



AB-SPIR-FM-DVA

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

DESCRIPTION

The AB-SPIR-FM-DVA combines occupancy sensing, daylight harvesting, 0-10V dimming and Bluetooth® NLC into a convenient, plug and play, field installable sensor. Utilizing a 2.5mm audio jack, the sensor can be easily installed in the field and is compatible with many Aleo panel luminaires, reducing lead times and labor cost. Using Bluetooth® NLC—the first wireless standard for professional lighting—this system supports Bluetooth® NLC, enabling reliable, scalable control. It can be easily expanded with Bluetooth® NLC-certified products or compatible switches for seamless integration and energy code compliance.

APPLICATIONS

Indoor: Open offices, Individual offices, Conference rooms, Classrooms, Retail stores, Hospitals, Lobbies.

SPECIFICATION FEATURES

OVERVIEW

- Bluetooth® NLC
- PIR sensing with daylight harvesting
- On-board antenna
- LED indicator for motion
- Sensor reset by a Remote controller (RC100) & Magnet

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-DVA

AB	SPIR	FM	D	V	A
Series	Controls	Mounting	Input Power	Dimming	Form Factor / Connection
AB AleoBlue™	SPIR PIR Sensor	FM Fixture Mount	D DC Power	V 0-10V Dimming	A Twist in w/ 2.5mm audio jack, Rectangular

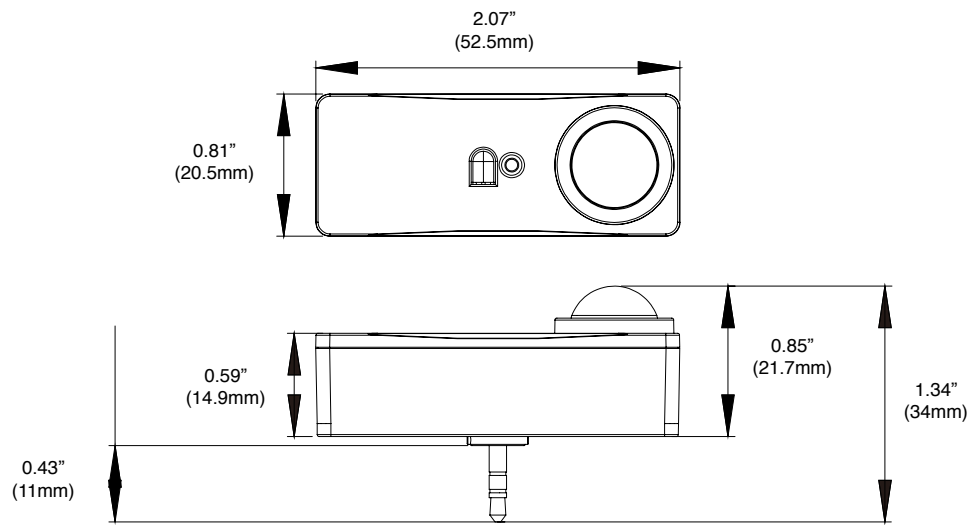
Specifications and Dimensions subject to change without notice.

PERFORMANCE SUMMARY

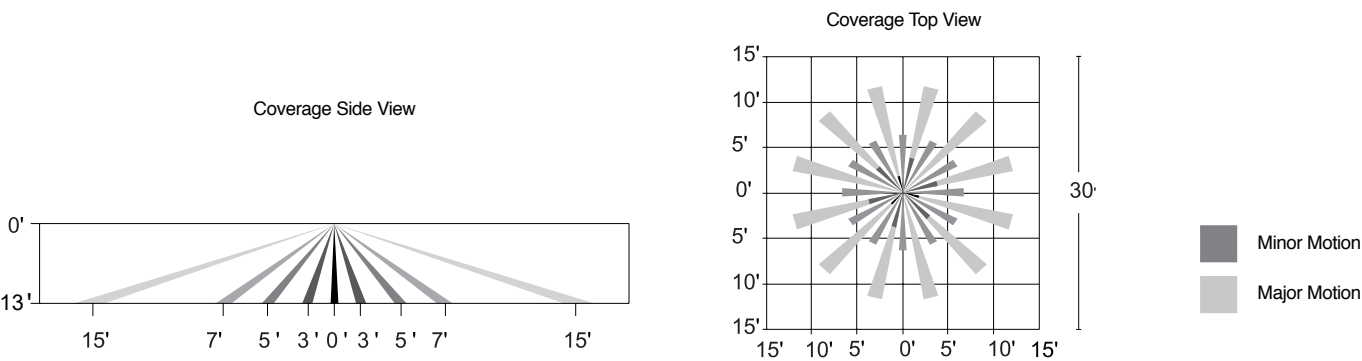
Input Voltage	10-14VDC	IP Rating	IP20
Input Current	>50mA	Mounting Height (Max.)	12ft. (max.)
Dim Control Output	0-10V, max. 25mA sinking current	Bluetooth® Range (Max.)*	100 ft.
Factory Reset	Magnet & Remote Control Reset	Color	White
Status Indicators	Red (network status), Green (occupancy detection)	Warranty	5 Years Limited
Wireless Protocol	Bluetooth® NLC	Operating Temperature	-40°F ~ +158°F (-40°C ~ +70°C)
Sensing Type	Passive infrared (PIR)	Warranty	5-year Warranty
Operating Temperature Range	-20°C to 60°C		

