



FA575

High-Power Repeater

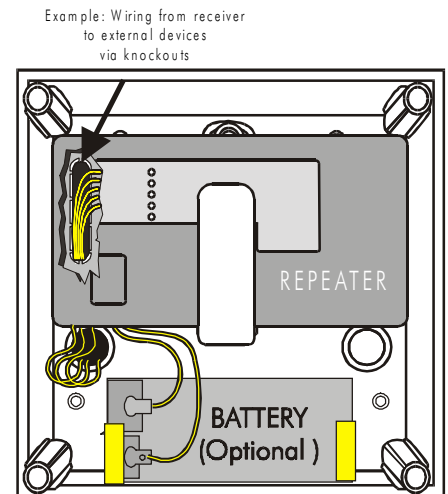
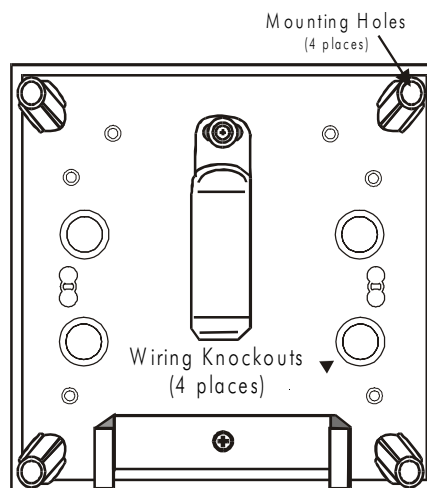
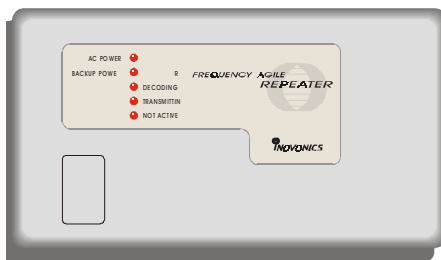
Exterior Installation Housing

Frequency Agile® 900MHz

Installation Instructions

Product Description

The FA575 is a sophisticated repeater in a weatherproof enclosure that receives, decodes, and re-transmits signals from Inovonics FA-series transmitters. It acts as a "range extender" for any decodable Inovonics transmission. The FA575 is intended for quick and easy outdoor installation. (For applications that require neither the weatherproof enclosure nor the optional backup battery, the repeater is available by itself as the FA570.)



Installation

- 1) The enclosure can be mounted with screws inserted in the mounting holes.
- 2) Flex the repeater clip slightly to insert the repeater.
- 3) Flex the battery clip slightly when inserting a battery.

Wiring

- 1) Wiring should be routed through the oval knockout in the repeater housing base.
- 2) Wiring should exit the enclosure through knockouts in the enclosure base.

Specifications

Repeater housing dimensions: 6.38" x 3.60" x 1.10"
Repeater weight: 5.3 oz.
NEMA 4 enclosure dimensions: 7" x 7" x 3"
Enclosure + repeater weight: 20.7 oz.
Power requirement: 14VAC @ 20 VA
(Optional) Backup battery: 12VD
Low voltage threshold: 10.5-11.5VDC

Specifications

Receiver type: frequency-hopping spread spectrum
Operating frequency: 902-928 MHz
Operating Environment: 32°-140°F (0-60°C),
up to 95% relative humidity
(non-condensing)

LED Indicators

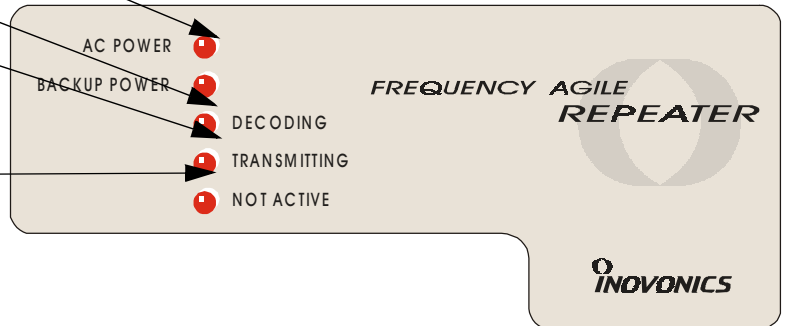
- "AC POWER" and "BACKUP POWER" LEDs show repeater power source.
- "DECODING" indicates that the repeater is receiving RF energy.
- "TRANSMITTING" indicates that the repeater is transmitting.

Note: The repeater does NOT decode while transmitting.

