

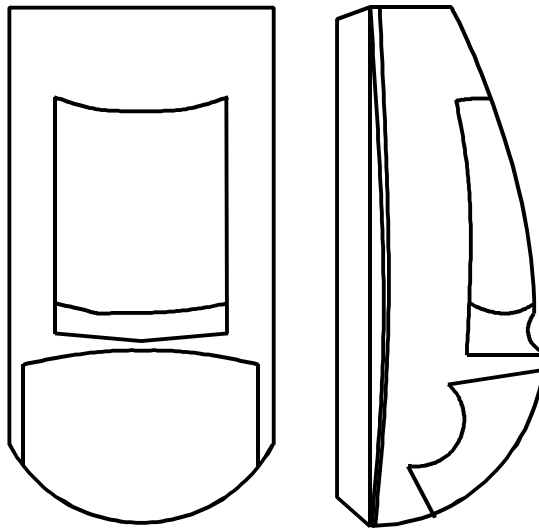


**FA206I**  
**Frequency Agile® 900MHz Transmitter**  
**Passive InfraRed Motion Detector**

**Installation Instructions**  
**02467C**

**Overview:**

The FA206I is a low-current motion detector highly sensitive to moving heat (infrared radiation) sources. It features increased immunity to RFI, vibration, static, lightning, ambient temperature changes and other common causes of false alarms.



**Features:**

- Reliable 900 Megahertz transmitter operation.
- Inovonics' *Frequency Agile*® radio link.
- Spectrum analysis embedded in VLSI electronics.
- Hard full-pattern spherical lens.
- Diffractive reflection mirror for Creep Zones.
- Standard wide-angle lens; special detection pattern lenses available.
- Fire-retardant white ABS plastic housing.

***Important Notes***

- ▲ These products are designed to be installed and maintained by professional security technicians.
- ▲ Products, unless specifically noted, are intended for indoor use.
- ▲ Manually test all products regularly.

## Technical Specifications:

Dimensions:	2.8"W x 5.4"L x 2. 2"D
Operating temperature:	32°F to 120°F
Humidity:	10% to 90% non-condensing
Battery:	Inovonics BAT604 (3.0V lithium Duracell DL123A, or equivalent) Note: Battery is supervised
Typical battery life:	2 years in location with low to moderate activity*
Pulse count:	selectable single pulse or multiple pulse
Sensitivity:	3.6°F at 2 ft/sec
Detection speed:	1.5-5 ft/sec
Standard lens coverage area:	50' x 105°
Long Range lens coverage area:	90' x 6° (optional)
Extra Wide Lens coverage area:	20' x 140° (optional)
Pet Alley coverage area:	35' x 90° (optional)
Degrees of mounting swivel:	+/- 10° right or left, 15° down (optional bracket)
Mounting height:	5 to 8 feet with standard lens

\* The battery life of a PIR transmitter is highly dependent on "traffic" in its coverage area. PIRs installed in reception areas and similar areas may experience reduced battery life.

**LED indicator: lights only during 1-minute walk test period, and during transmission test.**

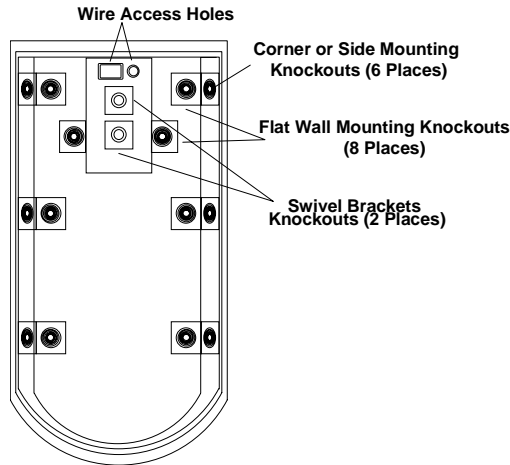
## Installation:

General mounting advice:

