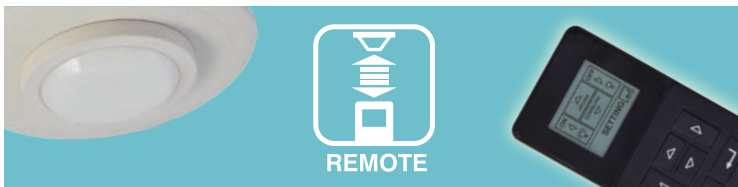


BED-511 series

Low Voltage Virtual Midnight Sensor



OVERVIEW

The BED-511 series member of the TRANS family is 12~24VDC low voltage a remote programmable virtual midnight (VM) sensor designed to provide control signal for IR-TEC power pack to execute virtual midnight automatic lighting control.

This daylight sensor employs a cutting edge digital ambient light sensor (ALS) with an advanced algorithm to provide closed loop, dynamic ambient light level sensing capability. The sensor is able to determine a virtual midnight point based on the measured dusk and dawn points. A dry contact signal will be activated from the preset time point "before" VM to the preset time point "after" VM.

All sensor settings and adjustments can be programmed via an IR-TEC TRANS programmer (SRP-280) or OS-NET programmer (SRP-281) on the floor via simple and intuitive remote operation. This 2-way remote setting capability does away with the need for ladders, scissor lifts, bucket trucks or any other tools.

Like all TRANS family, the BED-511 sensor is also available in various mounting options. This feature offers a second-to-none design and installation flexibility to achieve virtual midnight lighting control.

FEATURES

- Digital data control ambient light sensor
- Human-eye matching spectral response
- Sensor operation LED indicator built-in
- 12~24VDC low voltage power operation
- 2-way IR remote programming capability
- Test and Burn-in modes available for testing
- Automatic virtual midnight point adjustment
- Dry contact output for power pack control
- Available with variety of mounting options

APPLICATION

- Educational
- Industrial/Retail
- Public building
- Commercial

The BED-511 sensor can be used with IR-TEC's ON-PPU to provide automatic germicidal lighting from a certain point before midnight to a certain time after midnight.

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TRANS

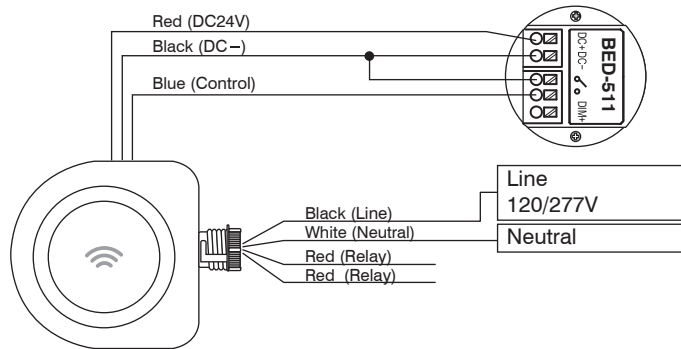
OPERATION

With 12-24VDC power applied, the sensor will automatically determine a so-called “Virtual Midnight” point by continuously measuring the daylight level defined as dusk and dawn for 3 days. The control signal will be activated from the preset time point “before” VM (Tb) to the preset time point “after” VM (Ta). Via an IR-TEC power pack, the associated lighting can be activated automatically to execute specific functionality.

SPECIFICATIONS

Power supply	12~24 VDC±5%
Photo sensor	Digital data control ambient light sensor
Current drain	10/20 mA @24VDC, standby/active
Digital output	Isolated dry contact, max. 1A, 48 VDC
Tb (Time before VM)	Fixed 30 mins
Ta (Time after VM)	0.5-6 hours
Sensing range	Approx. 0.2 ~ 200 fc (2~2,000 lux)
Field of view	Approximate 80°
Op. humidity	Max 95% RH, non-condensated
Op. temperature	-40°F~131°F (-40°C~55°C)
Dimensions	Ø2.56"xH1.77" (Ø65 x H45mm)

WIRING DIAGRAM



Mounting Options

The BED-511 series can be mounted into the ceiling, attached to a fixture or mounted into a junction box to control the connected lighting. Different mounting option is available by combining with specific mounting bracket from the chart below. The bracket will be shipped with the sensor when ordered with the respective code. Mounting option code F and W allow the BED-511SX sensor to be integrated with OEM light fixture for indoor and wet location.

Code	Mounting Option	Mounting Bracket
F	Fixture Integrated	---
W	IP-66 Fixture Integrated	---
E	Fixture External	EMB-500
P	IP-66 Fixture External	PMB-500
S	Ceiling Surface	SMB-500
C	Junction Box	CMB-500
R	Ceiling Recess	RMB-500