

FA570 Frequency Agile® High-Power Repeater

Installation and Operation Manual - 02824D

1 Overview

The FA570 is a sophisticated repeater that receives, decodes, and re-transmits signals from Inovonics Wireless FA transmitters. It acts as a range extender for any decodable Inovonics Wireless transmission. The FA570 is intended for quick and easy indoor installation. The optional ACC640 Receiver Enclosure accommodates an optional backup battery and can also be used in outdoor installations.

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

1.2 FA570 LEDs

AC Power LED: Lit when the FA570 is receiving AC power (Fig. 1).
Backup Power LED: Lit when the FA570 is receiving power from the battery (Fig. 1).
Decoding LED: Lit when the FA570 is receiving an RF transmission (Fig. 1).
Transmitting LED: Lit when the FA570 is transmitting an RF message (Fig. 1).
Not Active LED: Lit when the FA570 has not received an Inovonics Wireless transmission within its programmed check-in interval (Fig. 1).

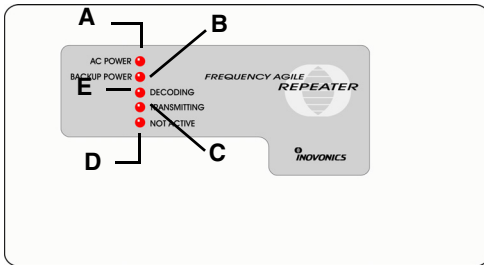


Figure 1 FA570 LEDs

- A. AC Power LED B. Backup Power LED C. Decoding LED
 D. Transmitting LED E. Not Active LED

2 Installation and Startup

2.1 Connect Power Cabling

Before beginning startup, power must be connected to the FA570 high-power repeater. To connect power to the high-power repeater:

1. Use a small screwdriver to press the housing release tab on the top or bottom of the high-power repeater (Fig. 2); separate the housing.
2. Connect power cabling (Fig. 2).
 - Power source should be 14 VAC at 20VA. Power supply must be unswitched, uninterrupted, and regulated.
 - Wire should be two-conductor 20AWG (or larger) stranded-tinned copper with PVC insulation rated to 300 volts at 80°F. Wire length should not exceed 328 feet.

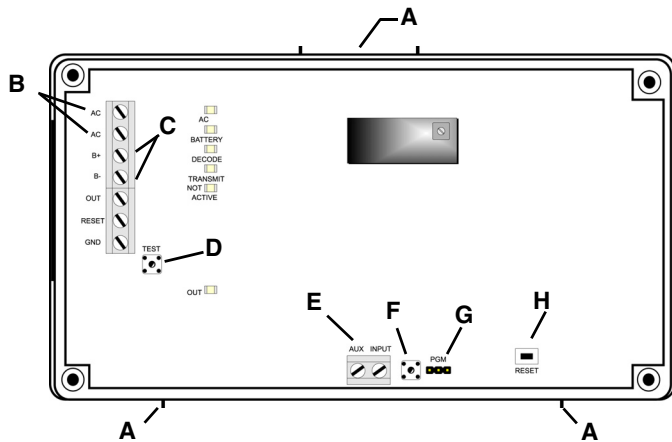


Figure 2 FA570 Components

- A. Housing release tabs B. AC power connection C. Battery power connection
 D. Test button E. External terminal connection F. Tamper button
 G. Program header H. Reset button

2.2 Register the High-Power Repeater

Although the FA570 repeater is functional upon startup, Inovonics Wireless strongly recommends you register it using your receiver or control panel. Inovonics Wireless recommends all high-power repeaters be supervised. To program the FA570:

1. Connect the programming device's cable to the FA570 programming header.
2. Program the FA570 using the control panel or receiver manual.

- Because the FA570r may be processing signals from 24-hour points, it should be programmed as a 24-hour point.
- To program the FA570 for supervision, it must be programmed to send check-in signals.

3. Press the FA570 **Reset** button by the receiver or control panel.
4. Disconnect the programming cable.

2.3 Mount the High-Power Repeater

To mount the high-power repeater:

Caution: Mount the enclosure and high-power repeater in a location removed from metal. Metal objects (duct work, wire mesh screens, boxes) will reduce RF range.

5. Use the provided anchors and screws to mount the high-power repeater in a location accessible for future maintenance.

- In large installations, high-power repeaters should be mounted so that every transmitter has multiple transmission paths to the serial receiver or network coordinator. This kind of redundancy preserves system integrity in the event of temporary interruptions of any transmission path in the system.
- For maximum efficiency, high-power repeaters should be mounted with as few obstacles as possible between it and the receiver, network coordinator or control panel.

2.4 Test the High-Power Repeater

1. The Not Active LED lights when the FA570 has not received an Inovonics Wireless transmission within its programmed check-in interval. The Decoding LED lights when the FA570 receives a transmission. Activate transmitters associated with the FA570 and ensure the FA570 receives the RF messages.

2. Press the FA570 test button to send a status message. Ensure the message is received by the receiver or control panel.

3 Specifications

Dimensions: 6.5" x 3.5" x 1"

Weight: 5.3 oz

Operating environment: 32° - 140°F, 90% relative humidity, non-condensing

Power requirement: 14VAC @ 20VA

Low voltage threshold: 10.5-11.5VDC

Battery capacity: 1800 mAh @ 3.7 typical

Operating frequency: 902-928 MHz

4 Warranty/Disclaimer

Caution: Changes or modifications to this unit not expressly approved by Inovonics Wireless Corporation may void the installer's authority to operate the equipment as well as the product warranty.

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 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.

Note: E-mail support@inovonics.com for a copy of the CE Declaration of Conformity.