

Installation Instructions DS820i/DS820iT Series TriTech PIR/Microwave Intrusion Detectors with Pet Immunity

1.0 Description

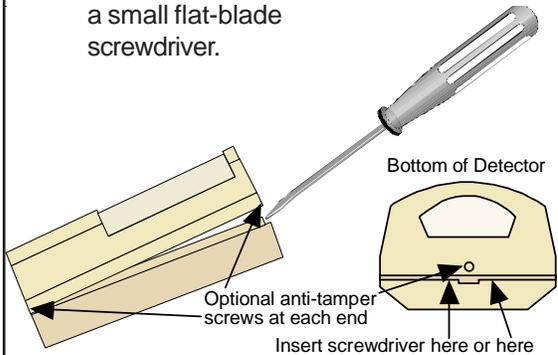
The DS820i and DS820iT Series are high performance TriTech Passive Infrared (PIR)/Microwave (MW) Intrusion Detectors which use advanced signal processing to provide outstanding catch performance and unsurpassed false alarm immunity. They are designed to detect movement of a human body in the interior of a structure as it moves across the Detector's field of view. When motion is detected, the Detector sends an alarm signal to the control panel. With Bosch Security Systems Pet Friendly® pet immunity, these Detectors will not detect a dog up to 100 pounds (45 kg) or two 60 pound (27 kg) dogs, up to 10 cats, numerous rodents or flying birds. This pet immunity feature has not been tested by Underwriters Laboratories.

2.0 Specifications

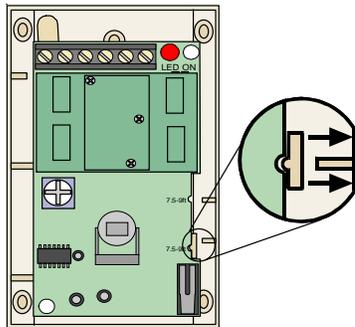
- **Input Power:** 6 to 15 VDC, 16 mA nominal standby (up to 35 mA during walk testing and alarm). Use only Limited Power Source up to 5 A maximum.
- **Standby Power:** No internal standby battery. *For UL Certified installations, 4 hours (64 mAh) standby power must be provided by the control unit or by a Listed burglary power supply.*
- **Alarm Relay:** Silent operating Normally Closed reed relay. Contacts rated 3 W, 125 mA, 28 VDC maximum for DC resistive loads; and protected by a 4.7 Ω, 1/2 W resistor in the common "C" leg of the relay. Do not use with capacitive or inductive loads.
- **Temperature:** The storage and operating temperature range is -40°F to +120°F (-40°C to +49°C). *For UL Certified installations, the temperature range is +32°F to +120°F (0°C to +49°C).*
- **Microwave Frequency:**
DS820i/820iT: 10.525 GHz (UL Listed)
DS820iTA: 10.687 GHz (Export only, not UL Listed)
DS820iTB: 9.9 GHz (Export only, not UL Listed)
- **Coverage:** 20 ft. by 20 ft. (6 m by 6 m)
- **Tamper:** ("T" models only) Normally Closed (with cover on). Contacts rated at 28 VDC, 125 mA max. Connect tamper circuit to a 24-hour protection circuit.
- **Options:** B335 Low Profile Swivel Mount Bracket, B338 Ceiling Mount Bracket. (The use of brackets is **not** recommended for pet applications and may reduce range and increase dead zone areas).
- **Patents:** This product is covered by one or more of the following U.S. patents: #4,660,024, #4,764,755, #5,077,548, #5,208,567, #5,262,783, #5,450,062, and #5,670,943. Other patents pending.

3.0 Installation

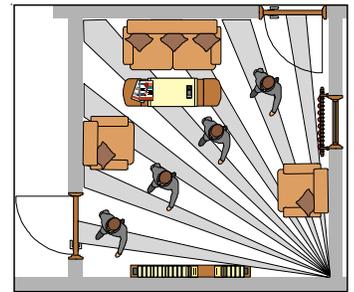
3.1 Remove the cover using a small flat-blade screwdriver.



