FIREWOLF™ BY NAPCO

INSTALLATION INSTRUCTIONS
FW-4 and FW-2

These Installation Instructions are for the FW-4 and the FW-2 FIREWOLF Smoke Detectors.

CAUTION

Install this and all life safety devices in accordance with applicable NFPA standards, local codes, and the authorities having jurisdiction. Failure to follow these instructions may result in failure of the detector to initiate an alarm condition. Napco Security Systems, Inc. and the original equipment manufacturer, are not responsible for detectors that have been improperly installed, tested, or maintained.

For testing and cleaning information, refer to these instructions and/or call the NAPCO fax request line at (516) 842-3291. Also refer to NFPA-72 Chapter 5 for Automatic Fire Detectors for installation guidelines and Chapter 7 for testing and maintenance requirements.

Use "3M" Weatherban # 606 non-flammable sealing compound to seal field wiring conduit openings in the mounting back box. Compliance with this request may reduce the occurrence of the "STACK EFFECT".

Box Mounting		
Trim Ring	3" OCT	4" OCT

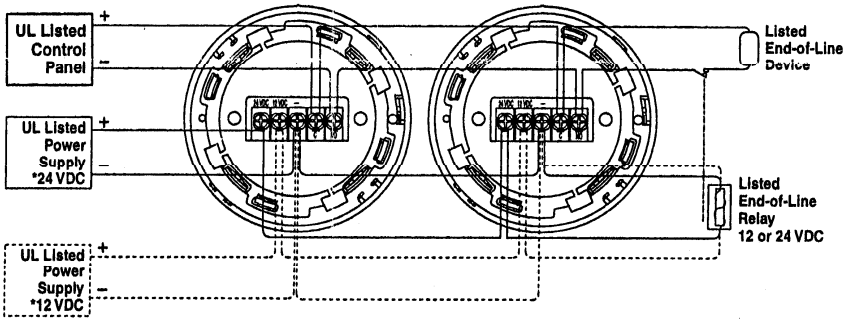
SPECIFICATIONS	SMOKE DETECTOR DATA	
Detector	FW-4	FW-2
Type of Detector	Photoelectric (4 wire baseless)	Photoelectric (2 wire baseless)
Working Voltage	8.0 - 35.0 VDC	8.0 - 35.0 VDC
Voltage Waveform	Filtered DC 15% ripple max.	Filtered DC* 15% ripple max.
Max. Alarm Current	55mA @ 35.0 VDC	Limit current to 150mA @ 35.0 VDC
Max. Surge Current	200µA	200µA
Average Standby Current	38µA @ 12 VDC 55µA @ 24 VDC 70µA @ 35 VDC	38µA @ 12 VDC 55µA @ 24 VDC 70µA @ 35 VDC
Compatibility Identifier	N/A	HD-6
Sensitivity Test Feature	Built-In Test Feature	Built-In Test Feature
NAPCO Control Panel Compatibility	N/A	See Wiring Diagram Below

Note: When mounting detector on a wall, it must be between 4" and 12" from the celing.

WIRING: Connect wiring to the bases as shown in the wiring diagrams that follow. Detectors may be mixed on the same initiating loop as long as the number of two-wire powered detectors does not exceed the specifications of the control panel. See Specification Table - above.

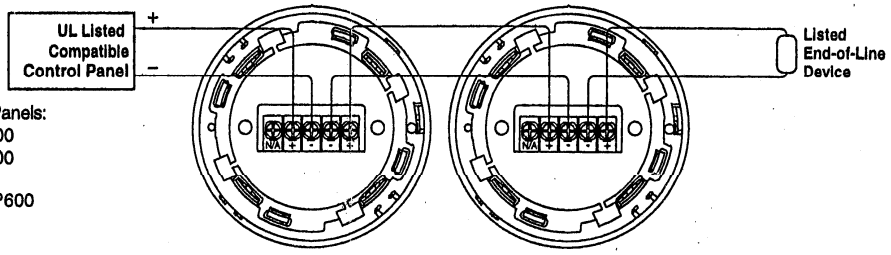
CAUTION: Connect wiring to terminals as shown. Do not loop wire under terminals. Break wire run to provide supervision.

FW-4 Wiring Diagram



*** Use either 12 VDC or 24 VDC. They cannot be used simultaneously.**

FW-2 Wiring Diagram



Compatible Control Panels:
GEM-P3200, SS3200
GEM-P9600, SS9600
GEM-P800
NAPCO Express XP600
GEM-P1632
MA-3000, SS5500

Note: Cross listings with additional manufactures and models pending, Contact NAPCO Tech Support for the latest listings. (800) 645-9440

CAUTION
The FW-2 requires current limiting to no more than 150mA @ 35.0 VDC.

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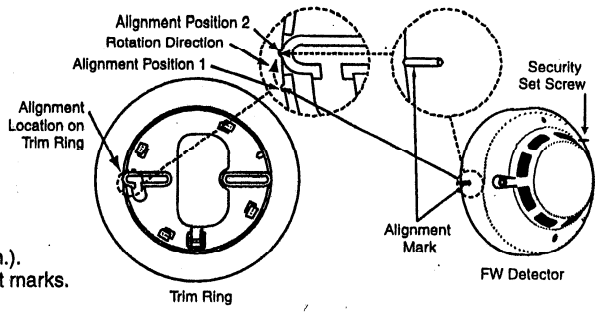
Napco Security Systems, Inc.
333 Bayview Avenue • Amityville, NY 11701
Phone: (800) 645-9445 • (516) 842-9400 • Fax: (516) 789-3383

To mount the FW-4 and the FW-2 Baseless Detector Head to the Trim Ring do the following:

1. Place the Baseless Detector Head over the Trim Ring with it's back towards the Trim Ring.
2. Place the detector with the Alignment Mark at Alignment Position 1 (see diagram).
3. Then bring the detector together with the Trim Ring.
4. Turn the detector clockwise and when the Alignment Mark is at Alignment Position 2 the detector will have snapped into place (see diagram).
5. To engage the vandal-resistant, security locking feature tighten the security set screw with a hex wrench (1.5 mm.).
6. Refer to the diagram for visual reference to the alignment marks.



