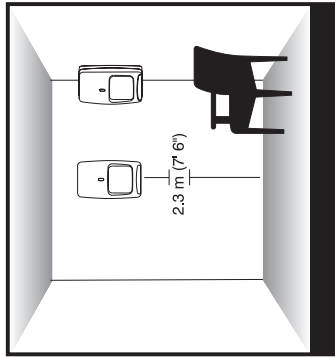


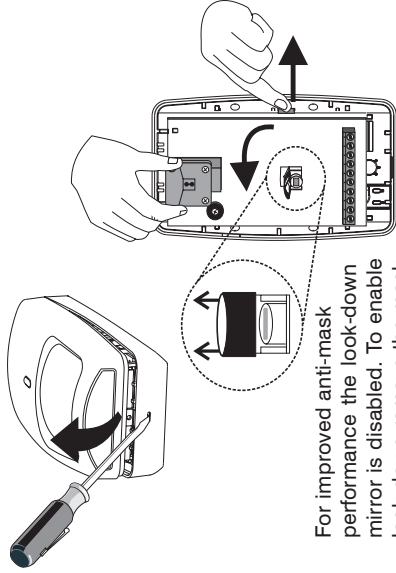
1 Select the mounting location.



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.

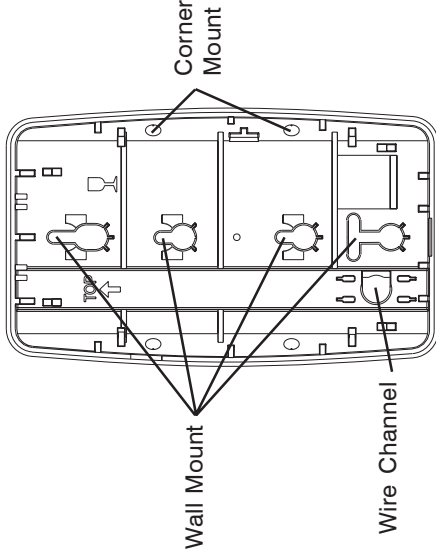
2 Separate the sensor housings and remove the printed circuit board (PCB).



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.



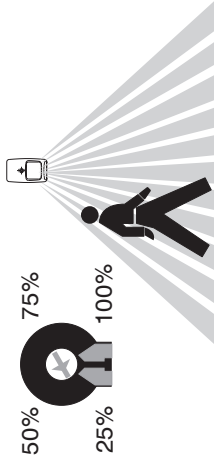
- Slide the wire through the wire channel in the back housing.
- Mount the back housing flat against a wall or in a corner.
- Replace the PCB.

4 Wire the unit.

Trouble 125 mA 25 VDC	Tamper 50 mA 24 VDC	Alarm 125 mA 25 VDC	Power 40 mA 7.5-16 VDC (For UL 8.0-16 VDC)
TBL	TBL	NO	C
T	T	EOL	NC
T	T	V-	V+

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

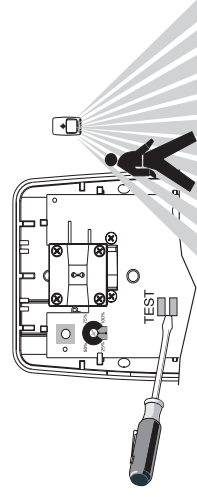
5a Walk-test the sensor.



- Set Switch 3 to select the appropriate fluorescent light filter (see Dip Switch chart on the next page).
- Apply power to the unit. Initialization is 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.
- **The sensor MUST be walk tested after every power up to complete the power up mask detection test.**

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.

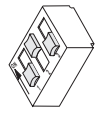


- Use a screwdriver to short the test pads.
- During the Zone Finder walk-test mode, the LED turns:
 - green for one second for every PIR detection;
 - yellow for two seconds for every microwave detection.
- Adjust the microwave range as necessary.
- Zone finder mode times out after ten minutes.

