

BLE to 0-10V Ceiling Mounted AC PIR Sensor With 10A Relay



Important: Read All Instructions Prior to Installation

Features

- Bluetooth to 0-10V sensor controller
- Mesh network, which has a much longer control distance, transmits received signals to neighboring devices
- All devices on 0-10V line are broadcast controlled by mobile application
- Supporting our kinetic energy switches and EnOcean switches EWSSB and EWSDb
- Autonomos sensor-based control
- Support sensitivity adjustment, Mesh Network, a better method to deal with false trigger
- Available with Magnetic reset (touch reset icon for 5 seconds)
- On-board antenna
- Waterproof grade: IP20, suitable for indoor luminaries
- 5 years warranty

Parameters

Input & Output Characteristics

| | |
|-------------------|---|
| Operating voltage | 100-277VAC 50/60Hz |
| Stand-by power | <0.5W |
| Relay | Resistive: Max. 10A @ 120-277VAC Capacitive: Max. 8A @ 120-277VAC Inductive: Max. 7A @ 120-277VAC |

Safety & EMC

| | |
|-----------------------|--|
| EMC standard (EMC) | EN55015, EN61000, EN61547 |
| Safety standard (LVD) | EN60669-1, EN60669-2-1 AS/NZS60669-1/-2-1 |
| RED | EN300328, EN301489-1/-17 |
| Certication | ENEC, CE, RED, UL |

Sensing

| | |
|--------------------|--------------------------------|
| Movement detection | Max. ϕ 10-12m @ 3m height |
| Installation | 2-6m, Max. 6m |

Environment Parameters

| | |
|-----------------------|-------------------|
| Operation temperature | Ta: -10°C ~ +50°C |
| IP rating | IP20 |

Mechanical Data

| | |
|------------------|---------------------|
| Dimension | See below |
| Material | Flame-retardant/ABS |
| Protection Class | Class II |

Connectors

| | |
|--------------------------|--|
| Terminal block/Wire size | AC Line: 18 AWG Signal Line: 22 AWG |
| Wire strip length | 10mm |

Product Info

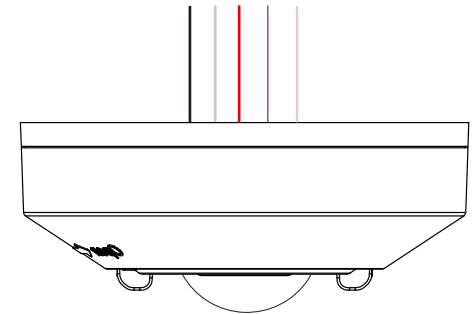
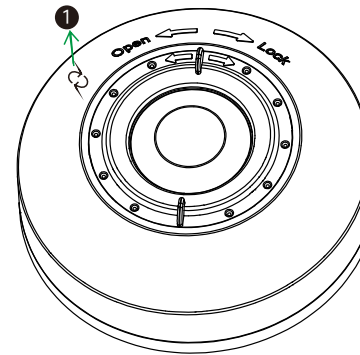
- 1 Reset icon: Please using magnetic to reset the devices (hold for 5 seconds)

Cable Wiring:

