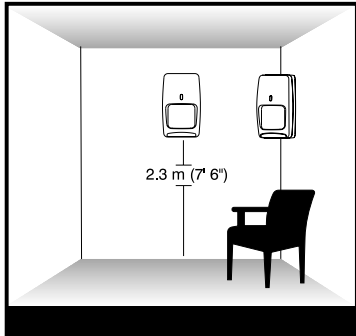


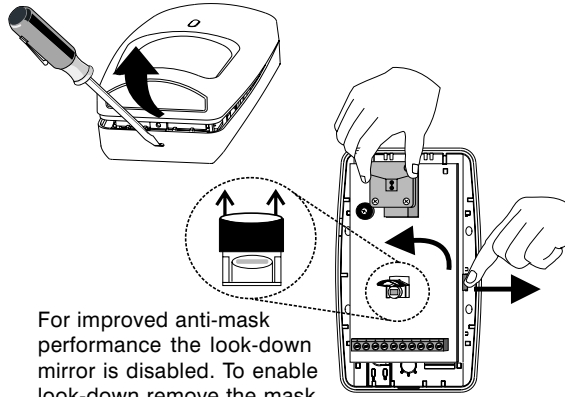
1 Select the mounting location.



Mounting Location Guidelines

- 2.3 m (7'6") 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

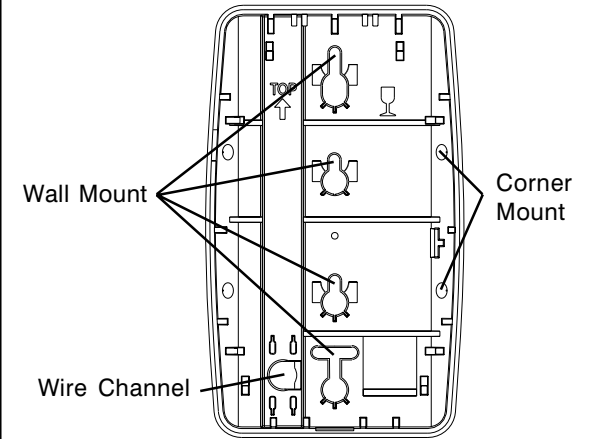
2 Separate the sensor housings and remove the printed circuit board (PCB).



For improved anti-mask performance the look-down mirror is disabled. To enable look-down remove the mask.

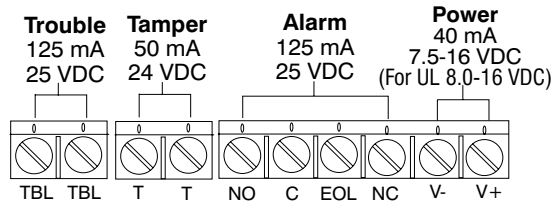
- Use a small screwdriver to unfasten the housing latch. Gently pull apart the housings.
- Push outward on the PCB latch and lift the PCB out of the housing.

3 Mount the unit.



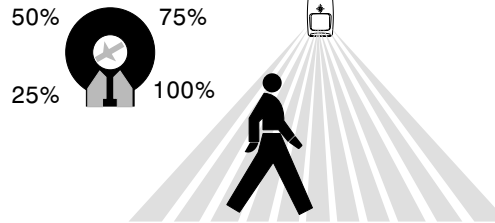
- Slide the wire through the wire channel in the back housing.
- Mount the back housing flat against a wall or in a corner.
- Replace the PCB.

4 Wire the unit.



- Connect wires as shown using 0.3 - 1.0 mm² (18 to 22 gauge) wire size. Observe proper polarity.

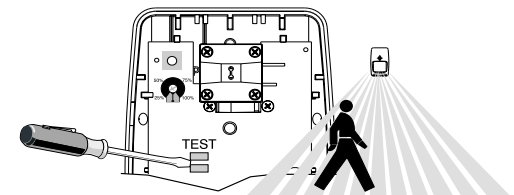
5a Walk-test the sensor.



- Set Switch 3 to select the appropriate fluorescent light filter (see Dip Switch chart on the next page).
- Apply power to the unit. Initialization and mask detection are complete when the LED stops flashing slowly.
- Adjust the microwave range to minimum setting (25%) by turning the range adjustment counterclockwise using a small screwdriver.
- Replace the front housing.
- Begin walking through the detection area.
 - The LED will turn red, indicating an alarm detection.
- Increase the microwave range as necessary.
- Repeat the items in step 5a until proper detection range is obtained.

5b Optional: Walk-test using Zone Finder

Use the Zone Finder mode to identify the PIR and/or microwave pattern. In Zone Finder mode the red LED is disabled.



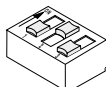
- Use a screwdriver to short the test pads.
- During the Zone Finder walk-test mode, the LED turns:
 - green for one second for every PIR detection;
 - yellow for two seconds for every microwave detection.
- Adjust the microwave range as necessary.
- Zone finder mode times out after ten minutes.

LED INDICATORS

LED	OPERATION MODE			
	Normal	Power Up	Trouble	Zone Finder
Red	ON Alarm	Slow Blink	Fast Blink	OFF
Yellow	ON Microwave	OFF	OFF	ON Microwave
Green	ON PIR	OFF	OFF	ON PIR

DIP SWITCH SETTINGS (SW1)

Factory default settings are shown in grey.



