

EVO Lite

Ceiling Sensor



Overview

The EVO Lite Ceiling Sensor is a low profile ceiling mount sensor designed to install in a standard commercial ceiling. The sensor is provided with dual-tech operation utilizing passive infrared and passive acoustic sensing. Configured with a few simple button presses for easy set-up and adjustment, this sensor supports occupancy and vacancy in a single device. The ELCS also supports traditional 18/3 wiring, offering the contractor multiple wiring options, and allowing the ELCS to be used with the 24VDC occupancy sensor inputs of ILC's LightLEEDer and AP3 systems, as well as most 3rd party systems and power packs.

The occupancy sensor also has a full range photo sensor and supports open loop daylight dimming. The EVO Lite occupancy sensor uses the newest digital components and detection techniques for superior performance. Sensors detect occupant movement as they move through the field of view via passive infrared technology. With 2 models available for both small and large motion and an auxiliary relay for HVAC, the ELCS is a cost effective and feature rich sensing device. Acoustic technology enables enhanced detection once the lighting is turned on



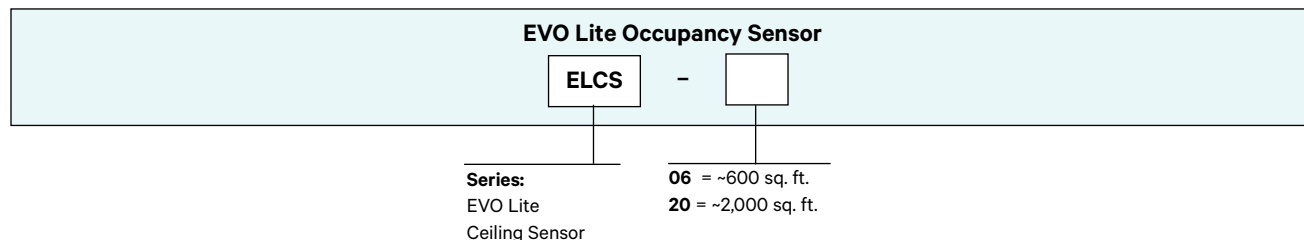
Features

- **Made in the USA, meets BABA Requirements**
- Dual-Tech sensor with IR and acoustics
- Available in small/large motion detection
- Incorporated photo sensor for daylighting 0 to 1500 fc
- 2 Isolated RJ45 jacks
- ILC blue rear cover
- Wire leads for hardwired connection, photo sensor 0-10V dimming, and auxiliary relay
- Push-button switch for setting configuring settings and photo sensor
- LED indicators for IR (red) and acoustics (blue) for activation indicators and programming
- Same enclosure and mounting as LightSync digital sensor
- Auxiliary relay output for connection to BAS system or Plug-load Power Pack

Warranty

Five-Year limited warranty

Ordering



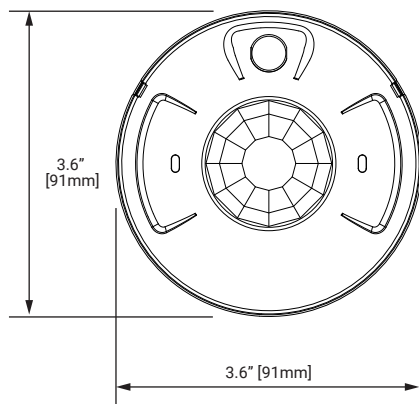
All ILC product configurations are built to be compliant with the Buy American Act of 1933 (BAA) or the Buy America Build America Act (BABA). BABA is the minimum Government compliance requirement for the Buy America Build America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. Please refer to the [DOMESTIC PREFERENCES](#) website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

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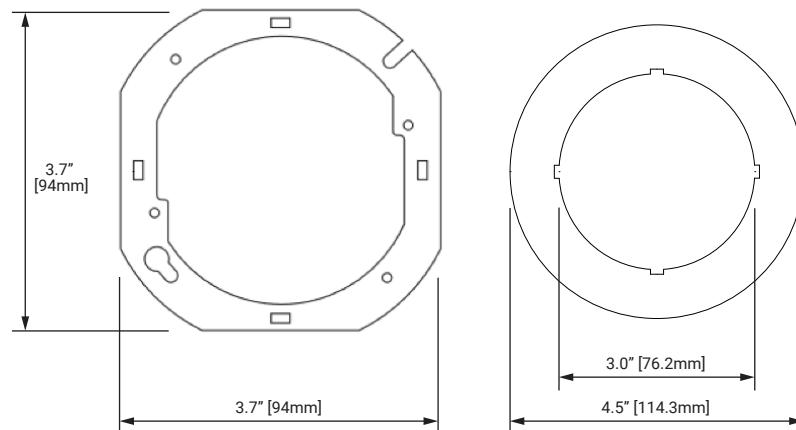
Ceiling Sensor

Physical

Top View



Junction Box Mounting Plate



Designed to be installed into ceiling tile with spring clips
 or onto junction box with trim ring cover

Specifications

Physical:

