



INSTALLATION INSTRUCTION ILSEMPIR016 4-IN-1 MOUNT PIR MOTION SENSOR



Thank you for purchasing an INTEGRAL LED product. When installed correctly this unit will provide years of service - with no replacements required. For support or warranty information please see integral-led.com. Always turn off circuit power at the distribution unit before installation and maintenance. Please ensure that the power cannot be connected inadvertently.

General Safety Instructions

- This sensor must be installed by a qualified electrician in accordance with the instructions provided and in compliance with recognised electrical and safety regulations relevant to the country it is being installed.
- This is a Class II sensor. Earth connection is not required.
- The input voltage of this sensor is 220-240VAC, 50/60Hz.
- This sensor is suitable for Wall, Ceiling, In-Corner and On-Corner surface mount. Adequate for installation on surfaces with normal flammability e.g. wood, masonry. Before making the fixing hole(s), check that there are no obstructions hidden beneath the mounting surface, such as pipes or cables. Do not use on highly flammable surfaces or in flammable atmosphere.
- This sensor is designed to be installed on a ceiling tile/solid material, with a minimum thickness of 3mm.
- This product is IP54-rated and suitable for Indoor or Outdoor use.
- This product is not suitable for dimming.
- Ensure mains supply is isolated before starting any work.
- Operating Temperature: -20°C to +40°C. Do not exceed.
- Should the unit malfunction, return to distributor or reseller. No user serviceable parts inside. Do not disassemble or attempt to repair the sensor outside of the installation guidelines.
- Do not install or use the sensor if the housing is found to be broken.

Installation Instructions

- Ensure the AC/mains power is not connected and cannot be reconnected during installation.
- Determine the installation method and make sure the fixing devices used are adequate for the substrate where the sensor will be fixed.
- Mark the fixing points on the substrate, aligning the cable adequately in the cable entry of the supplied surface bracket.
- Remove the front part of the sensor with a slotted head screwdriver using a twisting motion.
- Pass the cable through the cable entry and fix the surface bracket to the substrate using adequate fixing devices, ensuring the sensor body can later be securely attached to the surface bracket.
- Unscrew the connection terminals and connect the Mains power and the Load cables according to the wiring diagram.
- Install the terminal connector in its position, carefully aligning its slots with the leading plastic pins located inside the surface bracket, switch on the Mains power supply and conduct a function test.
- Once tested and in good working order, attach the sensor body to the surface bracket with a gentle push.

Installation Advice

As the detector responds to changes in ambient temperature, avoid the following situations:

- pointing the detector towards objects with highly reflective surfaces, such as mirrors, windows, etc.
- mounting the detector near heat sources, such as heating vents, air conditioning units, lights, etc.
- pointing the detector towards objects that may move in the wind such as curtains, trees or plants.

Manual Override Function

With the sensor in auto detection mode and the light in ON state, if you wish to keep the connected luminaires constantly ON, simply switch power off and back on twice (OFF-ON-OFF-ON) within 5 seconds. During Override mode, the built-in red indicator light in the sensor dome will stay on and the connected light(s) will illuminate continuously. Sensor is now in 8-hour override mode.

After 8 hours the sensor will return to automatic operation mode.

To restore PIR sensing capabilities prior to the 8-hour time-out, switch off the power for over 10 seconds and switch back ON again.

Remote control function

1. "OPEN SENSOR MODE" button - sensor will operate in a 24-hour mode: 10 sec delay time, 100% distance, no daylight detection threshold. After initial warm up of 30sec, the load and the indicator light should turn on synchronously. In the case of no induction signal received, the load should stop working within 10 ± 3 seconds, the red indicator light will be off, after the first induction signal is received and over, the load will enter working state after 10 ± 3 seconds after any further motion detected. In case of any consecutive motion detected in the meantime, Time-Delay is added continually based on the consecutive motion detections after the initial detection - this will restart the hold time from the moment of last motion detection.

After pressing "OPEN SENSOR MODE" button, the following functions can be further selected:

- HOLD TIME ZONE delay: 10S, 30S, 5MIN, 10MIN, 20MIN, 30MIN.
- SENSITIVITY ZONE: LOW button ~ 2M, MEDIUM button ~ 6m, HIGH button ~ 12M.
- "DAYLIGHT LUX ZONE: NIGHT button <10LUX, LOW button ~ 25LUX, MEDIUM button ~ 250LUX, HIGH button ~ 500LUX, DAY/24H button - continuous operation, disregards daylight threshold.



