EN1260 EchoStream® Passive Infrared Motion Detector

Installation and Operation Manual - 05379D

1 Overview

The EN1260 is a low-current motion detector highly sensitive to moving heat (infrared radiation) sources. It features increased immunity to radio frequency interference, vibration, static, lightning, ambient temperature changes, and other common causes of false alarms.

The EN1260 includes a range of features, including a wall tamper capability for increased security, and a fixed or variable sleep time option for normal or high-traffic applications.

Caution: The EN1260 needs one minute for stabilization after power up. During the stabilization period, the LED will blink twice per second, and the EN1260 will not be operational.

1.1 Inovonics Wireless Contact Information

If you have any problems with this procedure, contact Inovonics Wireless technical services:
- E-mail: support@inovonics.com
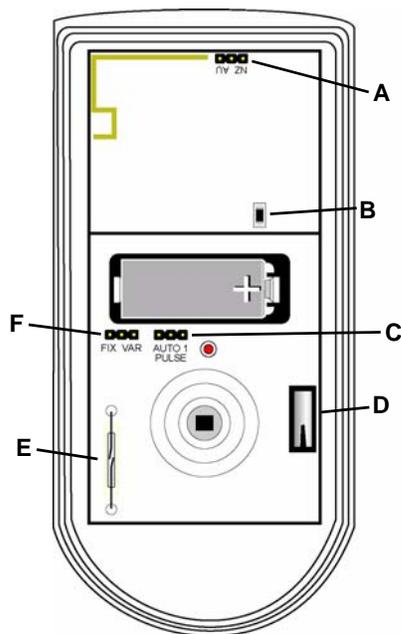- Phone: (800) 782-2709; (303) 939-9336

EN1260 Components

Figure 1 EN1260 components

A Frequency band selection pins	**B** Reset button	**C** Pulse count selection pins
D Tamper switch	**E** Test mode reed switch	**F** Sleep time selection pins

2 Installation and Startup

2.1 Install/Replace Battery

To install the battery:
1. Use a small Phillips screwdriver to remove the screw at the bottom of the EN1260 housing; separate the housing.
2. Install/replace the battery.
3. Press the **Reset** button to initialize the transmitter.

2.2 Select Frequency Band

EchoStream products are able to use a range of radio frequencies, and must be configured for your geographic area. To configure the EN1260:
1. Place a selection jumper on the appropriate frequency band selection pins (Fig. 1).
   - Place the jumper on the left two pins to select 915-928 MHz for Australia.
   - Place the jumper on the right two pins to select 921-928 MHz for New Zealand.
   - Leave the jumper off the pins to select 902-928 MHz for North America.
2. Press the **Reset** button.

Caution: When pressing the **Reset** button, make sure you don't also touch the frequency band selection pins. Touching the frequency band selection pins while pressing the **Reset** button can inadvertently set the EN1260 to the wrong frequency band.

2.3 Select PIR Sensitivity

The pulse count jumper setting provides control for normal or difficult operating environments. Automatic pulse count is recommended for reliable operation in environments subject to temperature fluctuations that may cause false alarms. The single pulse count mode is more sensitive to minor temperature variations, and should be used in sites where variant heat sources will not cause false alarms. Automatic pulse count is the factory default because it allows more reliable operation in environments subject to temperature fluctation. To select PIR sensitivity:
1. Place a selection jumper on the appropriate pulse count selection pins.
   - Place the jumper on the left two pins to select automatic pulse count.
   - Place the jumper on the right two pins to select single pulse count.
2. Press the **Reset** button to complete configuration.

2.4 Select Fixed/Variable Sleep Time

The sleep time jumper setting provides control for normal or high-traffic operating environments. When set to fixed, if the EN1260 senses motion, it will transmit an alarm, then enter sleep mode for 180 seconds; if motion is sensed when the sleep time has expired, the EN1260 will transmit another alarm. Fixed sleep time is recommended for normal operating environments. When set to variable, if the EN1260 senses motion, it will transmit an alarm, then enter sleep mode for 180 seconds; if motion is sensed before the sleep time has expired, the EN1260 will restart the 180 second interval. Variable sleep time is recommended for high-traffic operating environments.
1. Place a selection jumper on the appropriate sleep time selection pins.
   - Place the jumper on the left two pins to select fixed sleep time.
   - Place the jumper on the right two pins to select variable sleep time.
2. Install the battery.
3. Press the **Reset** button.

2.5 Register the Transmitter

The EN1260 must be registered with the system receiver in order to be monitored and supervised. Each EN1260 has a unique factory-programmed identification number. Refer to the receiver, network coordinator or control panel installation instructions for details on registering a transmitter.
1. When prompted reset the EN1260, press the EN1260 **Reset** button.
2. Replace the EN1260 cover.

Caution: The EN1260 should be tested after registration to ensure operation. To test the EN1260, activate each of the conditions and ensure an appropriate response.

Note: The EN1260 retains programming data in non-volatile memory. It does not require re-programming after loss of power.

