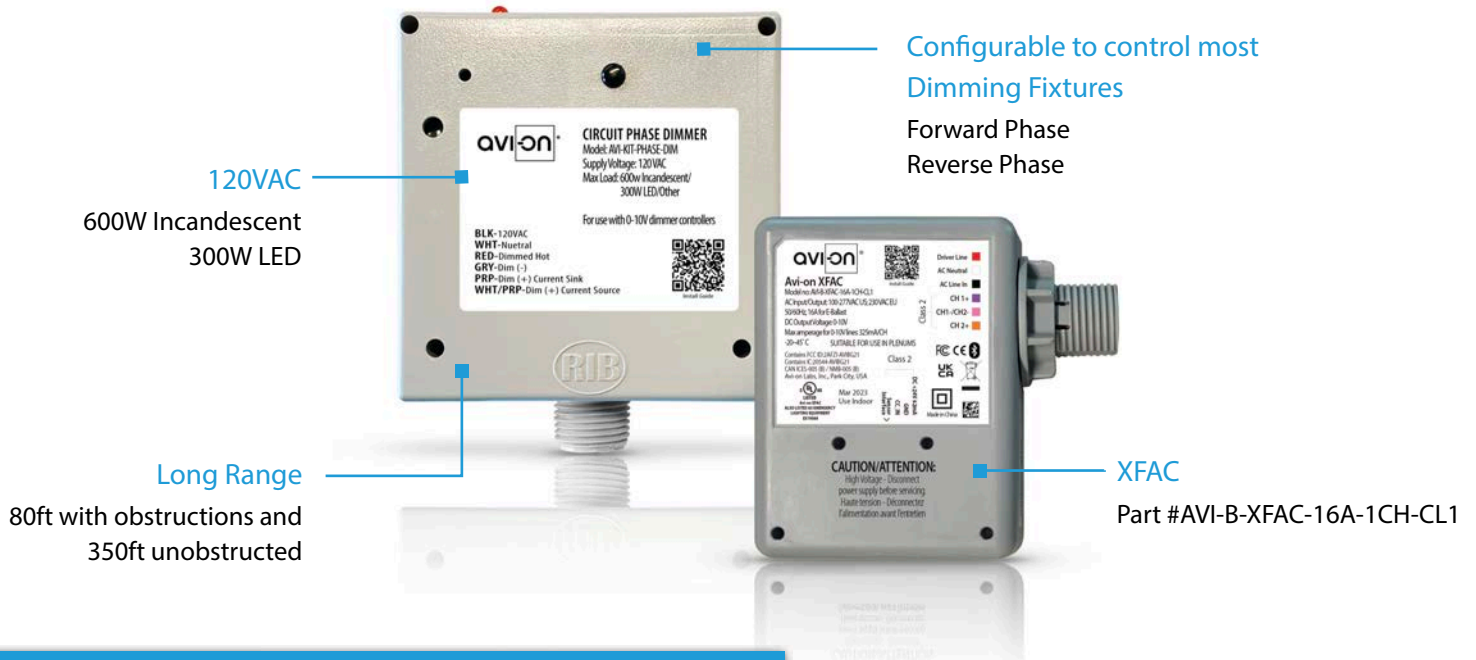


# 120V Circuit Phase Dimming Kit

## Circuit Level Phase Dimming with Avi-on Networks



### PRODUCT OVERVIEW

Control forward or reverse-phase dimmable light fixtures using the AVI-KIT-PHASE-DIM. The kit includes an Avi-on XFAC network node with 0-10V output and a 0-10V input 120V phase dimmer. Easily installed in a single 2X4 or 4x4 box. Consult maximum load ratings for sizing fixtures per dimmer. Note that LED loads are only recommended (and warranted) up to 300W, but depending on the specific fixture, it may be possible to add more.

### ORDERING INFORMATION

Part Number	Supply Voltage	Channels	Max Load
AVI-KIT-PHASE-DIM	120 VAC	Single	600w Incandescent/ 300W LED/Other

To order please contact Avi-on sales at **(877) AVION-US**, (877) 284-6687 or [prosales@avi-on.com](mailto:prosales@avi-on.com) for information on becoming an Avi-on partner and order details.

