Notifier FRM-1

Notifier FRM-1 Intelligent Addressable Relay Module User Manual

Model: FRM-1

INTRODUCTION

The Notifier FRM-1 is an intelligent addressable relay module designed for use in fire alarm systems. This module provides a single Form-C relay contact that can be programmed to operate in response to specific system events. It is an essential component for controlling external devices such as door holders, fans, or other auxiliary equipment within a fire detection and alarm system.

This manual provides detailed instructions for the proper installation, operation, and maintenance of the FRM-1 module to ensure its reliable performance and compliance with safety standards.

PRODUCT OVERVIEW

Figure 1: Front view of the FRM-1 module, showing the Notifier logo and the status indicator LED.

Figure 2: Rear view of the FRM-1 module, displaying the product label with model number, patent details, and terminal assignments for wiring.

Figure 3: Internal view of the FRM-1 module, revealing the screw terminals for loop and address connections, and the mounting plate.

Figure 4: The FRM-1 module with its original packaging and a small installation guide.

The FRM-1 module is compact and designed for easy integration into existing fire alarm control panels (FACP) that support Notifier's intelligent addressable protocol. It features an intelligent design for reliable communication and operation within the system.

SAFETY INFORMATION

Always observe the following safety precautions when installing, operating, or maintaining the FRM-1 module:

- Installation must be performed by qualified personnel in accordance with all local and national electrical codes and standards.
- Disconnect all power to the fire alarm control panel before installing or servicing the module.
- Ensure proper grounding to prevent electrical shock.
- Do not operate the module outside its specified voltage and current ratings.
- Refer to the fire alarm control panel manual for specific wiring and programming instructions.

SETUP AND INSTALLATION

The FRM-1 module is designed for DIN rail mounting. Follow these general steps for installation:

1. **Power Disconnection:** Ensure the fire alarm control panel (FACP) is completely powered down before beginning installation.
2. **Mounting:** Secure the FRM-1 module to a standard DIN rail within the FACP enclosure or an approved auxiliary enclosure.
3. **Addressing:** Set the unique address for the module using the rotary switches on the device. Each module on the

Signaling Line Circuit (SLC) must have a distinct address.

4. **Wiring:** Connect the SLC wiring to the designated terminals (SLC+ and SLC-) on the module. Refer to Figure 2 for terminal assignments.

5. **Relay Connections:** Wire the external device (e.g., door holder, fan control) to the Form-C relay contacts (Normally Open, Normally Closed, Common) as required by your application. Ensure all connections are secure.

6. **Verification:** Double-check all wiring connections for correctness and security.

7. **Power Restoration:** Restore power to the FACP and verify the module's status indicator.

8. **System Programming:** Program the FACP to recognize the new module and configure its relay operation according to the system's design specifications.

Note: Always consult the specific installation manual for your fire alarm control panel for detailed wiring diagrams and compatibility information.

OPERATING INSTRUCTIONS

The Notifier FRM-1 operates automatically once properly installed and programmed within the fire alarm system. Its operation is dictated by the programming configured in the main fire alarm control panel (FACP).

- **Status Indicator:** The module features a green LED indicator. This LED typically flashes during normal communication with the FACP and illuminates steadily when the relay is activated or in an alarm/active state, depending on programming.

- **Relay Activation:** The Form-C relay will change state (from Normally Open to Closed, or Normally Closed to Open) when the FACP sends a command to activate the module, usually in response to an alarm condition or a programmed event.

- **Supervision:** The FRM-1 module is supervised by the FACP, meaning the panel continuously monitors its presence and operational status. Any communication loss or fault with the module will be reported by the FACP.

For specific operational scenarios and programming details, refer to the programming manual of your Notifier fire alarm control panel.

MAINTENANCE

The Notifier FRM-1 module requires minimal maintenance. Regular system checks, as part of the overall fire alarm system maintenance, are crucial to ensure its continued reliability.

- **Visual Inspection:** Periodically inspect the module for any signs of physical damage, loose connections, or environmental issues (e.g., excessive dust, moisture).

- **Functional Testing:** As part of routine fire alarm system testing (e.g., annual or semi-annual), verify the proper operation of the FRM-1 module and the external device it controls. This typically involves initiating a test condition that triggers the relay.

