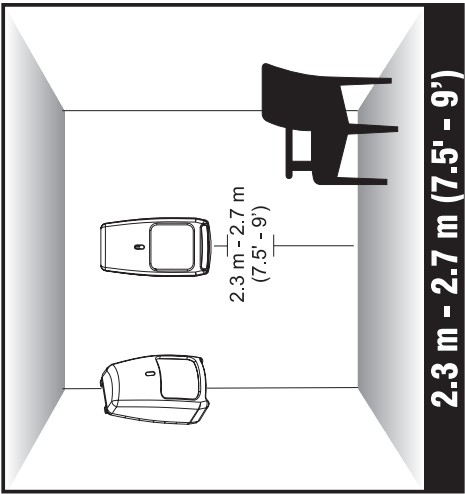
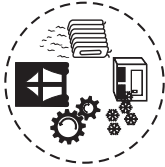


1 Select the mounting location.



Aim away from:

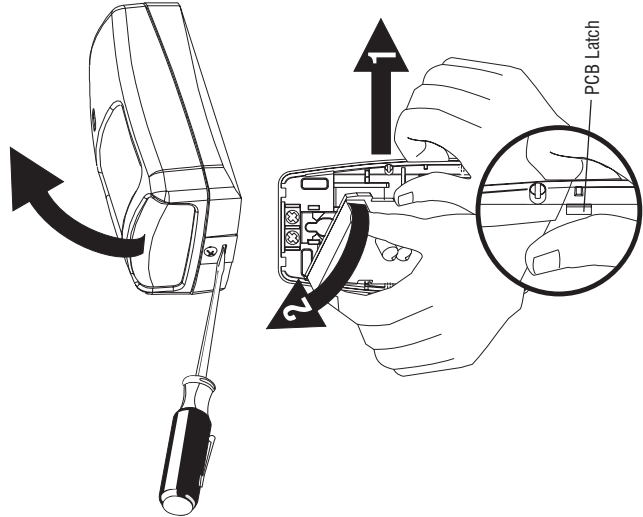


Mounting Location Guidelines

- 2.3 m - 2.7 m (7.5' - 9') mounting height.
- Avoid direct or reflected sunlight.
- Aim sensor away from windows or heating/cooling devices.
- Sensor must have a clear line-of-sight to protected area.

2

Separate the sensor housings and remove the printed circuit board (PCB).

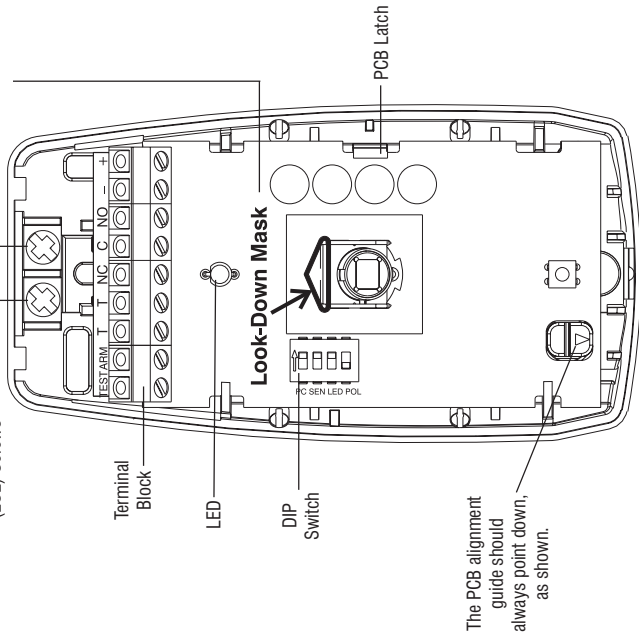


- Use a small screwdriver to remove the cover screw (if installed), then push in the housing latch at the bottom of the sensor, and gently pull apart the housings.
- Push outward on the PCB latch and lift the PCB out of the housing.

5

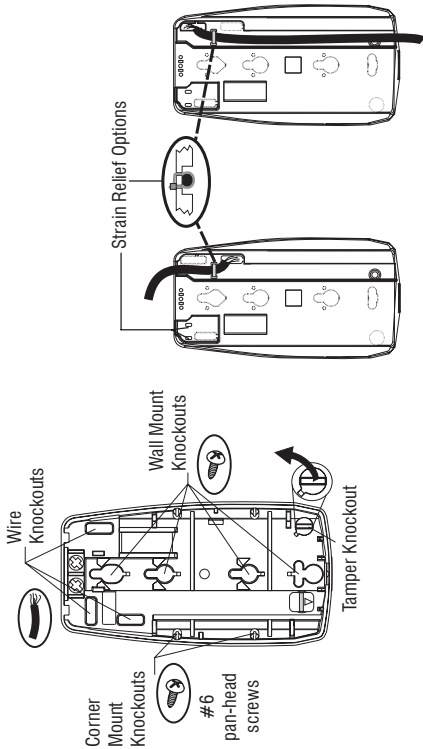
Set the DIP switches.

