0-10V Bluetooth NLC PIR Sensor Controller with 2.5mm Audio-Jack Interface

Important: Read All Instructions Prior to Installation

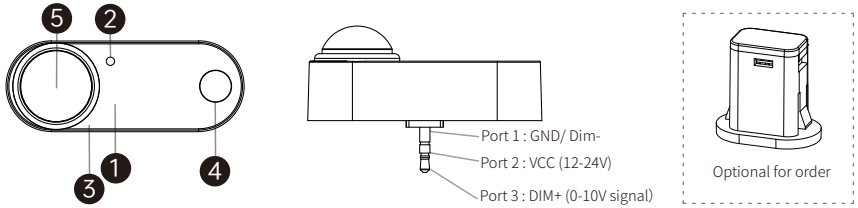
Features

- Bluetooth to 0-10V signal PIR sensor controller, Bluetooth® mesh network
- 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
- In typical indoor environment, the typical range for wireless communication is over 25m/82ft . Actual range is dependent on field installation.
- Standby power consumption less than 0.5W,meet latest ERP regulation
- Available with Manual & Magnetic reset
- Support sensitivity adjustment, Mesh Network, a better method to deal with false trigger
- 2.5mm audio-jack interface (plug & play)
- On-board antenna
- Waterproof grade: IP20
- 5 years warranty

Parameters

Input	Power	12-24VDC
	Signal	Bluetooth
Output	Signal	0-10V
Control	Dimming Curve	Logarithmic
	Dimming Method	PWM
Environment	Operating Temperature	-25°C~+55°C
	Relative Humidity	8% to 80%
Others	Size	See dimensions

Product info



① Green LED indicator (inside housing)：Flashes during commissioning

① Red LED indicator (inside housing)：Flashes when motion is detected

② Light sensor: Ambient light detection and daylight harvesting

③ Magnetic reset area:

a) Bring the magnet close once to turn the device ON or OFF. If the device is connected to the network, the green indicator stays on for 3s. If not connected, the green indicator flashes quickly 6 times.

b) To reset the device, hold the magnet near for over 3s until the green indicator starts flashing quickly, then remove it. After reset, the green indicator flashes slowly 3 times, and the connected load light also flashes slowly 3 times.

④ Manually reset area:

a) Short press the button to turn the device ON or OFF. If the device is connected to the network, the green indicator stays on for 3s. If not connected, the green indicator flashes quickly 6 times.

b) To reset the device, hold the button for over 3s until the green indicator starts flashing quickly, then release it. After reset, the green indicator flashes slowly 3 times, and the connected load light also flashes slowly 3 times.

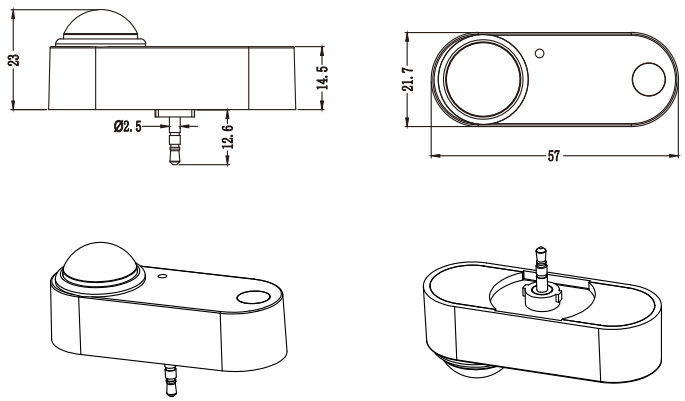
⑤ PIR Lens.

Operation

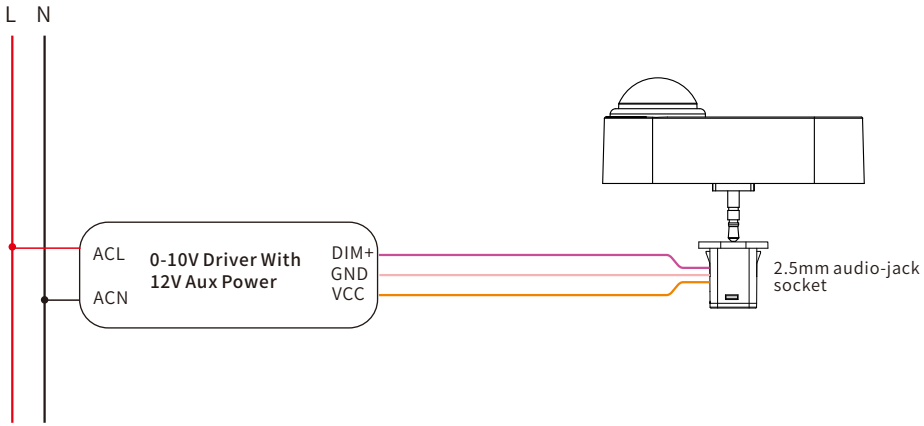
- Do wiring according to connection diagram.
- Kindly refer to “SunSmart Commissioning User Manual” for further pairing.
- Available with Manual & Magnetic reset.

