



### HIGH BAY END-OF-AISLE SENSOR FIXTURE MOUNT BOX • LINE VOLTAGE • PASSIVE INFRARED (PIR)

#### SPECIFICATIONS

##### FEATURES

- 100% Digital PIR Detection, Excellent RF Immunity
- Up to 45 ft Mounting
- Coverage up to 110 Linear ft
- Self-Contained Relay - No Power Pack needed
- Push-Button Programmable
- User Adjustable Time Delays
- No Field Calibration or Sensitivity Adjustments Required
- Convenient Test Mode
- 100 Hr Lamp Burn-in Timer
- Green LED Indicator

##### LAMPMAXIMIZER® TECHNOLOGY

- Protects Lamp Life while Maximizing Energy Savings
- Minimum On Timer (15 min default)
- Occ. Time Delay (10 min default)
- LampMaximizer+ Mode - Optimizes Lamp Life & Energy Savings (disabled by default)
- Switch Counter (in 1000's)
- Total Lamp On Time (in hrs)

##### PHYSICAL SPECS

SIZE 3.63" H x 3.63" W x 1.50" D  
(9.22 cm x 9.22 cm x 3.81 cm)  
WEIGHT 6 oz  
MOUNTING 1/2" knockout  
COLOR White

##### ELECTRICAL SPECS

MAXIMUM LOAD  
800 W @ 120 VAC  
1200 W @ 277 VAC  
1500 W @ 347 VAC  
MINIMUM LOAD None  
MOTOR LOAD 1/4 HP  
FREQUENCY 50/60 Hz  
DIMMING LOAD Sinks < 20mA;  
~40 Ballasts @ .5mA each

##### ENVIRONMENTAL SPECS

OPERATING TEMP  
14° to 160° F (-10° to 71° C)  
STORAGE TEMP  
-14° to 160° F (-26° to 71° C)  
RELATIVE HUMIDITY  
20 to 90% non-condensing  
SILICONE FREE  
ROHS COMPLIANT

#### OVERVIEW

High Bay Aisle Way lighting control is easily accomplished by the **HMRB 10** Series Passive Infrared (PIR) occupancy sensor. This line voltage sensor easily installs to a standard junction box through a 1/2 inch knockout. Designed to be deployed in pairs and mounted 30 to 45 ft (9.14 to 13.72 m) high at the both ends of an aisle, each **HMRB 10** views up to 110 linear ft (33.53 m) of aisleway space. The **HMRB 10** powers itself from line voltage and switches loads directly without the need for a power pack. While ideal for on/off control of T5/T8 fluorescent lighting, HID bi-level fixtures can also be controlled when the Start-to-High (SH) option is added. For simultaneous control of entire aisles, a low voltage solution is recommended. For example, use two **HMB 10** Series sensors mounted on the ends with added **CMB 50** or **CMB 6** Series sensors covering the inner aisle as needed.

#### SENSOR OPERATION

The sensor detects changes in the infrared energy given off by occupants as they move within the field-of-view. When occupancy is detected, a self-contained relay switches the lighting on. The sensor is line powered and can switch line voltage (see specifications). An internal timer, factory set at 15 minutes, keeps the lights on during brief periods of inactivity. This timer is push-button programmable from 30 seconds to 20 minutes, and is reset every time occupancy is re-detected. This state-of-the-art sensor requires no field calibration or sensitivity adjustments.

#### LAMPMAXIMIZER®

This sensor also contains patent pending LampMaximizer technology that allows users to aggressively target energy savings while still protecting lamp life. A minimum on timer, factory set at 15 minutes, helps preserve lamp life by eliminating all lamp cycles shorter than lamp warranties specify. A standard occupancy time delay is also present that ensures lights turn off (assuming minimum on timer has elapsed) if no occupancy is detected. This timer is factory set at 10 minutes to promote energy savings, but is adjustable between 30 seconds and 20 minutes. These adjustments can be done manually, through the unit's push-button, or automatically every two weeks through an advanced mode, called LampMaximizer+, that determines the optimum time delay in order to maximize both lamp life and energy savings. Additionally, this sensor maintains statistics on total lamp on time and number of cycles.

#### OPTIONS

##### OCCUPANCY CONTROLLED DIMMING (D)

- Provides dimming outputs to control 0-10 VDC dimmable ballasts
- Provides a second occupancy time-out period that enables the lights to go to a dim setting before turning off
- Adjustable max/min dim setting