Install the look-down mask (black ring supplied) as shown, to reduce the look-down sensitivity if desired.



3

Mount the unit.



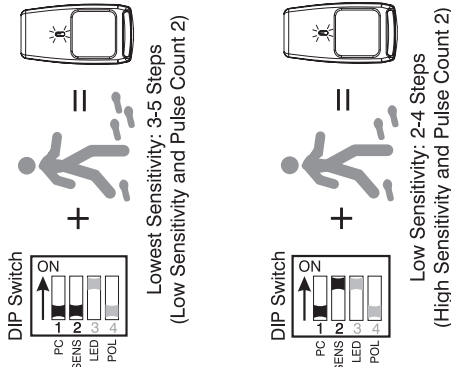
- Slide the wire through the wire knockouts in the back housing, attach the wire with a wire tie, and cut off the excess wire tie.
- Mount the back housing flat against a wall or in a corner using #6 screws supplied. [Notes: If using the wall tamper, refer to the Tamper Switches section. If using a mounting bracket see the Accessories section, and follow the installation instructions supplied with the bracket.]
- Replace the PCB.
- Seal any openings with RTV compound.

6

Configure the sensitivity and walk-test the sensor.

Set the sensitivity appropriate for the application (see options below), replace the front cover, and apply power to the sensor. Begin walk-test after the LED stops flashing (see the LED Operation section). Walk through the detection zones, observing the sensor's LED whenever motion is detected. The red LED shows actual alarm relay operation.

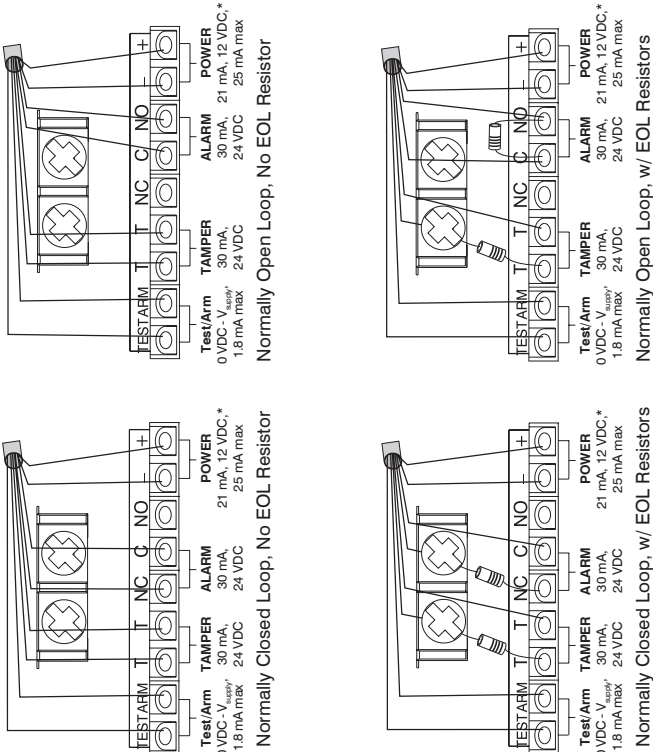
The absolute range of all PIR units is subject to variation because of different types of clothing, backgrounds, and ambient temperature. For this reason, ensure that the most likely intruder routes are well within the PIR's detection zones and that walk-testing is carried out along those routes.



Note: Pulse count 2 setting is not recommended for long range devices.

4

Wire the sensor. Connect wires to terminal as shown using wire size 0.8 - 1.5 mm (22-16 AWG). Observe the proper polarity.



Note: EOL = Single End-of-Line supervised resistor.

*For UL voltage, see Specifications Section.

Note: For High Security applications, disable the LED (S3=OFF), and set the sensitivity to High (S1 and S2=ON).

MOUNTING LOCATION GUIDELINES

The IS25100TC is designed for use indoors. The sensor can be corner, wall, or bracket mounted (see Accessories section). Make sure that the sensor has a clear line-of-sight to the protected area: infrared light cannot penetrate solid objects, and the sensor must “see” an area in order to detect a moving person. The sensor should be pointed into the room interior, and away from windows and heating/cooling sources. Additionally, the sensor should be installed on a surface where the temperature is similar to that of the area being protected and **not** pointed at direct or reflected sunlight.

