

EDS SENSOR

INSTALLATION AND MAINTENANCE MANUAL (IMM)

PLC  **Multipoint**



1 INTRODUCTION

1.1 General

1. Please read these instructions carefully to prevent any possible injury or equipment damage.
2. Installer must be a qualified and experienced service technician.
3. Verify the product ratings to confirm that this product will satisfy your requirements and application.

1.2 Overview

The EDS sensor is designed to work directly with an electronic dimming ballast's Class 2 Low Voltage Power Supply using a 0-10V dimming control signal. It is ideal for daylight control or task tuning and to compensate for lumen depreciation. The sensor is available in an indoor version only and is intended to be ceiling mounted.

2 INSTALLATION

The sensor's Fresnel lens detects reflected light within a 60° angle from furnishings and the floor. Mount the indoor sensor in a 1/2" diameter hole in the false ceiling tile using the adhesive backing. For most general applications, the sensor should be mounted between 6-8 feet from the window area, central to the area illuminated by the electrical lighting that will be controlled. For controlling lighting in a task area, mount the sensor directly over the task area. In all cases, the sensor must be mounted so that it is exposed to reflected light only and not at any direct light. **(See Figure 1)**

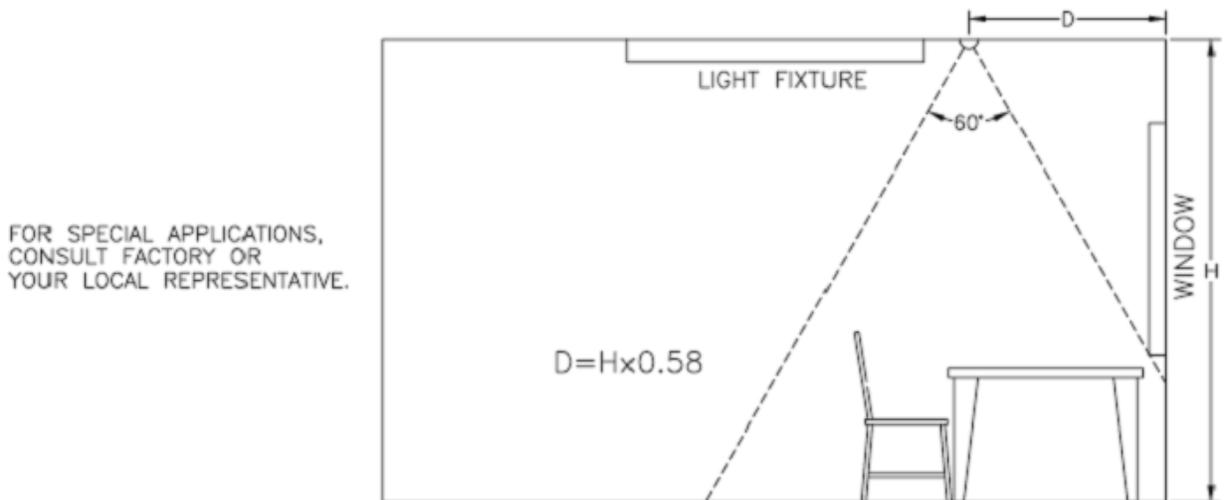


FIGURE 1: EDS SENSOR MOUNTING LOCATION

3 CONNECTION

The EDS Sensor is a two wire, loop powered device that provides light level control of up to 50, 0-10VDC dimming ballasts.

To prevent electrical shock, disconnect power to the electronic dimming ballast(s) before connecting the sensor. Do not run the wires with or near power wiring. Use 20 or 22 AWG wire. For long wire runs or where there is excessive electrical noise, shielded cable or conduit is required. Maximum wire length is 100 ft. Observe the following wire color designations:

VIOLET: Input Voltage

GREY: Sinking Voltage

WHITE/GREEN: This wire loop controls the sensor response delay, leave intact for a 20s delay, cut for a 10s delay. **(See Figure 2)**

