

# PIR lighting system

RS stock numbers:
Detector unit
Two-zone controller

568-815 568-809

#### General

The **RS** security lighting system comprises a controller and multiple passive infrared detectors. The system controllers are available in two versions depending upon the level and sophistication of coverage required and are designed to switch external lighting loads and audible devices. The controllers are intended for indoor use only and are only compatible with the **RS** weatherproof detectors (**RS** stock no. 568-815).

## Passive infra-red detector (RS stock no. 568-815)

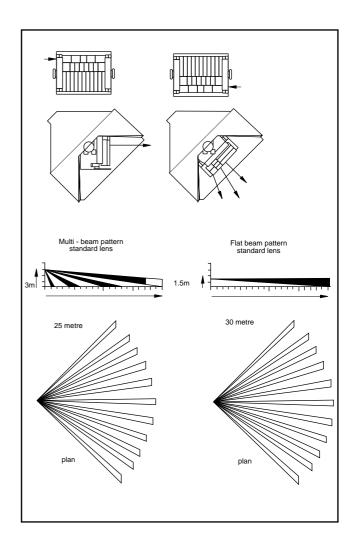
The **RS** PIR detector consists of a fully adjustable and directional sensor with a focussing Fresnel lens. The lens has two possible beam patterns depending upon the position that the lens has been inserted in the sensor module, providing a detection area pattern as described opposite. The sensor is mounted in a fully weatherproof wall mounting housing.

It is important to install the detector on a vertical surface.

The sensor is activated when a person or other infrared emitting object moves within the established beam pattern. Static objects and general background emissions are ignored. The circuit is inhibited during daylight hours by an integral photo-cell.

## **Detector specification**

| Range                             | 20/30 metre nominal       |
|-----------------------------------|---------------------------|
|                                   | with standard lens        |
| Voltage                           | 9 to 15Vdc @ 5mA          |
|                                   | reverse protected         |
| Control signal for beep output    | Switching -ve             |
|                                   | (24 hour) 25mA max.       |
| Control signal for light output _ | Switching -ve             |
|                                   | (darkness) 25mA max.      |
| l minute lo                       | onger than last detection |
| Adjustment                        | Sensitivity control       |
|                                   | ±45° pan and tilt         |
| Temperature                       |                           |



## Two-zone controller (RS stock no. 568-809)

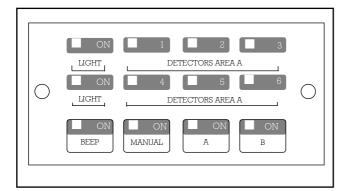
The **RS** two-zone multi-sensor security lighting controller processes signals from a possible 6 **RS** outdoor PIR detectors. A further 6 detectors may be incorporated within the system by connecting pairs of detectors in parallel. This extensive network of detectors connected via the controller provides movement activated lighting during darkness and audible warning of movement day or night.

The controller, which is only intended for indoor installation, is capable of switching 1500W of external lighting per monitored area or zone (3000W total) for a period adjustable between 2 seconds and 6 minutes.

In addition to the integral sounder an external low power piezo-sounder can be connected to the controller to give a remote audible warning of movement.

As well as operating lighting via movement triggering, the controller can be used in a manual mode with the lights in either designated area capable of being switched individually manually.

All functions are controlled from the flush front panel by four push on/off buttons: BEEP, MANUAL, A and B with indicators to show selection.



Operation



When lit the audible warning of movement will operate if detection of movement takes place day or night.



When off, the lighting is controlled from the detectors provided A or B or both are selected. When ON, the lighting is MANUAL override depending upon the setting of A and B.



When off, lighting in area A will not operate. When ON lighting in area A is selected (see MANUAL button).



When off, lighting in area B will not operate. When ON lighting in area B is selected (see MANUAL button).

Other indicators show which detector gave the signal during darkness (1, 2, 3, for area A and 4, 5, 6, for area B) and which area of lighting has been activated. (LIGHT A, LIGHT B.)

#### **Further features**

A number of additional facilities can be selected from the back of the controller:

## Area linking

Lighting in both areas can be linked to ensure that any detector is capable of activating all lights in both designated areas

#### Pulse count

Each sensor has a total of 24 beams and the controller has an option of two detection types. Either one beam must be crossed for the system to activate or two beams must be crossed during the time period set up (ie. 2 seconds to 6 minutes)

## Engineer walk test

This option allows the two individual areas and their corresponding detectors to be tested/checked day or night using the external lighting. Detectors 1, 2, 3 will switch the lights in area A and detectors 4, 5 and 6 will switch lights in area B for 4 seconds when a detector gives a signal.

## Two-zone controller specification

| Power supply         | 240Vac, 50Hz                  |
|----------------------|-------------------------------|
| Switching capability | 2 x 1500W (3000W)             |
| Light on timer       | 2 seconds to 6 minutes        |
| Temperature range    |                               |
| Dimensions           | H 86mm, W 146mm, D 43mm       |
| Fir                  | s 2 gang 38mm deep back boxes |

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