Product Specifications

Avi-on Dual-Tech Sensor

Non Bluetooth Dual-tech ceiling mount sensor from Avi-on

Both PIR & Ultrasonic

Avi-on dual-tech sensors utilize both PIR and ultrasonic detection

Simple Installation

Sensor is factory preset to allow for quick installation right out of the box

Customizable Settings

Lighting configuration managed through the Avi-on App and manual adjustments can be made through the sensor face

Enhanced Performance

Dual technology provides advanced detection that can offer enhanced performance in areas where a PIR sensor alone is insufficient

PRODUCT OVERVIEW

Avi-on dual technology sensors, which utilize both PIR and ultrasonic detection methods, can offer enhanced performance in areas where a PIR sensor alone is insufficient. For instance, in spaces with partitions that obstruct the line of sight to certain occupants, a PIR sensor alone may inadvertently turn off the lights when the room is still occupied. This sensor is analog and is intended to be used in conjunction with the analog sensor input of the AVI-XFAC-16A-1CH-CL1 Power Packs or AVI-SIM-12-24VDC-EA.

The Avi-on Dual-tech Ceiling Mount Sensor are powered by and send their signal to the XFAC (AVI-XFAC-16A-1CH-CL1) or Avi-on Sensor Input Module (AVI-SIM-12-24VDC-EA) with power supply (AVI-PSR20-277-24-150). Sensor is factory preset to allow for quick installation right out of the box in most applications. Lighting configuration should be done through Avi-on App. Manual adjustments can be made physically on the sensor face.

PIR Sensitivity
50%: sensor range is set to approximately half the widest range. Sensitivity to minor motion is increased within a smaller detection area.
100%: sensor range is set to maximum. Sensitivity to minor motion is decreased.

Power and Connection
The AVI-SEN-DUCM-24 can be powered by the 24VDC Aux port of the AVI-XPP-16A. Up to three (3) sensors may be powered from one XFAC. When used with the AVI-SIM-12-24VDC-EA, a separate 24DC power supply must be used such as the AVI-PSR20-277-24-150.

Trigger Mode:
The sensor has 6 different trigger options that can be applied by adjusting dip switches 2, 3, and 4.

Both: requires motion detection by the PIR and Ultrasonic sensor to trigger an event.

ORDERING INFORMATION

	Part Number	Name	Description
☐	AVI-SEN-DUCM-12-24VDC	Dual-tech Ceiling Mount Sensor	Dual-tech Non-Bluetooth Ceiling Mount Sensor

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

Project		Location/Type	

PRODUCT OVERVIEW (cont.)

Either: requires motion detection by only one sensor (PIR or Ultrasonic) to trigger an event.

PIR: requires motion detection by the PIR sensor to trigger an event. Output signal from the Ultrasonic sensor is ignored.

Ultrasonic: requires motion detection by the ultrasonic sensor to trigger an event. Output signal from the PIR sensor is ignored.
*It is recommended this setting is set to **Both**.*

Time Delay Adjustment
This is set by the factory to the appropriate default. Time delay adjustments and other sensor behaviors are set using the Avi-on platform on the XPP the sensor is connected to.

Ultrasonic Sensitivity Adjustment
Use a small slotted screwdriver to turn the trimpot. Min (-) setting is best for smaller areas and near doorways or heat sources to avoid false triggering. Max (+) setting is best for larger open areas. It is not recommended that this setting be changed from its default.

On/Off
There is a 40-second warm-up period when power is first applied to the sensor.
Before making adjustments, make sure office furniture is installed, lighting circuits are turned on, and HVAC systems are turned on. VAV (variable air volume) systems should be set to their highest airflow.

