

## ALC4-R 4-Channel 0-10 V Lighting/ **Plug Load Controller**



### **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 quarantee 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.

#### **OVERVIEW**

The ALC4-R 4-Channel controller allows for each channel to be independently controlled via schedule, sensor, or combination of the technologies to provide even greater energy savings. Each channel can be configured to work as either 0-10 VDC for dimming applications, or as ON/OFF for plug load or other non-dimming application needs. These settings will be available via the ARISTA app.

#### WARNINGS/SAFETY

### WARNING

Risk of Fire or Electric Shock

- Disconnect power at the circuit breaker(s) or disconnect switch(es) before installing or servicing.
- Installation and/or wiring must be in accordance with national and local electrical code requirements.
- Only use copper conductors rated 105°C minimum
- Battery is not user replaceable.
- Do NOT use timer to control devices that could have dangerous consequences due to inaccurate timing such as sun lamps. sauna, heaters and slow cookers.
- Class 1 connections shall be torqued to a minimum of 10.6 lb-in.
- Class 2 connections shall be torqued to 4.5 lb-in.
- Cover should be installed at all times when not servicing.

### NOTICE

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

#### Ratings1

Operating Voltage	120-277 VAC
E-Ballast/ Magnetic Ballast	16 A, 120-277 VAC
Resistive	20 A, 120-277 VAC
General Purpose	20 A, 120-277 VAC
Tungsten	12.5 A, 277 VAC
Motor	1/2 HP, 120 VAC; 1 HP, 240 VAC
Ambient Operating Temperature	0° to 55° C (32° to 131° F)
Dimensions	8.2" H x 8.2" W x 2.8" D

#### For indoor use only

<sup>1</sup>The ALC4-R is suitable for plenum use. ^1 Type 1 action, operating control, PD2 pollution

degree, Impulse voltage 4000V.

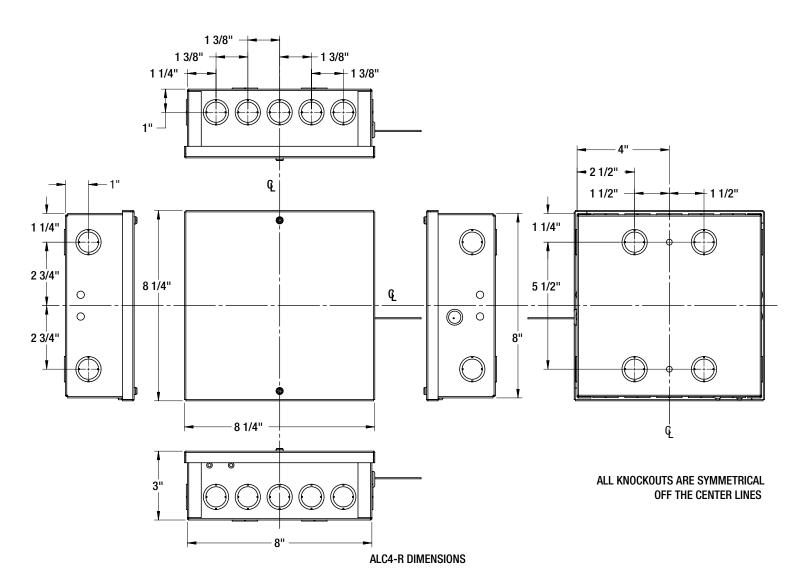
Class 1:0-10VDC output = 50mA per channel

Class 2: 24 VDC = 290mA Total

### **INSTALLATION (SEE WARNINGS BEFORE INSTALLING)**

- 1. Determine mounting location.
- 2. Determine and remove proper knockouts for installation.
- 3. Install proper fittings for installation adhering to all local codes.
- 4. Connect all input and output wiring (See wiring diagrams for examples).
  - a. Be sure to keep all Class 1 and Class 2 wiring separated.
- 5. Install the included antenna.
- 6. Turn power ON to the controlling circuit.
- 7. Verify blue LED is flashing and all connected loads are ON.
  - a. Green Load indicators and loads should turn ON and OFF by manual button presses.
- 8. Refer to programming instructions.

