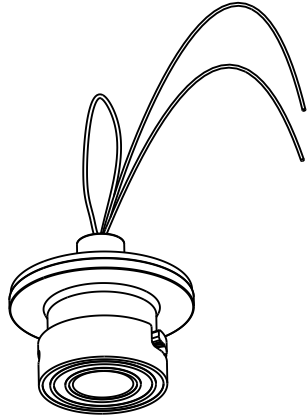


## MPL-010 Daylight Sensor



### SPECIFICATIONS

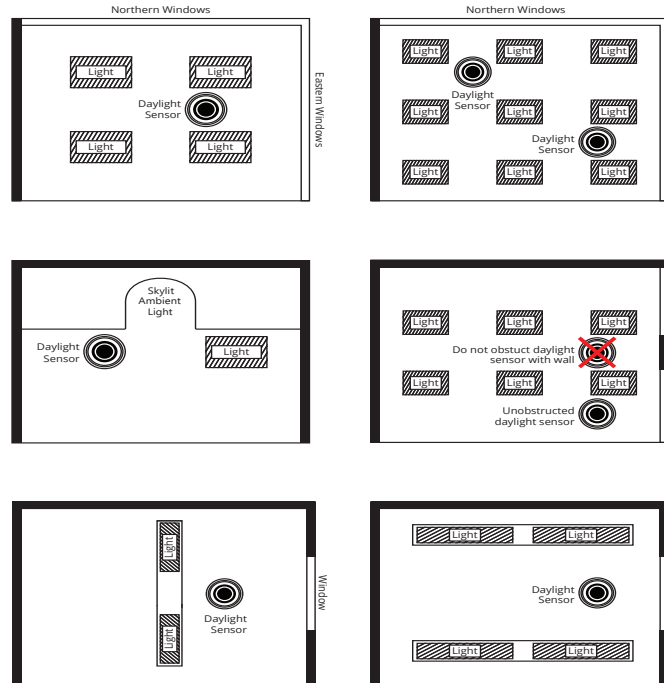
Voltage .....	10VDC
Light range.....	0-160 FC
Power supply.....	low-voltage LED Ballast
Operating temperature .....	32°to 131°F (0°to 55°C)
Dimensions: Width - Depth.....	1.34in (34mm) - 1.66in (42mm)
Stud length.....	.64in (16mm)
Stud diameter.....	.49in (12mm)
Total wire length.....	Maximum 100 ft
Time delay black wire intact.....	15 seconds (default)
Time delay black wire separated .....	7 seconds
Violet wire.....	Input Voltage
Gray wire.....	Sinking Voltage
Cable length.....	10in (254mm)
Maximum current sink.....	.50mA
Mounting.....	3M adhesive

### DESCRIPTION

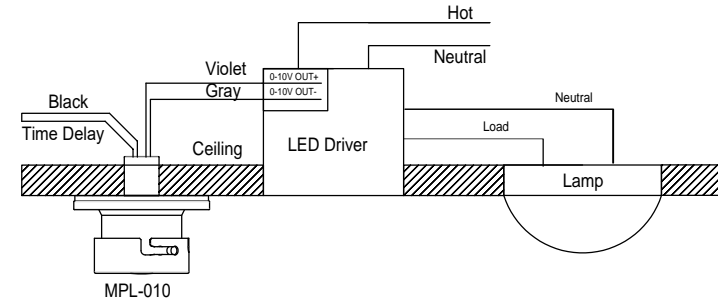
Enerlites MPL-010 daylight sensor dims and illuminates in accordance to present natural light. When bright daylight is shining in the room, the sensor lowers its light level. It provides a simple and effective solution for daylight harvesting. When there is little or no daylight coming in, the sensor brightens its light. The sensor connects to a 0-10V dimmable driver and uses photocell to measure ambient lux levels and automatically calculate how much artificial light needs to be emitted from light source. The MPL-010 can operate as a stand alone daylight sensor or can be paired with Enerlites motion ceiling sensors to add motion detection functionality.

### PLACEMENT GUIDELINES

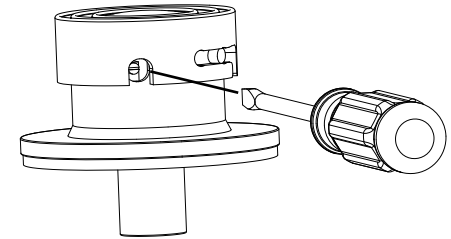
- Place the daylight sensor so its at the nearest window at a distance from the window of one to two times the effective window height (H).
- The effective window height (H) starts at the window sill or 3ft (1m) up from the floor, whichever is higher, and ends at the top of the window.
- Ensure that the view of the daylight sensor is not obstructed (e.g. ceiling fans or pendant fixtures).
- Allocate one sensor for each partitioned space such as a private office.
- In case of an open office allocate one sensor at least every 30 linear feet of window wall.
- One sensor for every individually controlled shade group will provide the ideal daylighting behavior.
- Proper sensor placement should try to maximize the ratio of natural light to artificial light, while not being constantly washed out with sunlight.
- Avoid placing the sensor in direct light from fixtures in the space. This can cause the sensor's readings to be off and the system to not daylight properly.



