aleoblue™

Project	
Type	Date
Cat. No.	

AB-SPIR-FM-DVB

AleoBlue™ Wireless Bluetooth® PIR High Bay Occ Sensor w/ Daylight Harvesting

DESCRIPTION

The AB-SPIR-FM-DVB combines occupancy sensing, daylight harvesting, 0-10V dimming and Bluetooth® Mesh into a convenient, plug and play, field installable sensor. This advanced sensor brings greater controllability, energy savings, and intelligence to high bay lighting. Utilizing a 3.5mm audio jack, the sensor can be easily installed in the field and is compatible with many Aleo high bay luminaires, reducing lead times and labor cost.

APPLICATIONS

High bay applications: warehouse, distribution centers, storage, manufacturing, shops, retail.
Exterior applications: area/site lighting, wall packs

SPECIFICATION FEATURES

OVERVIEW

- Bluetooth® Mesh SIG
- PIR sensing with daylight haversting
- Built-in 25mA 0-10V sinking current output
- On-board antenna
- LED indicator for motion

WARRANTY

5-year Limited Warranty. See warranty documentation for more information.

BENEFITS

- Cost-effective solution for energy savings
- Energy code compliance
- Robust mesh network
- Decentralized control (no single point of failure)
- Gateway-less configuration & operations

ORDERING INFORMATION

EXAMPLE: AB-SPIR-FM-DVB

AB	SPIR	FM	D	V	B	[Blank]
Series	**Controls**	**Mounting**	**Input Power**	**Dimming**	**Form Factor / Connection**	**Finish Color**
AB AleoBlue™	**SPIR** PIR Sensor	**FM** Fixture Mount	**D** DC Power	**V** 0-10V Dimming	**B** Twist in w/ 3.5mm audio jack, Round	**Blank** White **BLK** Black

Specifications and Dimensions subject to change without notice.

Aleo Lighting, Inc. I www.aleolighting.com I (877) 358-8825

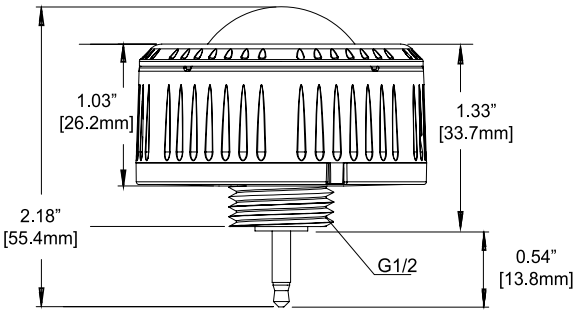
PERFORMANCE SUMMARY

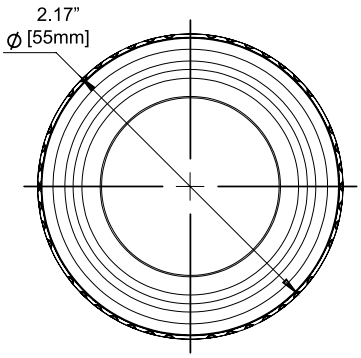
Input Voltage	12-24VDC
Sinking Current	25mA (max.)
Factory Reset	Magnet Reset
Status Indicators	Red (network status), Green (occupancy detection)
Wireless Protocol	Bluetooth® Mesh SIG
Occupancy Sensing Type	Passive infrared (PIR)
Sensing Information	Can be shared within Bluetooth® mesh network

Operating Temperature Range	-20°C to 60°C
IP Rating	IP65
Detection Angle	360°
Mounting Height (Max.)	40-feet
Bluetooth® Range (Max.)	300-feet
Warranty	5-year Warranty