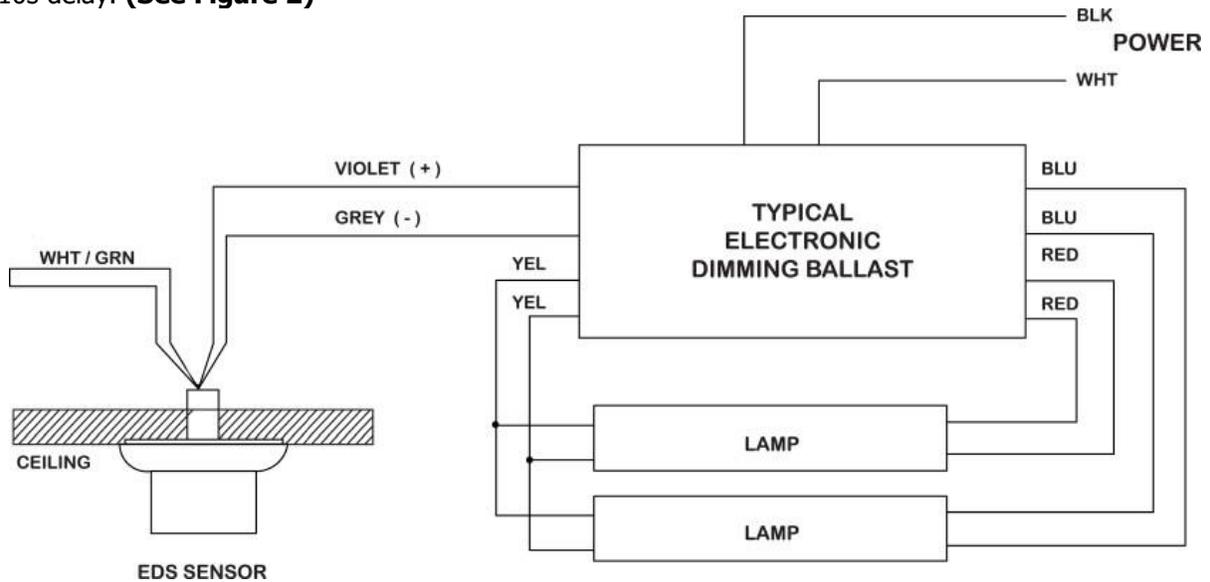


FIGURE 2: EDS SENSOR CONNECTION DIAGRAM

Additional dimming ballasts should be connected in parallel.

4 CALIBRATION

For daylight control, calibration should be performed at night or with the blinds tightly shut. For task tuning or lumen depreciation, calibration can be performed at any time.

The EDS sensor comes equipped with a built-in amplifier and a 25-turn potentiometer with a range of 10 to 140fc to adjust the limits of the sensor. To access the potentiometer, first remove the outer protective screw then insert the supplied calibration tool through the port in the sensor to engage the potentiometer screw head.

1. Calibration for Daylight Control

At night or with the blinds tightly shut, rotate the potentiometer adjustment counterclockwise (facing the adjustment port) using the adjustment tool until the lights begin to dim. Slowly rotate the screw clockwise just until the lighting comes back up to full output. The lights are now set to begin dimming as the exterior light level increases.

2. Calibration for Task Tuning or Lumen Depreciation

Slowly rotate the potentiometer adjustment counterclockwise (to dim) or clockwise (to brighten) until the desired light level is attained.

When calibration is complete, remove the calibration tool and re-insert the plastic screw to seal the port.

NOTE: ENSURE THAT THE SENSOR VIEW IS UNOBSTRUCTED DURING THE ENTIRE CALIBRATION PROCEDURE.

5 OPERATION

The EDS sensor is functional when the electronic dimming ballast is switched ON. Once calibrated, the sensor needs no further attention.

6 MAINTENANCE

Every 2 months wipe the sensor lens clean with a non-scratching clean cloth and ensure that no foreign debris remains. Check the housing for damage such as cracks, burns or other deformations. Check that no moisture has penetrated the sensor, as this will likely render it inoperable.

If you have any questions, please call us toll-free at 1-866-998-5483

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