- For the most precise installation, The FA206I functions best when areas being protected are bounded by solid barriers. Walls and floors provide good backdrops for detecting changes in infrared energy.
- For best detection, locate FA206Is so that intruders move **across** detection zone patterns, rather than toward or away from the sensor.
- Check areas for potential sources of false alarms. Remember that the sensor responds to quick changes in heat patterns within its coverage pattern. Avoid locating it where it is exposed to direct or reflected sunlight, or to objects which can be heated quickly by sunlight. Do not place the FA206I looking at windows. Don't place it near heat or cold sources, like heater ducts or air conditioners, which might direct hot or cold air onto the sensor. Look for appliances such as space heaters which can rapidly heat up. If necessary, mask the lens to eliminate potential sources of false alarms.
- Find out about normal use of the area. Are there pets? Might there be birds, bats, mice, for example, in a warehouse?
- When the sensor might detect users who enter the protected area through a delayed door, program the sensor as a "Follower" device. The PIR will not go into alarm during the entry delay period, but will trip instantly otherwise.
- Make end-users aware of the location of the FA206I and caution them about obstructing the coverage pattern when re-arranging furniture or stock.

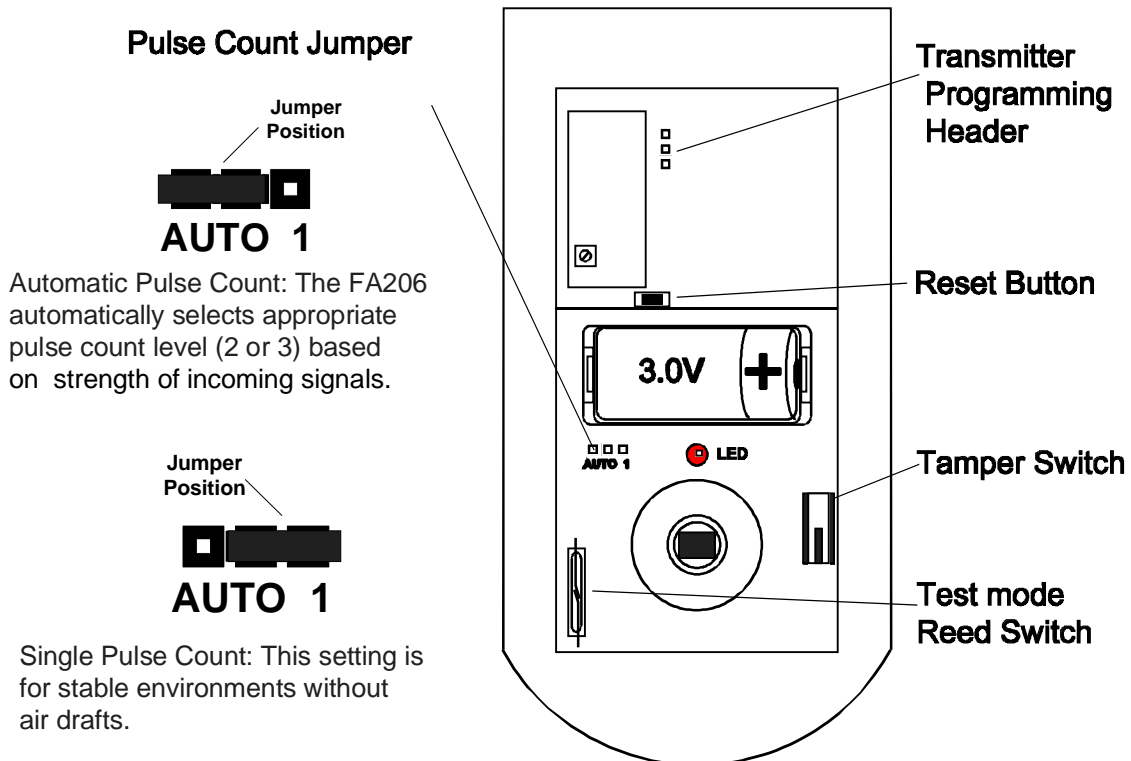
## Mounting Instructions:

The FA206I may be mounted directly on walls and corners with screws through the direct mounting knockouts shown in the figure, or can be mounted on walls, ceilings or corners by using the appropriate SRB Swivel Mounting Bracket adapters. (Available separately from Inovonics.)