### WIRING DIRECTIONS



### SENSOR POTENTIOMETER ADJUSTMENT



- Turn clockwise to increase the brightness level of the connected lighting.
- Turn counter-clockwise to reduce the brightness level of the connected lighting.

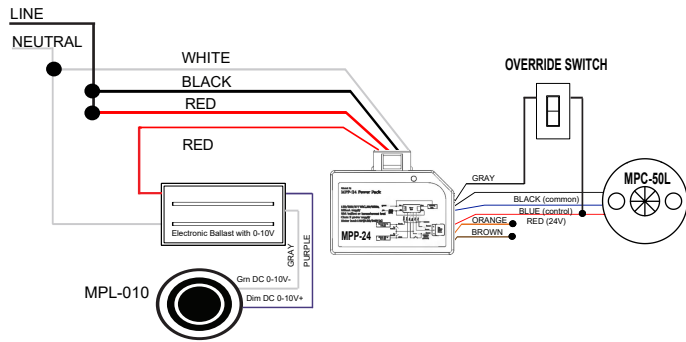
### TROUBLESHOOTING

#### Excessive dimming

- Mounting the photosensor near windows where large amounts of sunlight could strike or reflect onto the photosensor may cause the photosensor to over dim the lights. Move the photosensor further from the window or to a less exposed position. Refer to "Placement Guidelines" for possible problems.

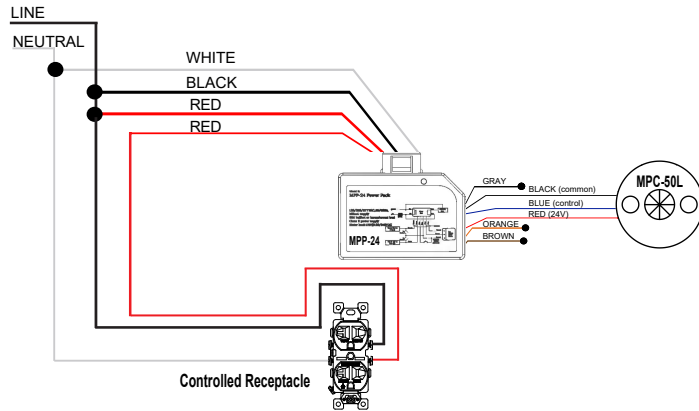
# SINGLE ROOM CONTROLLER OPTIONS

## DAYLIGHT HARVESTING - OCCUPANCY SENSOR SWITCH

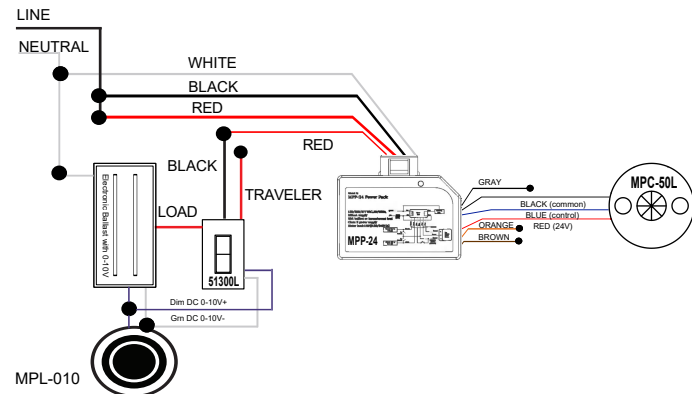


1. When lights are manually turned off, switch must be returned back to the on position for the occupancy function as set.

