



# **Product Overview**

The AX-OC range of occupancy sensors are passive infra-red sensors for monitoring occupation through body heat. Detection of occupation will activate the internal relay. The 230Vac Versions have mains rated volt free contacts, whereas the low voltage units can be used to switch a BMS system.

# **Features**

- Flush, Surface and Wall mount options
- Volt free contact output.

- Compatible with many BMS products
- Flush unit supplied with 3 metres of cable

# **Product Specifications**

Sensor type:		Passive Infra-Red Detector		
Field of View:	Flush & Surface	360 deg		
	Wall	110 deg		
Coverage:	Flush & Surface	7 metres diam max. (at 2.7m height)		
	Wall	upto 12 metres.		
Power Supply:	OC-24-x	12 or 24Vac/dc +/- 15%		
	OC-240-x	240vAC 50/60hZ +/-15%		
Relay:		SPDT		
<b>Contact Rating:</b>	OC-24-x	1A resistive @50Vac/dc		
	OC-240-x	8 A @240Vac resistive (3A ind) or 8 H.F. Ballasts		
<b>Electrical Connections:</b>		+V, 0V, Relay common, NO		
Ambient Temp. Range:		0 to +50°C		
Materials:		Flame retardant ABS, polypropylene		
Conformity:		CE marked, EMC, LVD.		
Country of Origin:		Italy		
Order Codes				
AX-OC-24-F	-	Flush Mounted Occupancy sensor 12/24Vac/dc		
AX-OC-24-S	-	Surface Mounted Occupancy sensor 12/24Vac/dc		
AX-OC-24-W	-	Wall Mounted Occupancy sensor 12/24Vac/dc		
AX-OC-24-C	-	Ceiling Mounted Occupancy Sensor 12/24Vac/dc		
AX-OC-240-F	-	Flush Mounted Occupancy sensor 240Vac		
AX-OC-240-S	-	Surface Mounted Occupancy sensor 240Vac		
AX-OC-240-W	-	Wall Mounted Occupancy sensor 240Vac		

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AX-OC Occupancy Sensors

### Installation

#### Siting:

The AX-OC should be sited so that the detection pattern (shown below) captures the normal occupancy positions inside the room. You should also follow the following guidelines.

- Avoid direct sunlight entering the sensor
- Do not sight within 1 metre of any lighting
- Do not position sensor within 1 metre of ventilation or forced air heating.
- Do not position sensor on a vibrating surface

#### **Flush Mounting**

The AX-OC-F should be installed in a ceiling tile through a 41mm hole, using the plastic clips supplied. Ensure the tile is is sufficiently strong to take the weight of the sensor and that there is sufficient clearance in the ceiling void.

#### Surface Mounting

The AX-OC-S has fixing lugs to allow mounting to metal boxes or BESA boxes and has side knockouts for cable entry. also has a bracket for ceiling or wall mounting where anangle is required.

#### Wall Mounting

The AX-OC-W has a fixing bracket to enable it to be mounted onto the wall, or alternatively you can mount the unit directly to the wall using using the screw holes inside the back cover.

Wall Mount

# Configuration

# **Setting Time Delay**

The occupancy timing has 4 selections 4, 8, 16 and 32 minutes -selectable via dip switches.

# Dimensions

# **Detector Pattern**

#### **Flush & Surface Mount**

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# Connections

#### Wiring: The flush units come with 3m of 4 core cable The surface and wall units have a 4 way terminal block -Red +VMains Voltage -Brown 240V Low Voltage -Black 0V -Blue Neutral -Green Relay Common -Black Relay Common -Yellow N.O. Contact -Black N.O. Contact

# **Installation and Timing Control**

1/ Connect wiring to terminal block as indicated

2/Adjust time switch positioning to T1 & T2 off and T3 & T4 to required time delay

3/ Fix unit in position

4/ Power up the unit

5/ Wait 10 mins for the unit to stabilise

6/ Set T2 (test mode) switch to on and ensure the unit switches off when there is no movement, and switches on when movement is detected in the detection zone

7/ Set T2 (test mode) to off

# Time Delays Switch positions (switch 1 should be off at normal sensitivity)

4 Minutes	2 off	3 on	4 on
8 Minutes	2 off	3 on	4 off
16 Minutes	2 off	3 off	4 on
32 Minutes	2 off	3 off	4 off

## **Recommended delays**:

Office low traffic	16 minutes
Office high traffic	8 minutes
Classroom	8 minutes
Corridor	8 minutes

# Sensitivity

The system should function normally when installed as directed. In exceptional circumstances where more sensitivity is essential Switch 1 can be put in the ON position. Note this may make the system susceptible to false triggering caused by, for example, extreme air movement.

# **Fault Finding**

1/Relay will not close	Check power is on, if LED's flash check photocell setting
2/ Relay goes on and off every 10 seconds	Time delay is in Test Mode
3/ Relay goes off when i am working but comes on	Re-position sensor or increase time delay or change sensitivity
when i move	setting
4/ Relay goes on and off every 30 seconds	Adjust photocell
5/ For IR detection only	ensure RV1 and RV2 are kept fully clockwise
6/ The yellow/green LED's flash	ensure RV1 and RV2 are kept fully clockwise

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