*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

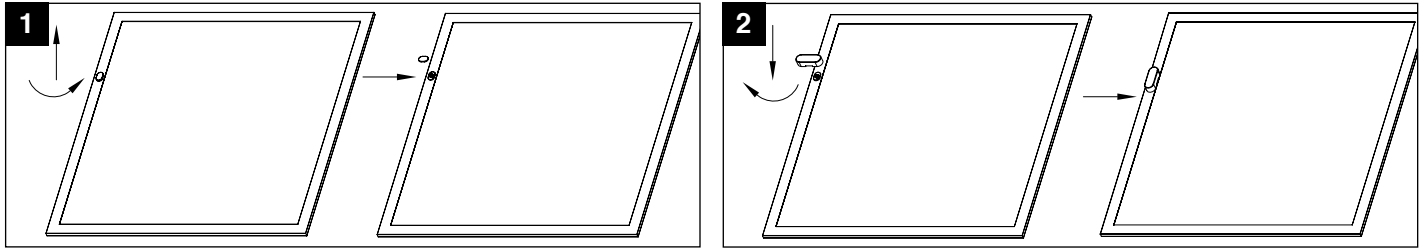


DETECTION AREA



Specifications and Dimensions subject to change without notice.

SENSOR INSTALLATION



Rotate and remove the socket cover.

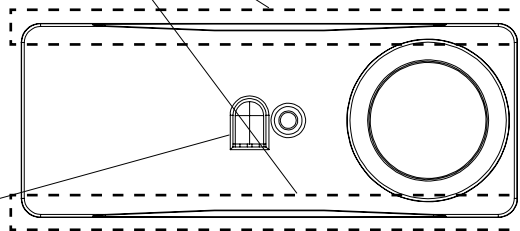
Insert and rotate the sensor to complete installation.

ADDITIONAL INFORMATION

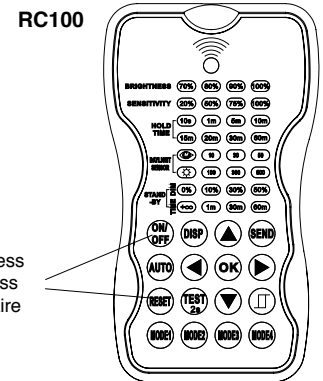
Magnetic Reset: Use a strong magnet to touch this area for 5 seconds.

