

1

FAST GUARD

FREEWAVE™ WIRELESS SENSOR




INSTALLATION INSTRUCTIONS
P/N 7101471 REV. A A.Y.

2

INTRODUCTION

The FAST GUARD is an advanced, fully supervised low-current wireless SENSOR that includes a FreeWave transmitter. Both transmitter and sensor circuits are powered by long life Lithium battery.

Each FAST GUARD has a unique ID code (this code is impossible to reproduce). Compatible FreeWave receivers are designed to "learn" specific IDs and respond to them only.

Following detection, FAST GUARD triggers the on-board transmitter that transmits its specific FreeWave ID followed by an alarm signal and status designators for battery condition. Alarm and other data are forwarded to the alarm control panel. A periodic transmission test for supervision purposes takes place automatically every 12-14 min. The receiver is informed that the particular detector is taking an active part in the wireless security system.

3

The FAST GUARD sensor is designed to detect intruders in the protected territory, to safeguard the goods during their transportation and storage, to keep windows, doors, different kinds of fences and walls from being penetrated through. When a thin hardly visible double microwire is torn, the sensor triggers the alarm.

By welding the end of the microwire on an open flame (with a match or a lighter) the alarm signal stops, and the sensor is ON again.

4

The FAST GUARD has a unique Alarm Power Saver (APS) mechanism that enables transmitter activation only 2 min after the last movement has been detected.

FEATURES

- State-of-the-art wireless security system
- Unique microwire Technology
- Powered by a 3.6 Volt Lithium battery (AA size)
- Battery life : up to 4 years
- Built in Automatic Power Saver (APS)
- Frequency: 868MHz
- Low Battery condition signal transmission
- Test mode for RF signal.
- Range up to 1 km in free space.
- Unique ID number
- Easy and fast installation.

5

OPERATION

The Wireless SENSOR transmits the following events data:

SUPERVISION - a periodical transmission. Every 12~14 min indicates detector's presence.

READY – transmission generated by welding the end of the wire. Ready signal indicates that the sensor is armed.

ALARM – alarm transmission triggered by SENSOR intrusion detection.

LOW BAT – Whenever the battery reaches a pre-set low level (2.4V) Battery Low signal will be sent with the next message (Supervision, Alarm, etc).

6

APS

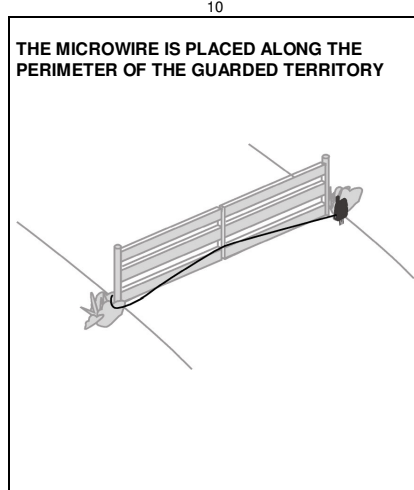
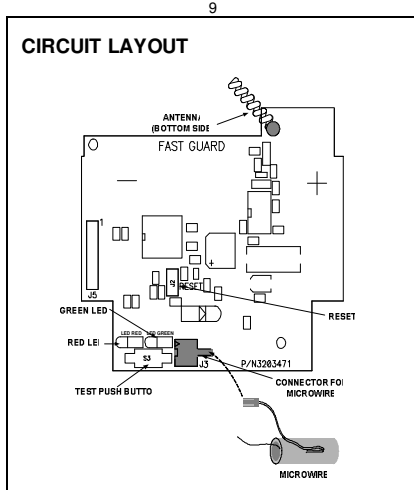
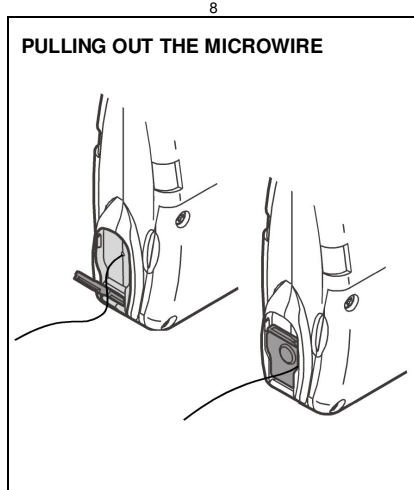
The unique APS (Automatic Power Saver) function built in the detector enables a battery life span up to four years.