2.6 Mount the Transmitter

Mount the transmitter.
1. Remove the EN1260 printed circuit board from the housing.
2. Use the included hardware to mount the EN1260 housing back plate to the mounting surface.
   a. If using the wall tamper function for increased security, mount the housing back plate per Figure 2, ensuring the tamper switch is depressed..
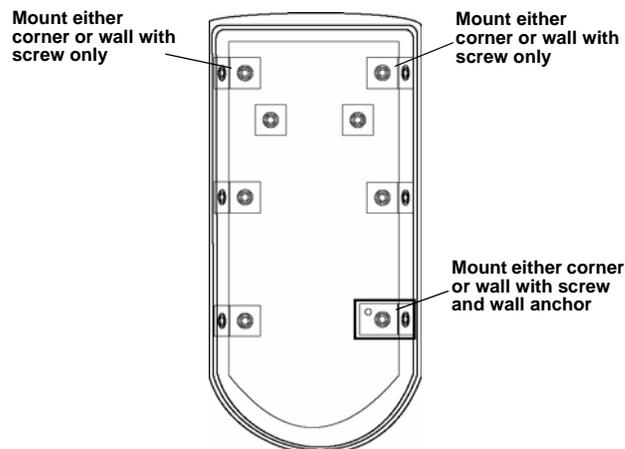

Mount either corner or wall with screw only

Mount either corner or wall with screw only

Mount either corner or wall with screw and wall anchor

Figure 2 EN1260 mounting back plate
   b. If not using the wall tamper, mount the housing back plate using all appropriate hardware.

3 Test the EN1260

3.1 Perform a Walk Test
The walk test is performed to test the PIR, ensuring motion is sensed. To perform a walk test:
1. Hold the magnet to the reed switch for less than one quarter of a second, The LED will light three times to indicate the three-minute walk test has been activated.

Note: To activate the walk test, the magnet shouldn't remain near the reed switch for more than one-quarter of a second.

2. Walk in front of the PIR to test the sensor. The LED will light every time the PIR senses motion.
3. The unit will not transmit alarm signals during the three minute test period. When the walk test ends, the LED will light six times.

3.2 Perform Transmission Test
1. Hold the magnet to the reed switch for more than four seconds. The LED will light three times to indicate the transmission test has been activated.
2. The unit will transmit alarm and restoral cycles at regular intervals for approximately one minute. The LED will light every time the unit transmits. Ensure transmissions are received by your network coordinator, receiver or control panel.

4 Operation
The EN1260 transmitter signals an alarm condition when motion is detected by the sensor.

4.1 Zone Pattern for Standard Lens
The standard wide-angle lens has a coverage pattern of 105°, and covers an area 18 m x 18 m (60 ft x 60 ft). It has a total of 52 zones: (18 long range + 16 intermediate + ten short range + six nearest range + two creep zones). Optional lenses are available. Contact Inovonics Wireless technical services.

4.2 Lens Options
The following optional lenses are available for the EN1260:
- ACC672CT curtain lens
- ACC672LR long range lens
- ACC672PA pet alley lens

Note: Mounting height of the EN1260 with standard lens may be anywhere within a range of 7 to 9 feet (2.1 to 2.7 m).
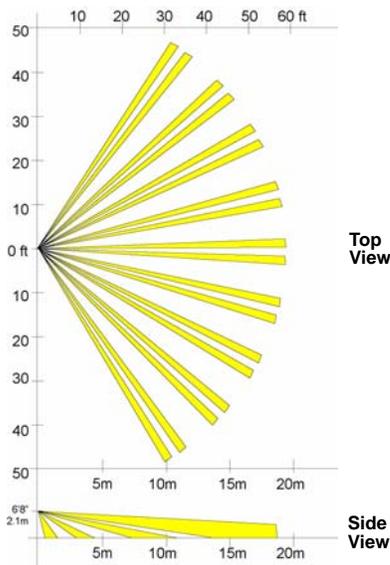

Figure 3 EN1260 zone map

5 Specifications
Dimensions: 4.5"H x 2.5"Wx 1.6"D (11.4 8cm x 6.4 cm x 4.1 cm)
Operating temperature: -4° to 140°F (-20° to 60°C)
Humidity: 0 - 90% (non-condensing)
Battery: 3V lithium (CR123A orDL123A)
Tamper: Housing and wall tamper
PIR RF interference immunity: Greater than 30 v/m 26 MHz - 1 GHz
Alarm lockout time: 3 minutes
Mounting height: 7 to 9 feet (2.1 to 2.7 m)

6 Television and Radio Interference
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.

7 FCC Part 15 and Industry Canada Compliance
This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

8 Warranty and Disclaimer
Note: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Inovonics Wireless Corporation ("Inovonics") warrants its EchoStream 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 thirty-six (36) 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 work directly through their authorized distributor who will be given a Return Material Authorization ("RMA") number by Inovonics. Details of shipment will be arranged directly through the authorized distributor.
This warranty is void in cases of improper installation, misuse, failure to follow installation and operating instructions, alteration, 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. There is no warranty by Inovonics that Inovonics product will be merchantable or fit for any particular purpose, nor is there any other warranty, expressed or implied, except as such is expressly set forth herein. In no event shall Inovonics be liable for an incidental, consequential, indirect, special, or exemplary damages, including but not limited to loss of profit, revenue, or contract, loss of use, cost of down time, or interruption of business, nor any claim made by distributor's customers or any other person or entity.
This warranty will not be modified or extended. Inovonics does not authorize any person to act on its behalf to modify or extend this warranty.
This warranty will apply only to Inovonics Products. Inovonics will not be liable for any direct, incidental, or consequential damage or loss whatsoever, caused by the malfunction of Product due to products, accessories, or attachments of other manufacturers, including batteries, used in conjunction with Inovonics Products.