power on.

### ■ IMPORTANT:

Never attempt to remove the lens cover as this will damage the sensor and render all guarantees invalid.

### ■ TECHNICAL DETAILS:

Voltage: 220 -240V ~ 50 Hz

Wattage: Max. 2000W incandescent bulb (resister-load) or 600W fluorescent load or 300W LED load

Detection range: 360°, radius 4.5 meters with installation height of 2.8 meters

Duration time: From (10±5) seconds to (4±1) minutes adjustable

Lux control level: From daylight to night

OFF: Power off for storage and long time charging