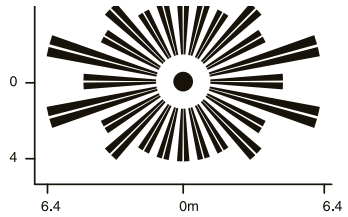
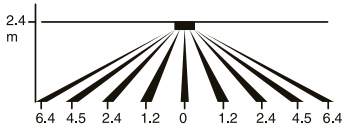
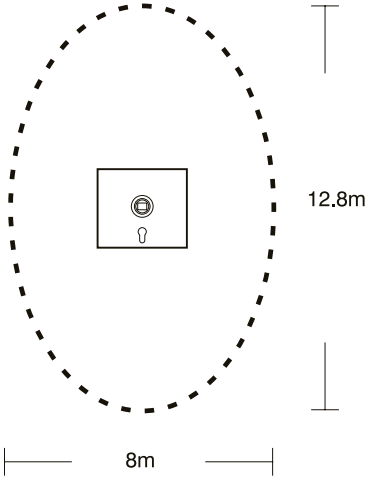
COVERAGE







SPECIFICATIONS

DIMENSIONS	102mm diameter x 30mm
MOUNTING HEIGHT	2.1 to 5m, optimum 2.4m
COVERAGE	12.8m x 8m @ 2.4m height
SENSOR	Dual element pyroelectric.
PULSE COUNT	Selectable 1–2 or 3–4.
RANGE ADJUSTMENT	Selectable high/low
VISUAL DISPLAY	Red alarm LED. Pre-alarm: Short flash Alarm: On for 5 seconds
ALARM OUTPUT	Normally Closed relay, dry contacts. Max. 0.5A@24V.
ALARM PERIOD	5 seconds.
TAMPER OUTPUT	Normally Closed dry contacts.
WARM UP PERIOD	30 seconds.
OPERATING VOLTAGE	9-15V DC.
CURRENT DRAW	15mA
RF IMMUNITY	15V/m 10-1000MHz

CE N55

QUANTUM 360 PIR
INSTALLATION NOTES
This revision February 2010

Document part number: 890-096
For products: 100-048 Quantum 360 PIR

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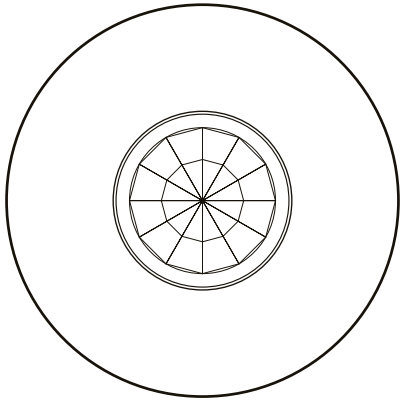
Specifications may change without notice.

INSTALLATION NOTES

NESS QUANTUM™

MODEL: Quantum 360 PIR

PART NUMBER: 100-048



- Ceiling mount Passive Infra-Red motion sensor.
- 360° coverage.
- High R.F. and E.S.D. immunity.
- High white light immunity.
- Selectable Pulse Count.
- Adjustable range.
- Low current draw.
- 9–15V DC operation.

MADE IN AUSTRALIA

REV 2-10

MOUNTING LOCATION

The Quantum 360 Passive Infrared Detector (PIR) should be mounted on a solid section of ceiling at a height of between 2 metres and 5 metres.

It should be mounted at least 2 metres away from electrical lighting such as neon and fluorescent lights.

Cables to the PIR should be kept well away from other wiring especially mains wiring.

Select the mounting position for optimum coverage noting that the coverage provided by the Quantum 360 is slightly elliptical. The elliptical pattern can be identified by the LED position and the keyhole on the circuit board, (see lens array drawing).

INSTALLATION & TESTING

1 Remove the lens and cover of the Quantum 360 by turning the cover anti-clockwise.

2 Locate the base on the ceiling, pass the cable through the cable entry hole and then screw it in position.

Note the slightly elliptical pattern provided by Quantum 360. The long axis of the ellipse is in line with the LED and the keyhole on the circuit board regardless of the orientation of the cover. See the Lens Array drawing.

3 Use a silicon sealant to seal any cable entry holes or mounting holes in the base of the PIR to prevent air draughts and insects from entering the Quantum 360.

4 Set the RANGE and PULSE COUNT links to suit your application (see Program Links).

5 Replace the lens cover by screwing it clockwise.

6 After connecting power at the control panel wait approximately 30 seconds for the detector to read the environment.

7 Walk test the coverage by walking slowly across the protected area. The LED should indicate detection at a maximum of 3 to 4 walking steps.

The LED will give short pulses to indicate detection of infrared below the alarm threshold level. Alarm level is indicated when the LED turns on for 5 seconds.

WIRING

1. Connect a regulated DC power source to the terminals marked +12V and 0V observing correct polarity.
2. Connect the ALARM terminals to a zone on your control panel using an End Of Line Resistor as shown in your control panel's installation manual. These are Normally Closed contacts which open on alarm.
3 Connect the Tamper terminals to your control panel as required. These are Normally Closed contacts which open on alarm.

PROGRAM LINKS

RANGE (LK1)
The range link sets the level of infrared required to generate an alarm pulse which in turn affects the sensitivity of the detector.

Link ON: Full range. 6.4m x 4m coverage.
Link OFF: Approx. 4m x 2.5m coverage.

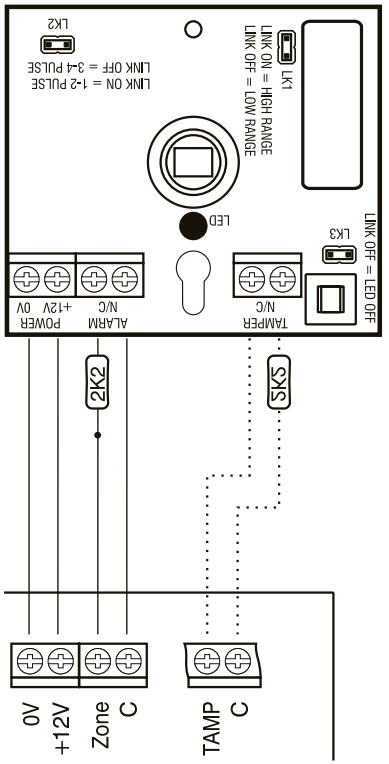
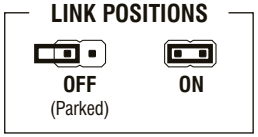
PULSE (LK2)
The PULSE COUNT link selects either of two Pulse Count positions.

Link ON: 1–2 Pulses or walk steps should cause an alarm.
Link OFF: 3–4 Pulses or walk steps should cause an alarm.

LED (LK3)
The alarm LED has two functions.
a) Pre-alarm indication (short flash).
b) Alarm indication (on for 5 seconds).

The LED may be disable if required by removing LK3.

QUANTUM 360 circuit board



QUANTUM 360 wiring to a control panel.