

IR Quattro COM2-24

Presence Detector



The IR Quattro COM2-24 is a low voltage passive infrared presence detector setting a new standard in lighting and HVAC control with minimal movement required for human presence detection. Lighting is controlled in relation to both the presence of motion and ambient light levels. The HVAC output (isolated normally open and normally closed dry contacts) are signaled in relation to only the presence of motion. It features a single pyroelectric detector with a high performance lens system creating 1,760 switching zones. Operational choices of manual on or auto on with either momentary or maintained switch options. Included light level feature provides the option to turn lights off when sufficient daylight is present for additional energy savings. The innovative mechanical reach setting enables the designer with a precise method of controlling lighting zones by means of optimizing the sensors detection reach without compromising sensitivity providing true precise presence detection in the desired detection zone. The convenient "COM-Link" feature enables multiple sensors to link together via the communication link for peer to peer grouping achieving expanded detection zones with control set up functions set at only one primary sensor for the entire group. Mounting options provide for 4" Square box, 4" Octagon box, Round 3.0 Mud-Ring or directly to the ceiling with quick mount spring tabs. The available service and user wireless remotes provide simplified commissioning and occupant convenience.

The Control PRO group of presence detectors are available in multiple presence detection technologies for the control of heating, ventilation and air-conditioning as well as lighting (as in the COM2-24 versions) and optional 1-10 volt dimming and daylighting options (in the DIM-24 versions).

Applications

The typical application is for offices, schools and other indoor public building spaces.

Project Name:
Location:



IR Quattro COM2-24 Specifications

Item No.	64420 IR Quattro COM2-24
Accessories	65300 RC 3 service remote 65320 RC 4 user remote 65330 WGC wire guard cage
Voltage	18-24 VDC/VAC (34 mA)
Load Rating	control output - 1 A @ 30 VAC/VDC HVAC dry contacts - 1 A @ 30 VAC/VDC
Sensing Technology	passive infrared (PIR)
Time Delay Setting	control output - 30 sec. - 30 min. pulse mode (approx. 2 sec. 'ON' 8 sec. 'OFF') IQ mode (automatic adjustment to the usage profile) HVAC dry contacts: 0 sec. - 10 min. switch 'ON' delay 1 min. - 2 hrs. stay 'ON' time auto-HVAC mode
Light Level Setting	10 - 1000 lux / 1 - 100 fc
Environment	IP20 rated, 0° C to +40° C / 32° F to 104° F
Installation Height	2.5 - 8 m / 8 - 26 ft
Coverage at 9 ft	360° square mechanically scalable detection zones presence: max. 4.7 x 4.7 m (22.09 sq.m.) max. 15 x 15 ft (225 sq.ft.) radially: max. 4.7 x 4.7 m (22.09 sq.m.) max. 15 x 15 ft (225 sq.ft.) tangentially: max. 7.1 x 7.1 m (50.41 sq.m.) max. 23 x 23 ft (529.00 sq.ft.)
Lens Design	13 detection levels, 1760 switching zones
Dimensions	4.72 x 4.72 x 3.03 in, 120 x 120 x 77 mm (LxWxD)
Warranty	5 years
Certifications	C-UL-US Listed, RoHS compliant UL 2043 Plenum Rated, CA Energy Code compliant

Key Features:

- Independent ON and OFF time settings for the HVAC (NO/NC)
- PIR Presence Detection with Mechanical reach setting
- Square coverage pattern with 1760 switching zones
- Service and user wireless remotes available
- Manual ON mode (MAN) / Automatic mode (AUTO)
- Momentary / Maintained switch option
- 'ON' only / 'ON' & 'OFF' manual switching
- Light level feature turns lights off with sufficient daylight
- "COM-Link" communication allows for up to 10 sensors to be grouped together
- Auto-HVAC mode reduces presence detection sensitivity and requires additional detection verification before signaling the HVAC output.