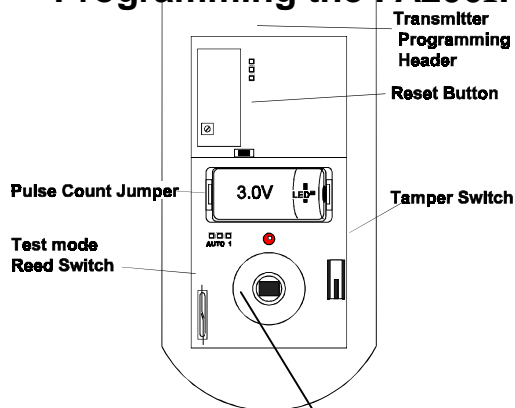


## Pulse Count vs. Automatic Pulse count

The Pulse Count jumper setting provides control for normal or difficult operating environments. Automatic Pulse Count is recommended for reliable operation in environments which may be subject to temperature fluctuations which might cause false alarms. The Single Pulse Count mode is more sensitive to minor temperature variations, so should be used in sites where variant heat sources will not cause alarms.



## Programming the FA206I:



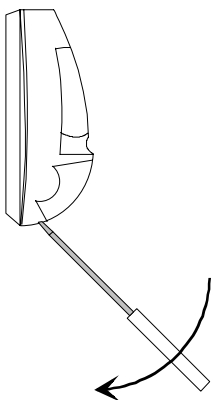
Typical battery life: 2 years  
(in low to moderate activity area)  
Battery type: 3.0V lithium Duracell DL123A  
(Inovonics BAT604)

### Recommended Programming:

External contacts: N/C (only)  
EOL: No  
Internal Contact: No  
Check-in: 60 seconds

#### Attention:

Observe the location of the Test Mode reed switch before re-assembling the housing cover.



### Programming the transmitter:

1. Remove the FA206I cover. Insert a small flat-blade screwdriver about ¼-inch at the tab on the bottom of the unit. The screwdriver will enter the slot at about a 45° angle. Pry downward on the handle of the screwdriver until the latch holding the cover to the housing base releases.
2. Enter programming mode for the receiver unit, using recommended options. Connect the programming cable between the transmitter and the receiver.
3. Press the transmitter reset button.
4. When programming is complete, disconnect the programming cable and replace the FA206I cover.

**Note:** The FA206I retains programming data in non-volatile memory. It does not require re-programming after loss of power. Install a new battery and press the reset button to re-initialize the transmitter and restore programming.

**Walk test:** With the cover on the unit, quickly (less than ½ second) pass a magnet near the Test Mode Reed Switch. This activates a 1-minute walk test mode. Within this period, the LED will light every time the PIR senses motion. The unit will not transmit alarm signals during this test period.

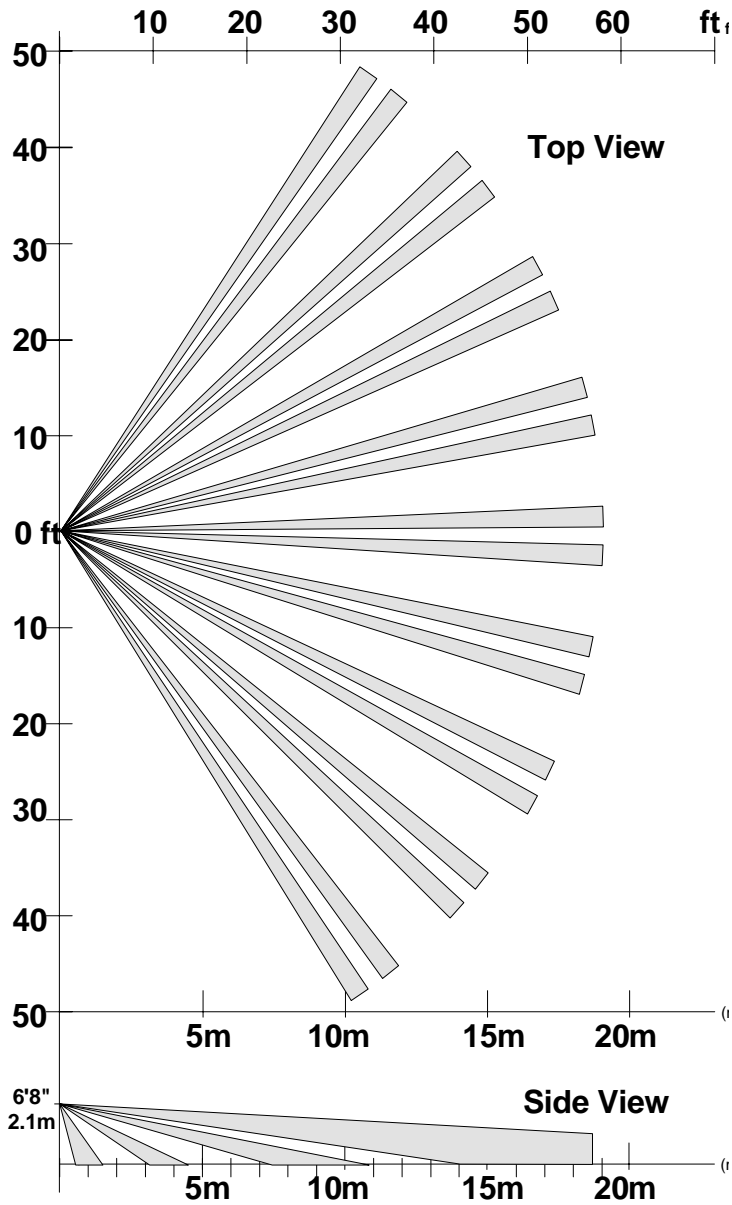
**Transmission test:** With the cover on the unit, hold a magnet near the Test Mode Reed Switch for at least 1 second. This activates a 1-minute transmission test mode. Within this period, the unit will transmit alarm and restoral cycles at regular intervals for approximately one minute. The LED will light every time the unit transmits.