TAMPER SWITCHES

The IS25100TC is equipped with normally-closed (NC) cover tamper. Each sensor is shipped with the cover tamper operational.

A wall tamper switch is also provided. To use the wall tamper switch, remove the PCB, and the Tamper Knockout located toward the bottom of the back cover (see Step 3 on page 1). Before mounting the sensor, install a tamper screw in the wall so it protrudes 6.35 mm (1/4”) above the mounting surface. Replace the PCB and mount the sensor on the wall, over the tamper screw. The tamper screw will depress the back tamper lever as shown.

The cover and wall tamper switches are in series, so if either switch opens, a tamper will be signalled at the terminal block on the PCB.

LED OPERATION

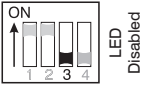
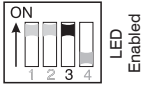
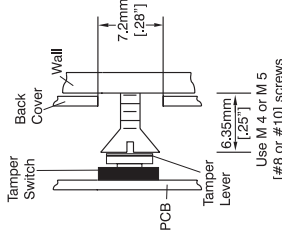
To Enable the alarm LED, turn switch S3 ON.

To Disable the alarm LED, turn switch S3 OFF. The LED will temporarily remain enabled for 10 to 12 minutes. This feature gives the installer time to walk-test the unit as explained below.

Automatic Walk-Test Mode with alarm LED disabled (switch S3 OFF):

After applying power to the sensor, it will warm up for up to three minutes, and then the LED will temporarily remain enabled for a 10 minute walk-test period. After 10 minutes, the LED will automatically switch to disabled.

To restart the 10 minute walk-test mode, switch S3 ON, and then OFF again.



Conditions	OPERATION		
	Alarm LED		Alarm Relay
Warm Up (up to 3 minutes)	Enabled	Disabled (Normally Closed Loop)	Alarm Relay (Normally Opened Loop)
	Slow Blink	Slow Blink	Opened
Normal	OFF	OFF	Opened
Alarm	ON for 3 seconds	*See LED Operation for 3 seconds	Closed
Trouble	Fast Blink	Fast Blink	See Troubleshooting

CONTROL INPUTS

There are two inputs, TEST and ARM, allowing some of the sensor functions to be controlled remotely. Each input is internally pulled up to +5V through a 10KOhm resistor.

The POL switch (switch 4) can reverse the logic sense of both the input control signals.

To select the appropriate POL (switch 4) setting, refer to the table in step 5, on page 1.

TEST Input

The Test input allows the LED to be remotely enabled. To use this feature, the LED DIP switch (switch 3) must be OFF; allowing the LED to operate based on the voltage level connected to the Test Input. Like the LED DIP switch, however, the Test Input will not enable the LED if the sensor is armed (see the Arm Input section).

ARM input / Alarm Memory

When armed, the sensor's LED is disabled. If an alarm occurs while armed, an alarm is triggered, and the sensor stores the event in memory. When next disarmed, the Alarm Memory turns the LED On. To clear the alarm event from memory, the sensor should be re-armed briefly (0.5 to 2 seconds) and then disarmed.

Note: When inputs are not used, the POL switch should be OFF.

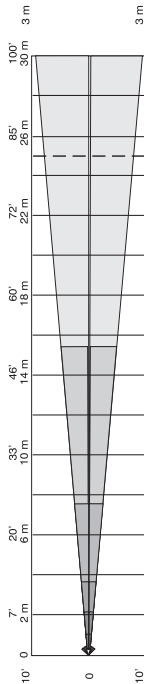
Switch 3	Test Input	LED Operation
OFF	Active	Enabled
OFF	Inactive	Disabled
ON	Active	Enabled
ON	Inactive	Enabled

TROUBLESHOOTING

- Symptom:** Sensor is not operating.
Corrective Action: Check to make sure the Power terminals are wired correctly. If the power terminals are wired correctly, and the sensor does not operate when power is applied, replace the sensor.
- Symptom:** Fast Blinking LED -- Trouble condition; two possible causes.
 - Temperature Compensation failure:** The sensor checks Temperature once every 100 ms. When a Temperature Compensation failure occurs, the sensor defaults to room temperature sensitivity and continues to operate normally while signalling trouble. The trouble is stored in memory, and when the next valid alarm condition is detected, the alarm relay latches open (NC loop).
PIR self-test failure: In the absence of PIR signals, the sensor internally checks its PIR circuit once every ten minutes. If six consecutive self-tests fail, the sensor signals trouble with its LED, and the relay latches closed (NC loop). Subsequent detection of a valid PIR Signal will clear the trouble, and the relay will return to normal operation.
Corrective Action: Replace the sensor.

