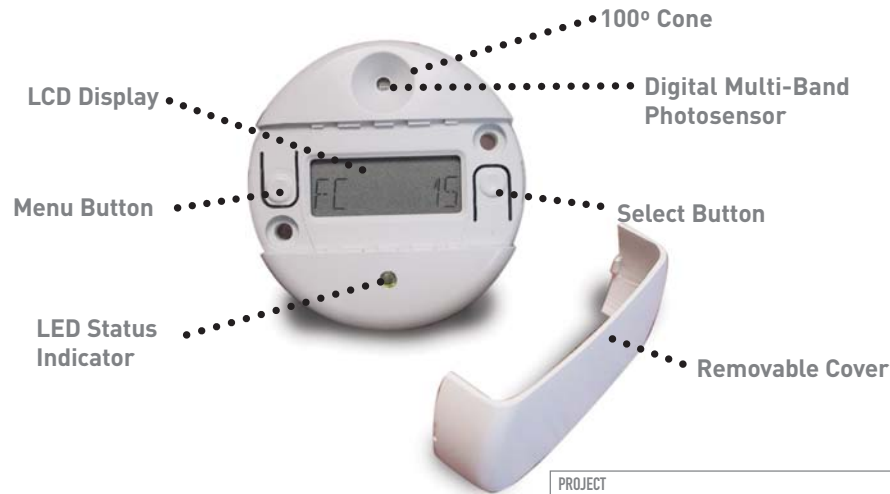




LightSaver® LS-101 Daylighting Controller



PROJECT
LOCATION/TYPE

Product Overview

Description

The LS-101 Daylighting Controller is a single zone, ON/OFF device which can be installed in an open or closed loop application to turn lights off automatically when sufficient natural daylight is present. It consists of an advanced digital multi-band photosensor that measures light similar to the way the human eye perceives it, an on-board microcontroller, and an LCD display. This photosensor is positioned behind a 100° cone that cuts off unwanted light, preventing false triggering.

Operation

The LS-101 is a self-contained 24 VDC device with an extended range of 1-1400 fc that only requires a low voltage power pack to operate. By adjusting the setpoints, it will turn lighting systems off when the ambient light levels exceed the OFF setpoint, and will turn lighting systems back on when natural light levels have fallen far enough to warrant it. Because of its factory presets, many set-up applications require little or no adjustment of the settings. The LS-101 is expandable with a low voltage wall switch to enable manual override or with a occupancy sensor to enable its 'Hold On While Occupied' feature.

Features

- Easy-to-read LCD Display prompts installer through set-up and accurately reflects the current control mode and light level.
- Four user-adjustable parameters: ON Setpoint, OFF Setpoint, OFF Setpoint Time Delay, and 'Hold On While Occupied' Mode (if wired with an occupancy sensor)
- Test Mode overrides the programmed Time Delay to allow installer to check if settings are correct.
- Control load status verification allows testing and confirmation that the wiring is correct by pressing the select button
- Manual Override for one hour (if wired with a low voltage, push-button wall switch)
- Meets Section 119's requirement for daylighting in California's Title 24 Lighting Code.
- LED status indicator identifies if the LS-101 is in Override or Test Mode, or if the device has switched the lights on or off.
- Two mounting options for either top-lit or side-lit applications
- Low voltage leads are color coded to match wire colors on the power pack.
- Shape and design developed to prevent mis-alignments.
- Can be programmed in most daylight conditions

On, Off & Deadband Settings

The LS-101 features adjustable settings for ON setpoint, OFF setpoint and time delay, should adjustment be required. Adjusting the ON setpoint will automatically calculate your OFF setpoint to a predetermined deadband setting. The deadband can be adjusted to a value of 25%, 50%, 75% or 100% above the ON setpoint. When the sensed light level drops below the ON setpoint for 20 seconds, the output signal will switch on. And when the sensed light level exceeds the OFF setpoint for the length of the time delay, the output signal will switch OFF. The time delay can be adjusted to 3, 10, 20 or 30 minutes.