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

Motion Indicator: Green
Status Indicator: Red



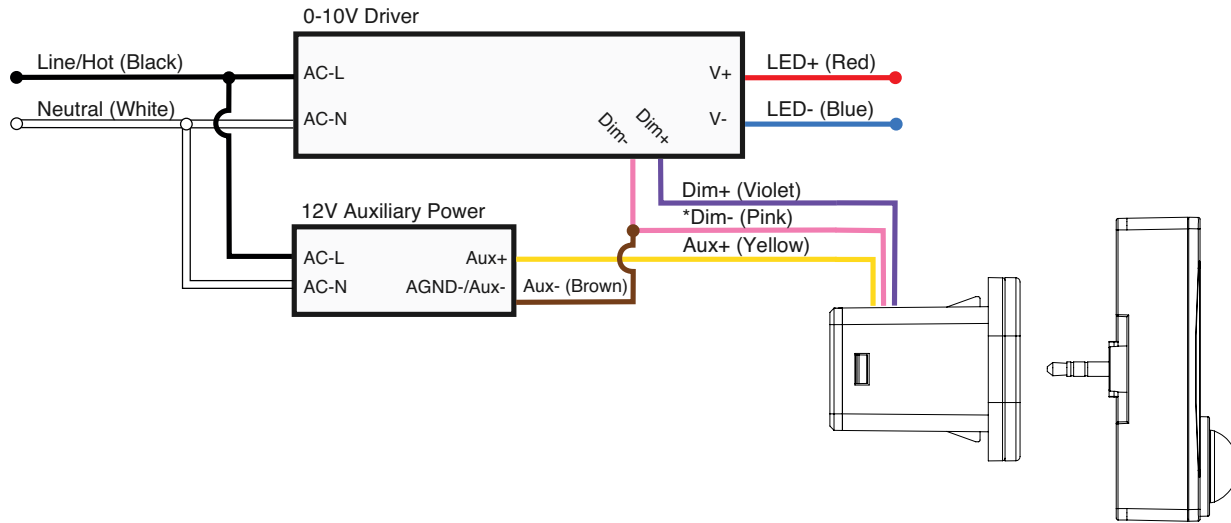
Remote Control Reset:
Point it to sensor. First press "RESET" button, then press "ON/OFF" button. Luminaire quickly flashes to indicate success.



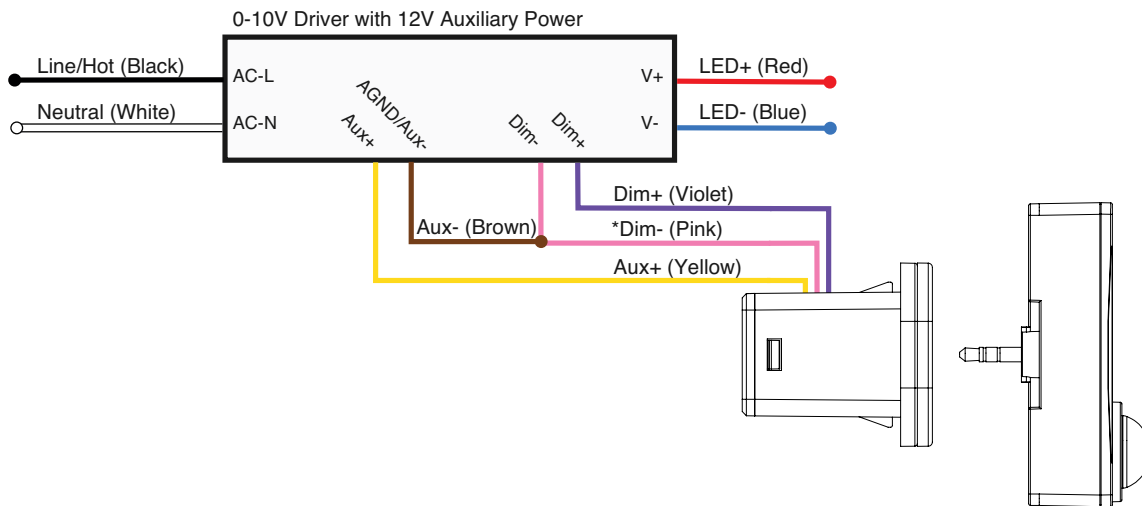
WIRING DIAGRAM

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

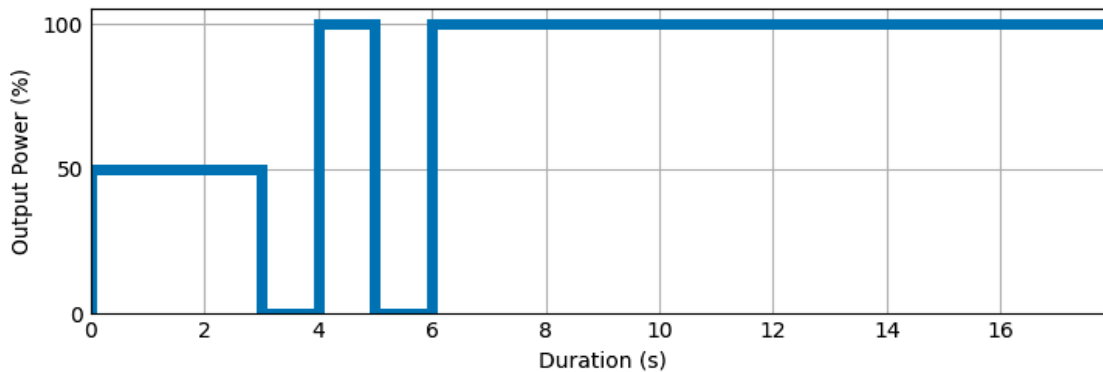
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END OF LINE TESTING

The AleoBlue Sensor/Node initiates an automatic End-of-Line (EOL) test sequence upon initial power-up. This uncommissioned mode provides a visual confirmation that the fixture is operating correctly prior to integration into the AleoBlue control system.