PIR

1760 PIR Detection Zones



15 x 15 Ft Presence
23 x 23 Ft Tangential



1 - 100 fc



18 - 24 VDC/VAC & HVAC



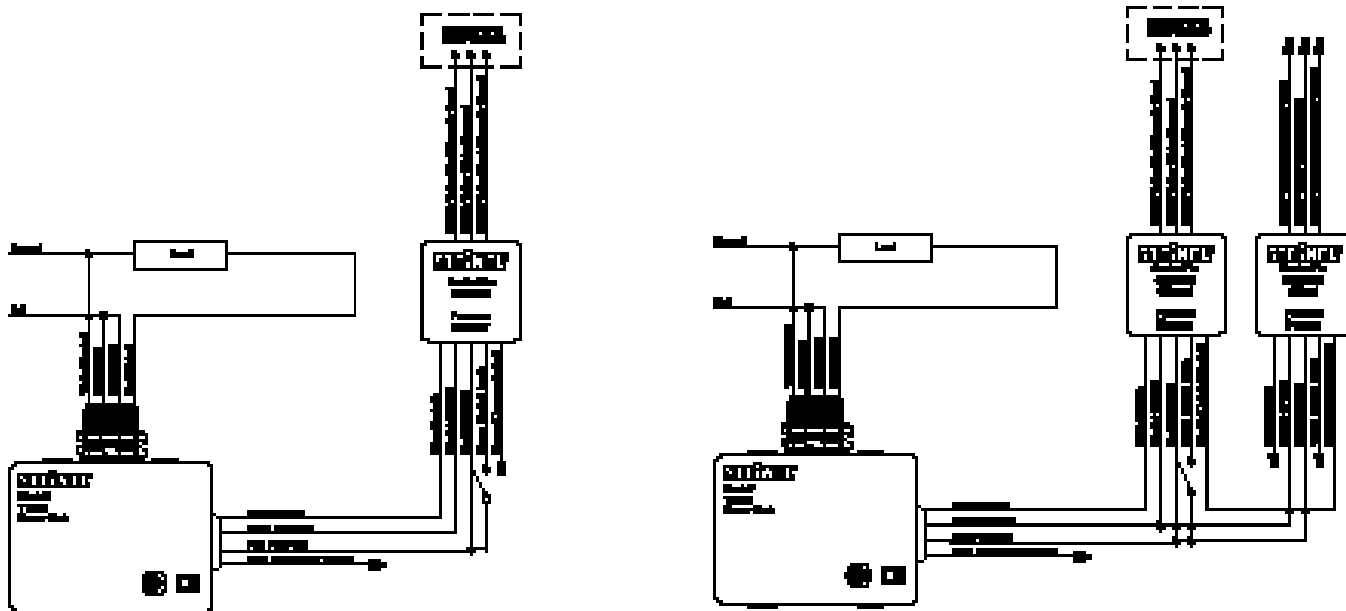
30 Sec - 30 Min

IR Quattro COM2-24

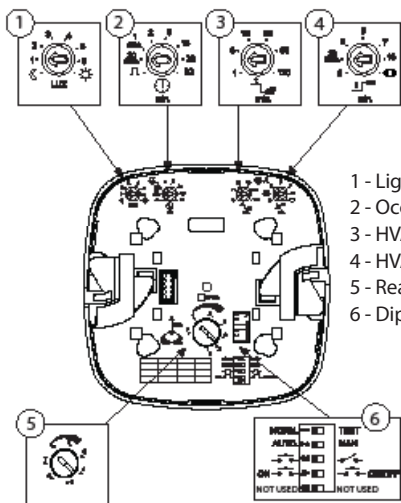
Presence Detector



Wirir



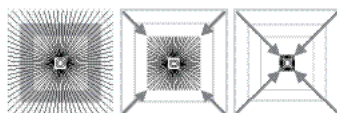
Settings



- 1 - Light level setting
- 2 - Occupancy time delay setting
- 3 - HVAC stay-'ON' time
- 4 - HVAC switch-'ON' delay
- 5 - Reach setting
- 6 - Dip switch settings



- DIP 1 - Normal mode / Test mode (NORM / TEST)
- DIP 2 - Manual ON mode (MAN) / Automatic mode (AUTO)
- DIP 3 - Momentary / Maintained switch option
- DIP 4 - 'ON' only / 'ON' & 'OFF' manual switching
- DIP 5 - Not used

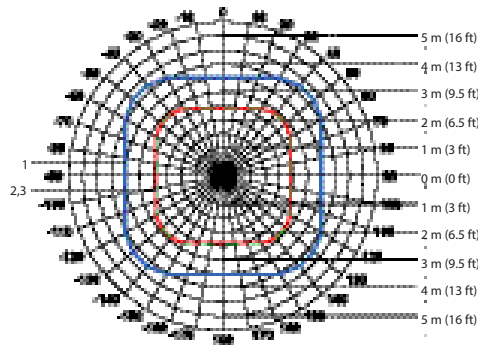


Mechanical Scalability

Coverage

Shown at 9 ft mounting height. Coverage will vary depending on mounting height. See pages 4 & 5 of the instruction manual for coverage at heights from 8 to 13 ft. Maximum mounting height up to 26 ft.

One Gridline = 0.5 m / 1.5 ft

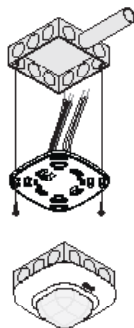


1 - Tangential - motion perpendicular to the sensor
7.1 x 7.1 m (23 x 23 ft)

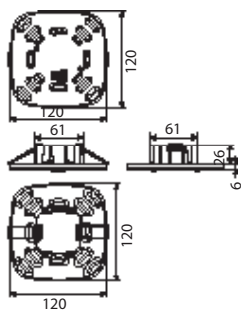
2 - Radial - motion either directly toward or away from the sensor
4.7 x 4.7 m (15 x 15 ft)

3 - Presence - minor motion as described by NEMA WD7 with the additional requirement of both radial and tangential detection
4.7 x 4.7 m (15 x 15 ft)

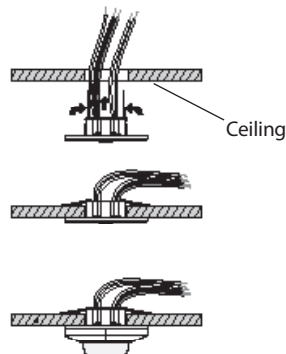
Mounting



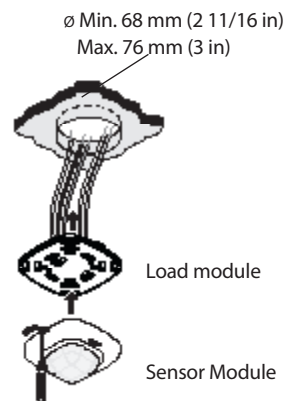
IR Quattro



Mounts to a 4" Square box, 4" Octagon box or Round 3.0 Mud-Ring



Mounts directly to ceiling with quick mount spring tabs



Load module

Sensor Module