*Bluetooth® Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

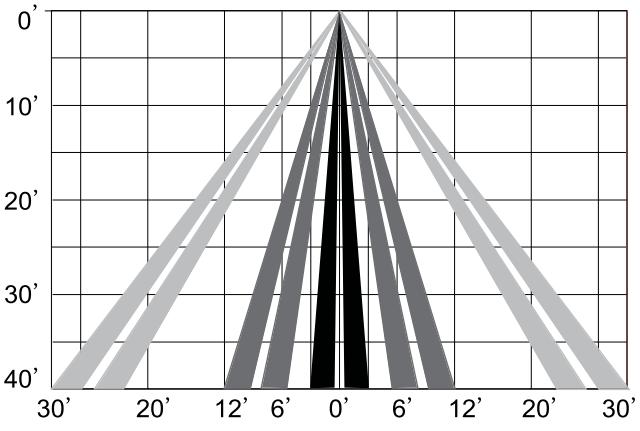
PRODUCT DIMENSIONS



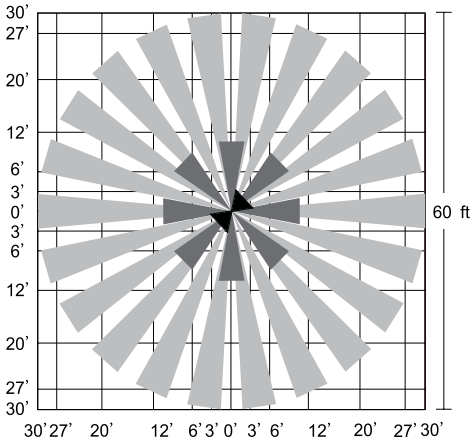


DETECTION AREA

Coverage Side View



Coverage Top View

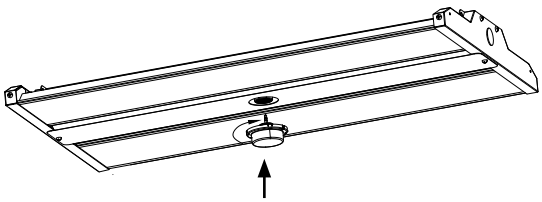


Specifications and Dimensions subject to change without notice.

SENSOR INSTALLATION

Plug and Play Sensor

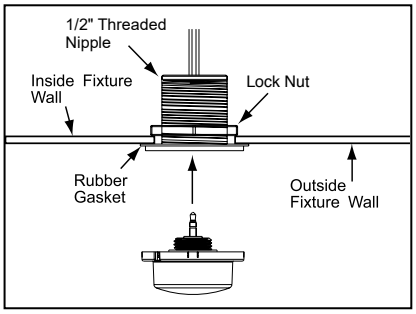
Compatible with Aleo luminaires that have PP1 Receptacles



Typical Installation:

1. Remove sensor cover.
2. Plug sensor jack into port and rotate sensor clockwise until sensor base reaches the bottom.
3. Do not overtighten. Ensure sensor is fully and completely engaged with receptacle base.

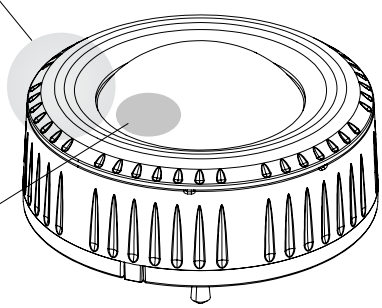
Fixture Mounting



ADDITIONAL INFORMATION

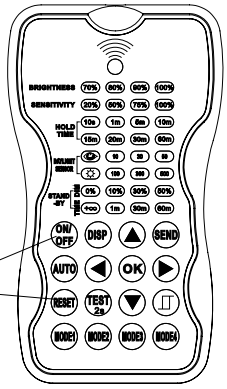
Magnetic Reset: Use strong magnet to touch this area for 5 seconds.

Note: Sensor must not be covered by metallic or high density material that may block Bluetooth® radio signal.



Motion Indicator: Green
Status Indicator: Red

RC100



Remote Control Reset: Point it to sensor. First press “RESET” button, then press “ON/OFF” button. Luminaire quickly flashes to indicate success.