- "NOT ACTIVE" means that the repeater has not received an Inovonics transmission within its programmed check-in interval. It is "waiting" for incoming traffic.

Note that when power is first applied or when the repeater reset button is pressed, the "NOT ACTIVE" LED will be on until the first valid transmitter message is received.

This is a useful diagnostic indicator. In installations where the repeater services many transmitter messages, illumination of the "NOT ACTIVE" LED might indicate a repeater receiver problem.



Operation

Power supply: A 14VAC transformer is provided with the FA575.

Backup battery: An optional 1.2AH battery can be mounted in the FA575 enclosure.

Low voltage detection: The repeater will report low voltage if the supply voltage (either primary or backup) causes its DC input voltage to drop below its low voltage threshold.

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

Supervision: The repeater should be programmed to send check-in signals to the receiver, but can operate unsupervised.

To program for supervision: When programming the **system panel** to supervise the repeater, the repeater point should be programmed as a 24-hour point. This is because the repeater may be processing signals from 24-hour points and should be given this same level of point status monitoring.

When programming the **repeater** for supervision, it is necessary to program the repeater to send check-in signals. All other programming options other than check-in times (like normally open versus normally closed, and presence or absence of EOL resistor) will be ignored. Repeater programming is accomplished by connecting a programming cable to the programming header on the repeater, setting the appropriate check-in time when prompted by the panel or receiver display device, and pressing the repeater's Reset button. (See panel or receiver programming or installation manuals for more specific information.)

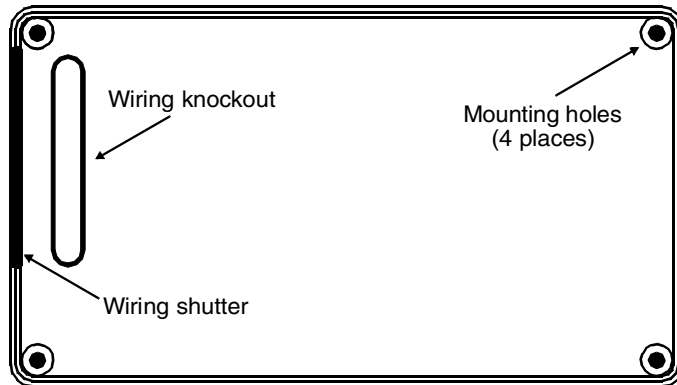
Test Button: The Test Button is used only in unique OEM applications.

Tamper: Case tamper is provided.

Installation

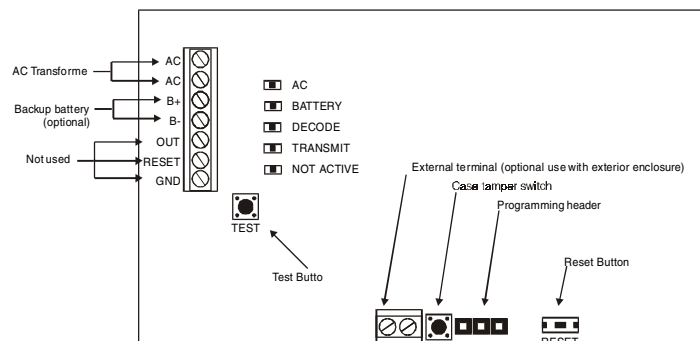
Mounting repeaters:

- Repeaters should be mounted in locations indicated by the system designer.
- Do NOT mount repeaters on metal surfaces or inside metal enclosures. Do not mount where sheet metal ductwork, wire mesh screens, etc. might unnecessarily block transmissions. The FA575 housing has an inside knockout to permit wires from power sources to be brought into the housing from behind the unit.
- The repeater unit also has a removable shutter to permit wires to enter the housing from the side of the unit.



Power Supply:

- The FA575 transformer requires an *unswitched* 120VAC power outlet. (AC power must be supplied all of the time.)
- The transformer case should be secured to the electrical outlet to prevent accidental unplugging.
- Recommended AC power requirement of repeater: 14VAC (only) at 20VA. (ACC610)
- Recommended backup power requirement (optional): 12 VDC, 1.2 Ah. (BAT603) Note that ACC640 Receiver Enclosure or equivalent is needed to mount the battery and receiver.
- 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 repeater: 100 meters (328 feet). Measure voltage at repeater 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.

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.

This warranty will not be modified, varied or extended. Inovonics does not authorize any person to act on its behalf to modify, vary or extend this warranty. This warranty will apply to Inovonics Products only. All other products, accessories or attachments used in conjunction with Inovonics equipment, including batteries, will be covered solely by their own warranty, if any. 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.

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 Corporation 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.