Switch	OFF	ON
1	Standard Sensitivity	Intermediate Sensitivity
2	LED disabled	LED enabled
3	60 Hz Fluorescent Filter	50 Hz Fluorescent Filter

TROUBLE SHOOTING

Problem: Red LED is flashing rapidly, trouble relay is actuated.

Explanation: The sensor is in one of three conditions:

Microwave supervision failure: The sensor continues operating using PIR as the only detection method. When detection occurs on the PIR channel, the alarm relay will latch open until the Microwave trouble is removed.

PIR self-test failure: Alarm relay does not actuate.

Temperature compensation failure: When alarm occurs, the alarm relay will latch open until the trouble is cleared.

Solution: Power down the sensor or enter zone finder mode which will perform self-test. If the trouble does not clear, replace the sensor.

Problem: Trouble relay is actuated without red LED flashing.

Explanation: Anti-mask condition is detected.

Solution: Verify that the sensor is not masked or blocked. Walk through the detection pattern. Replace the sensor if it does not clear.

MASK FUNCTIONS

The DT-7550C detects a variety of masking materials and objects. When it determines the presence of a mask, the DT-7550C sensor signals a trouble condition. Mask materials may be detected up to one foot from the sensor.

A visual inspection and walk-test is recommended for all trouble signals. The sensor clears a mask condition when it detects motion on the PIR and microwave technologies. Refer to the Trouble Function chart for sensor operation.

POWER UP ANTI-MASK (Patent Pending)

At power up, the DT-7550C looks for PIR activity. It signals the presence of a mask if the PIR does not respond when microwave activity is detected.

NORMAL OPERATION

The DT-7550C signals a mask condition when reflective objects are placed up to a foot in front of the sensor. Follow the mounting guidelines as shown in Step 1.

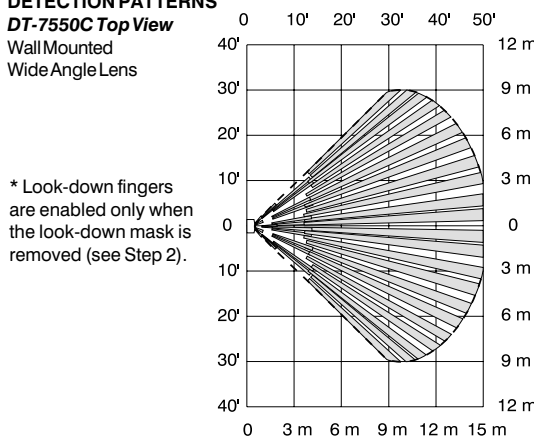
TROUBLEFUNCTION

Sensor Status	Trouble Relay	LED
Normal	Closed	Normal
Self-test Failure	Open	Trouble Flash
Mask	Open	Normal

DETECTION PATTERNS

DT-7550C Top View

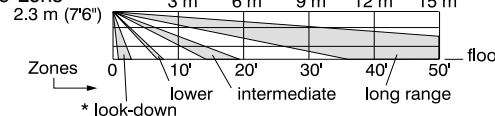
Wall Mounted
Wide Angle Lens



* Look-down fingers are enabled only when the look-down mask is removed (see Step 2).

DT-7550C Side View

Wide Angle Lens



FCC Notice: This equipment has been tested and found to comply with the limits for a field disturbance sensor pursuant to Part 15 of the FCC Rules. The user is cautioned that changes or modifications not expressly approved by IntelliSense® could void the user's authority to operate this equipment.

This equipment has 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

PRODUCT SPECIFICATIONS

Range:
15 m x 18 m (50' x 60')

Alarm relay:
Energized Form C
125 mA, 25 VDC, 20 Ohm series resistor

Trouble relay:
De-energized Form B
(NC) 125 mA, 25 VDC

Tamper switch:
(NC) 50 mA, 24 VDC

Power requirements:
7.5 - 16 VDC (UL 8.0 - 16 VDC)
25 mA typical, 40 mA maximum, 12 VDC
AC Ripple: 3 V peak-to-peak at nominal 12 VDC

Microwave frequencies:
24.125 - 24.200 GHz

PIR white light immunity:
6,500 Lux typical

Fluorescent light filter:
50 Hz or 60 Hz selectable

RFI immunity:
30 V/m, 10 MHz - 1000 MHz

Operating temperature:
0° to +55° C (-10° to +112° F)
5 - 95% relative humidity (non-condensing)

Self-test intervals:

Microwave Supervision	Continuous
PIR self-test	Once every hour
Temp. Comp.	Every 30 seconds

PIR fields-of-view:
Standard Wide Angle Lens
22 long range edges
12 intermediate edges
6 lower edges
* 4 Look-down edges

Dimensions:
11.9 cm H x 7.1 cm W x 4.2 cm D
(4.685" H x 2.795" W x 1.654" D)

Sensitivity:
Standard 3 - 4 steps
Intermediate 2 - 3 steps

Approvals/listings:
FCC