3.2 Press the vertical adjust tab toward the side of the base and lift out the board.



3.3 Select a mounting location. Mount the sensor where an intruder will most likely cross through the coverage pattern.



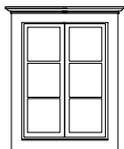
3.4 Avoid:



Mounting
Outdoors



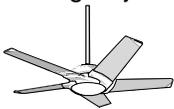
Direct Sunlight



Windows
and
Uninsulated
Walls



Moving Objects



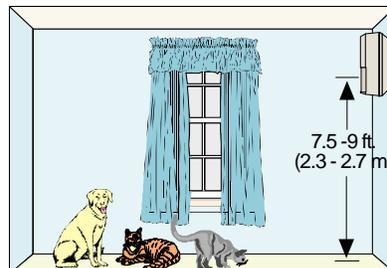
Heat
Sources



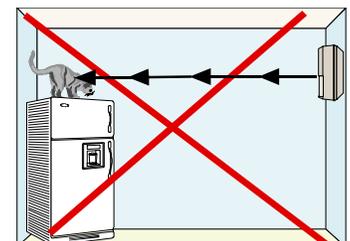
Air
Conditioning
Outlets

3.5 Observe the Pet Immunity mounting recommendations.

NOTE: The upper areas are not pet immune.



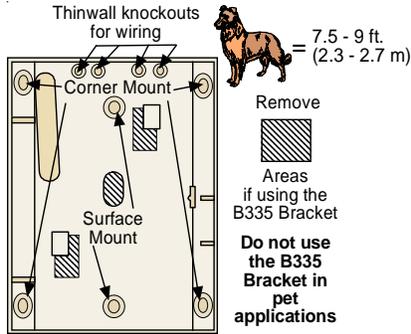
Mount the detector 7.5 to 9 feet (2.3 to 2.7 meters) above the floor



Don't point where pets can climb.

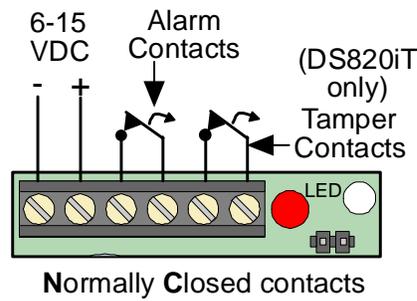
3.5 Mount the detector.

NOTE: To avoid possible circuit board damage, use **only** the mounting hardware provided in the appropriate punch-out mounting holes.



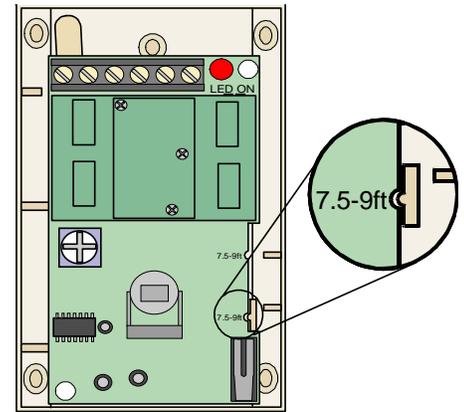
! Don't overtighten the mounting screws!
Cover may not attach correctly !

3.6 Wire the detector.

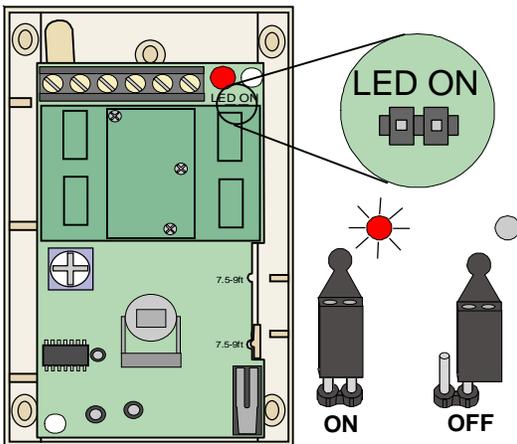


NOTE: Use only Limited Power Source up to 5 A maximum.

