Fire-Lite ES-50X

Fire-Lite ES-50X Addressable Alarm Control Panel User Manual

Model: ES-50X | Brand: Fire-Lite

1. INTRODUCTION

The Fire-Lite ES-50X is an advanced 50-point addressable fire alarm control panel designed for small to medium-sized applications. It features a built-in communicator, supports up to 50 addressable devices, and includes a real-time clock/calendar with four programmable function keys. This manual provides essential information for the proper installation, operation, and maintenance of the ES-50X panel to ensure reliable fire detection and notification.

Figure 1: Front view of the Fire-Lite ES-50X Addressable Alarm Control Panel. The panel is housed in a red enclosure with a central control interface featuring an LCD display, keypad, and function buttons. A key lock is visible on the right side of the enclosure.

2. SAFETY INFORMATION

Important: Read all instructions carefully before installation and operation. Failure to follow these instructions may result in property damage, serious injury, or death. This device must be installed by qualified personnel in accordance with all local and national electrical codes and standards, including NFPA 72.

- **Electrical Hazard:** Disconnect all power sources before servicing or installing the panel.
- **Battery Safety:** Use only recommended battery types. Dispose of batteries according to local regulations.
- **Grounding:** Ensure proper grounding of the panel and all connected devices.
- **Environmental Conditions:** Install the panel in a dry, clean environment within specified temperature and humidity ranges.
- **System Testing:** The fire alarm system must be tested regularly as per NFPA 72 and local authority having jurisdiction (AHJ) requirements.

3. SETUP & INSTALLATION

3.1 Package Contents

Verify that all components are present before beginning installation:

- Fire-Lite ES-50X Control Panel
- Installation Manual
- Mounting Hardware Kit
- Keys for Enclosure Lock

3.2 Mounting the Panel

The ES-50X panel is designed for surface mounting. Choose a secure, dry location that is easily accessible for servicing and visible for status indication.

1. Mark the desired mounting holes on the wall using the panel's enclosure as a template.
2. Drill appropriate pilot holes for the mounting screws.
3. Secure the panel to the wall using the provided mounting hardware. Ensure the panel is level and securely fastened.

3.3 Wiring Connections

All wiring must comply with NFPA 70 (National Electrical Code) and NFPA 72 (National Fire Alarm and Signaling Code), as well as local codes.

- **AC Power Connection:** Connect the main AC power supply to the designated terminals. Ensure a dedicated circuit breaker is used.
- **Battery Connection:** Connect the standby batteries to the battery terminals. Observe correct polarity.
- **SLC (Signaling Line Circuit) Wiring:** Connect addressable devices (smoke detectors, heat detectors, modules) to the SLC terminals. Follow the wiring diagrams provided in the detailed installation manual for proper loop configuration.
- **NAC (Notification Appliance Circuit) Wiring:** Connect notification appliances (horns, strobes) to the NAC terminals. Ensure proper supervision and power calculations.
- **Auxiliary Outputs/Inputs:** Connect any auxiliary devices or monitoring inputs as required by the system design.

3.4 Initial Power-Up

After all wiring is complete and verified:

1. Ensure all field wiring is correctly terminated and free of shorts or opens.

2. Connect the standby batteries.

3. Apply AC power to the panel. The panel will perform a self-test and then display its operational status.

4. Verify that the panel indicates a "Normal" or "System Healthy" status. Address any trouble conditions immediately.

4. OPERATING INSTRUCTIONS

4.1 Control Panel Interface

The ES-50X features an LCD display, a numeric keypad, and dedicated function buttons for system interaction.

- **LCD Display:** Shows system status, event messages, and menu options.
- **Keypad:** Used for entering codes and navigating menus.
- **Function Keys:**

    - **ACK (Acknowledge):** Silences audible alarms and acknowledges new events.
    - **SILENCE:** Silences notification appliances (horns/strobes) after an alarm.
    - **RESET:** Resets the system after an alarm or trouble condition, clearing latched events.
    - **TEST:** Initiates system test functions (requires appropriate access level).

4.2 Responding to Alarms

When an alarm occurs, the panel will activate notification appliances and display alarm information.

1. **Acknowledge:** Press the **ACK** button to silence the panel's internal buzzer and acknowledge the alarm. The LCD will show the alarm location.

2. **Silence:** After verifying the situation and ensuring safety, press the **SILENCE** button to silence horns and strobes. *Do not silence if there is an active fire or danger.*

3. **Investigate:** Proceed to the alarm location to investigate the cause.

4. **Reset:** Once the cause of the alarm is resolved and the area is safe, press the **RESET** button. The panel will attempt to clear the alarm condition and return to normal. If the alarm persists, the condition has not been resolved.

4.3 Viewing System Status and Events

The panel's display provides real-time system status. Use the navigation buttons (up/down arrows) to scroll through event history or system menus.

- **Normal:** Indicates the system is operating correctly with no active alarms, troubles, or supervisory conditions.
- **Alarm:** Indicates a fire alarm condition.
- **Trouble:** Indicates a fault in the system (e.g., open circuit, ground fault, low battery).
- **Supervisory:** Indicates a condition that requires attention but is not an immediate fire alarm (e.g., sprinkler valve closed).

5. MAINTENANCE

Regular maintenance is crucial for the reliable operation of your fire alarm system. All maintenance should be performed by qualified personnel.

5.1 Routine Checks (Monthly)

- Verify the panel displays "Normal" status.
- Check for any visible damage to the panel or connected devices.
- Test a different initiating device (e.g., smoke detector, pull station) each month to ensure proper alarm activation and notification. Reset the system after each test.

5.2 Annual Inspection and Testing

A comprehensive annual inspection and test of the entire fire alarm system should be conducted by a certified fire alarm technician in accordance with NFPA 72.

