

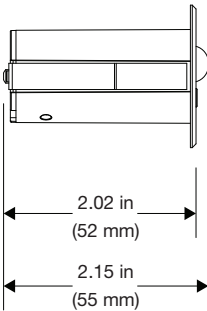
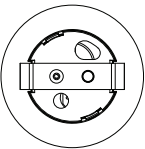
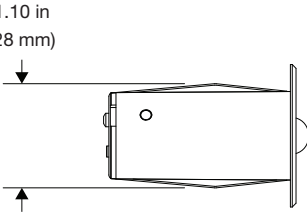


Description

The Crestron® GLS-OIRLCL-C-CN sensor features passive infrared (PIR) technology for occupancy detection. It provides a powerful and cost-effective solution for reducing energy consumption and enhancing the functionality of lighting and environmental systems. The GLS-OIRLCL-C-CN is a low-profile, ceiling-mounted occupancy sensor designed for areas up to 500 square feet, making it great for use in conference rooms, hallways, and private offices. Reliable Cresnet® wired communications directly connects the sensor to a Crestron control system for integrated control of lighting, climate, and other devices in the room.


A built-in photosensor detects the amount of ambient light in the room. When daylight harvesting is enabled, the photosensor can override the occupancy sensor's signal to turn on the lights if the ambient light level is above a set threshold. This prevents the lights from turning on when there is sufficient daylight in the room. Programming logic must be included to utilize this override feature.

The dimensions of the GLS-OIRLCL-C-CN are shown below.



Additional Resources

Visit the product page on the Crestron website (www.crestron.com) for additional information and the latest firmware updates. Use a QR reader application on your mobile device to scan the QR image.

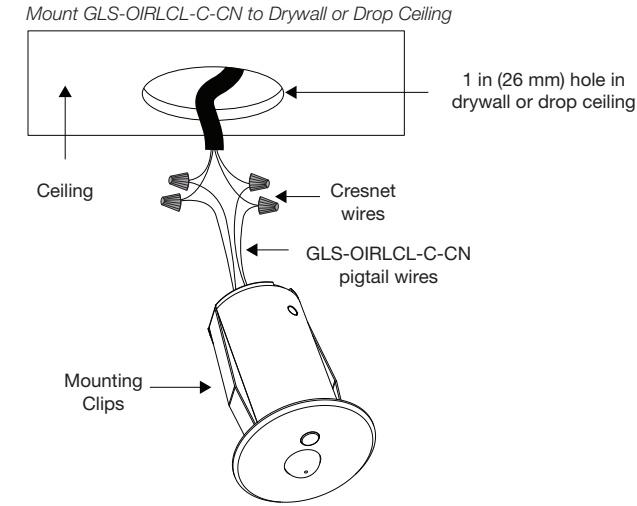


Installation

The GLS-OIRLCL-C-CN can be installed into a drop ceiling, drywall, or an octagon electrical box. Refer to the instructions that follow to install the sensor.

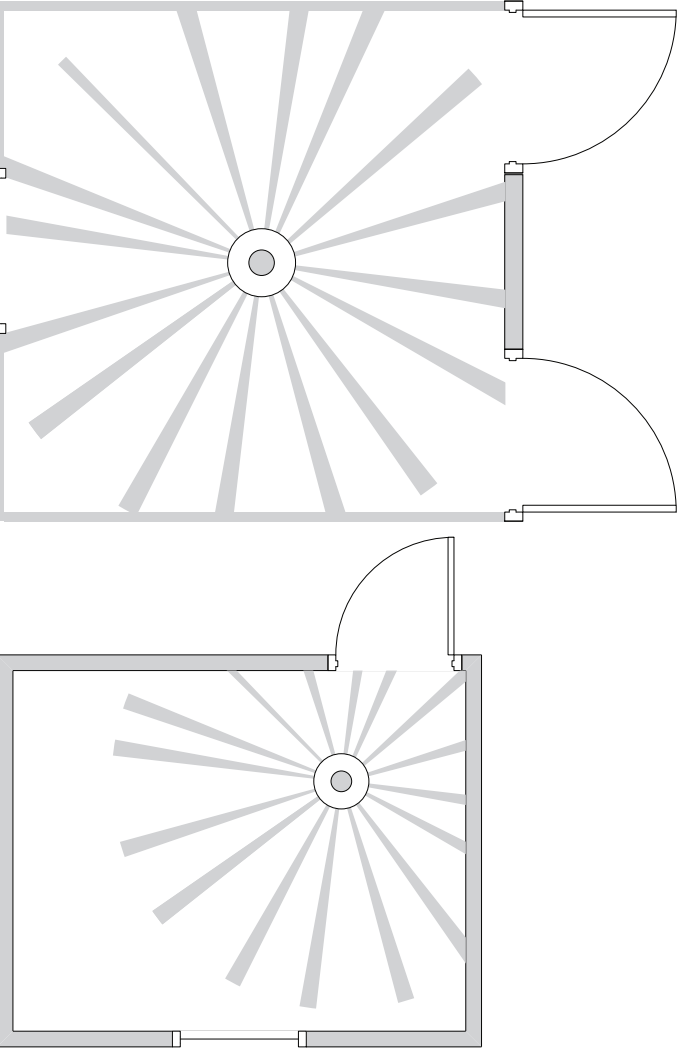
NOTE: Before securing the sensor to the ceiling, refer to the “Mounting Location Diagram” section to choose the best orientation. Avoid areas where false tripping may occur due to outside motion such as an open door. Identify and avoid areas of possible vibrations and air currents (e.g., projectors, fans, vents) and mount the sensor at least 5 feet (2 meters) away from these items.