The EOL sequence is intended for use at the end of the manufacturing line and during field installation, allowing fixture manufacturers and electrical contractors to verify proper LED functionality before commissioning.

The sequence continues until the device is provisioned into an AleoBlue network. Once commissioned, the visual test will no longer activate on power-up.



Disclaimer: Bluetooth® radio signal and range is highly dependent on the sensor integration and installation method. It is recommended to conduct testing to verify range performance and ensure proper sensor installation. Ensure that no enclosure or objects are obstructing the radio signal, as these may impact communication reliability.

ALEOBLUE WIRELESS BLUETOOTH® CONTROLS

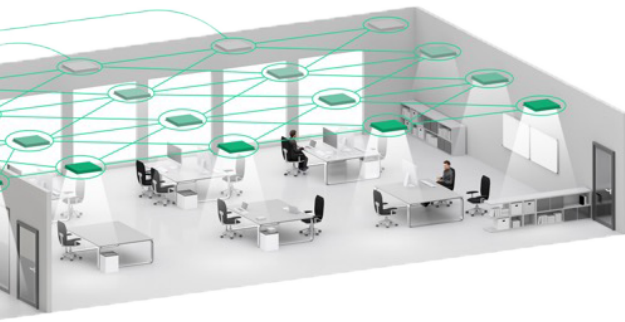


The AleoBlue is a complete solution for managing connected lighting systems using a Bluetooth® NLC lighting network. This enables seamless implementation of simple to complex lighting control scenarios without specialized training or lighting control engineering expertise.

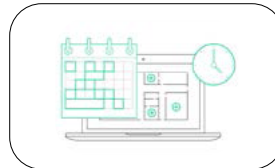
DLC NLC Qualified.

FEATURES AND BENEFITS

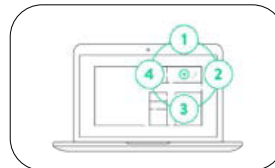
- Lighting Zones / Grouping
- Manual control of individual lights
- On Power up Behavior
- Zone Linking
- High-End Trim
- LLLC (Luminaire Level Lighting Controls)
- Energy Monitoring
- Optimized Energy Consumption
- Less Hassle with On-Site Adjustments
- More Savings
- Increased Safety
- More Flexibility
- 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



SCHEDULING



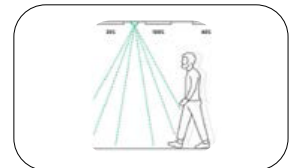
SCENES



HIGH / LOW END TRIM



OCCUPANCY SENSING



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



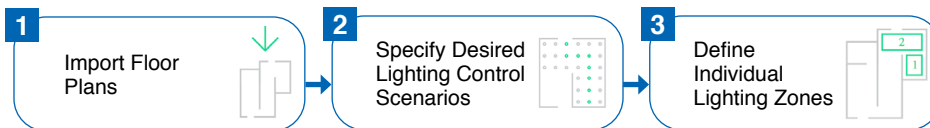
No single point of failure (no central device)



Compatibility with a widely available devices (smart phones & tablets – both with Bluetooth® 4.0 and Bluetooth® 5)

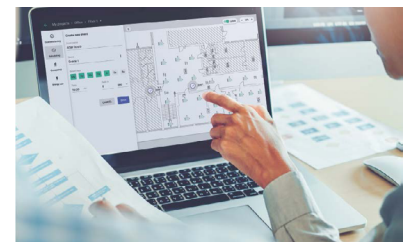
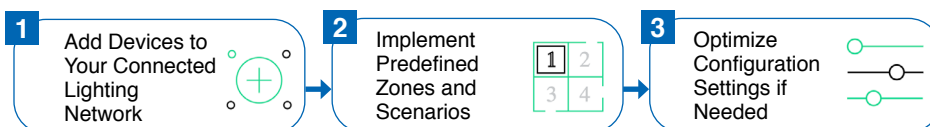
PLANNING

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.



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.



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.

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