SPECIFICATIONS

Name	Avi-on Dual-Tech Ceiling Mount
Sensor Type	Dual tech (PIR / Ultrasonic) ceiling mount
Input Voltage	12 to 24 VDC
Power Consumption	40mA @12VDC 25mA @25VDC
AC to DC Power Supply	AVI-PSR20-277-24-150 class 2 power pack
PIR Sensor Range	1600 ft^2 (150 m^2)
Ultrasonic Sensor Range	900 ft^2 (85 m^2)

Part Number	AVI-SEN-DUCM-12-24VDC
Operating Temperature	-30° C to 70°C
Storage Temperature	-40° C to 80°C
Relative Humidity	90-95% non-condensing
Mounting	Ceiling mount up to 12 ft (3.7m)
Color	White
Warranty	5 years
Certifications	UL/cUL listed power pack

Case Dimensions (Excluding Wires)

Name	Width	Length	Height
Dual-Tech Sensor	4.3"(108mm)	4.3"(108mm)	1.6"(40mm)

Certifications

Type	ID
UL	E341446
cUL	E341446

DIAGRAMS

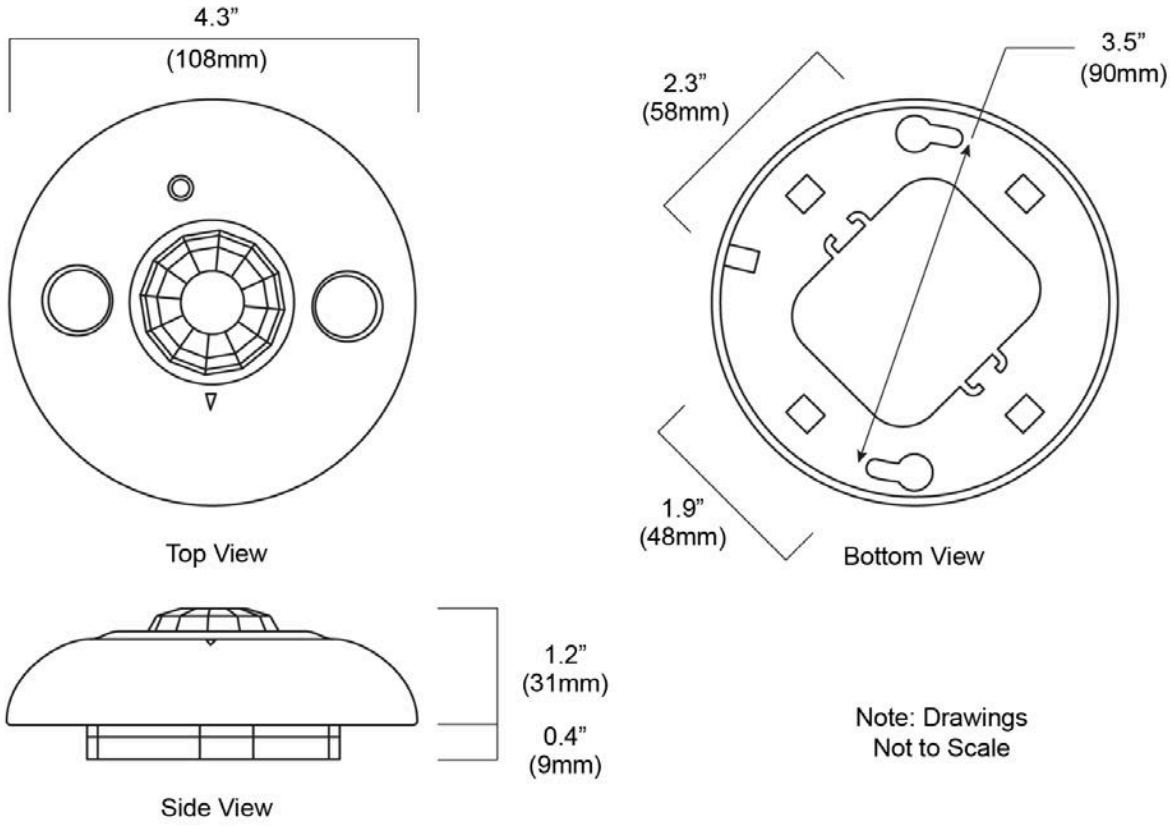


Figure 1. Sensor Dimensions

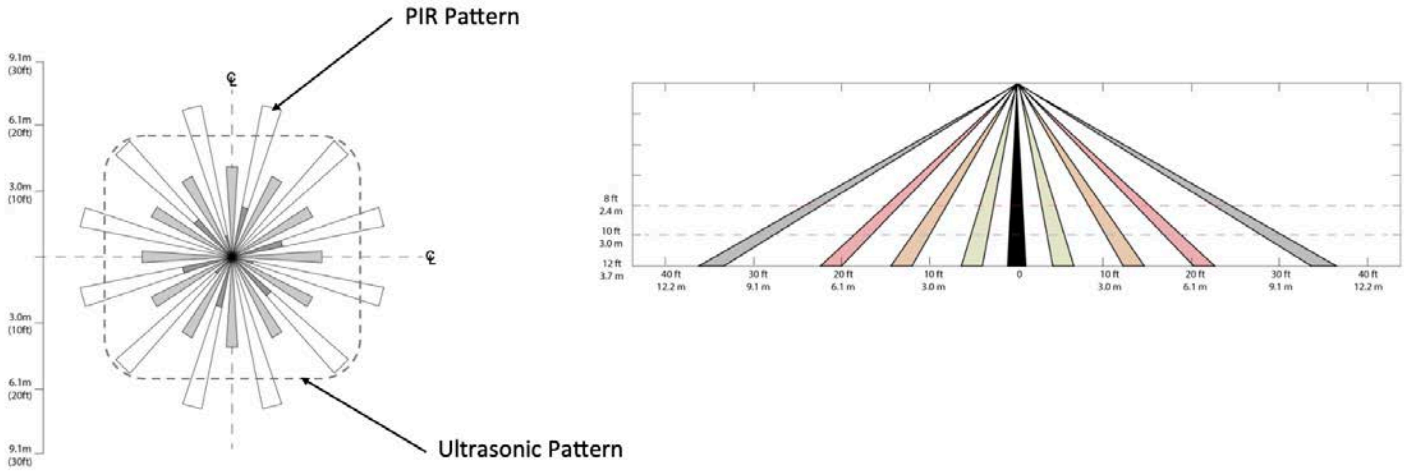


Figure 2. Ceiling Mount Coverage Area

DIAGRAMS (cont.)

