Alco

intelligent solutions

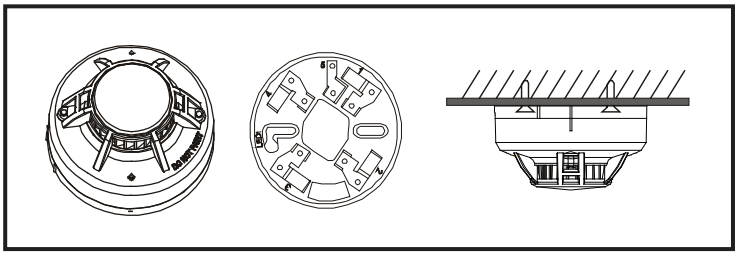
CFS-SD300 SERIES CONVENTIONAL - SMOKE DETECTOR

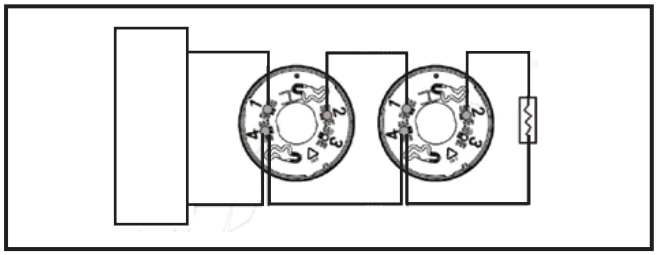
USER MANUAL

SPECIFICATIONS

Height:	2.2″ (55 mm) installed in Base
Diameter:	4.0″ (103 mm)
Weight:	5.5 oz. (155 g)
Operating Voltage Range:	9 to 28VDC Volts Non-polarized
Standby Current:	≤60μA @ 24 VDC
Maximum Alarm Current (LED on)	≤30mA @ 24 VDC
Operating Humidity Range:	10% to 93% Relative Humidity,
Operating Temperature Range:	14°F to 122°F (-10°C to50°C)
Adjustable Sensitivity:	0.15～0.3dB/m

INSTALLATION DIAGRAM



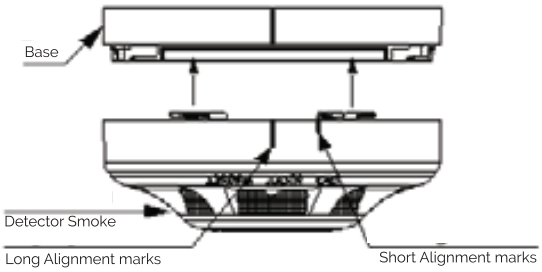


INSTALLATION

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations.

NOTE: Verify that all detector bases are installed, that the initiating-device circuits have been tested, and that the wiring is correct.

- Wire the sensor base per the wiring diagram.
- Notify the proper authorities that the system is in operation.
- After all sensors have been installed, apply power to the control unit.
- Test the sensor(s) as described in the **TESTING** section of this manual.
- Install the sensor into the sensor base. Push the sensor into the base while turning it clockwise to secure it in place.



BEFORE INSTALLING

NOTICE: This manual should be left with the owner/user of this equipment.

IMPORTANT: The detector must be tested and maintained regularly following **NFPA 72** requirements. The detector should be cleaned at least once a year.

Remove power from initiating-device circuits before installing detectors

GENERAL DESCRIPTION

- The device is photo electronic detector uses a state of-the-art optical sensing chamber.
- The alarm can be reset only by a momentary power interruption.
- Two LEDs on each detector provide local **360˚** visible alarm indication.
- They flash every 5 seconds indicating that power is applied and the detector is working properly.
- The LEDs latch on in alarm. LEDs will be off when a trouble condition exists indicating that the detector sensitivity is outside the listed limit.
- This detector is designed to provide open area protection and to be used with most conventional fire alarm control panel

TAMPER-RESISTANCE

The detector include a tamper-resistant capability that prevents their removal from the bracket without the use of a tool.

TESTING

- Before testing, notify the proper authorities that the smoke detector system is undergoing maintenance and will temporarily be out of service.
- Disable the zone or system undergoing maintenance to prevent unwanted alarms.
- Detectors must be tested after installation and as part of periodic maintenance.

NOTE: Before testing the detector, check to ensure the LEDs blink.

- If they do not, the detector has lost power **(check the wiring)**, it is defective **(return it for repair)**, or the detector sensitivity is outside the listed limits.

The sensor can be tested in the following ways:

- Smoke Entry test: Aerosol Generator **(Gemini 501)**
- The GEMINI model 501 aerosol generator can be used for smoke entry testing. Set the generator to represent.
- **4%/ft** to **5%/ft** obscuration as described in the GEMINI 501 manual. Using the bowl shaped applicator apply aerosol until the panel alarms.
- A sensor that fails any of these tests should be cleaned as described under **CLEANING**, and retested. If the sensor fails after cleaning, it must be replaced.

CLEANING

Before removing the detector, notify the proper authorities that the smoke detector system is undergoing maintenance and will be temporarily out of service. Disable the zone or system undergoing maintenance to prevent unwanted alarms.

- Remove the sensor to be cleaned from the system.
- Vacuum the screen carefully without removing it. If further cleaning is required.
- Remove the chamber cover/screen assembly by pulling it straight out.
- Use a vacuum cleaner or compressed air to remove dust and debris from the sensing chamber.
- Turn until it is firmly in place.
- Remove the sensor cover by pressing firmly on each of the four removal tabs that hold the cover in place.

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