7

INSTALLING THE SENSOR

The microwire is pulled out of the cassette, located in the sensor unit side. The end of the microwire is closed by welding with the help of a match or a lighter. After switching on the power supply, the sensor gives a short-time green light and transmits signal "READY". It means the closing of the microwire circuit and the beginning of the sensor operation in normal state, i.e. the state of controlling the integrity of the microwire.

The microwire is placed along the perimeter of the guarded territory at a height of 0.5 – 0.7 meters and fixed every other 3 to 10 meters on a pole, a tree, etc. The microwire should be in such a way that stealing or breaking the barrier could break the microwire.



11

RFSI – RF SIGNAL INDICATION

The FREEWAVE control panel has an "RF Signal quality" indication for each transmitter to help the installer define the best location for the detector from an RF point of view. The indication value is between 1 and 100, where 100 is the best RF received signal. RFSI indication below 30 indicates a weak RF link. It is then necessary to find a better installation location for the sensor.

NOTE:
See FREEWAVE control panel installation instructions.

12

ID REGISTRATION - "LEARN" PROCEDURE

Refer to the system receiver's installation instructions and follow the procedure given for "learning" detector IDs. Perform transmission (SENSOR in test mode) for learning it by FREEWAVE control panel receiver. Make sure that the receiver is in learning mode - according to control panel installation instructions.

NOTE:
It is recommended to power up the detector and let the system receiver "learn" the detector's ID before installation.

TEST MODE**ALARM TRANSMISSION TEST**

Pressing the Push Button enables the alarm transmission test feature, and activate 1 transmission signal.
Verify on the **FREEWAVE** control panel that display show **Trouble Zone # X**

This test enables to activate the alarm transmission immediately.

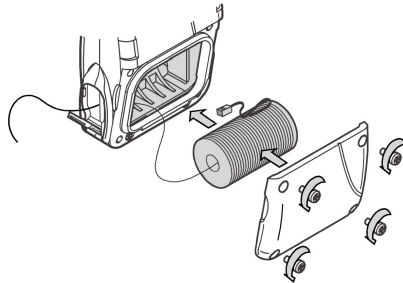
BATTERY REPLACEMENT

- Remove the front small cover by unscrewing 4 screws.
- Remove the front big cover by unscrewing 4 screws.
- Remove the PCB by unscrewing 2 screws.
- The battery is located at the bottom side of PCB.
- **Capacitors discharge must be done before battery replacement.**

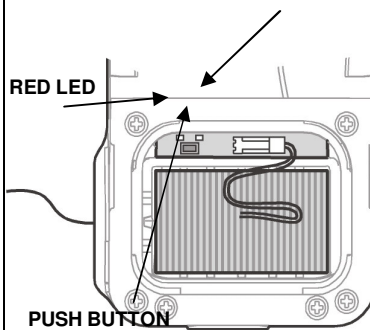
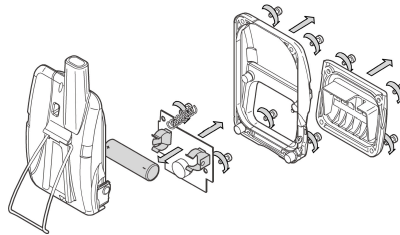
Use flat screwdriver to make momentary short circuit on J2 pins. (see Fig.3)

- Replace the battery according to the polarity marked on the front of the PCB.