DETECTION PATTERNS

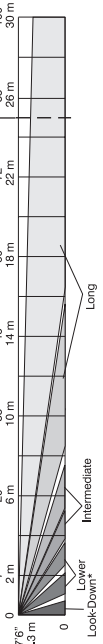
Top View



Dashed line = TS 50131-2-2 and T014 detection pattern.

Note: The distances in the illustrations represent the maximum detection distances under ideal circumstances. A walk-test is required after mounting to ensure proper detection.

Side View



* Look-down fingers are fully enabled only when the look-down mask is not installed (see Step 5).

SPECIFICATIONS

Range:

30 m x 6 m (100' x 20')
[TS 50131-2-2 and T014 Range: 25 m x 5 m]

Mounting Height (center of lens):

2.3 m - 2.7 m (7.5' - 9') [Note: 2.3 m (7.5') is the optimum mounting height.]

Power requirements:

8.5 - 15.4 VDC (UL: 10 - 14 VDC); 21 mA nominal at 12 VDC, 25 mA max; AC Ripple: 50 to 120 Hz, 3 V peak-to-peak at nominal 12 VDC

Alarm relay:

Form C
30 mA, 24 VDC;
40 Ohms resistance max

Tamper switches:

Cover and Wall
Form A (normally closed with cover installed)
30 mA, 24 VDC

RFI immunity:

30 V/m, 10 MHz-1000 MHz

PIR white light immunity:

6,500 Lux (min.)

Sensitivity:

Switch selectable (Lowest, Low, Medium and High)

Operating temperature:

-10° C to 55° C (14° F to 131° F)

Relative Humidity:

5% to 95%; non-condensing

Temperature Compensation:

Advanced dual slope

PIR fields-of-view:

Dual element
4 long range
4 intermediate
4 lower
4 look-down

Dimensions:

11.2 cm x 6.0 cm x 4.0 cm
4-3/8" x 2-1/4" x 1-1/2"

Weight:

94 g (3.32 oz)

Packaged/Product 171 g (6.04 oz)

Control Signal Levels & Current

(Test / Arm inputs):

(L) = 0.0 VDC to 1.5 VDC; -0.6 mA max
(H) = 3.5 VDC to V_{supply}; 1 mA typical at 12 VDC, 1.8 mA max

Accessories Included:

Mounting hardware
Look-down mask

Accessories Available:

SMB-10 Swivel Mount Bracket (P/N 0-000-110-01)
SMB-10C Swivel Mount Ceiling Bracket (P/N 0-000-111-01)
SMB-10T Swivel Mount Bracket w/ Tamper (P/N 0-000-155-01)

EN 50131-1 Compliant Accessories:

SMB-10T Swivel Mount Bracket w/ Tamper (P/N 0-000-155-01)

Approvals/listings:

FCC part 15, Class B verified
IC: ICES-003, Class B verified
CE C-Tick cULus listed

Note: When installed in UL or CUL installations, the IS25100TC must be set on either medium or high sensitivity.

SIA PIR-01

Passive Infrared detector standard features for false alarm immunity

Enclosure rating: IP30 IK04

Tested and certified to EN 50131-1 and TS 50131-2-2 Security Grade 2; Environmental Class II by Telefication B.V.
PD6662

Note: In TS 50131-2-2 compliant

installations: select the high sensitivity setting, and install a cover screw (included).

Suitable for connection to an EN 60950 Class II Limited Power Source in European installations.

To obtain applicable EU compliance Declaration of Conformities for this product, please refer to our Website,
<http://www.security.honeywell.com/hscce/international/index.html>. For any additional information regarding the compliance of this product to any EU specific requirements, please contact:

Quality Assurance Department,
Honeywell Security & Custom Electronics,
Newhouse Industrial Estate
Motherwell,
Lanarkshire ML1 1SB,
Scotland,
United Kingdom.

Tel: +44(0)1698738200

Email: UK64Sales@Honeywell.com



IMPORTANT: The IS25100TC should be tested at least **once each year**.

For proper wiring methods, refer to the National Electrical Code NFPA 70.

FCC NOTICE: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The user is cautioned that changes or modifications not expressly approved by Honeywell could void the user's authority to operate this equipment.

NOTE: This equipment as been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: 1) Reorient or relocate the receiving antenna; 2) Increase the separation between the equipment and receiver; 3) connect the equipment into an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an expert-enced radio/television technician for help.

IC Notice: This Class B digital apparatus complies with the Canadian ICES-003.
Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.