**NOTE:** 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)

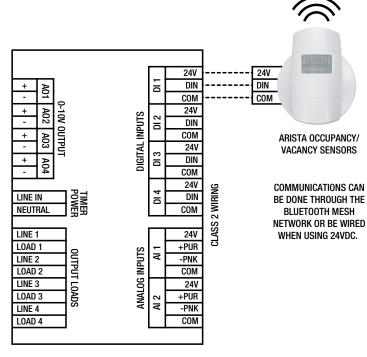


NOTE: Bluetooth Operations have a maximum range of 100'

0-10V LIGHTING CONTROL

#### **ALC4-R CLASS 1 WIRING DIAGRAM UNSWITCHED LINE** NEUTRAL **CHANNEL 1 POWER SOURCE NEUTRAL** 24V 0-10V DIN DIMMING **DIMMING** COM LIGHTING WHT 24V LOAD 0-10V 0UTPUT BLK DIN A03 COM 24V DI 3 DIN COM **CHANNEL 2 CLASS 2 WIRING** 24V **POWER SOURCE** <u>D</u> DIN **NEUTRAL NEUTRAL** COM LINE 1 24V NON-DIMMING LOAD 1 +PUR LIGHTING WHT LINE 2 -PNK LOAD COM **BLK** LOAD 2 LINE 3 24V ALL OUTPUTS CAN BE LOAD 3 +PUR -PNK LINE 4 **CONFIGURED FOR EITHER** LOAD 4 COM PLUG LOAD CONTROL OR

# **ALC4-R DIGITAL INPUT WIRING DIAGRAM**

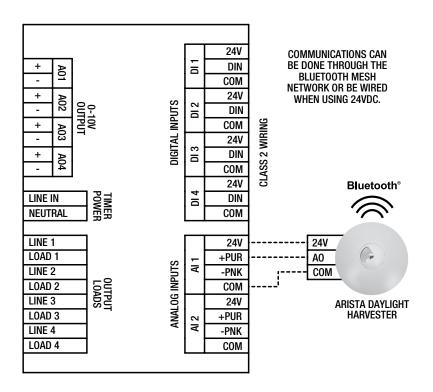


Bluetooth®

Terminal	Description
COM	Connect to COM (Common) from switch/sensor
DIN1 or DIN2	Connect to DO (Digital Output) from switch/sensor
24 V	Connect to 24 V (Power) from switch/sensor

Note: Maximum distance <= 200' with a minimum wire size of 24 AWG; maximum wire size of 16 AWG.

## **ALC4-R ANALOG INPUT WIRING DIAGRAM**

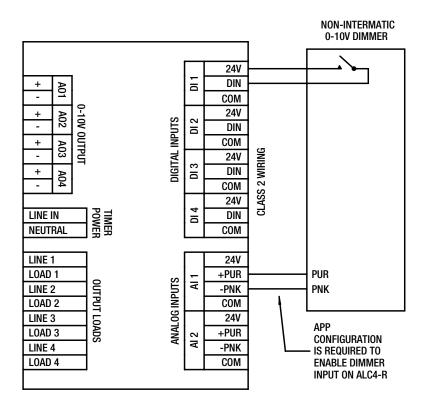


Terminal	Description
COM	Connect to COM (Common) from sensor
-PNK	Connect to pink 0-10 V analog output wire from sensor (Not needed when using ARISTA ALC-DH-BT Daylight Harvester)
+PUR	Connect to AO (Analog Output) from sensor
24 V	Connect to 24 V (Power Input) for sensor

Note: 1. Maximum wiring distance <= 200' with a minimum size of 24 AWG; maximum size of 16 AWG.

2. Communications can be done via Bluetooth or wired when using 24 V installations and ARISTA ALC-DH-BT Daylight Harvesters.

## **ALC4-R 3RD PARTY 0-10V DIMMER WIRING DIAGRAM**



Terminal	Description
-PNK	Connect to Pink 0-10 V wire from Dimmer
+PUR	Connect to Purple 0-10 V wire from Dimmer
DIN1 or DIN2	Connect switch leg side of Dimmer (APP configuration required for DIN2)
24 V	Connect to power side of Dimmer

**Note:** 1. This approach utilizes both Digital and Analog Inputs on the ALC4-R.

- 2. When using a non-Intermatic dimmer switch, daylight harvesting will need to be installed as a wireless configuration.
- 3. Additional configurations may be required in the App depending on switching configurations.

