



FA536

Locator

Frequency Agile[®] 900MHz
Interior Installation Housing

Installation Instructions 02803D

Product Description

The FA536 is a sophisticated locator designed and intended for use by qualified OEM customers. The FA536 receives, decodes, and re-transmits signals from Inovonics FA-series transmitters. The FA536 is used to determine the approximate location of roving transmitters. The FA536 appends location identification data to signals initiated within its reception range. User-created system software can then identify the general area from which the signal originated. The locator is not recommended for use in multi-story buildings.

The FA536 is intended for quick and easy indoor installation. (Kits are available for outdoor installation.)



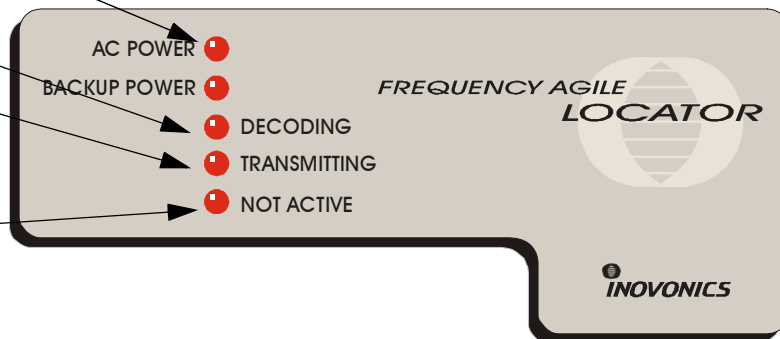
Specifications

Housing dimensions: 6.38" x 3.60" x 1.10"
Weight: 6.9 oz.
Power requirement: 14VAC (power adapter provided)
(Optional) Backup battery: 12VDC
Low voltage threshold: 10.5-11.5VDC
Maximum current: 75mA
Receiver type: frequency-hopping spread spectrum
Operating frequency: 902-928 MHz
Operating Environment: 32° to 140°F (0° to 60°C),
up to 95% relative humidity
(non-condensing)



LED Indicators

- "AC POWER" and "BACKUP POWER" LEDs show locator power source.
 - "DECODING" indicates that the locator is receiving RF energy.
 - "TRANSMITTING" indicates that the locator is transmitting.
- Note: The locator does NOT decode while transmitting.*
- "NOT ACTIVE" means that the locator has not received a transmission in a specified period. It is "waiting" for incoming traffic.



Operation

Power supply: A 14VAC transformer is provided with the FA536.

Backup battery: An optional 1.2Ah battery (BAT603) can be mounted inside the outdoor housing.

Low voltage detection: The locator will report low voltage if the supply voltage (either primary or backup) drops into a preset range.

- AC power failure will not be reported directly—the system receiver and PC will detect inactivity if locator power is off for the duration of the supervision window.

Supervision: Locators should be programmed to send check-in signals to the receiver, but can operate unsupervised. The system integrator will assess application conditions and will establish parameters for proper supervision.

Output: The FA536 will NOT repeat signals from other locators or other repeaters. When an FA536 receives a "firsthand" alarm signal (i.e., a signal coming directly from a transmitter), the open collector output will switch to a "low" state until either the reset button on the locator is pressed, or the external reset terminal is shunted to ground. The output can be used to activate annunciation or signalling equipment. Output reset occurs when the transmitter causing the alarm condition restores (unless locator is factory-programmed to latch).

External reset: A circuit connecting the reset terminal with the ground terminal via a N/O momentary switch can be used to reset the locator Output terminal.

Test mode: Pressing the Test button will cause the locator to transmit a current status message until the button is released.

Tracking Jumper: When the Track jumper is in the "NO" position, the locator will append identification data to firsthand alarm signals ONLY. In the "YES" position, data will also be appended to original supervisory (check-in) transmissions. This permits rough position tracking of roving transmitters, but decreases the locator's ability to receive alarm transmissions, especially in installations with hundreds of transmitters. (Locators are "busy" sending in supervisory data for significant portions of their duty cycles.)

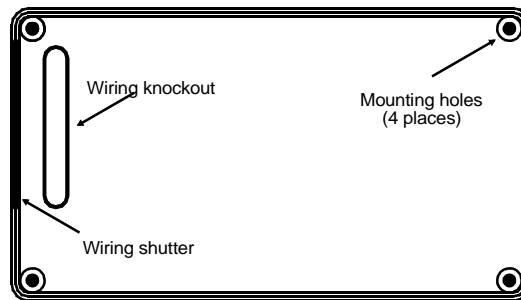
External tamper / Auxiliary input: This terminal can be used to connect a tamper switch outside the case, or to a N/C input whose activation will cause the FA536 to send a locating tamper transmission.

Locator Range Potentiometer: The Locator Range Pot is provided on the locator to allow the receiver to be desensed, so the locator coverage can be limited, providing better resolution of location. The Pot can be set from full sensitivity of -110dB (maximum receive range) to a minimum sensitivity of -40dB (minimum receive range). Locators should be mounted in locations indicated by system designer. **Sensitivity adjustments are necessary whenever replacing a locator.**

Installation

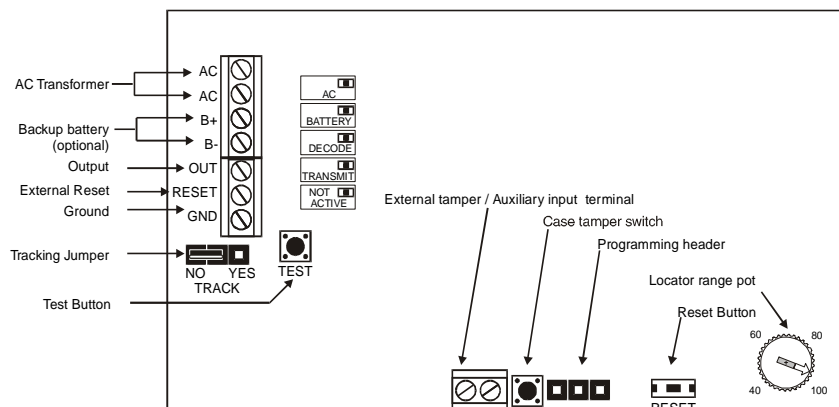
Mounting locators:

- Locators should be mounted in locations indicated by the system designer.
- Unless specifically instructed to do so by the system designer, do NOT mount locators on metal surfaces or inside metal enclosures. Do not mount where sheet metal ductwork, wire mesh screens, etc., might unnecessarily block transmissions.
- The FA536 housing has an inside knockout to permit wires from power sources to be brought into the housing from behind the unit.
- The FA536 also has a removable shutter to permit wires to enter the housing from the side of the unit.



Power Supply:

- The FA536 transformer requires an *unswitched* 120VAC power outlet.
- The transformer case should be secured to the electrical outlet to prevent accidental unplugging.
- Recommended AC power requirement of locator: 14VAC at 20VA. (ACC610)
- Recommended backup power requirement (optional): 12 VDC, 1.2 Ah. (BAT603)
- Recommended wire requirements: 2-conductor 20AWG (or larger) stranded tinned copper with PVC insulation rated to 300 volts @ 80°. (Belden #8205, for example.) Maximum recommended wire length between transformer and locator: 100 meters (328 feet). Measure voltage at locator on long wire runs. (Source: Tech Note #1053.)
- Wire runs should be hidden or protected by conduit.



Warranty & Disclaimer

Inovonics 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 Corporation 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.

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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.**

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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.