Project	Location/ Type

## SPECIFICATIONS

<b>Input Voltage:</b>	120 VAC	<b>Radio Frequency:</b>	2.4GHz
<b>0-10V Dimming:</b>	Load Current Sink	<b>Wireless Standard:</b>	BLE 4.2 with Mesh
<b>Load Capacity:</b>	1 W min, 600W Max Incandescent/ Halogen Recommended 300W Max LED and Other	<b>Point to Point Range*:</b>	80ft with obstructions and 350ft unobstructed
<b>Size:</b>	4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple (102mm x 102mm x 46mm)	<b>Warranty:</b>	5 years; 10 years optional
<b>Mounting:</b>	External or internal box mount	<b>Regulatory:</b>	FCC: 2AFZI-AV11010 B IC: 20544-AV11010 B BQB: D031801, DID: 86303 UL 916, C-UL, NEMA 1
<b>Weight:</b>	8oz (16g)		
<b>Operating Temperature:</b>	-30F to +122F (-34C to +50C)		
<b>Storage Temperature:</b>	-40F to +185F (-40C to +85C)		
<b>Humidity Rating:</b>	95% non-condensing		

*\*When communicating through the mesh, range is essentially unlimited (5000ft+)*

## INSTALLATION AND CONFIGURATION

- 1) Verify that the connected load does not exceed the device ratings.
- 2) Verify the dimming type of the connected fixtures and set the Forward/Reverse Phase DIP switches to match the fixture type being controlled. Do not mix different fixture types on the same dimmer. **IMPORTANT:** Leave the Current Source 0-10V DIP switch set to OFF.
- 3) Install the XFAC and Phase Dimmer in a 4x4 or equivalent electrical box following local electrical code requirements. Connect the AC, DC power, and 0-10V Dimming wires as shown in the wiring diagram below. Cap off the Purple/White wire.
- 4) When configuring the XFAC in the Avi-on network, **Low End Trim must be set to 25%** to avoid potential fixture flicker and to ensure expected operation of wall stations, daylight harvesting, and sensors.
- 5) The unit contains a thermal protection cutoff. If the unit is overloaded, it will shut off and restart when it cools down. It is not rated for continuous overloading, however. Overloading can easily lead to premature failures and is not covered by warranty.

# DIMENSIONS & WIRING DIAGRAMS

Switch Settings		
Switch 1	ON	Leading Edge Dimming
Switch 1	OFF	Trailing Edge Dimming
Switch 2	OFF	Current Sink 0-10V