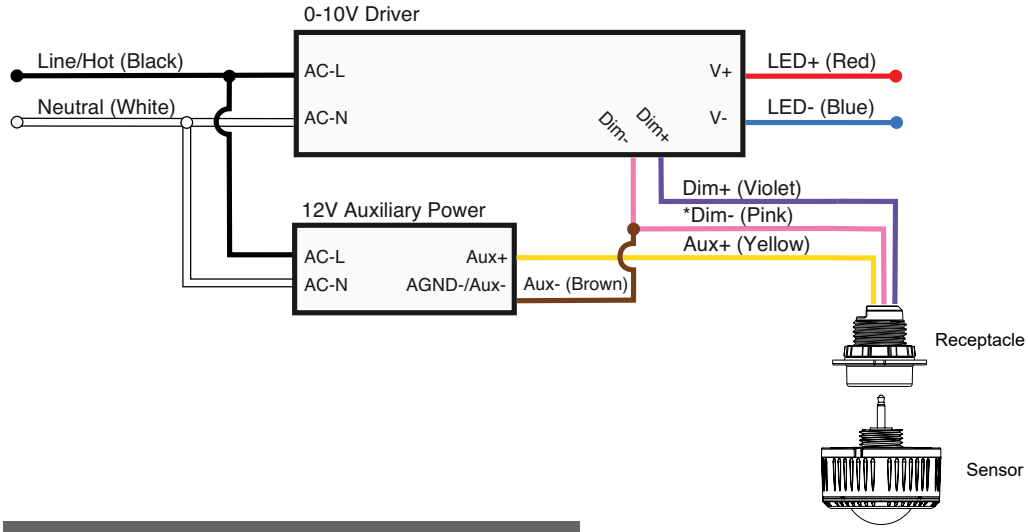
Specifications and Dimensions subject to change without notice.

Aleo Lighting, Inc. I www.aleolighting.com I (877) 358-8825

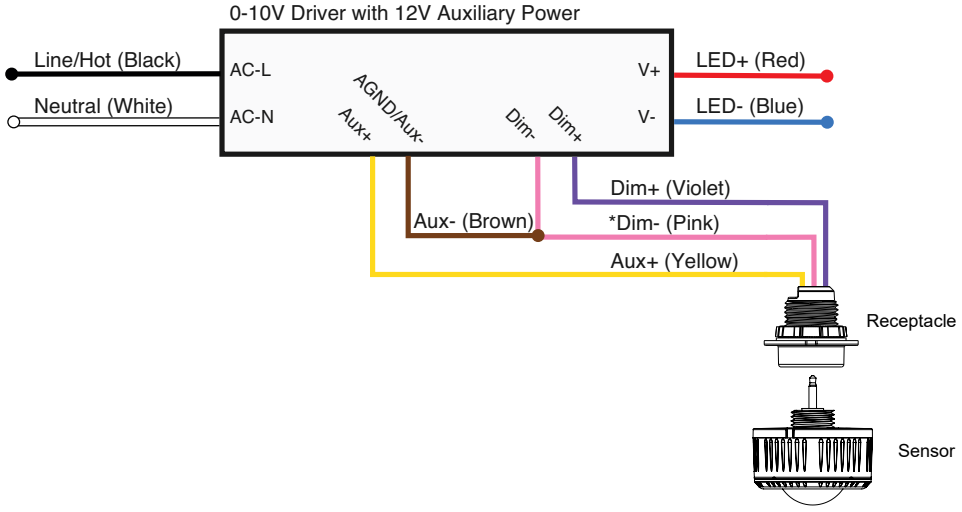
WIRING DIAGRAM

0-10V Driver (3-Conductor)

Note: Driver must have 0-10V and Dim-to-Off function. 12V aux. power is required.



0-10V Driver with 12V Auxiliary Power (3-Conductor)



[1] *Dim-* consists of *Aux-* and AGND (analog ground) electrical conductors connected together

aleo LIGHTING + CONTROLS
www.aleolighting.com
10988 Bloomfield Ave., Santa Fe Springs, CA 90670
(877) 358-8825

aleoblue™

ALEOBLUE WIRELESS BLUETOOTH® CONTROLS

DLC LISTED

The AleoBlue is a complete solution for managing connected lighting systems using a Bluetooth® NLC lighting network. This enables seamless implementation of simple to complex lighting control scenarios without specialized training or lighting control engineering expertise.