L (Input) : Black, 18 AWG ; N (Input) : White, 18 AWG

L' (Output) : Red, 18 AWG

Dim+ (Output) : Violet, 22 AWG Dim- (Output) : Pink, 22 AWG

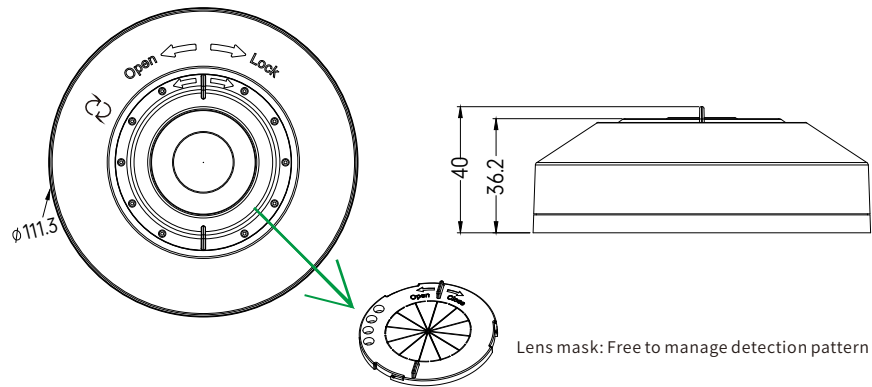


Package Info

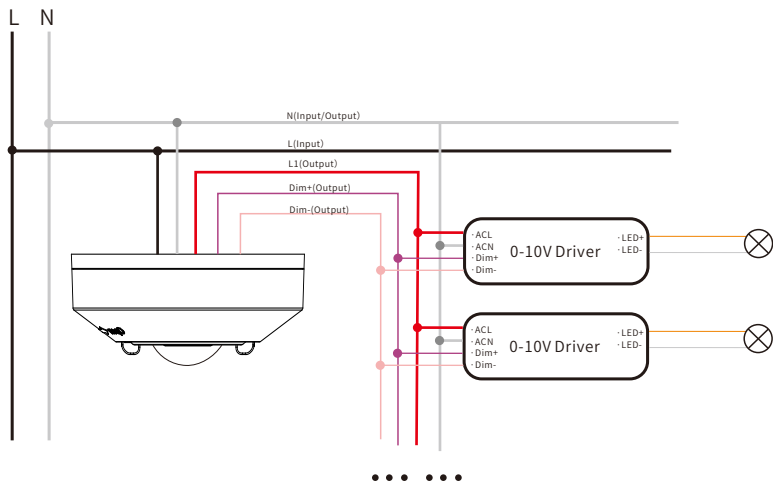
- 1x Sensor with Low-bay lens (Default)
- 1x High-bay lens (Free to switch when project required)
- 1x PIR Lens cover (Adjust its detection pattern when various application required)
- 1x A set of screws (Installation required)

Warning DO NOT install with power applied to device.
DO NOT expose the device to moisture.

Dimension

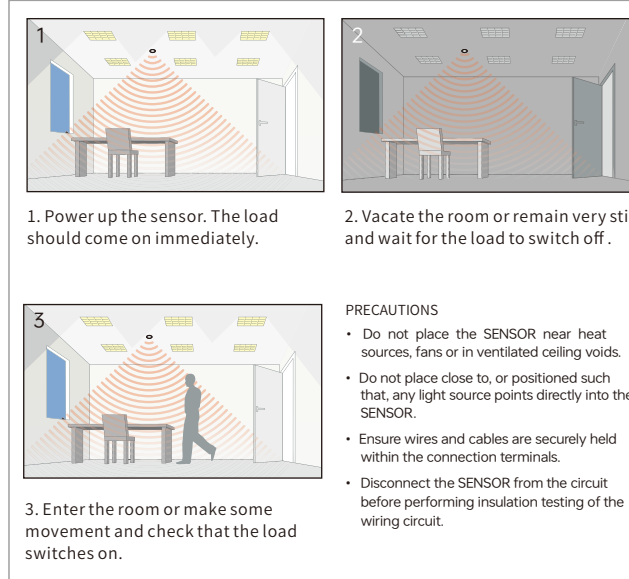


Wiring



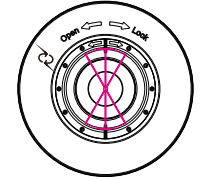
Note: With Max.20mA 0-10V BUS current output, it shall connect Min.10pcs 0-10V Driver.

Application

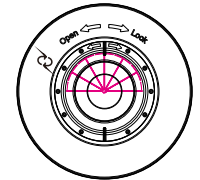


PRECAUTIONS

- Do not place the SENSOR near heat sources, fans or in ventilated ceiling voids.
- Do not place close to, or positioned such that, any light source points directly into the SENSOR.
- Ensure wires and cables are securely held within the connection terminals.
- Disconnect the SENSOR from the circuit before performing insulation testing of the wiring circuit.



Aisle/Corridor application:
Split the lens cover into aisle type.



Semi-sphere application:
Split the lens cover into Semi-circle type.

Specification

Energy Savings

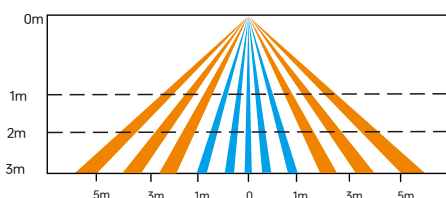
- Low/High-end trimming
- Daylight harvesting
- Occupancy/Vacancy detection
- Auto and advanced demand response programs
- Time-of-Day dimming schedule
- Energy monitoring

Comfort & Convenience

- Advanced occupancy detections
- Light-level stability
- Configurable dim-and-linger occupancy
- Personalized setting profile
- Work with kinetic switch keypad and dimmer wallstation
- Multi-scenes control

