

SILENT KNIGHT SK-FIRE-CO-W

SILENT KNIGHT SK-FIRE-CO-W Honeywell Addressable Fire/CO Detector Instruction Manual

Model: SK-FIRE-CO-W

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the SILENT KNIGHT SK-FIRE-CO-W Honeywell Addressable Photo/Thermal/IR/CO Detector. This device is designed to detect smoke, heat, and carbon monoxide (CO) within an addressable fire alarm system. Read this manual thoroughly before installation and keep it for future reference.

2. SAFETY INFORMATION

WARNING: This detector is part of a life safety system. Improper installation or maintenance can compromise its effectiveness and lead to serious injury or death. Always adhere to local codes, standards, and the National Fire Protection Association (NFPA) guidelines.

- Installation must be performed by qualified personnel in accordance with all applicable codes and standards.
- Do not paint the detector. Paint can interfere with the sensing elements.
- Test the detector regularly as specified in the maintenance section.
- This detector is not a substitute for property insurance.
- Carbon monoxide detectors are not designed to detect smoke or fire. This is a combo unit, but its CO sensing capabilities are distinct from its fire sensing capabilities.

3. PRODUCT OVERVIEW

The SILENT KNIGHT SK-FIRE-CO-W is an advanced multi-criteria detector combining photoelectric smoke, thermal (heat), infrared (IR) flame, and electrochemical carbon monoxide (CO) sensing technologies. It is designed for use with compatible addressable fire alarm control panels. The detector provides comprehensive protection by monitoring multiple environmental factors simultaneously.



Figure 1: Front view of the SILENT KNIGHT SK-FIRE-CO-W Honeywell Addressable Fire/CO Detector. This image shows the white casing with indicator lights and the sensor grille.

4. SETUP AND INSTALLATION

IMPORTANT: Installation must be performed by a certified fire alarm technician.

4.1 Pre-Installation Checks

- Verify that the detector model is compatible with the fire alarm control panel.
- Ensure all necessary tools and wiring are available.
- Confirm power to the control panel is OFF before beginning installation.

4.2 Mounting Location

Select a mounting location that complies with NFPA 72 and local codes. Generally, detectors should be installed:

- On the ceiling, at least 4 inches (10 cm) from a wall.
- Away from air vents, fans, and areas with high humidity or extreme temperatures.
- In every sleeping area and on every level of the home, including the basement.
- For CO detection, ensure placement near sleeping areas and living spaces.

4.3 Wiring

1. Attach the detector base (purchased separately) to a standard electrical box.
2. Connect the addressable loop wiring to the terminals on the detector base as per the control panel's wiring diagram. Ensure correct polarity.
3. Set the detector's address using the rotary switches or programming tool, matching the address configured in the fire alarm control panel.

4.4 Detector Attachment

Align the detector with the mounting base and rotate clockwise until it clicks into place. Ensure it is securely seated.

5. OPERATING INSTRUCTIONS

Once installed and powered, the detector will perform a self-diagnostic test. The status LED indicators provide visual feedback on the detector's operational state.

5.1 Normal Operation

During normal operation, the detector's LED will flash periodically (e.g., green every few seconds) to indicate proper communication with the control panel.

5.2 Alarm Conditions

- **Fire Alarm:** If smoke, heat, or IR is detected above preset thresholds, the detector will enter an alarm state. The LED will illuminate solid red, and the internal sounder (if enabled) will activate. The control panel will also indicate a fire alarm.
- **Carbon Monoxide (CO) Alarm:** If CO levels exceed safe limits, the detector will enter a CO alarm state. The LED will flash red, and the internal sounder will emit a distinct CO alarm pattern (e.g., 4 beeps, pause, 4 beeps). The control panel will indicate a CO alarm.

5.3 Trouble Conditions

A trouble condition indicates a fault with the detector (e.g., sensor failure, communication error). The LED may flash amber, and the control panel will display a trouble signal. Contact a qualified technician for service.

6. MAINTENANCE

Regular maintenance ensures the detector operates effectively.

6.1 Testing

- **Manual Test:** Press and hold the test button on the detector for a few seconds. The detector should go into alarm, and the sounder should activate.
- **Functional Test:** Use approved test aerosols for smoke and CO, and a heat source for thermal testing, as per manufacturer guidelines and NFPA 72.
- Perform tests monthly or as required by local codes.

6.2 Cleaning

Dust and debris can affect detector performance. Clean the detector annually or as needed.

1. Turn off power to the fire alarm control panel.
2. Gently vacuum the exterior of the detector, especially around the sensing chambers, using a soft brush attachment.
3. Do not use cleaning solvents or sprays directly on the detector.
4. Restore power and test the detector after cleaning.

7. TROUBLESHOOTING

Symptom	Possible Cause	Action
Detector not communicating (Trouble signal on panel)	Incorrect wiring, incorrect address, faulty detector, power issue.	Check wiring connections and polarity. Verify detector address. Ensure panel power is stable. Contact technician.
False alarms	Dust/debris in sensing chamber, high humidity, cooking fumes, steam, improper placement.	Clean detector. Relocate if near sources of false alarms. Contact technician for sensitivity check.
Detector fails to test	Faulty detector, insufficient test agent, power issue.	Ensure proper test procedure. Verify power. Replace detector if necessary.
CO alarm without apparent CO source	Sensor contamination, end-of-life, actual low-level CO.	Ventilate area. Have CO levels professionally checked. Detector may need replacement.

8. SPECIFICATIONS

- **Brand:** SILENT KNIGHT
- **Model:** SK-FIRE-CO-W
- **Sensor Types:** Photoelectric (Smoke), Thermal (Heat), Infrared (IR), Electrochemical (CO)
- **Power Source:** Addressable Loop (Plug-in to system)
- **Color:** White
- **ASIN:** B07GL4MKNF
- **UPC:** 783863044335
- **Manufacturer:** SILENT KNIGHT

9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact SILENT KNIGHT customer support directly. Technical support and service should be handled by a qualified fire alarm professional.

For further assistance, please contact your authorized SILENT KNIGHT distributor or installer.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question