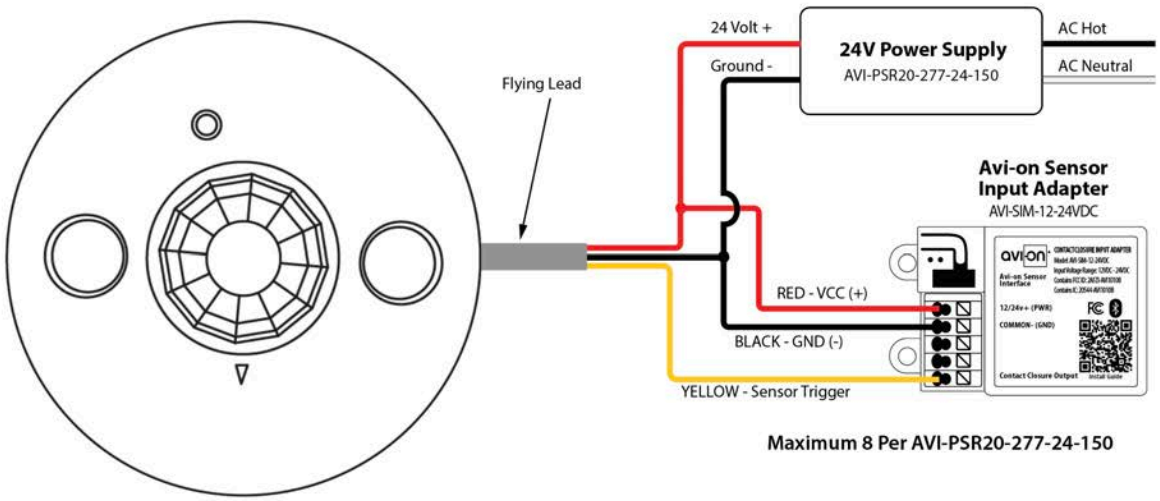


Figure 3. Wiring Diagram