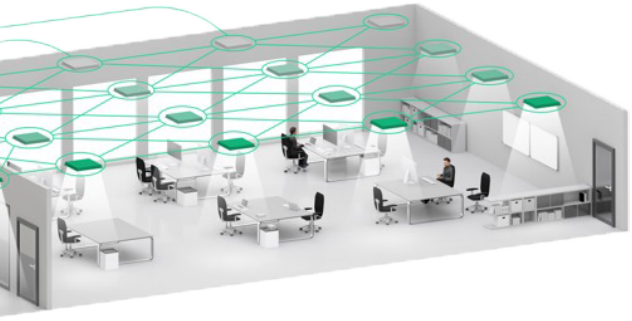
DLC NLC Qualified.

FEATURES AND BENEFITS

- Lighting Zones / Grouping
- Manual control of individual lights
- On Power up Behavior
- Zone Linking
- High-End Trim
- LLLC (Luminaire Level Lighting Controls)
- Energy Monitoring
- Optimized Energy Consumption
- Less Hassle with On-Site Adjustments
- More Savings
- Increased Safety
- More Flexibility
- Intuitive and user-friendly web and iOS apps
- No specialized training or lighting control expertise required
- Optimized for commercial spaces of any size
- No additional wiring or central control box
- Customizable lighting control parameters
- Future proof with Software Updates
- Multiple Zone Configurable
- Built-In Scenarios + Customization

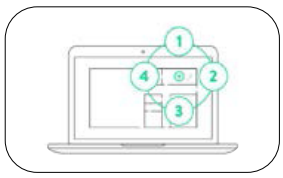
BLUETOOTH® NLC TECHNOLOGY ADVANTAGES

- The fastest low-power communication
- Scalability to thousands of devices
- The most advanced encryption standards as well as the cutting-edge device authentication
- No single point of failure (no central device)
- Compatibility with a widely available devices (smart phones & tablets – both with Bluetooth® 4.0 and Bluetooth® 5)

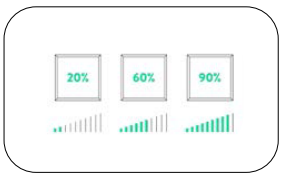


SCHEDULING

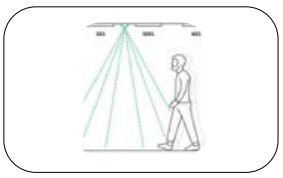
SCENES



HIGH / LOW END TRIM



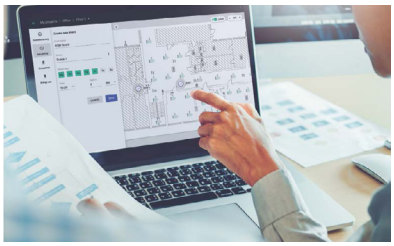
OCCUPANCY SENSING



PLANNING

Remote preparation of a retrofit project with the use of our web app. Uploading floor plans, defining individual lighting zones and choosing lighting control scenarios.

1. Import Floor Plans
2. Specify Desired Lighting Control Scenarios
3. Define Individual Lighting Zones



IMPLEMENTATION

Adding lighting devices to the Bluetooth® NLC network on-site with the use of an iOS app.

Customization and calibration of lighting control parameters during and after the commissioning process. Defining scenes for specific working activities.

1. Add Devices to Your Connected Lighting Network
2. Implement Predefined Zones and Scenarios
3. Optimize Configuration Settings if Needed

PROVISIONING / CONFIGURATIONS

The Bluetooth® NLC Node is in the Unprovisioned Mode until it is provisioned by a “Provisioner”, which typically is a smart phone with a Bluetooth® NLC compatible app.

Specifications and Dimensions subject to change without notice.

Aleo Lighting, Inc. I www.aleolighting.com I (877) 358-8825