- Full system test, including all initiating devices, notification appliances, and control functions.
- Battery load test and voltage check.
- Verification of communication with the central monitoring station (if applicable).
- Cleaning of smoke detectors.

5.3 Battery Replacement

Standby batteries typically have a lifespan of 3-5 years. Replace them proactively or when the panel indicates a low battery trouble condition.

1. **Disconnect AC Power:** Turn off the circuit breaker supplying power to the panel.
2. **Disconnect Old Batteries:** Carefully disconnect the old batteries, observing polarity.
3. **Install New Batteries:** Connect new, fully charged batteries of the correct type and rating.
4. **Restore AC Power:** Turn on the circuit breaker. The panel should clear the battery trouble.
5. **Dispose:** Dispose of old batteries responsibly according to local environmental regulations.

6. TROUBLESHOOTING

This section provides solutions to common issues. For complex problems, contact a qualified fire alarm technician.

Problem	Possible Cause	Solution
Panel displays "System Trouble"	Various issues: low battery, AC power loss, ground fault, open circuit on SLC/NAC.	Check AC power. Verify battery connections and voltage. Consult the panel display for specific trouble codes and refer to the detailed installation manual for diagnostics.
Notification appliances do not activate during alarm	NAC wiring fault, power supply issue, silenced by mistake.	Check NAC wiring for opens or shorts. Verify NAC power supply. Ensure the system is not in "Silence" mode.
Panel does not reset after alarm	Alarm condition still present, device not cleared.	Ensure the initiating device (e.g., smoke detector) has cleared the alarm condition. Check for residual smoke or heat. If a pull station was activated, ensure it is reset.
Device fault on SLC loop	Damaged device, incorrect wiring, address conflict.	Identify the specific device from the panel display. Check wiring to the device. Verify device address. Replace faulty device if necessary.

7. SPECIFICATIONS

Key technical specifications for the Fire-Lite ES-50X Addressable Alarm Control Panel:

- **Model Number:** ES-50X
- **Brand:** Fire-Lite
- **Device Capacity:** Up to 50 addressable devices
- **Power Source:** AC (main), Battery (standby)
- **Alarm Type:** Audible
- **Color:** Maroon
- **Item Weight:** 23.5 pounds (10.68 Kilograms)
- **Package Dimensions:** 22.2 x 20 x 6.2 inches
- **Manufacturer:** Fire-Lite
- **UPC:** 783008112622
- **Style:** Traditional

8. WARRANTY & SUPPORT

For specific warranty details, please refer to the warranty statement included with your product packaging or contact Fire-Lite directly. Fire-Lite products typically come with a limited warranty covering defects in materials and workmanship.
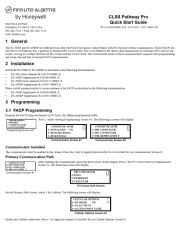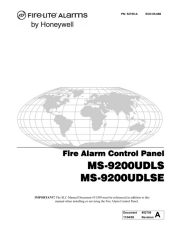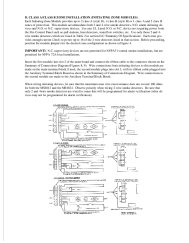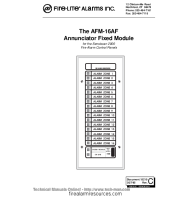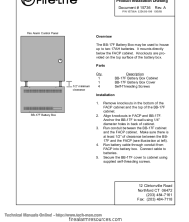
Technical Support

For technical assistance, troubleshooting beyond this manual, or service inquiries, please contact your authorized Fire-Lite distributor or a certified fire alarm technician. Do not attempt to repair the panel yourself, as this may void the warranty and compromise system integrity.
For general information about Fire-Lite products, visit the official Fire-Lite website.

Related Documents - ES-50X

[CLSS Pathway Pro Quick Start Guide - Fire-Lite by Honeywell](#)
Quick start guide for the Fire-Lite CLSS Pathway Pro, a communicator and gateway for ES-50XP and ES-200XP Fire Alarm Control Panels (FACPs) connecting to Honeywell's CLSS Cloud via LTE CAT-M1 networks. Provides instructions for FACP and CLSS programming.

[Fire-Lite MS-9200UDLS / MS-9200UDLSE Installation and Programming Manual](#)
Comprehensive manual for the Fire-Lite MS-9200UDLS and MS-9200UDLSE Fire Alarm Control Panels (FACPs) and Digital Alarm Communicator/Transmitters (DACTs), covering installation, programming, and operation for fire protection systems.

[Fire-Lite MS-4812 and MS-4824 Technical Reference Manual](#)

This document provides a comprehensive technical reference for the Fire-Lite MS-4812 and MS-4824 fire alarm control panels, detailing installation, programming, and operational procedures.

[Fire-Lite AFM-16AF Annunciator Fixed Module - Technical Manual](#)

Comprehensive technical manual for the Fire-Lite AFM-16AF Annunciator Fixed Module, covering installation, operation, specifications, and warranty for the Sensiscan 2000 Fire Alarm Control Panels.

[Fire-Lite MINISCAN 112/124 Fire Alarm Control Panel Instruction Manual](#)

Comprehensive instruction manual for the Fire-Lite MINISCAN 112/124 fire alarm control panel. Details installation, system wiring diagrams, controls, indicators, battery selection, and troubleshooting. Essential guide for system setup and maintenance.

[Fire-Lite BB-17F Battery Box Installation Drawing and Guide](#)

Detailed installation drawing and guide for the Fire-Lite BB-17F Battery Box. Learn how to mount and connect the battery box to your Fire Alarm Control Panel (FACP) with step-by-step instructions and parts list.