2. Press "OFF POWER LOAD" button turn off the light.

3. Press "P&S MODE" button to activate Photocell mode, the connected luminaire will turn ON and OFF once to indicate the Photocell function is activated. Natural light under 10 LUX will switch the light ON, and natural light over 150 LUX will switch the light OFF. During operation in this mode, the built-in red indicator light will be ON and OFF in 1-second intervals to indicate operation.


Note: Each time a remote button is pressed, the sensor load will toggle between on and off state, indicating that a function has been changed. The two knobs on the product and the function buttons on the remote control can all set the sensor function, and the setting takes the last operation as the priority (for example, if last setting is done through one of the knobs on the sensor, the target value of the sensor set with the knob will be taken as a priority).

Note: With any press of a button on the remote, the red led light in the sensor lens will flash to indicate a command received.

SPECIFICATION:

Mains Input: 220 -240V/AC, 50/60Hz	Detection Range: $180^\circ + 360^\circ$
IP Rating: IP54	Detection Distance: 12m max (<24°C, radius, adjustable)
Operating Temperature: -20~+40°C	Relative Humidity: <93%RH
Ambient Light: <10-2000LUX (adjustable)	Power consumption: approx. 0.5W
Time Delay: Min. 10sec±3sec	Installation Height: 1.8-2.5m wall mount
Max. 30min±5min	2.2-4m ceiling mount
Rated Load: 2000W 	Detection Motion Speed: 0.6-1.5m/s
1000W 	

TEST PROCEDURE:

- Turn the TIME knob clockwise to the minimum (10s). Turn the LUX knob clockwise to the maximum (SUN).
- Switch on the power and allow 30sec for sensor to warm up, during which time sensor and its connected load will remain off. After 30sec, the sensor will turn on the load upon induction signal received (motion detected). If no further motion is registered, the load should switch off within $10\text{sec} \pm 3\text{sec}$.
- Turn LUX knob anti-clockwise to the minimum (MOON) . If the ambient light exceeds 10LUX, the sensor and load will not operate. If the ambient light is less than 10LUX (darkness), the sensor will resume motion detection and switch connected load on. Under no induction signal condition, the load should switch off within $10\text{sec} \pm 3\text{sec}$.

Note: When testing in daylight, please turn LUX knob to  (SUN) position, otherwise the sensor will automatically switch off!

TROUBLESHOOTING:

- The load doesn't work:
 - a. Check the Mains power and the load connections.
 - b. Indicator light turns on after sensing motion, but load is off - Please inspect load.
 - c. The indicator light is not on after sensing, please check if the daylight threshold setting on the dial corresponds to the ambient light.
 - d. Please check if the working voltage corresponds to the power source.
- The sensitivity is poor:
 - a. Please check the ambient temperature.

- b. Please check for obstructions in front of the sensor, affecting the signal reception.
- c. Please check if the signal source is in the detection field.
- d. Please check the installation height.

→ The sensor doesn't switch the load off:

- a. Check for continual signals in the detection field.
- b. Check if time delay isn't set to the longest, adjust setting accordingly.
- c. Ensure the power connections correspond to the wiring instructions.
- d. Check if any objects moving in the wind may be triggering the sensor.
- e. Check if sensor isn't triggered by nearby heat sources.
- f. Check surroundings for highly reflective objects.