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

REPLACING THE MICROWIRE**CROW ELECTRONIC ENGINEERING LTD. ("Crow") - WARRANTY POLICY CERTIFICATE**

This Warranty Certificate is given in favor of the purchaser (hereunder the "Purchaser") purchasing the products directly from Crow or from its authorized distributor. Crow warrants these products to be free from defects in materials and workmanship under normal use and service for a period of 24 months from the last day of the week and year whose numbers are printed on the printed circuit board inside these products (hereunder the "Warranty Period"). Subject to the provisions of this Warranty Certificate, during the Warranty Period, Crow undertakes, at its sole discretion and subject to Crow's procedures, as such procedures are from time to time, to repair or replace, free of charge for materials and/or labor, products proved to be defective in materials or workmanship under normal use and service. Repaired products shall be warranted for the remainder of the original Warranty Period. All transportation costs and in-transit risk of loss or damage related, directly or indirectly, to products returned to Crow for repair or replacement shall be borne solely by the Purchaser. Crow's warranty under this Warranty Certificate does not cover products that is defective (or shall become defective) due to: (a) alteration of the products (or any part thereof) by anyone other than Crow; (b) accident, abuse, negligence, or improper maintenance; (c) failure caused by a product which Crow did not provide; (d) failure caused by software or hardware which Crow did not provide; (e) use or storage other than in accordance with Crow's specified operating and storage instructions. There are no warranties, expressed or implied, of merchantability or fitness of the products for a particular purpose or otherwise, which extend beyond the description on the face hereof. This limited Warranty Certificate is the Purchaser's sole and exclusive remedy against Crow and Crow's sole and exclusive liability toward the Purchaser in connection with the products, including without limitation - for defects or malfunctions of the products. This Warranty Certificate replaces all other warranties and liabilities, whether oral, written, (non-mandatory) statutory, contractual, in tort or otherwise. In no case shall Crow be liable to anyone for any consequential or incidental damages (inclusive of loss of profit, and whether occasioned by negligence of the Crow or any third party on its behalf) for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever. Crow does not represent that these products can not be compromised or circumvented; that these products will prevent any person injury or property loss or damage by burglary, robbery, fire or otherwise; or that these products will in all cases provide adequate warning or protection. Purchaser understands that a properly installed and maintained product may in some cases reduce the risk of burglary, fire, robbery or other events occurring without providing an alarm, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss or damage as a result. Consequently, Crow shall have no liability for any personal injury, property damage or any other loss based on claim that these products failed to give any warning. If Crow is held liable, whether directly or indirectly, for any loss or damage with regards to these products, regardless of cause or origin, Crow's maximum liability shall not in any case exceed the purchase price of these products, which shall be the complete and exclusive remedy against Crow.

ALARM TRANSMISSION TEST**GREEN LED****BATTERY REPLACEMENT****REPLACING THE MICROWIRE**

- Remove front small cover by unscrewing 4 screws.
- Disconnect microwire connector.
- Remove used microwire.
- Gently pull about 10-15 cm of new microwire.
- Insert the tip of the microwire through the side hole in the case (left hand side).
- Gently place the new microwire in its niche. Pay attention that the microwire is not twisted.
- Close the outer "door" of the case hole over the microwire.
- Connect the new microwire's connector to J3 connector.

BATTERY

A 3.6 V lithium battery (AA size) powers the unit. Thanks to the exclusive APS (Automatic Power Saver), the battery provides an up to 4 year operation. When the battery reaches the factory preset low level, a LOW BATTERY signal is sent and from this moment the detector remains operational for another **30** days only.

The battery must be replaced by Size AA Lithium battery 3.6V
Models as: **XENO XL-060F**
Or **TADIRAN TL - 5903**

This device complies with:

European Council Directive EMC 89/336/EEC

EN50130-4

EN301489

EN300220

EN50081.

SAFETY 73/23/EEC

EN60950 (ITE)

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