- 3.6"W x 3.6H x 1.4D (91mm x 91mm x 36mm)
- Low profile recessed ceiling mounting
- Spring retention clips for mounting in 3" hole
- Junction box mounted plate and trim ring provided
- RJ-45 In/Out ports
- 3-Wire #20AWG leads for auxiliary relay output NO/NC

Integrated Interfaces:

- Photocell hardwired direct 0-10VDC Sync control
- RJ-45 ports for hardwire over CAT-5 to EVO Lite Power Pack
- Aux relay output for BAS or Fire system

Operation:

- Configuration performed on device
 - An initial PIR event is required to enable acoustic functionality
 - Acoustic sensing overlaps and enhances/extends overall detection and time delay
 - Automatic gain control filters ambient noise
 - Sensor will re-trigger with acoustic only after an initial 5 minute time-out before a PIR trigger is required to restart the cycle
- AR relay included for BAS or plug-load power pack operation

Electrical:

- 10mA @15VDC
- Dimming: 100mA sink

Operating Environment:

- Location: Interior space
- Operating Temp: 0° to 50° C (32°F to 122°F)
- Humidity: 10% - 90% Non-condensing
- Atmosphere: Non-explosive/corrosive
- Vibration: Stationary

Domestic Preferences:

Domestic preference options to meet BAA or BABA requirements. BABA is the minimum Government compliance requirement for the Buy America Build America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

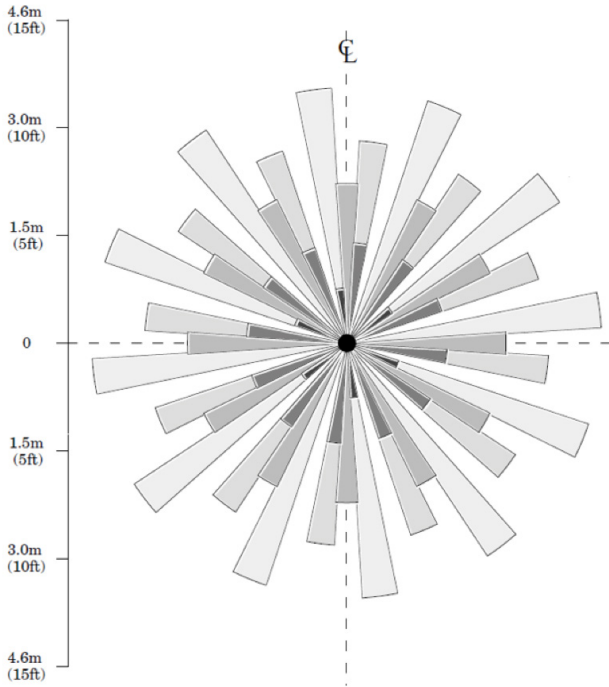
Certifications and Approvals:

- FCC Part 15
- Title 24 compliant
- ASHRAE compliant
- IECC compliant

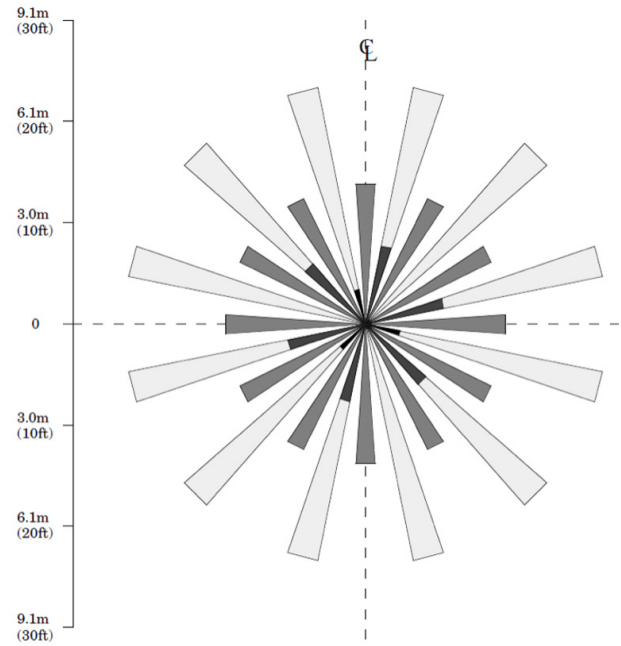
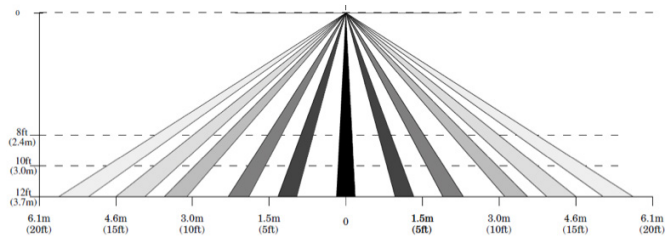
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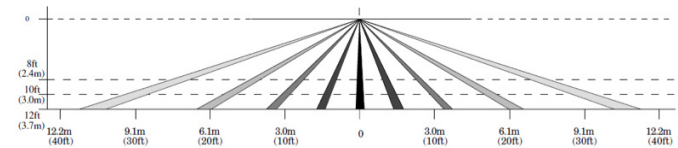
Sensor Coverage



Small Motion up to ~600 sq. ft.