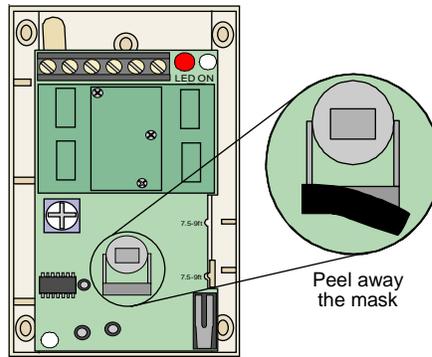
3.7 Snap the board into the base so the notch aligns with the tab.



3.8 Select LED operation.

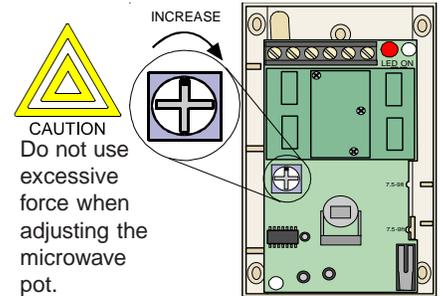


3.9 In non-pet applications only, if look-down is desired, peel away the look-down mask. **Do not remove the clear plastic lens.**



3.10 Microwave range is pre-set. Field adjustment is not required.

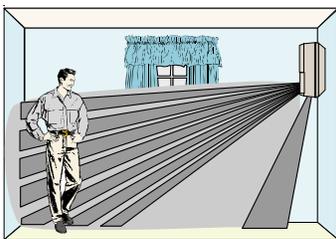
NOTE: If you choose to adjust the range, set the adjustment as low as possible for proper catch performance. Be sure to walk test throughout the coverage pattern after any adjustment.



3.11 Walk test the detector. Perform this test at the time of installation and annually thereafter.

- Green = PIR detect
- Yellow = MW detect
- Red = Alarm

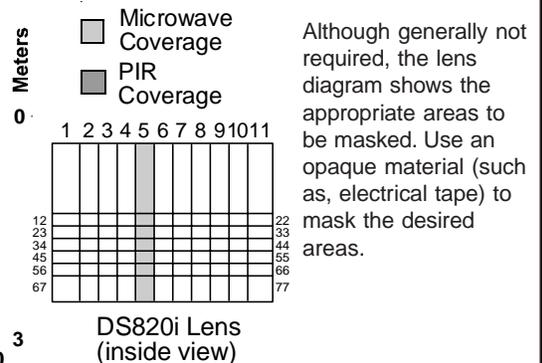
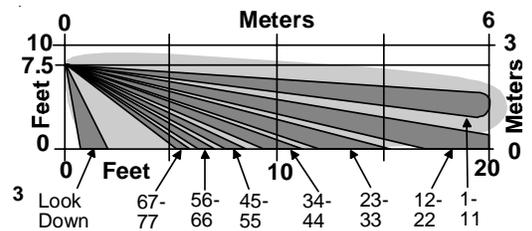
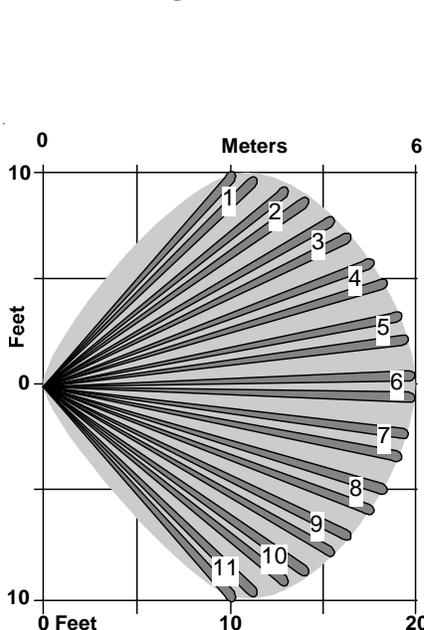
- Microwave Coverage
- PIR Coverage



This detector contains an environmental stabilization circuit which requires approximately 2 minutes after initial power-up to warm up. During this time the detector will not respond to any movement.

Please wait 2 minutes after initial power-up to perform any walk tests.

4.0 Coverage Patterns



5.0 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.
- 2) This device must accept any interference, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Bosch Security Systems can void the user's authority to operate the equipment.