ARISTA **ALC-DH-BT**

Daylight Harvester Sensor

INSTALLATION INSTRUCTIONS

COMPLIANCE

This device complies with part 15 of the FCC. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Important note: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user 's authority to operate the device.

This Class B digital apparatus complies with ICES-005 of Canada.

WARNINGS/SAFETY

⚠ WARNING

Risk of Fire or Electric Shock

- Turn OFF power at circuit breaker or fuse and test that the power is OFF before wiring.
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are not sure about any part of these instructions, consult a qualified electrician.
- Use this device only with copper or copper clad wire.
- INDOOR USE ONLY

NOTICE

Dispose of product per local regulations on the disposal of lithium batteries.

NOTE: To be used with Class II low voltage wiring.

RATINGS

Voltage - 24 VDC, 30mA or Lithium CR123A 3 V Battery

Dry Location

Ambient Operating temperature - 0° - 55° C (32° - 131° F)

Wiring Terminals are suited for 16-22 AWG wire with a maximum length of 200 ft. 18 AWG solid wire is recommended.

PRODUCT OVERVIEW

The ALC-DH-BT is a light sensor designed for use with the ARISTA Lighting Controls System by Intermatic. This sensor is used for daylight harvesting applications where energy conservation is essential. This sensor can be used for both open loop and closed loop applications.

NOTES: For Programming instructions please visit www.Intermatic.com. The Arista App is available on Apple App and Google Play stores. (Search for Arista by Intermatic)

WIRING DIAGRAM AND MOUNTING OPTIONS

Select from the mounting options below using protective eye wear for the entire installation. To wire the sensor to the ARISTA controller, follow the wiring diagram seen in Figure 1 (communication wire is optional). If you are not wiring the sensor, insert battery and mount the sensor.

NOTE: If using battery, make sure the switch is in the Battery position, If wired to controller terminals, select 24VDC switch position.

Wire from Terminal on ARISTA Controller	To Terminal on Occupancy Sensor
24 VDC	24 VDC
COM (Common)	COM (Common)
+PUR (Analog Input)	AO (Analog Output)

NOTE: Wired units must be powered from Intermatic ARISTA controllers.

Option 1 - Spring Mounting (see Figure 3)

1. Drill 3 1/2" hole in the location that the control will be mounted.
2. Pull both springs towards the center of the sensor to allow for them to pass through the 3 1/2" - 4" hole.
3. Slowly push up the sensor allowing the springs to grab the inside if the hole securing it to the ceiling. Refer to Figure 3.

Option 2 - Mount to a square to round drywall ring (see Figure 4)

NOTE: this will require the use of the surface mount adapter

1. Remove pre-attached springs from the base unit by gently squeezing the spring to allow for it to get by the molded posts and slide it out.
2. Install 8/32 screws into the box leaving approximately 1/4" to 3/8" of space between ring and screw head.
3. There is a plastic housing that is mounted to the electrical box and then the sensor can be inserted and twisted to lock in place.
4. Tighten the screws till snug. (Do not over tighten.)

Option 3 - Mount to a 4" octagon box (see Figure 5)

1. Remove pre-attached springs from the base unit by gently squeezing the spring to allow for it to get by the molded posts and slide it out.
2. Loosen screws on the octagon box.
3. Install the sensor on the screws and twist into place.
4. Tighten the screws till snug. (Do not over tighten.)

NOTE: After unit is secured, snap the finishing cover to the unit to complete installation.

NOTE: An optional lens cover is included to help block areas that should not be included in measuring the light level.

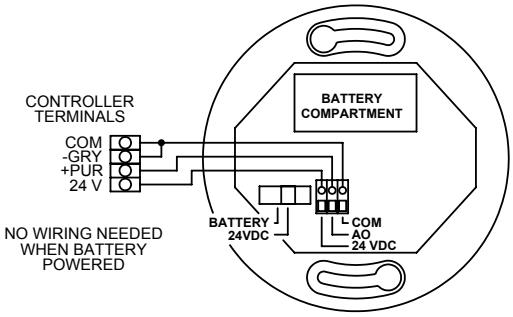
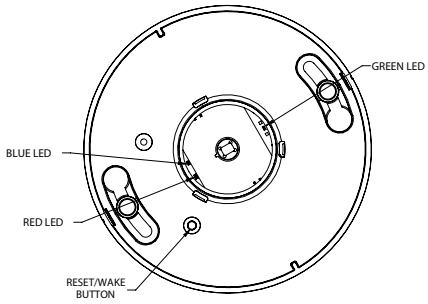


Figure 1



SHOWN WITHOUT COVERS

Figure 2

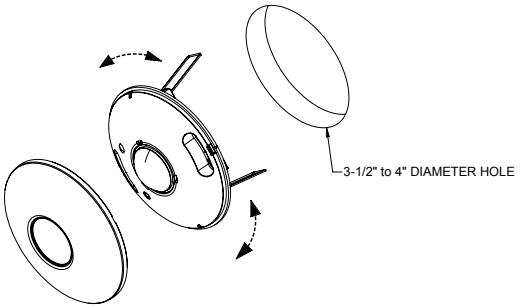
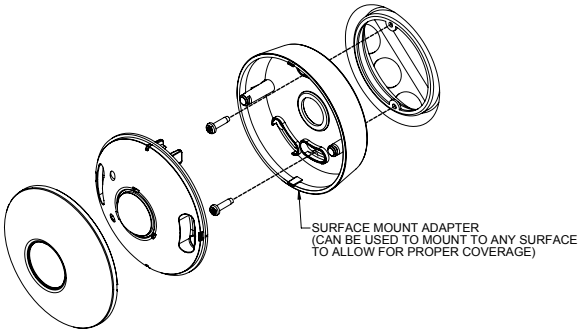
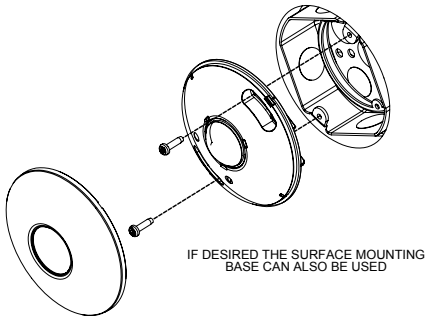