Applications

The LS-101 Daylighting Controller can be used to control any type of lighting: incandescent, fluorescent, compact fluorescent (CFL) and HID. The sensors work in peripheral offices, skylit areas, cafeterias, warehouses and any other indoor areas with natural light access.

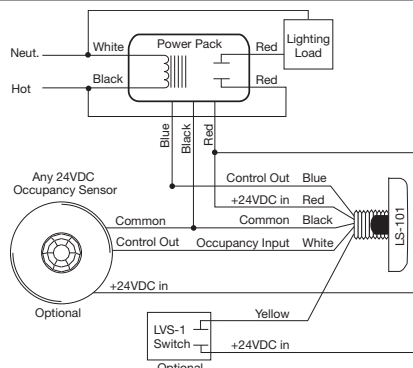


Specifications

- Digital Multi-Band Photosensor Range: 1-1400 foot candles
- ON Setpoint Range: 1-850 foot candles
- Status Indicator: Multi-function green LED
- Power Requirements: 12/24 VDC; 7 mA typical
- Output Signal: 24VDC; maximum 120 mA
- Location: Suitable for dry interior locations
- Environment: 32 to 120°F, less than 90% rh
- Dimensions: 2.4" diameter x 0.7" deep (61mm x 17mm)
- Five-year warranty
- UL listed

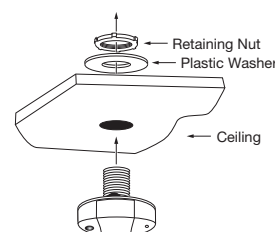
Wiring & Installation Location

Wiring Diagram

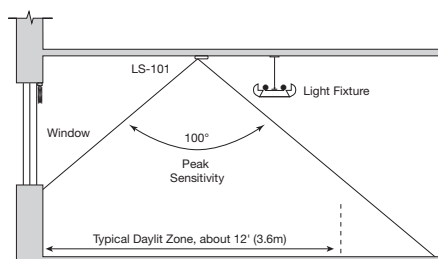


For other wiring diagrams, please visit the CAD Resource Center at www.wattstopper.com

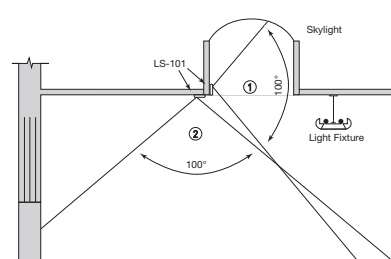
Mounting Installation



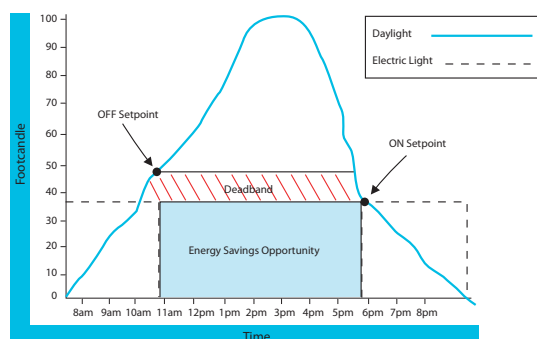
Side Lighting Application



Top Lighting Application



Deadband Level Chart



If the LS-101's photosensor lighting level drops below the ON setpoint, the lights will remain on. If the sensor's lighting level rises above the OFF setpoint, the LS-101 will automatically turn the lights off. If the sensor's lighting level remains in the predetermined deadband range (25%, 50%, 75% or 100%) the lighting will be passive until the sensor's level reaches the high or low setpoints.

Ordering Information

Catalog No.	Voltage	Current	Photosensor Range	Deadband Adjustment Range
☐ LS-101	12-24 VDC	7 mA Typical	1-1400 foot candles	25%, 50%, 75% & 100% above the ON setpoint