- Install into drop ceiling or drywall:
1. Select the mounting location for the sensor application.
 2. Use cutting tools appropriate for the surface to create a 1 in (26 mm) hole in the ceiling.
 3. Connect the Cresnet wires to the GLS-OIRLCL-C-CN's pigtail using the wire nuts (not included).
 4. Press the GLS-OIRLCL-C-CN into the hole. The mounting clips on either side of the device hold it in place.



Mounting Location Diagram

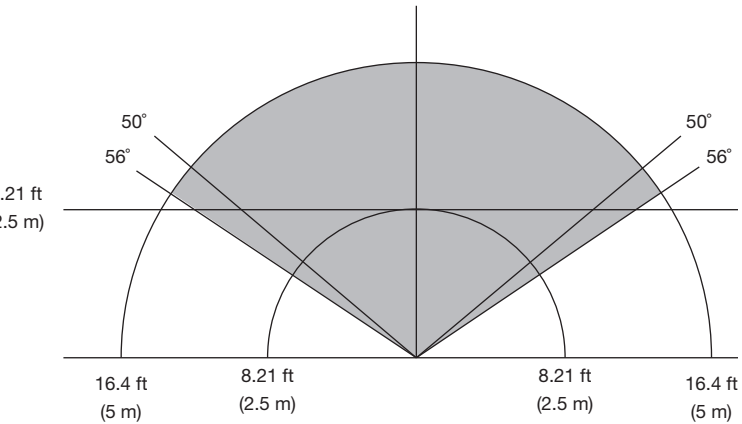
The GLS-OIRLCL-C-CN is designed to be mounted in the center of a room or the corner of a room.



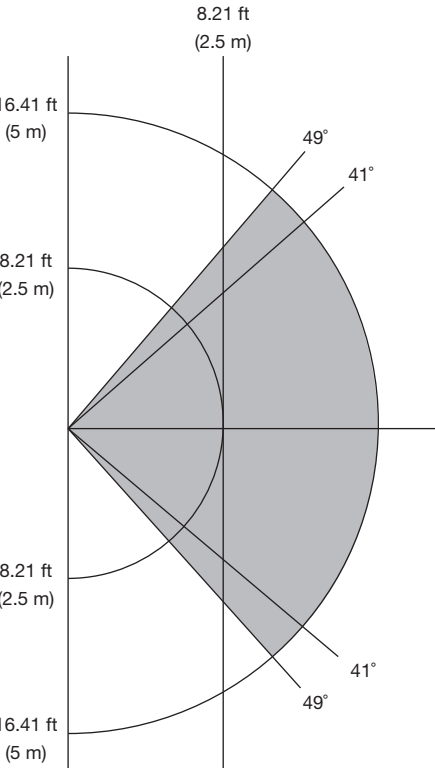
Detection Range

The detection pattern for the PIR sensitivity setting is shown in the illustration below. The first illustration shows the top view of the detection range, and the second illustration shows the detection range based on the side view of the sensor.

GLS-OIRLCL-C-CN Detection Range—Top View



GLS-OIRLCL-C-CN Detection Range—Side View



Operation

The descriptions below refer to a system which has been configured as an occupancy sensor—the lights turn on when a room is occupied, and the lights turn off when the room is vacant.

- NOTE:** The GLS-OIRLCL-C-CN can also operate as a vacancy sensor—the lights turn off when the room is vacant. The sensor will not turn the lights on.
- Timeout - The sensor is designed to turn the lights off after it stops detecting motion. The lights turn off if no motion is detected during the device's timeout period. The timeout is set using the IR remote.
 - Short Timeout - The short timeout allows a room to turn on the lights while it is being temporarily occupied; when the occupant leaves the room, the lights turn off shortly after the occupant leaves the room.

NOTE: The short-timeout feature works as follows: When a person enters the room, the lights turn on as usual, but, if the person leaves the room within 90 seconds, the short-timeout takes effect and the lights turn off after 60 seconds.
 - LED Operation - The LED is disabled during normal operation. The LED can be enabled using the programming remote.

Photocell Adjustment

The GLS-OIRLCL-C-CN has a built-in photocell that allows for complete daylight harvesting using the Crestron lighting system. Through programming, the photocell can dim lights or choose to not turn lights on at all if sufficient natural daylight is present.