Large Motion up to ~2,000 sq. ft.



8 feet to 15 feet mounting height recommended for small and large motion lenses, coverage pattern pending validation

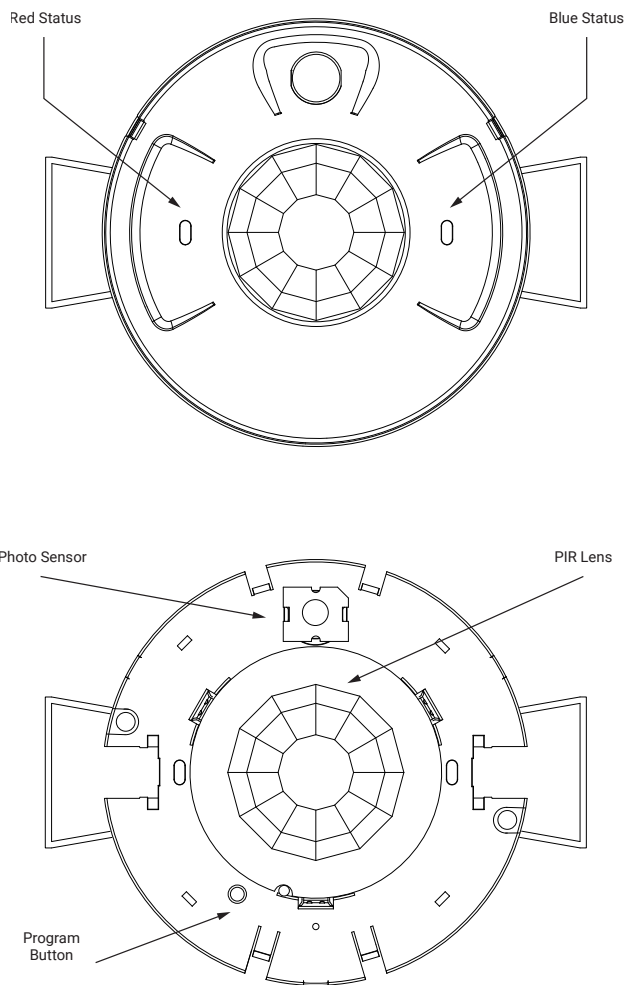
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Sensor Button Sequences

- Hold button for 20 seconds to enter configuration mode
- Red LED will flash parameter number every 3 seconds
 - Tap for next Parameter
 - Hold to Select
- Blue LED will flash parameter value number every 3 seconds
 - Tap for next Parameter
 - Hold to Select
- 20 second idle timer will discard edits
- Can still connect to panel using 18/3

| Parameter | | Value | |
|-----------|---|-------|----------|
| Blink | | Blink | |
| 1 | Unused/Skip | | |
| 2 | PIR Sensitivity | 1 | Low |
| | | 2 | Mid |
| | | 3 | High |
| | | | Invalid |
| 3 | Acoustic Sensitivity | 1 | Low |
| | | 2 | Mid |
| | | 3 | High |
| | | 4 | Disabled |
| 4 | Vacancy Time | 1 | 5 Min |
| | | 2 | 10 Min |
| | | 3 | 15 Min |
| | | 4 | 20 Min |
| | | 5 | 30 Min |
| | | 6 | 60 Min |
| | | 7 | 120 Min |
| 5 | LEDs | 1 | Disabled |
| | | 2 | Enabled |
| 6 | PC/0-10V Scale | 1 | 0 - 2.5 |
| | | 2 | 0 - 5.0 |
| | | 3 | 0 - 7.5 |
| | | 4 | 0 - 10 |
| | | 5 | 2.5 - 10 |
| | | 6 | 5.0 - 10 |
| | | 7 | 7.5 - 10 |
| 7 | Photocell / Occ Disable (Relay cutout) | 1 | Off |
| | | 2 | 88% |
| | | 3 | 75% |
| | | 4 | 62% |
| | | 5 | 50% |
| | | 6 | 38% |
| | | 7 | 25% |
| | | 8 | 12% |
| 8 | Exit Settings Mode | 1 | Discard |
| | | 2 | Save |



Sensor Settings

| Setting | Options |
|---|---|
| PIR Sensitivity | Low, Medium, High |
| Acoustic Sensitivity | Low, Medium, High |
| Vacancy Time | 5, 10, 15, 20, 30, 60, 120 min |
| LED Visibility | Enable / Disable |
| PC 0-10V Scale | 0-10V standard Open Loop dimming with +/- 2.5V, 5.0V and 7.5V offsets |
| Cut Out relay for Occupancy (disabled by Light level) | Cut Out relay range - Off, 88%, 75%, 62%, 50%, 38%, 25%, 12% |

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EVO Lite System

This diagram shows the the main components and topology of the Intelligent Lighting Controls EVO Lite system. The EVO Lite devices use CAT5 cable for device to device communications. See EVO Lite design guide for typical wiring data.