##### START-TO-HIGH TIMER (SH)

- Upon power up sensor holds lights ON and High for 20 min

##### 347 VAC (347)

- Allows sensor to be powered from and switch 347 VAC

##### LOW TEMP/HIGH HUMIDITY (LT)

- Sensor is corrosion resistant to moisture
- Operates down to -40° F/C



US LISTED  
TITLE 24  
MADE in U.S.A.  
5 YEAR WARRANTY

#### ORDERING INFO HMRB 10 [DIMMING] [START-TO-HIGH] [VOLTAGE] [TEMP/HUMIDITY]

##### DIMMING

Blank = Standard  
D = Occupancy Controlled Dimming

##### START-TO-HIGH

Blank = No STH  
SH = w/STH

##### VOLTAGE

Blank = 120-277 VAC  
347 = 347 VAC

##### TEMP/HUMIDITY

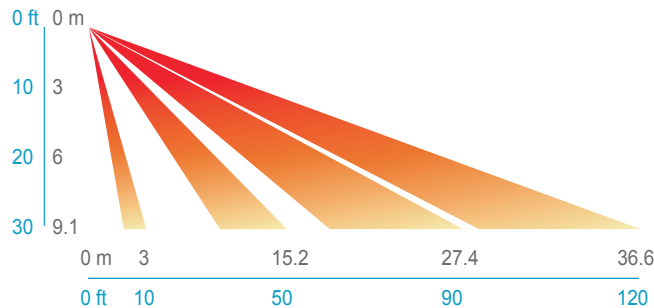
Blank = Standard  
LT = Low Temp

## COVERAGE PATTERN

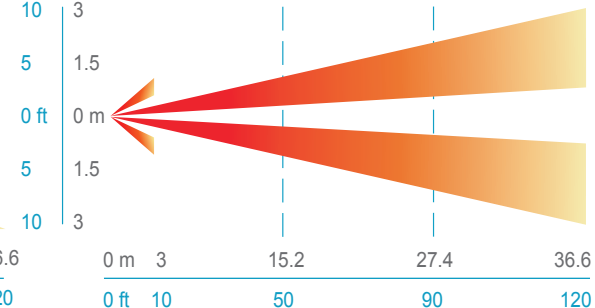
### HM 10 HIGH BAY END-OF-AISLE LENS

- Detects motion from the end of an aisle up to 110 ft (33.53 m) long
- Designed to mount 30 ft (9.14 m) high and 10 ft (3.05 m) back from end-of-aisle
- Sensors should always be applied in pairs facing each other from either end of an aisle

#### SIDE VIEW



#### TOP VIEW



## WIRING (DO NOT WIRE HOT)

#### STANDARD WIRING

- |        |               |                                |
|--------|---------------|--------------------------------|
| BLACK* | - Line Input  | } *BLACK wires can be reversed |
| BLACK* | - Load Output |                                |
| WHITE  | - Neutral     |                                |

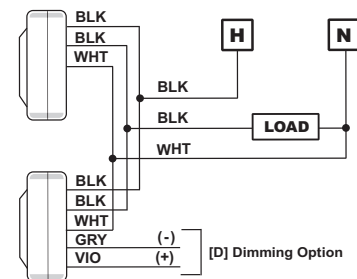
#### 347 VAC OPTION (347)

Black wires are replaced w/ Red wires

#### INITIAL POWER UP

The sensor's relay is shipped in a latched closed position so the lights will come on upon initial power-up. If the lights do not immediately turn on (initial installation only) the latching relay opened during shipment and will close within 30 secs.

Note: If the sensor loses power, the internal relay will latch to on.



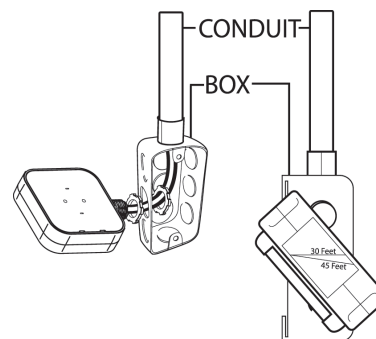
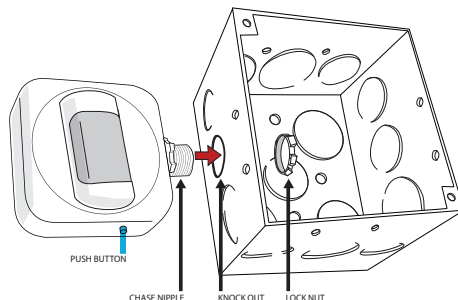
#### DIMMING OPTION (D)

**VIOLET** - Connect to Violet control wire from 0-10 VDC dimmable ballast

**GRAY** - Connect to Gray common wire from ballast

## INSTALLATION

- Sensor mounts through a 1/2" knockout to a junction box.
- The sensor must be mounted tilted forward approximately 43° at 30 ft (9.14 m) to achieve maximum coverage. At lower heights, or shorter desired coverage, the sensor tilt angle should be increased. Simply follow the guides on the side of the unit to set ideal tilt angles.



#### PROGRAMMING

Refer to instruction card IC7.001 for default settings and directions on programming the sensor via the push-button.

**sensorswitch**

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**WARRANTY:** Sensor Switch, Inc. warrants these products to be free of defects in manufacture and workmanship for a period of 60 months. Sensor Switch, Inc., upon prompt notice of such defect, will, at its option, provide a Returned Material Authorization number and repair or replace returned product.

**LIMITATIONS AND EXCLUSIONS:** This Warranty is in full lieu of all other representation and expressed and implied warranties (including the implied warranties of merchantability and fitness for use) and under no circumstances shall Sensor Switch, Inc. be liable for any incidental or consequential property damages or losses.

**TS-HMRB-001A**