

# BS-360

## CEILING MOUNT PIR INTRUSION DETECTOR



### FEATURES

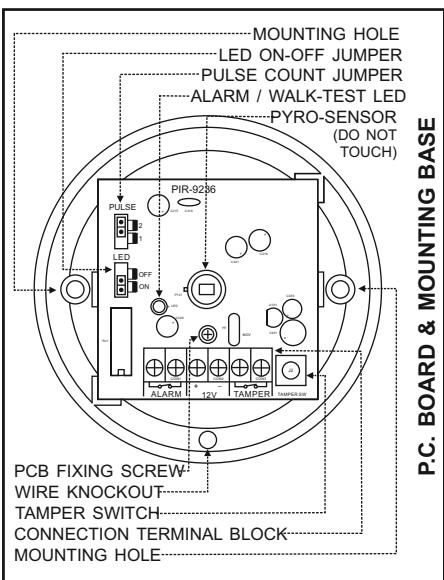
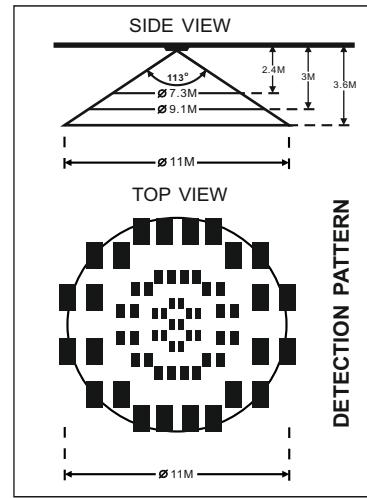
- ☛ Low Noise Dual Element Pyro-Sensor
- ☛ Alternative Polarity Signal Processing
- ☛ Security Logics are Integrated in the ASIC Device
- ☛ Surface-Mounted Component Technology, Greater EMI and RFI Immunity

**BS-360** ceiling mount passive infrared intrusion detector is designed for the application in the residential and commercial security systems. It gives a 11 metres diameter conical protection pattern when mounted on a 3.6 metres ceiling.

**BS-360** employs a low noise dual element pyro-sensor and an ASIC (Application Specific Integrated Circuit) device in security logic and environment controls.

The alternative polarity signal processor inside the ASIC has very high rejection to noise due to radio interference or power surges. The ASIC device also provides the functions of digital pulse counting, power-up delay and alarm output timing and controls. All of which maximizes security and false alarm immunity.

### Description



### CONNECTION TERMINAL BLOCK

**12V:** Connect the positive (+) side to a 8V to 16V DC power source, usually from the alarm control panel. Connect the negative (-) side to the common grounding point of the control panel.

**TAMPER:** If a tamper switch is required, connect these terminals to a 24 hour normally closed (N.C.) protection zone in the alarm control panel. The tamper switch contact is closed with the detector's front cover secured on the box. Opening of the front cover at any time will make the contact open and send an immediate alarm signal to the control panel.

**ALARM :** This is the alarm output relay of the detector. These two terminals should be connected to a normally closed (N.C.) protection zone in the alarm control panel.

## JUMPER SETTINGS

**LED:** ON Enables the LED

    "ON" for alarm condition

    "FLASH" for power-up period

OFF-----Disables the LED. Does not affect detection

**PULSE:** 1-NORMAL-----Standard Alternative Polarity Signal processing. For operation within a stable environment.

2-HARSH-----Double Processing Alternative Polarity Signals within 12 sec. For a harsh environment.

## INSTALLATION

### A) MOUNTING LOCATION

☞ The detector should be mounted on a stable ceiling. The maximum installation height is 12 feet (3.6m).

☞ The detector should be mounted in areas that do not have openings constantly exposed to the outside environment.

☞ Select the mounting location so that the expected motion of an intruder will cross the beam of the detection pattern.

☞ Do not locate detector where hot or cold moving air blows directly onto the unit.

☞ Avoid aiming the detector toward heating or air conditioning vents or ducts, exterior metal walls, exterior windows or curtains covering windows, refrigerator or freezer grills or other surfaces that may change temperature rapidly.

☞ Prevent putting large objects in front of the detector which will cause significant changes in the area or volume protected.

### B) MOUNTING

- ☞ Open the cover by gently inserting a small screw driver in the slot at the bottom of the unit, between the front cover and the base, lower the screw driver to release the cover from the base.
- ☞ It is necessary to remove the printed circuit board before going to mount the base in installation.
- ☞ Loosen the PC board fixing screw and pull out the PC board carefully.
- ☞ Mount the base at the location selected for optimum coverage. Use the two mounting holes at the back of the base to fasten the unit firmly to the ceiling.
- ☞ Use the wire knockout at the back of the base for running connection wires.

### C) WIRING AND REPLACING THE FRONT COVER

1. Put the PC board back into the base and fix it firmly with the PC board fixing screw.
2. Connect the wires to the terminal block.
3. Put the front cover back into its position and make sure that the tamper switch is depressed when the front cover is clicked into the base.

## WALK TEST

1. Walk test can be performed after the power up delay expired (the alarm LED is flashing during the power up period) to test the detector over the entire protected area to verify proper operation of the unit.
2. Walk into the protected area at a rate of 1 step per second across the protection beams and observe the LED.
3. Alarm output is given when the detector is tripped under the standard alternate polarity signal processing at NORMAL condition.
4. The HARSH condition requires the detector to be tripped twice within 12 seconds to give an alarm output under the double alternate polarity signal processing operation.

TECHNICAL SPECIFICATIONS	BS-360
Current Consumption	15mA Typical at 12VDC
Operating Voltage	8-16VDC, 12VDC Nominal
Detection Method	Passive Infrared with Alternate Polarity Signal Processing
Power-up Delay	2 Minutes Typical With Flashing LED Indication
Alarm Period	2-3 Seconds
Alarm Output	N.C. Relay Contact With 10 Ohm In Line Resistor. Contact Rating: 28VDC, 0.1A
Walk Test LED	Alarm Indicator, Enable-Disable Selectable
Pulse Counting	Normal Response Or 2 Pulses Within 12 Seconds For Harsh Environments
Tamper Switch	N.C. Contact With 10 Ohm In Line Resistor. Contact Rating: 12VDC, 50mA
Operating Temperature	-10°C to 55°C
Humidity	95% Non-Condensing
EMC	Conforms to CE-Mark Standard
Dimensions	86(DIA) x 25(H) mm
Guarantee	2 years

*Specifications are subject to change for modification without notice.*