Fig. 01

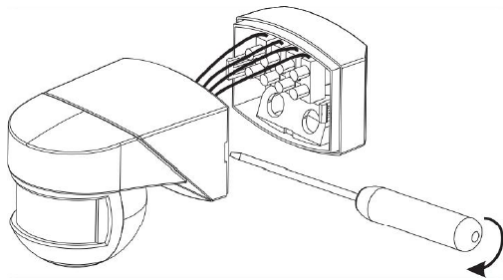


Fig. 02

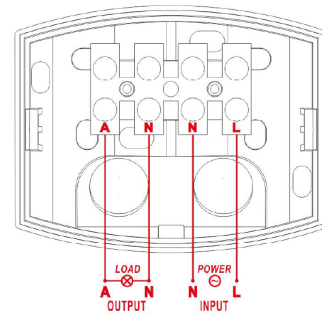


Fig. 03

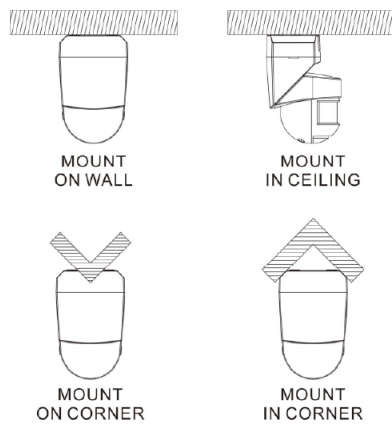


Fig. 04

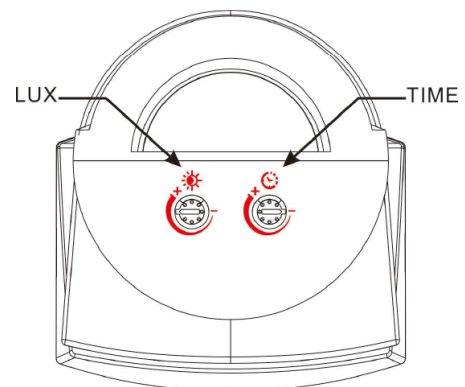


Fig. 05

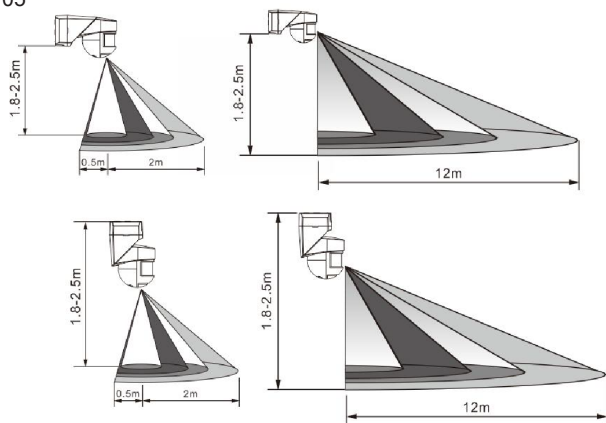


Fig. 06

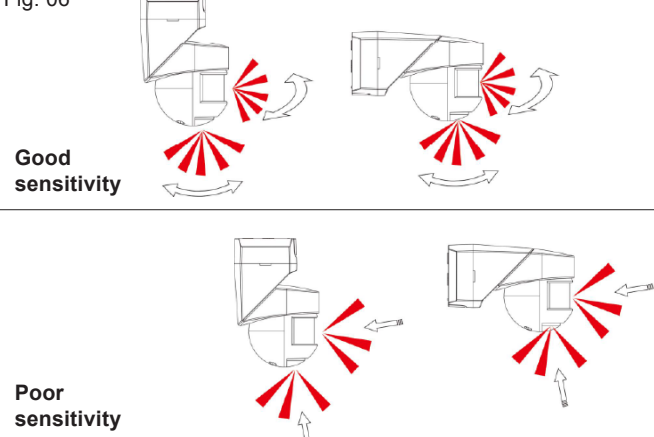
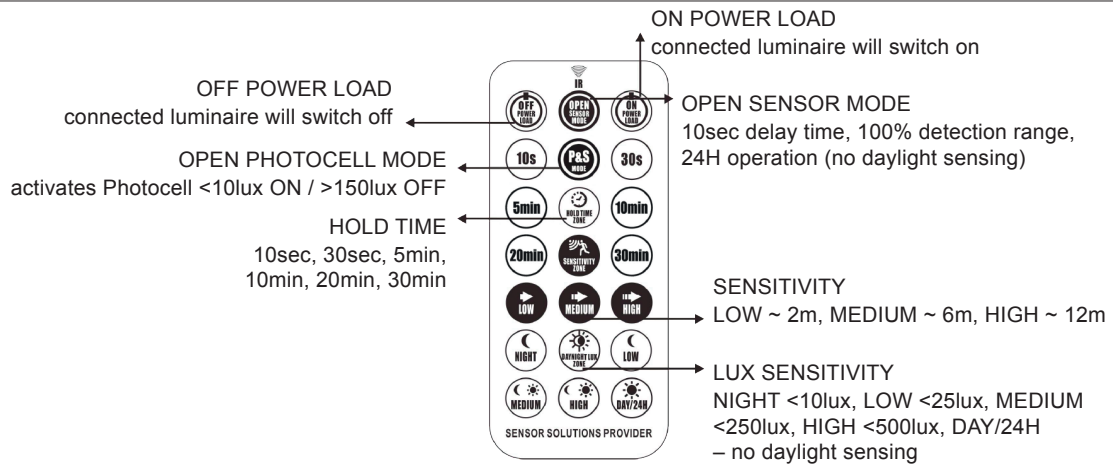


Fig. 07



Warranty/Technical and contact information are all available at www.integral-led.com
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