TESTING THE FW-4 and the FW-2 INSTALLATION

For go/no-go testing, a magnet will be required.

1. Hold the magnet just over the word "TEST" as shown on the Diagram 2A.
2. The detector should alarm within 10 seconds (If control panel is programmed for Fire Alarm Verification, it may take up to 30 seconds).
3. The detector's LEDs should be on Red continuously and any control panel indicating appliances should activate.
4. Silence the system and activate the control panel reset to reset smoke detector.
5. The smoke detector LEDs should flash Green.

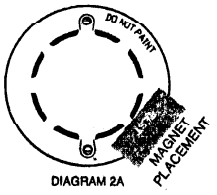


DIAGRAM 2A

FIREWOLF SENSITIVITY TEST FEATURE and INSTALLATION VERIFICATION

NOTE: The FW-4 and the FW-2 have a built-in automatic sensitivity test feature that will automatically indicate a change in sensitivity.

1. In normal condition both LEDs flash Green.
2. When the sensitivity drifts outside of its sensitivity limits, both LEDs flash Red (e.g., when the unit needs cleaning).
3. In the alarm state both LEDs are on Red continuously.
4. When the condition exists as stated in 2. The device needs to be cleaned or returned to the factory for servicing. Refer to these instructions for cleaning information.

MANUAL CLEANING PROCEDURE

Tools you will need:

- A 1.5 mm. hex wrench
- 2 small screwdrivers (1/8" wide)
- A small soft-bristled artist's paint brush
- Denatured alcohol
- Clean dry compressed air.

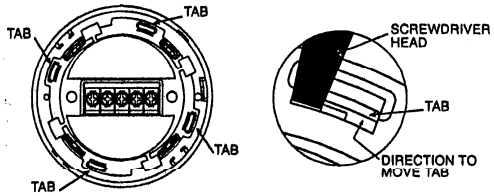


DIAGRAM 2B

NOTE: Use only lint-free materials when cleaning the chambers of the photoelectric smoke detector. Use of fibrous materials may result in false alarms.

Remove and Disassemble the Detector

Follow the steps in this section to prepare the detector for cleaning:

1. Using the hex wrench, loosen the security set screw, if engaged.
2. Remove the detector from the trim ring.
3. Disassemble detector by placing one screwdriver under the tab as shown in Diagram 2B.
4. Then place the second screwdriver under the next adjacent TAB pushing it the direction shown in Diagram 2B.
5. Push the screwdriver outward from the center of the detector and lift the Enclosure upward.
6. Do the same with the second screwdriver, but do not remove it. Keep it in place.
7. Take the first screwdriver and place it under the third TAB adjacent to the second TAB. Push the TAB outward and lift the Enclosure upward.
8. With three tabs freed, the Enclosure should finally remove easily with the application of the screwdriver.

Clean the Detector

Follow the steps in this section to clean the detector:

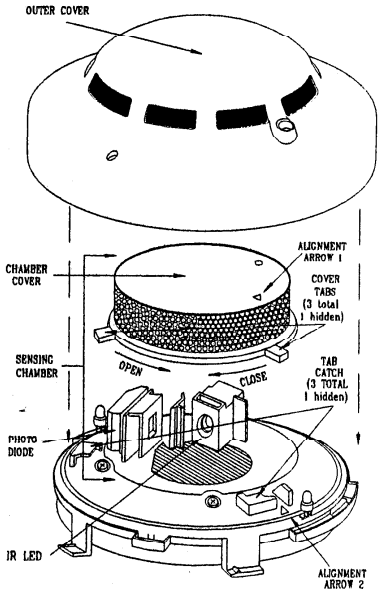
CAUTION: Do not attempt to remove the insect screen.

1. Remove the Outer Cover of the detector as specified and set aside.
2. Place the detector in the palm of your left hand and grasp the Chamber Cover with your right hand. Twist the Chamber Cover counter clockwise until the Cover Tabs clear the Tab Catches. Lift and separate the Chamber Cover and Outer Cover from the Optical Unit.
3. Swab the Optical unit with denatured alcohol using a small soft-bristled brush.
4. Use dry clean compressed air to dry the optical unit and to remove any remaining particles.
5. Clean the Chamber Cover and Outer Cover in the same manner.

Reassemble the Detector

Follow the steps in this section to reassemble the detector:

1. Locate the Alignment Arrows on both the Chamber Cover and the Optical Unit.
2. Set the Chamber Cover onto the Optical Unit while making sure that Alignment Arrow 1 and Alignment Arrow 2 are aligned with one another.
3. Holding the detector in your left hand and grasping the Chamber Cover with your right hand, rotate the Chamber Cover clockwise until the Cover Tabs snap into the tab catches.
4. Place the Outer Cover of the detector nose down on a flat surface.
5. Align the Outer Cover Nub with the Alignment Arrow on the enclosure (two orientations are possible, only one will fit properly).
6. With the Outer Cover Nub aligned with the Alignment Arrow, press down firmly on the back of the detector. The detector will snap into the Outer Cover. The detector is now ready to be returned to the base from which it was removed.
7. The detector should be retested by following the test procedure contained in this document.



EXPLODED VIEW OF THE FW SERIES SMOKE DETECTOR

NOTE: If after testing, the detector is not working within the prescribed range, then return it to manufacturer for servicing.