- **Cleaning:** If necessary, gently clean the exterior of the module with a soft, dry cloth. Do not use abrasive cleaners or solvents. Ensure power is disconnected before cleaning.

All maintenance and testing should be conducted by certified fire alarm technicians in accordance with NFPA 72 and local authority having jurisdiction (AHJ) requirements.

TROUBLESHOOTING

Most issues related to the FRM-1 module will be indicated by the fire alarm control panel (FACP) as a trouble condition.

Common troubleshooting steps include:

- **Module Trouble/Fault:**

    - Verify the module's address is correctly set and unique.
    - Check SLC wiring connections for looseness, shorts, or opens.
    - Ensure the module is receiving proper power from the SLC.
    - Consult the FACP's troubleshooting guide for specific trouble codes related to addressable modules.

- **Relay Not Activating:**

    - Verify the FACP programming for the module's activation logic.
    - Check the wiring to the external device connected to the relay contacts.
    - Ensure the external device itself is functional.

- **LED Indicator Issues:**

    - If the LED is off, check power and SLC communication.
    - If the LED is solid when it should be flashing, it may indicate an active state or a fault, depending on the FACP's programming and the module's status.

For complex issues, contact a qualified fire alarm technician or Notifier technical support.

SPECIFICATIONS

Attribute	Detail
Model Number	FRM-1
Brand	Notifier
Product Dimensions	4.9 x 4.9 x 1.3 inches
Item Weight	1.6 ounces
Mounting Type	DIN Rail Mount
Connector Type	Screw Terminals
Contact Type	Form-C (Normally Open/Normally Closed)
Contact Material	Silver
Operation Mode	Automatic
Power Source	Wired Electric (from SLC)
UPC	783863011252
First Available Date	December 5, 2010

WARRANTY INFORMATION

Specific warranty details for the Notifier FRM-1 module are typically provided with the product packaging or can be obtained directly from Notifier or your authorized distributor. Please retain your proof of purchase for warranty claims.

SUPPORT AND CONTACT

For technical assistance, product support, or service inquiries regarding the Notifier FRM-1 Intelligent Addressable Relay Module, please contact your authorized Notifier distributor or Notifier technical support. Contact information can typically be found on the Notifier official website or in the documentation provided with your fire alarm control panel.

It is recommended that all installation, programming, and servicing be performed by qualified and certified fire alarm professionals.

Related Documents - FRM-1

[Notifier FCM-1(A) and FRM-1(A) Series Control and Relay Modules Data Sheet](#)
Technical data sheet for Notifier's FCM-1(A) Addressable Control Module and FRM-1(A) Addressable Relay Module, detailing features, applications, specifications, and agency approvals for fire alarm systems.

[NOTIFIER NFS-3030 Intelligent Addressable Fire Alarm System | Technical Data Sheet](#)
Explore the NOTIFIER NFS-3030, an intelligent addressable fire alarm control panel from the ONYX Series. Engineered for medium to large facilities, it offers advanced detection, modularity, and extensive device support for critical fire safety applications.

[Notifier NFS-320 Intelligent Addressable Fire Alarm System Datasheet](#)
Comprehensive datasheet for the Notifier NFS-320 Intelligent Addressable Fire Alarm System, detailing its features, intelligent sensing capabilities, FlashScan protocol, system specifications, compatible devices, and agency approvals.

[Notifier NFS-640 Intelligent Addressable Fire Alarm System Datasheet](#)
Detailed overview of the Notifier NFS-640 Intelligent Addressable Fire Alarm Control Panel, covering its features, advanced FlashScan® protocol, intelligent sensing capabilities, programming options, system modules, and comprehensive technical specifications.

[Notifier AM-8000 Intelligent Addressable Fire Detection Installation Manual](#)
This installation manual provides comprehensive guidance for the Notifier AM-8000 Intelligent Addressable Fire Detection system. It covers system overview, technical specifications, electrical features, installation procedures, wiring diagrams, power supply calculations, testing, and maintenance.

[Notifier AFC-600 Intelligent Addressable Fire Alarm Control Panel with FlashScan® Datasheet](#)
Comprehensive datasheet for the Notifier AFC-600 Intelligent Addressable Fire Alarm Control Panel, detailing its features, specifications, system capacity, programming options, compatible devices, and agency approvals. Includes information on FlashScan® protocol and AWACS™™ sensing technology.