

Installation of presence sensor

CompactAir room unit

INTRODUCTION

Based on infrared emissions, the detectors monitor the level of infrared energy within a designated area (field of view). An intruder entering or crossing a field of view causes a rapid change in the level of infrared and a resulting alarm signal is sent to the unit (Compact Air).

Characteristics

SMD technological production
Double element infrared sensor
Super high RFI protection
Programmable pulse counter (2 or 3)
Noise reduction circuit
Vertical, adjustable beams
Silent alarm relay output
Walking test LED
Wall/corner mounting are obtainable
Manipulation protection

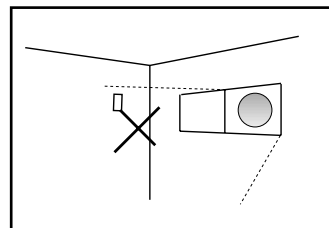
Specification

Presence sensor	CACZ-1-01
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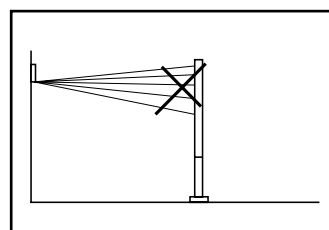
Data

Alarm period	3 +/- 1 sec
Pulse count	2, 3, pulse
Mounting height	1,5–3 meter
Tamper switch	N.C. cover opened activates
Humidity	95% max
Temperature	-20°C – 50°C
Dimensions	100 x 60 x 42 mm
Weight	78 gram

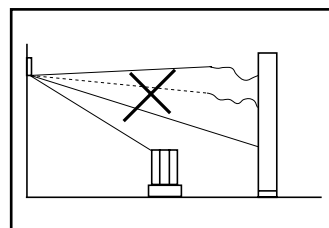
Installation hints



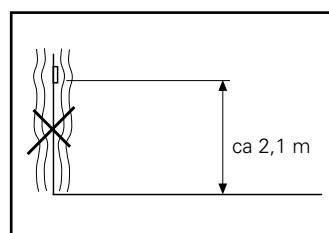
Do not install where the detector is exposed to direct sunlight or directly above strong sources of heat.



Make sure that the detection area does not have obstructions (curtains, screens, large pieces of furniture, plants, etc) which may block the pattern of coverage.



Avoid locating a unit in areas which contain objects likely to produce a rapid change in temperature, such as central heating, radiators or ducts (or heaters of any kind), air conditioners, open flame, etc.



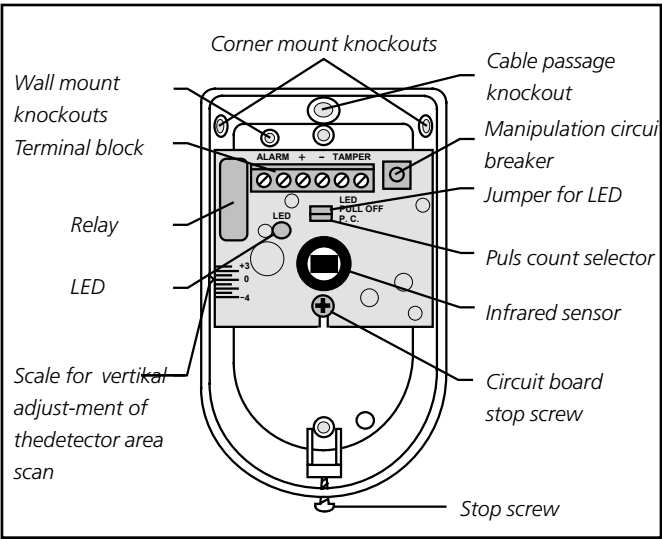
Install the detector at a height of approximately 2,1 meter from floor. Do not mount on an unstable surface.

IMPORTANT: Avoid running alarm wiring close to heavy duty electrical power cables.

Installation

1. Loosen the cover locking screw at the bottom of unit, remove the cover.
2. Mount the unit at select location.
3. Make the electrical connection of unit and mount the cover. The unit needs 30 sec for warm up time. During this time the LED will stay on.

Description



Walk test

It is required to conduct the walk test to verify adequate detection after installation is complete. Check that the jumper for the LED is seated over both pins on the circuit board. Apply power and wait for warm up time expires, then walk across the detection beams at normal speed. The LED will light for about 3 seconds when the motion is detected. In normal condition, conduct walk test at least once a year. If the LED is not to light up on detection of occupants, remove the jumper for the LED.

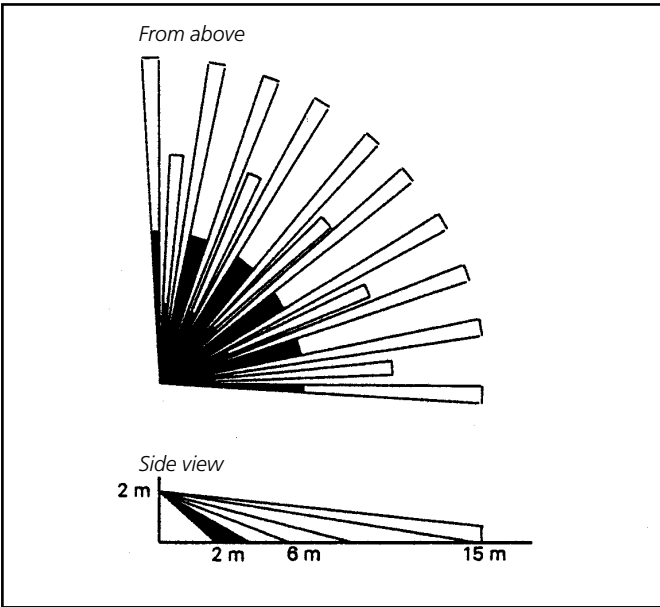
Vertikal adjustment

If detection pattern is not satisfactory, the detection beams can be adjusted vertically by sliding the circuit board up or down. If unit is mounted higher than 2,4 meter, loosen the circuit board locking screw and sliding the circuit board upward will tilt the detection beams downward.

Pulse count

The presence sensor features intelligent pulse count which reduces the possibility of false triggers caused by environmental and power line interferences. The pulse count can be set to count 2, or 3 pulse(s) by placing the jumper head on the corresponding position. The alarm signal will only be sent if selective pulse number is generated within the 20 seconds delay time. The intelligent pulse count circuitry analyzes the width difference of pulse signals. When human motion is detected, subsequent pulse signal will tide over the pulse count setting and send an alarm output without time lag. Conventional pulse count detectors can miss an intrusion due to this time lag.

Detection pattern



M/H	1,8 m	2,0 m	2,2 m	2,4 m	2,6 m	2,8 m	3,0 m
B/P	Detection coverage						
+3	1-8	—	—	—	—	—	—
+2	1-9	—	—	—	—	—	—
+1	1-11	2-14	3-13	—	—	—	—
±0	1-12	1-15	2-15	4-15	8-15	6-15	7-15
-1	1-10	1-14	2-13	3-14	5-14	6-14	8-15
-2	1-9	1-13	2-11	3-13	4-14	5-13	5-14
-3	1-8	1-11	2-10	2-11	3-13	4-12	5-12
-4	1-7	1-10	1-9	2-10	2-12	3-11	4-10

M/H: Mounting height

B/P: Presence sensors position