DT-7550C DUAL TEC® With Anti-Mask Motion Sensor Product Information

LED INDICATORS

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



DIP SWITCH SETTINGS (SW1)
Factory default settings are shown in grey.

Switch	OFF	ON
1	Low Sensitivity (Pulse Count 2)	High Sensitivity (Pulse Count 1)
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: A anti-mask condition is detected.

Solution: Verify the sensor was walk-tested after power up to ensure the power up mask detection test was completed. 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. 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 initiates the power up mask detection test. **The power up mask test will be completed ONLY after both the PIR and Microwave technologies are verified by a walk test and an alarm is signaled.** If not walk tested, the DT-7550C remains in power up mask testing mode indefinitely, and will issue a mask signal if a set number of microwave events occur before a PIR event.

The DT-7550C MUST be walk tested after every power up to complete the mask detection test.

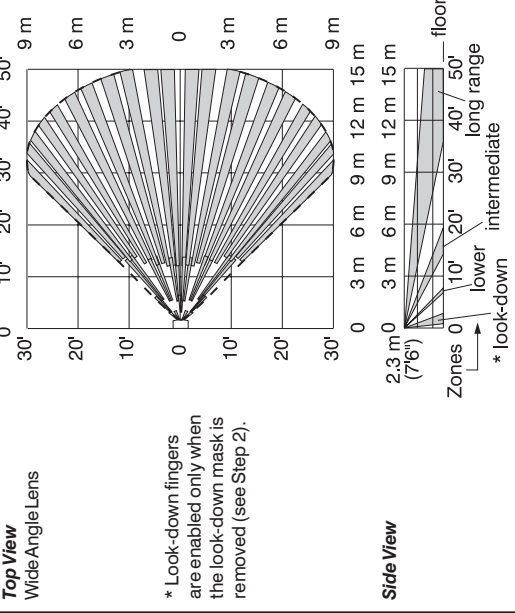
NORMAL OPERATION

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

TROUBLE FUNCTION

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

DETECTION PATTERNS



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

FCC Notice: This equipment has been tested and found to comply with the limits for a Class B digital device, under Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment uses 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.
 Changes or modifications to this equipment not expressly approved by Honeywell may void the user's authority to operate this equipment.

IC Notice: This apparatus complies with Canadian Standards ICES-003 B and RSS-210. Canada: Wiring methods shall be in accordance with CSA C22.1, Canadian Electrical Code, Part 1, Safety Standard for Electrical Installations.

PRODUCT SPECIFICATIONS

Range: 15 m x 18 m (50' x 60')
Power requirements: 7.5 - 16 VDC (UL 8.0 - 16 VDC, .60W) 30 mA typical, 40 mA maximum, 12 VDC AC Ripple: 3 V peak-to-peak at nominal 12 VDC
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
Microwave frequencies: 24.125 GHz

RFI immunity: 30 V/m, 10 MHz - 1000 MHz
PIR white light immunity: 6,500 Lux typical
Fluorescent light filter: 50 Hz or 60 Hz selectable
Sensitivity: Low (pulse count 2) 3 - 4 steps High (pulse count 1) 2 - 3 steps
Operating temperature: 14° F to +131° F (-10° C to +55° C) (indoor use environment)
Relative Humidity: 5 to 95%; non-condensing
Temperature compensation: Advanced dual slope
PIR fields-of-view: 22 long range edges 12 intermediate edges 6 lower edges *4 Look-down edges

Self-tests: Microwave Supervision, PIR self-test Temperature Compensation
Weight: 6.53 oz (185 g)
 Packaged Product Approx: 7.84 oz (222 g)
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)
Accessories Available: Optional Lens Kit - Long Range Curtain Lens Kit (P/N DT7000-LRLK)

Note: The function of this optional lens with this sensor has not been evaluated by Underwriters Laboratories Inc. Mounting Brackets - 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)
Approvals/ listings: ICC cULUS FCC

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5-051-642-00 Rev E