Figure 3



SQUARE TO ROUND RING

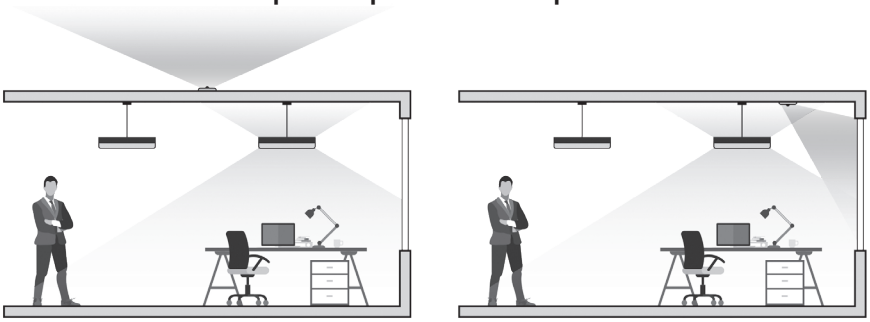
Figure 4



OCTAGON ELECTRICAL BOX

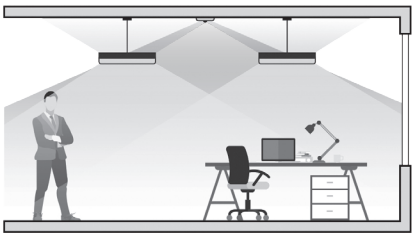
Figure 5

Open Loop Sensor Examples



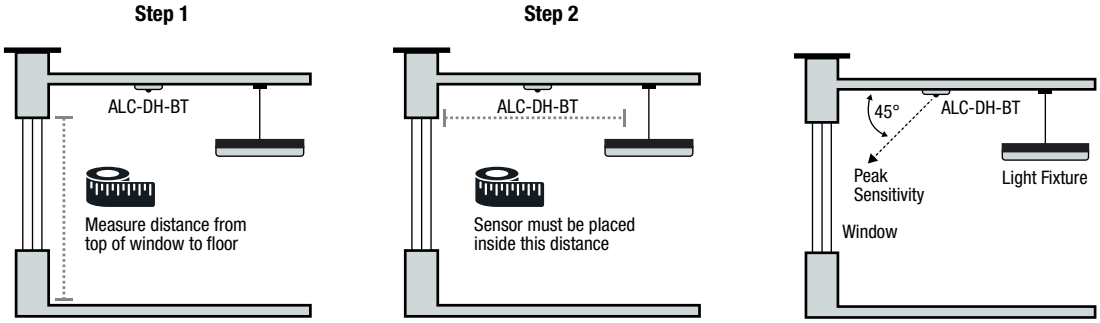
NOTE: Open-loop systems measure only the incoming daylight, not the contribution from the luminaire(s). The photosensor should not see any artificial light and therefore it should be mounted near a window or skylight, facing away from the controlled artificial lighting. Because there is no feedback, it is an open loop.

Closed Loop Sensor Example



NOTE: Closed-loop systems measure the combined contribution to the room's light level from both daylight and the artificial lighting system. Because the photosensor reads the artificial lighting system's light output, it "sees" the results of the controller's adjustment and may make further light level adjustments based on this feedback, creating a closed loop.

Closed Loop Sensor Placement Guidance



TROUBLESHOOTING

Symptom	
During installation, the ARISTA Mobile App can't find the sensor when scanning for devices in the area	**24 V Powered** • Verify power is supplied to the sensor • Verify the switch on the back of the sensor is in the 24 V position • Make sure the Blue LED is blinking slowly. If not, the sensor could already be provisioned into another area. If this is incorrect, factory reset the device by pressing and holding the reset button for more than 10 seconds • Make sure the phone/tablet and sensor are within 30 feet of each other • Verify Bluetooth Radio of programming device is turned ON **Battery Powered** • Verify the switch on the back of the sensor is in the battery position • Verify good battery; and good installation of battery • Make sure the Blue LED is blinking slowly. If not, the sensor may be asleep (to conserve battery). To wake up a sleeping sensor, press the button (for less than 5-seconds). • Verify Bluetooth Radio of programming device is turned ON
Sensor's Red LED is blinking once every 30 seconds	**Battery Powered** • Replace battery
Sensor's Red LED is on solid	**24 V or Battery Powered** • Replace Sensor

LIMITED WARRANTY

Warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased or (b) completing a warranty claim online at www.intermatic.com. This warranty is made by: Intermatic Incorporated, 1950 Innovation Way, Suite 300, Libertyville, IL 60048.

For additional product or warranty information go to: http://www.Intermatic.com or call 815-675-7000.