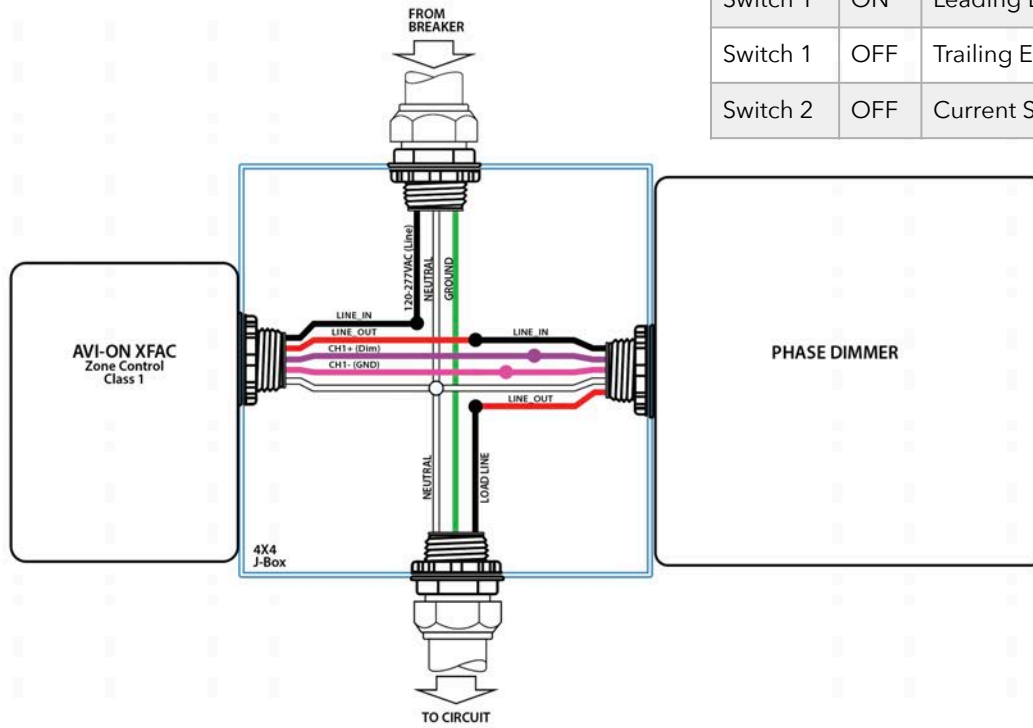


Figure 1. Wiring Diagram

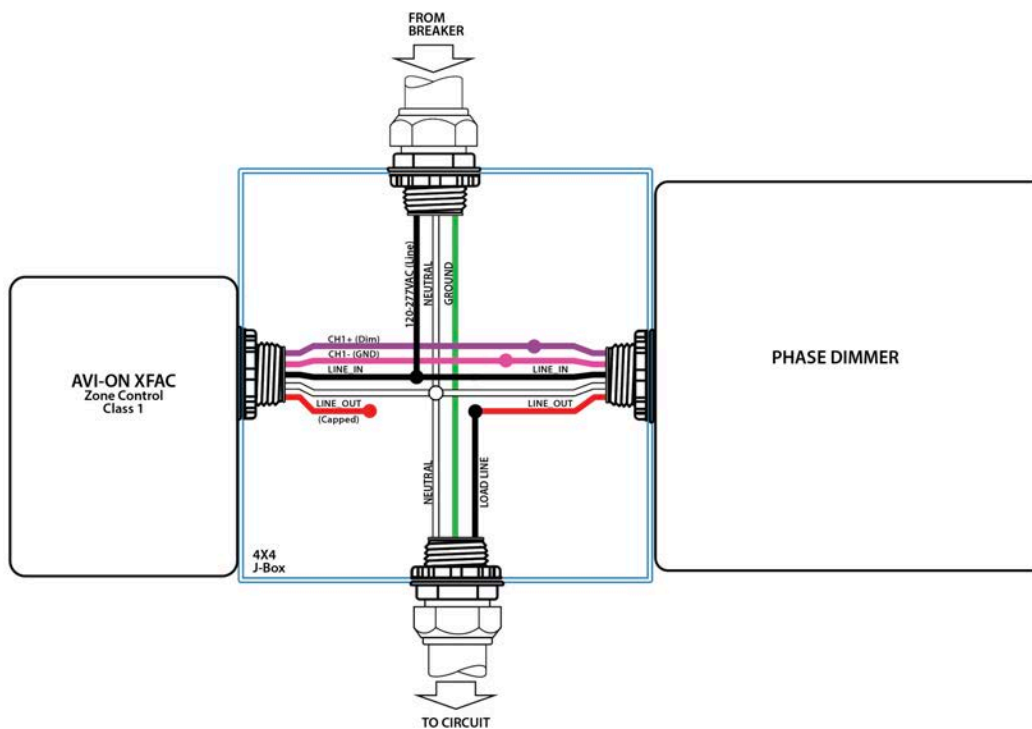


Figure 2. Wiring Diagram

# DIMENSIONS & WIRING DIAGRAMS

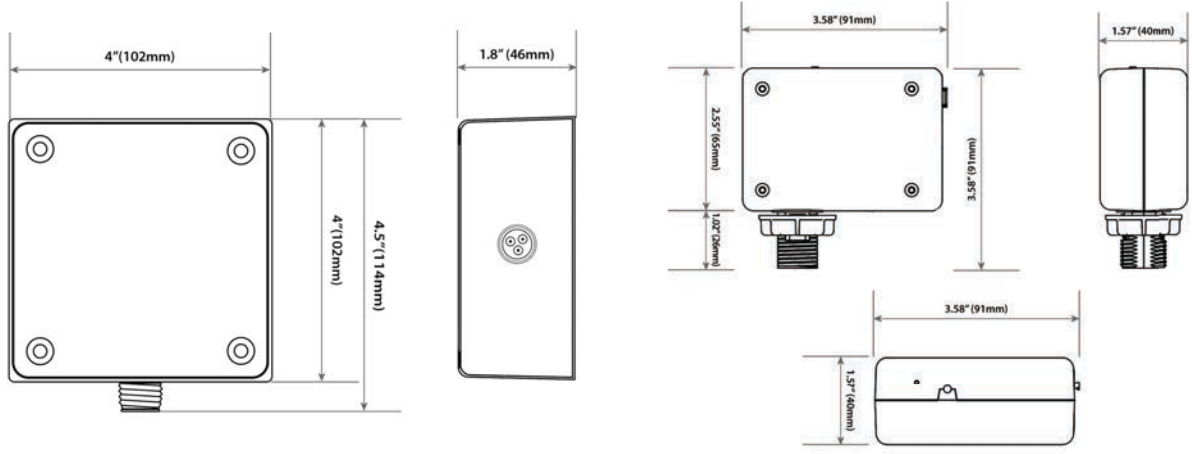


Figure 3. Dimensions

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