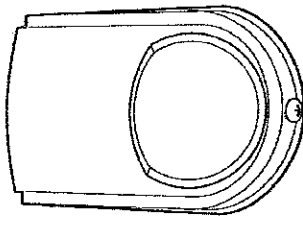
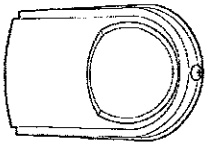


PASSIVE INFRARED DETECTOR

MODEL - FOCUS



Installation Manual



FOCUS Features

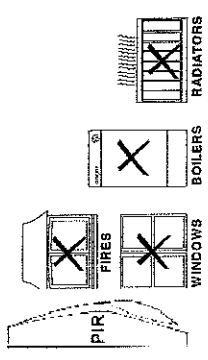
- EXTRA Low (8 mA) current draw @ 12V DC operation.
- S.M.D. Technology.
- 12m, 110° Convex honey comb, hemispherical infra-red lens.
- Excellent false alarm suppression.
- Thermal optic protection cavity.
- Walk test LED.
- High RFI & EMI Immunity.
- Pulse Counter (1, 2 and 4 pulses selectable)

Introduction

The *FOCUS* is a dual-element passive infra-red detector for use in electronic security systems. The *FOCUS* is compact, attractive and easy to install, it can be mounted indoors on a wall or in a corner. The *FOCUS* is ideal for commercial, office and residential applications. The *FOCUS* detects intrusion by determining changes in infra-red energy patterns. The *FOCUS* emits no radiation and is harmless to humans & animals. The *FOCUS* reduces false alarms to a very low level due to its effective elimination of background noises and nuisance stimuli.

Mounting Location

The *FOCUS* is designed for indoor use. It should not be mounted near to large metal objects or on metal surfaces. It needs to be mounted on a wall or in a corner at a height of approximately 2-2.5metres for the best general coverage in an average room. The detector has been designed to avoid false alarms, nevertheless, it is best to avoid looking directly at sources of heat such as fires and boilers, and always try to keep away from a window. A PIR can look at a radiator but should not be sited above one.



Do not site a PIR where its field of view may be obstructed (e.g. by curtains). Also note that PIRs work best when sensing movement across rather than along their detection beams. You need to consider the need to wire these units back to the Control Unit.

Mounting the detector

1. Remove and retain the screw from the bottom of the PIR and lift off the cover.
2. Carefully remove the electronic module from its retaining clips, ensuring not to touch the pyroelectric sensor (Illustration 1).

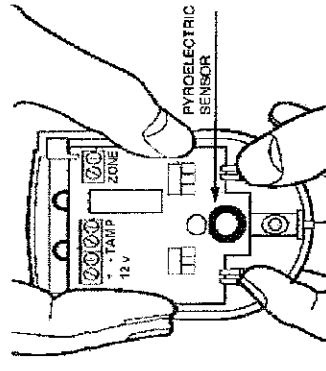


Illustration 1

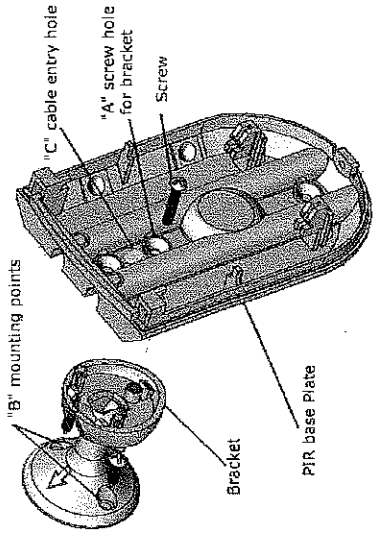


Illustration 2

- Use mounting points "A" at the base of PIR. Use a small drill to create a fixing hole at the mounting point. Fix the bracket to the PIR with screw provided (Illustration 2)
- Hold the bracket with PIR in the chosen position, ensuring that the front of the PIR will face towards the center of the protected area, mark and drill two fixing holes "B" in the wall. Use the cable entry holes "C" and make another hole in the detector base. Put one end of the wire through this hole "C", then secure the PIR to the wall.
- Replace the electronic module into the retaining clips, ensuring that it is correctly positioned and firmly seated.
- If required, select the PIR LED "ON" or "OFF" option and the sensitivity (pulse count) by setting the corresponding jumpers on the electronic module. Note that Pulse 1 option is more sensitive than the pulse 4 option. Pulse 1 option is used when it is necessary to activate an alarm on the first detected pulse, or in high security installations - where fast "catch" performance is of greatest importance. Pulse 2 or 4 settings provides improved protection against false alarms caused by all types of environmental disturbances. (Illustration 3)