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

Dimension

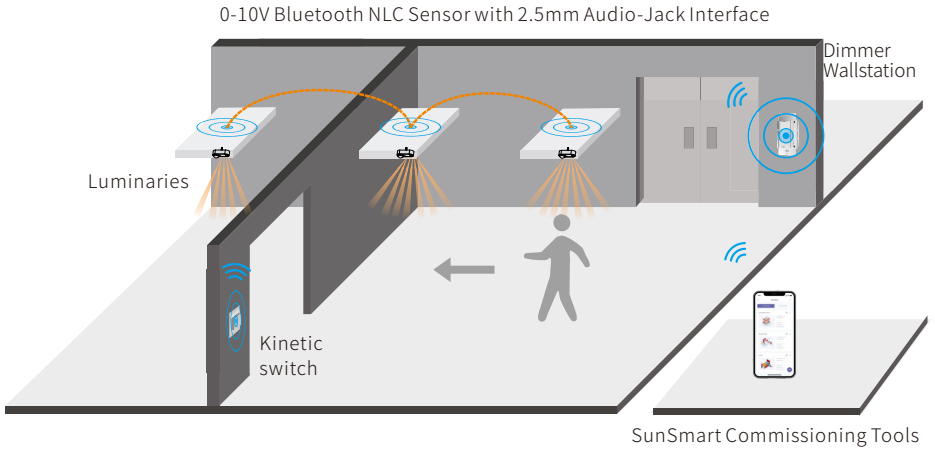


Wiring



Note: please make sure the polarity of 0-10V signal of the sensor is correctly connected.

Application



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

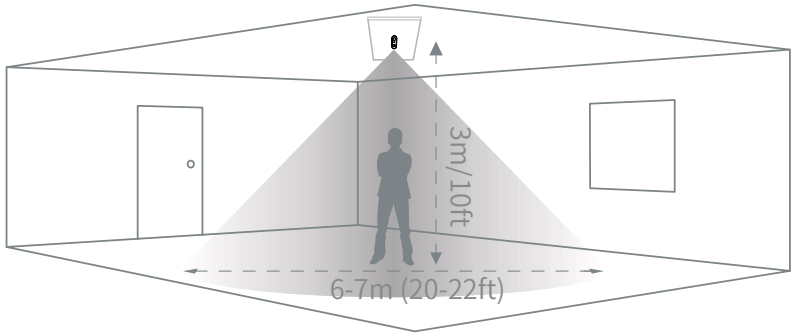
SENSING

- Mounting height:
  2-4m (6-13ft), Default 3m/10ft
- Detection range:
  Walking across: ϕ6-7m (20-22ft) @3m/10ft

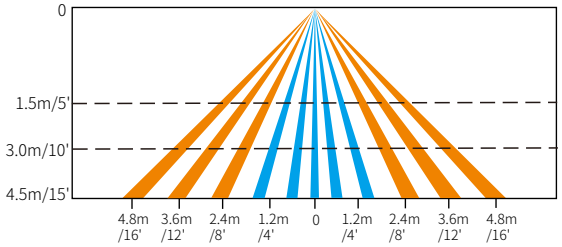
ENVIRONMENT & APPROBATION

- Operating temperature: -25°C to 55°C
- Agency approbations: UL Listed /FCC/ CE/ IC...
- Warranty: 5 years

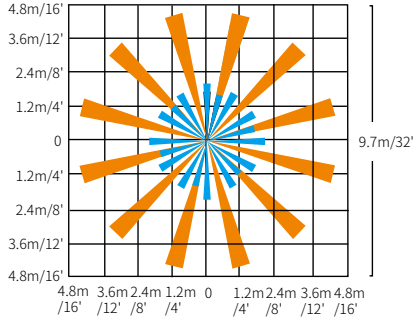
Detection Pattern



Coverage Side View



Coverage Top View



The detection area for movement 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)

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
2025-10-22	V1.0	Initial Version	Jesse

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