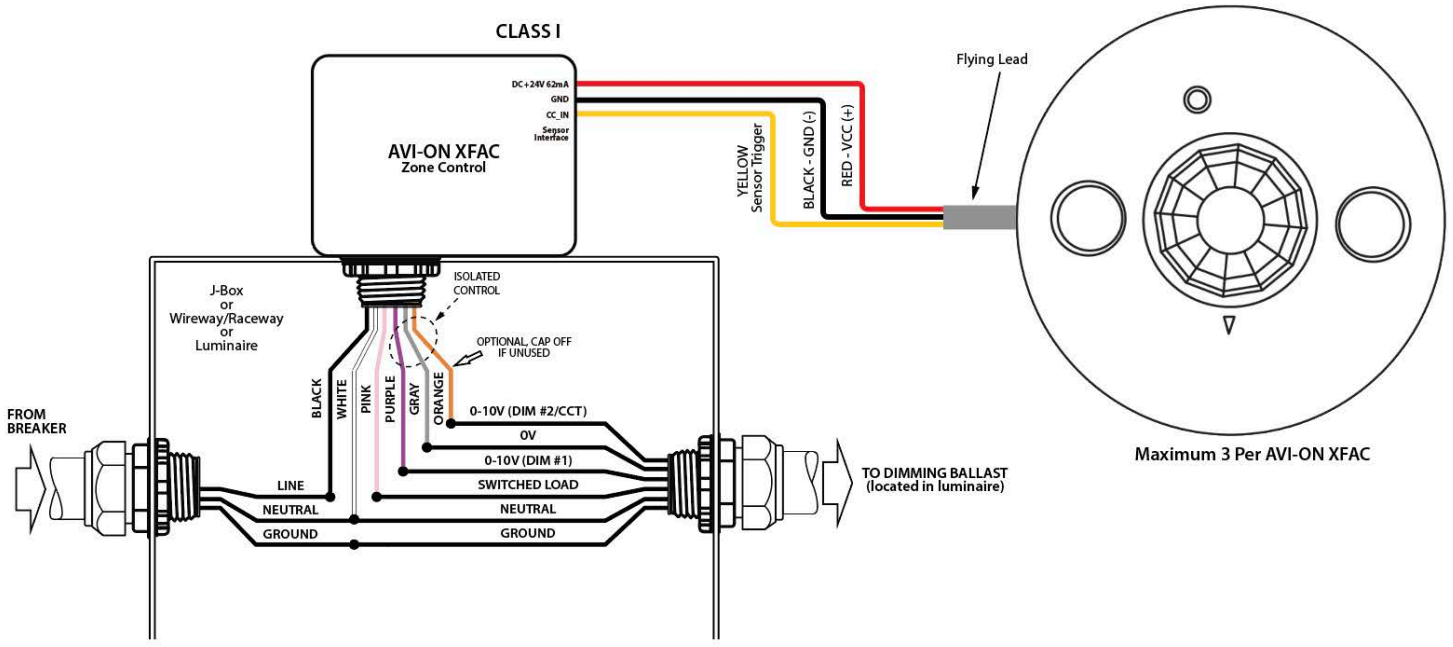
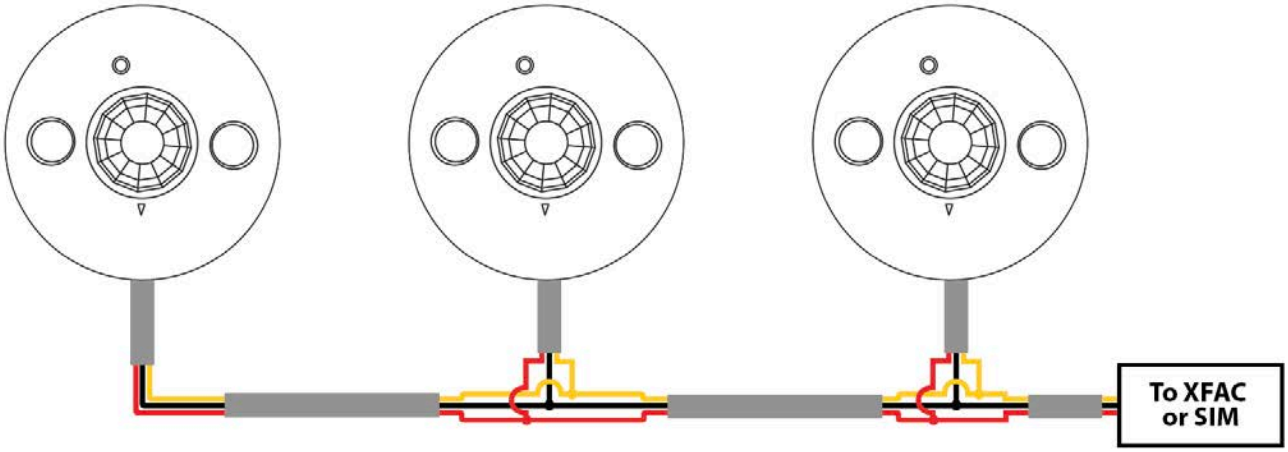