## PLUG LOAD CONTROL

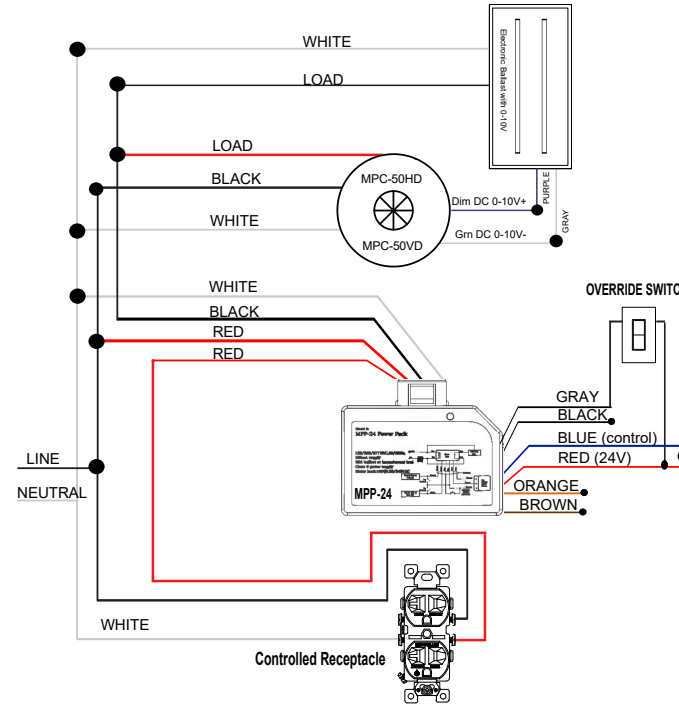


## DAYLIGHT HARVESTING - OCCUPANCY SENSOR SWITCH with DIMMER CONTROLLED



1. Daylight harvesting sensor supersedes dimmer during daylight.

## OCCUPANCY SENSOR with 0-10V BI-LEVEL DIMMING AND CONTROLLED RECEPTACLE



# OPERATION

The MPP-24 can be automatically operated by the use of low voltage ceiling sensors, manually with momentary switches, or on a schedule by the use of a relays.

**Automatic:** The MPC-50L or the MDC-50L may be installed with the MPP-24 to automatically turn ON/OFF the Load based on motion detection.

**Manual:** This feature **OVERRIDES ALL** control functions. The Load can be turned ON/OFF manually by installing a momentary switch. The momentary switch will affect the operation of the ceiling sensor. If the Load is turned OFF manually, the Load WILL NOT turn on again automatically until the time delay has expired on the ceiling sensor or the Load is manually turned ON again.

**Hold ON:** This feature overrides the Automatic control. The MPP-24 can be turned ON based on a schedule by connecting it to a relay such as a timer.

**Hold OFF:** This feature overrides the Automatic control. The MPP-24 can be turned OFF based on a schedule by connecting it to a relay such as a timer.

**Over Current Protection:** The MPP-24 has built-in short circuit and thermal protection. It prevents over current damage to the power pack when the output exceeds 200mA. Make sure the connected Load is under the specified ratings. Use additional MPP-24 power packs to distribute the Loads evenly.

**LED Indicator:**

- **LED is OFF:** There's no power coming to the power pack or the +24VDC is shorted.
- **LED BLINKS continuously:** The Load is ON.
- **LED is ON continuously:** The Load is OFF.

**Zero-Crossing:** The relay in the MPP-24 is built with Zero-Crossing Circuit. It's deviation of  $\pm 20\%$  prolongs the life of the relay and increases the reliability of movement. In other words, if an ON signal is received while the AC output to the Load is not very close to zero voltage, the relay will "wait" to switch ON again until the output AC wave reaches its next close to zero point.

# TROUBLESHOOTING

**The Load does not automatically turn ON after using the manual OFF switch:**

- Wait for the time delay on the sensor to expire or press the Manual switch to turn back on and wait for the time delay on the sensor to expire.
- Increase the sensitivity on the sensor and reduce the time delay.

**The Load does not turn ON when motion is detected:** The "HOLD OFF" or the Manual switch may be overriding the control. Override the switch again by manually turning on the Load and waiting for the time delay to expire.

**The Load does not turn OFF when time delay has expired:** The "HOLD ON" or the Manual switch may be overriding the control. Override the switch again by manually turning the Load OFF and then back ON and then wait for the time delay to expire.

# WARRANTY INFORMATION

This device is warranted to be free of material and workmanship defects for 2 years from the date of purchase. Original receipt or proof of purchase from an authorized retailer must be presented upon warranty claim. ALL claims must be verified and approved by Enerlites, Inc. Warranties from other Enerlites products may vary. This warranty is nontransferable and does not cover normal wear and tear or any malfunction, failure, or defect resulting from misuse, abuse, neglect, alteration, modification, or improper installation. To the fullest extent permitted by the applicable state law, Enerlites shall not be liable to the purchaser or end user customer of Enerlites products for direct, indirect, incidental, or consequential damages even if Enerlites has been advised of the possibility of such damages. Enerlites' total liability under this or any other warranty, express or implied, is limited to repair, replacement or refund. Repair, replacement or refund are the sole and exclusive remedies for breach of warranty or any other legal theory.