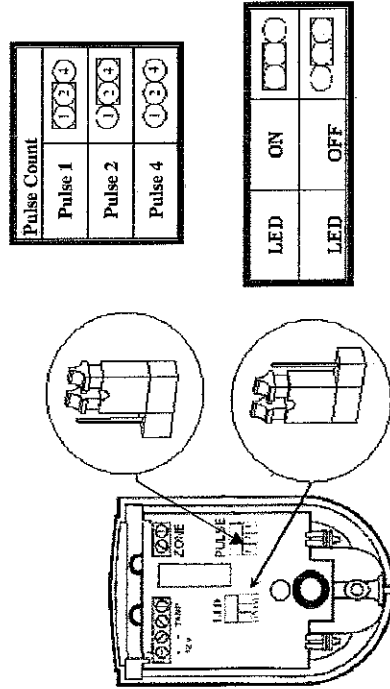


Illustration 3

- Connect the wires in accordance with the terminal block connections.
 - 12V+
 - TAMP Connect to a regulated D.C. power source, observing correct polarity.
 - ZONE Connect to a Tamper or 24 Hr. zone, NC in the control panel. Note these are normally closed switch contacts which open when the tamper opens.
 - Connect to an Alarm zone, NC in the control panel. Note these are normally closed relay contacts which open when the detector alarms.

Walk Testing

- Apply power and allow 3 minutes for warming up and stabilizing.
- Adjust the vertical pattern angle per Fig.1 below.
- Walk slowly across the field of view (in opposite directions) and observe the LED - it lights whenever you enter or exit a sensitive beam. Allow 5 seconds between each test for the unit to stabilize.
- After testing, the LED can be disabled to prevent unauthorized tracing of the coverage pattern. To disable the LED, remove the jumper from the left and middle pins of the LED selector (ON) and place it across the middle and right pins (OFF).

Lens Arrays

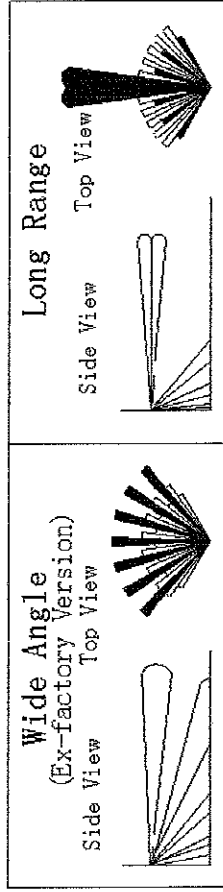
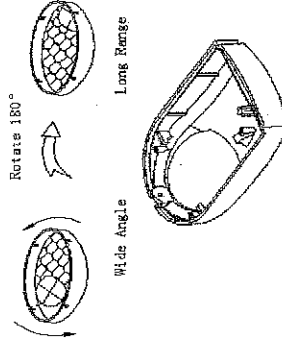


Fig. 1

LENS can be adjusted to suit your needs by simply rotating the angle of the lens 180° to change from wide angle version (Ex-factory version) to long range version if required.

WIDE ANGLE
 Angle: 105° x 110°
 Distance: 12m
 Zone Number: 64
 Default Setting - Ex Factory

LONG RANGE
 Angle: 5° x 5°
 Distance: 14m
 Zone Number: 8
 Default Setting + 180°



Specifications

- Operating Voltage 9 - 15V D.C.
- Current Draw 8 mA nominal at 12 VDC
- Alarm Output Normally closed dry contacts (0.5A/24V) with 15Ω resistor in series
- Tamper Output Normally closed dry contacts (0.5A/24V)
- Alarm Period 2-3 seconds
- Pulse Count 3 position selector 1, 2 and 4 pulse operation
- LED Walk test enabled and disabled with internal link
- Detector Dual Element low noise Pyroelectric sensor
- Detection Zones 64 detection zones
- Coverage Range 110°
- Up to 12 meters
- Operating Temperature 0 - 50°C