Setup and Configuration

- Initial setup is performed using Crestron Toolbox™ software.
- Additional configuration of the GLS-OIRLCL-C-CN is performed using the GLS-REMOTE-ODT/OIR remote. Refer to the GLS-REMOTE-ODT/OIR Operations Guide (Doc. 7541) at www.crestron.com/manuals.
- Timeout - Press the desired TIMEOUT - 30s/2m/5m/10m/15m/30m button to set the timeout.
 - Short Timeout - Press SHORT TIMEOUT - ENABLE or SHORT TIMEOUT - DISABLE to enable or disable Short Timeout mode. Short timeout allows the timeout to be set to 60 seconds when occupied for less than 90 seconds.
 - LED - Press LED - ENABLE or LED - DISABLE to enable or disable the LED of the device during normal operation.

Set Net ID

- The Net ID needs to be set prior to operation. The Net ID can be set using Crestron Toolbox software or the GLS-REMOTE-ODT/OIR remote.
- To set or change the Net ID of the sensor, use the remote.
1. Press and hold the **SET ID** button for 3 seconds. The sensor emits 3 short beeps to indicate that it is ready for Net ID entry.
 2. Enter the Net ID of the sensor using the numeric keypad on the remote. The sensor emits 1 short beep for each number entry.
 3. Press **SET ID** to confirm the entry. The sensor emits one long beep to indicate successful Net ID entry or three short beeps to indicate failed entry.

Verify Operation

After the GLS-OIRLCL-C-CN is installed, verify its installation location and operation.

Confirm Installation Location

Verify the installation location by entering the room, closing any doors and sitting in the room while observing the device's LED. While sitting still, verify that the sensor only detects actual motion and is not affected by any projectors, fans, vents, etc. Monitor the LED activity on the device. A properly installed occupancy sensor should have no LED activity when there is no motion in the room.

- Adjust Occupancy Sensitivity**
- NOTE:** If multiple occupancy sensors are located in the same room, adjust one at a time.
1. Press and hold **OCC SETUP** for 3 seconds on the IR remote to enter Occupancy Setup mode.
 2. Set the room sensitivity based on the illustrations in the “Detection Range” section on the previous page.
 3. Walk around the room to simulate typical room motion (e.g., sit at various places around a conference table and simulate typical motion for a conference room).
 4. Verify LED indication of motion (red for PIR).
 5. Adjust sensitivity levels, if necessary.
 - If no motion is detected in main areas of the room, increase the sensitivity.
 - If no motion is detected in the corners of the room, increase the timeout to allow greater chance of detecting motion.
 6. Repeat these steps until all expected motion is detected.

- Adjust Vacancy Sensitivity**
1. In Vacancy Setup mode, verify that nothing triggers occupancy when the room is vacant. When in Vacancy Setup mode, the occupancy sensor beeps to indicate motion. The occupancy sensor should beep when re-entering the room.
 2. Using the IR remote, place the sensor into vacancy setup mode by pressing the **VAC SETUP** button. Exit the room and close the door.
 3. Listen for beeps that indicate there is motion detected in the room.
 4. Walk by open door ways or entrances/exits to ensure that no false occupancies are being detected.
 5. If unwanted motion is detected, lower the PIR setting and retest.

Troubleshooting

The following table provides corrective actions for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

GLS-OIRLCL-C-CN Troubleshooting

TROUBLE	POSSIBLE CAUSE	CORRECTIVE ACTION
The controlled devices do not turn on.	The circuit breaker or fuse has tripped.	Reset the circuit breaker or replace the fuse.
	There is incorrect programming in the control system.	Check the control system logic or contact Crestron for assistance.
	There are incorrect settings on the device.	Increase the sensitivity slowly via the knob under the cover.
	The device is not mounted in the correct location.	Move the sensor into an area that can see the occupant or point of motion.
The controlled devices do not turn off.	Constant motion is detected by the device.	Slowly reduce the sensitivity and remove the motion source. Change the mounting location if there is no change.
	The sensor can detect motion in the hallway or another adjacent space.	Put the sensor in Test mode and walk through the adjacent spaces. If the red LED blinks, move the sensor or use masks.
	There are incorrect settings on the device.	Slowly reduce the sensitivity and TIMEOUT knob under the cover.
	There is incorrect programming in the control system.	Check the control system logic or contact Crestron for assistance.
The controlled devices remain on too long.	The timeout setting is too high.	Reduce the timeout setting to a lower setting.
The light level is too high or low.	The photosensor is blocked	Ensure that the photosensor has a full view of the room.

As of the date of manufacture, the product has been tested and found to comply with specifications for CE marking.

CE

Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada (IC) Compliance Statement

CAN ICES-3 (B)/NMB-3(B)

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

Crestron, the Crestron logo, Crestron Toolbox, and Cresnet are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Other trademarks,

registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

This document was written by the Technical Publications department at Crestron.

©2017 Crestron Electronics, Inc.

Crestron Electronics, Inc.
15 Volvo Drive Rockleigh, NJ 07647
Tel: 888.CRESTRON
Fax: 201.767.7576
www.crestron.com

Installation Guide - DOC. 7951A (2048112) 09.17

Specifications subject to change without notice.