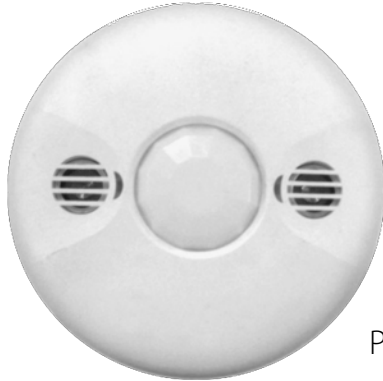


Avi-on Dual-Tech Sensor



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

Avi-on dual technology sensors, which use both PIR and ultrasonic detection methods, can provide improved performance in areas where a PIR sensor alone will not suffice. For example, areas with partitions that obscure line of sight to some occupants, may turn lights off when the room is occupied. This is an analog sensor used in conjunction with the analog sensor input of the AVI-XPP-16A Power Packs or AVI-SIM-24

The Avi-on Dual-tech Ceiling Mount Sensor are powered by and send their signal to the External Power Pack (AVI-XPP-16A) or Avi-on Sensor Input Module (AVI-SIM-24) with power supply (AVI-PSR20). 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.

Features

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 DUCM 24 can be powered by the 24VDC Aux port of the AVI-XPP-16A. Up to four (4) DUCM may be powered from one XPP. When used with the AVI-SIM-24, a separate 24DC power supply must be used such as the AVI-PSR20

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.

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.

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.

Parts and Ordering

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

Specifications

Name	Avi-on Dual-tech Ceiling Mount
Sensor Type	Dual tech (PIR / Ultrasonic) ceiling mount
Input Voltage	24VDC
Power Consumption	15.5mA
AC to DC Power Supply	AVI-PSR20-277-24-150 class 2 power pack
PIR Sensor Range	44ft / 1600 ft ² / 360° coverage
Ultrasonic Sensor Range	30ft x 30ft / 900 ft ² / 360° coverage
Time Delay	5 sec to 30 min

Part Number	AVI-SEN-DUCM-24
Photocell Sensitivity	10-150 fc (107-1615 lux)
Operating Temperature	-0° to 55°C
Storage Temperature	-10° to 60°C
Relative Humidity	95% non-condensing
Mounting	Ceiling mount
Color	White
Warranty	5 years
Certifications	UL/cUL listed power pack

Case Dimensions (Excluding Wires)

Name	Length (inches)	Width (inches)	Height (inches)
Dual-tech Ceiling Mount Sensor	1.38	4.52	4.52

Certifications

Type	ID
UL	E350121
cUL	E350121

Product Diagrams

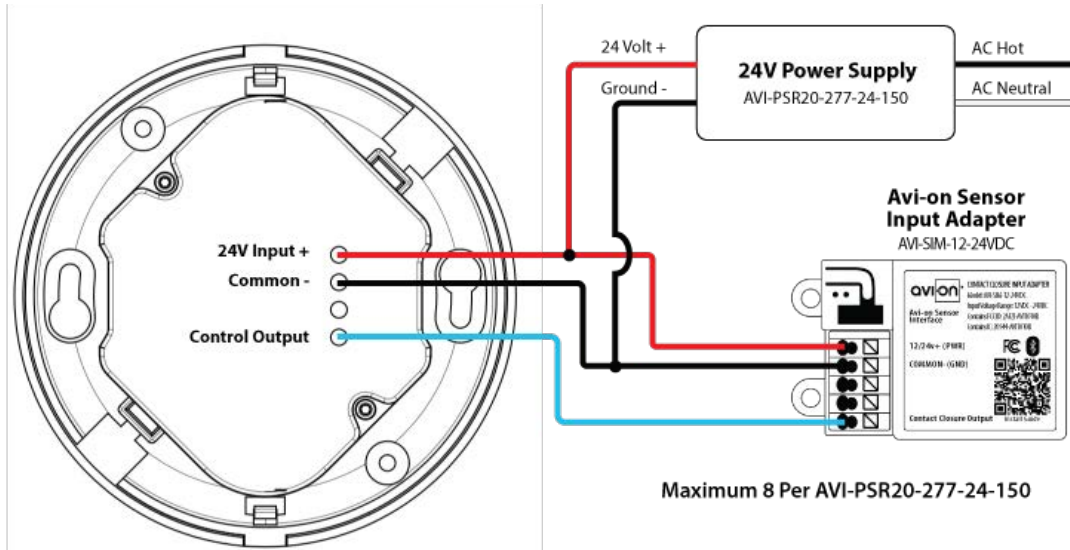


Figure 3. Wiring Diagram

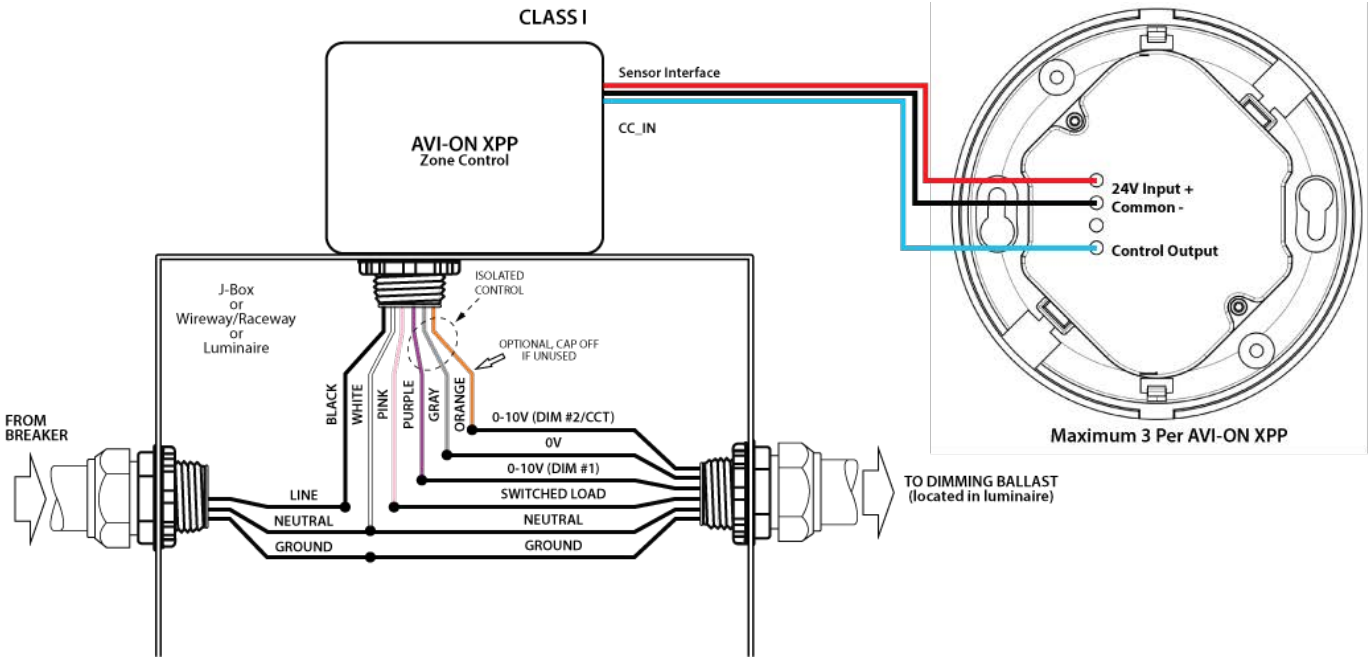


Figure 4. Wiring Diagram

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