**Operation:** The FA206I transmitter signals an alarm condition when motion is detected by the sensor. Once an alarm condition is signaled, further alarms are inhibited until no motion is sensed for a period of more than 90 seconds.

### Appendix A: Zone pattern for standard lens

The standard wide-angle lens has a coverage pattern of 105°, and covers an area 60' by 60' (18m x 18m). It has a total of 52 zones (18 long range + 16 intermediate + 10 short range + 6 nearest range + 2 creep zones.)

Note: Mounting height of the FA206I with standard lens may be anywhere within a range of 5 to 8 feet.



Note: Optional lenses are available. Contact Inovonics Technical Support.



For technical support  
or application assistance, call  
800-782-2709

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## Warranty & Disclaimer

Inovonics Wireless Corporation ("Inovonics") warrants its products ("Product" or "Products") to conform to its own specifications and to be free of defects in materials and workmanship under normal use for a period of twenty-four (24) months from the date of manufacture. Within the warranty period Inovonics will repair or replace, at its option, all or any part of the warranted product. Inovonics will not be responsible for dismantling and/or reinstallation charges. To exercise the warranty, the User ("User", "Installer" or "Consumer") must be given a Return Material Authorization ("RMA") Number by Inovonics. Details of shipment will be arranged at that time.

This warranty does not apply in cases of improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than Inovonics.

This warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express, or implied, including any warranty of merchantability or fitness for a particular purpose. Inovonics will not be liable to anyone for any consequential or incidental damages for breach of this warranty or any other warranties.

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This warranty does not warrant the replacement of batteries that are used to power Inovonics Products.

The User recognizes that a properly installed and maintained security system may only reduce the risk of events such as burglary, robbery, personal injury and fire. It does not insure or guarantee that there will be no death, personal damage and/or damage to property as a result. **Inovonics does not claim that the Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection.**

**Inovonics shall have no liability for any death, injury or damage, however incurred, based on a claim that Inovonics Products failed to function.** However, if Inovonics is held liable, directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, Inovonics' maximum liability will not in any case exceed the purchase price of the Product, which will be fixed as liquidated damages and not as a penalty, and will be the complete and exclusive remedy against Inovonics.



**Warning: The User should follow all installation, operation and maintenance instructions.** The User is strongly advised to conduct Product and systems tests at least once each week. Changes in environmental conditions, electric or electronic disruptions and tampering, may cause the Product to not perform as expected.



**Warning: Inovonics warrants its Product to the User.** The User is responsible for exercising all due prudence and taking necessary precautions for the safety and protection of lives and property wherever Inovonics Products are installed. Inovonics strongly advises the User to program Products to be supervised whenever used in applications affecting life safety. Users are warned that unsupervised devices are subject to undetected failure due to malfunction, battery failure, tampering, or changes in environment.