Figure 4. Wiring Diagram

DIAGRAMS (cont.)

Series



Parallel

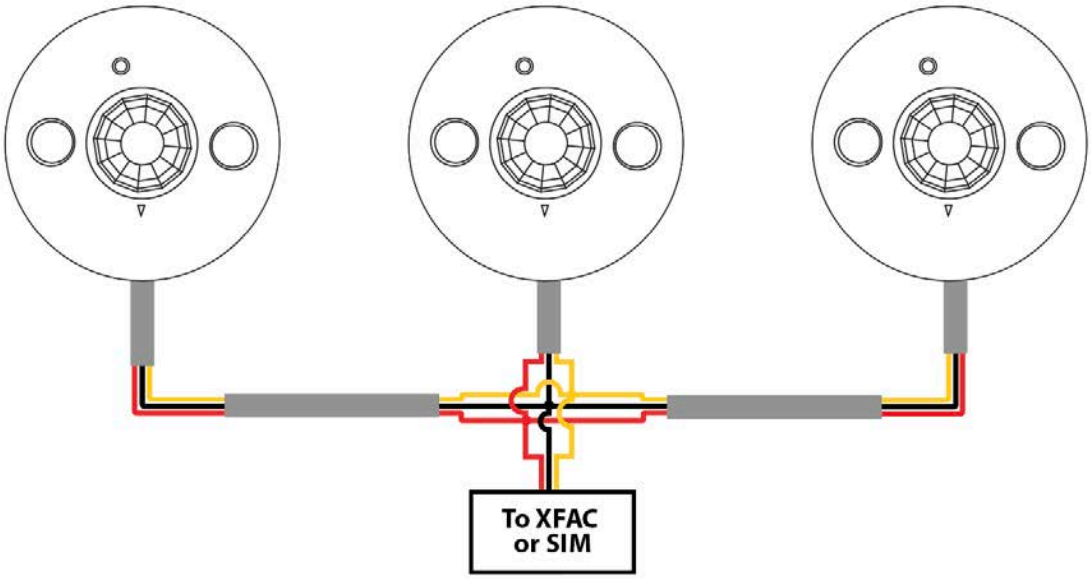


Figure 5. Series and Parallel Wiring