## Photo Sensor Head Installation Details



## Indoor Photo Sensor Head Installation

Placement of the sensor head for an indoor application will vary greatly depending on the space to be controlled. There are variables that need to be considered such as reflectivity of room surfaces, location of natural light sources such as windows and skylights, and location of electrical light sources such as recessed ceiling or pendent light fixtures. Proper placement of the photo sensor head will also depend on the operation scenario desired at the location.

**Open Loop Scenario:** *Monitors the incoming natural daylight levels and not the electrical lights.* In this scenario the photo sensor head should be placed in a location where it is primarily affected by natural light sources, such as being mounted in a skylight cavity or within a few feet of the window surface, where it will be only marginally affected by the room's electrical lighting.

**Closed Loop Scenario:** *Monitors the reflected light levels within the space including natural daylight and electrical lighting.* In this scenario the photo sensor head should be positioned so that it is equally affected by both the natural daylight and electric light sources. Placement shall be roughly between the rows of linear lights and the natural daylight sources.

The photo sensor head can be mounted in the ceiling, ceiling tile, skylight, light-well or lighting fixture. Mount the photo sensor to measure the light for one of the above scenarios. Be sure when mounting in or near a lighting fixture, that the light does not directly enter the eye. For mounting, drill a ½" hole in the determined location making sure to avoid obstructions behind the mounting surface. Insert the photocell sensor head and retain with the nut provided, then connect the three wires to the Photo Sensor Controller or Room Controller per wiring details provided.

## **Outdoor Photo Sensor Head Installation**

The outdoor photo sensor head must be installed properly to prevent faulty switching. It must not be installed where pole lights or direct artificial light will enter its eye. The photo sensor head must be installed in an open area on the top of the building away from artificial light sources and shaded areas. Mount the photocell head horizontally with the eye facing due north and the hood on top in an outdoor LB type conduit fitting with a standoff distance of typically 1 to 2' from the roof surface. This distance may need to be greater depending on the reflectivity of the roof or snow cover.



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