Detection Pattern

Coverage Side View

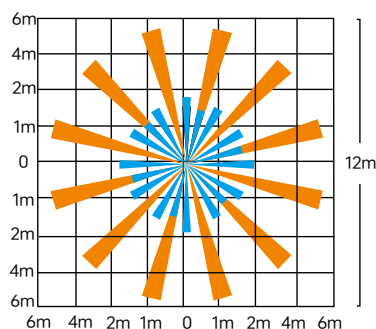


The detection area for movement sensor can be roughly divided into two parts:

- Slow movement (person moving $< 1.0'/s$ or $0.3m/s$)
- Quick movement (person moving $> 1.3'/s$ or $0.4m/s$)

Default sensitivity: 80% ($\phi 9m$ at 3m height)

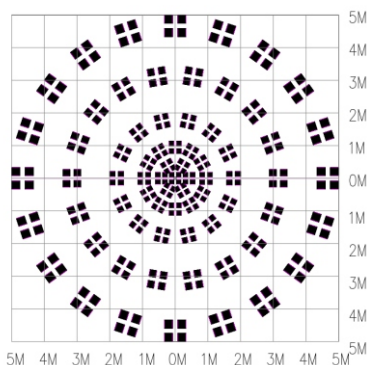
Coverage Top View



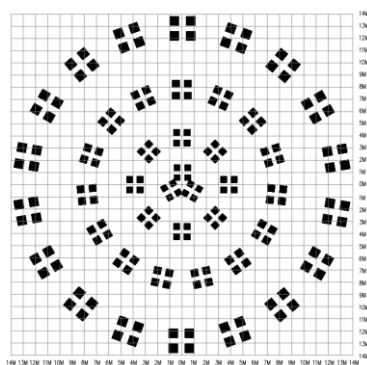
Detection Area

Note:

- Following different detection areas are based on different installation heights & patterns.
- Detection Pattern is a relevant value, the performance should depends on the site conditions (installation height/ temperature/ sunlight/ humidity/ blind area...etc)

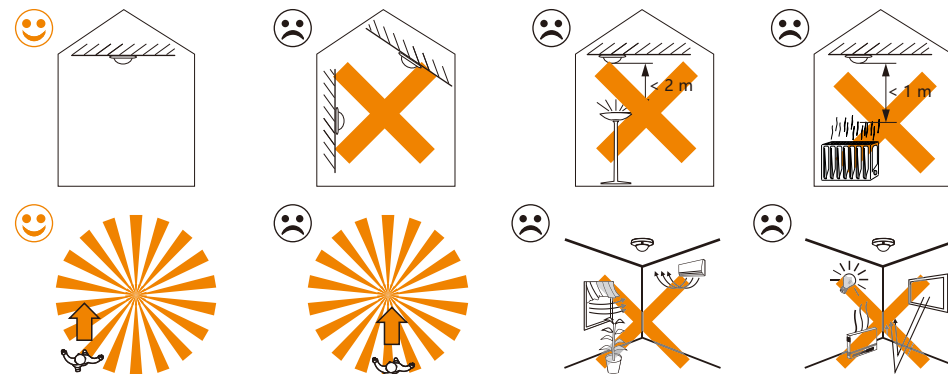


Low-bay lens detection pattern at 3m



High-bay lens detection pattern at 12m

Place/Detection Instruction



Installation Precautions

- Avoid areas with frequent temperature changes: Keep away from air conditioners, fans, refrigerators, ovens, and other objects that cause rapid temperature changes. The detection effectiveness of PIR motion sensors is closely related to temperature fluctuations, and vents or heat sources can lead to false alarms.
- Avoid areas with significant air flow.
- Avoid facing glass doors and windows directly: 1) Do not face glass doors and windows directly to avoid interference from strong light. 2) Avoid complex environments outside doors and windows, such as direct sunlight, crowds, and moving vehicles.
- Avoid installing opposite large, constantly moving objects: Large objects with significant motion can cause sudden changes in airflow within the detection area, leading to false alarms. Outdoor PIR motion sensors should not be installed opposite large trees or tall bushes.
- Avoid areas with screens, furniture, large potted plants, or other obstacles within the detection range.
- Avoid areas exposed to direct sunlight.

Update Log

| Date | Version | Update Content | Update by |
|-----------|---------|-----------------|-----------|
| 2025-2-14 | V1.0 | Initial Version | Jesse |

Subject to change without notice. Please contact us if you have any questions.