# **INSTALLATION AND** MAINTENANCE INSTRUCTIONS

DC Powered 4-Wire Smoke/Heat Detector With Relay Output



### 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 the proper authorities' requirements. The detector should be cleaned at least once a year.

#### 1. GENERAL DESCRIPTION

The detectors are photo-electronic detector uses a state of-the-art optical sensing chamber. This detector is designed to provide open area protection and to be used with most security alarm control

Two LEDs on each detector provide local 360° visible alarm indication. They flash every 5-6 seconds indicating that power is applied and the detector is working properly. The LEDs latch on in alarm, will be off when a trouble condition exists indicating that the detector sensitivity is outside the listed limit.

Heat detector and smoke & heat detector combine a photo electronic sensing chamber and a temperature heat detector.

### 2. SPECIFICATIONS

9 to 28 VDC Volts Non-polarized Operating Voltage Range:

Standby Current: ≤200µA Maximum Alarm Current (LED on): ≤45mA Alarm Relay Contact Ratings: 1A@ 24V DC

Operating Humidity Range: ≤95%RH(40°C±2°C) Relative Humidity, Non-condensing Operating Temperature Range: −10°C to 50°C (14°F to 122°F)

Operating Temperature Range: Smoke Alarm Sensitivity:

0.15~0.3dB/m 60°C (140°F) (only for with heat sensor) Temperature Alarm Sensitivity

Height:

55 mm installed in Base

Diameter:

103 mm

# WARNING

PREVENT CONTAMINATION AND DETECTOR SUBSEQUENT WARRANTY CANCELLATION, THE SMOKE DETECTOR MUST REMAIN COVERED UNTIL THE AREA IS CLEAN AND DUST FREE.

## 3. INSTALLATION

NOTE: All wiring must conform to applicable local codes,

ordinances, and regulations.

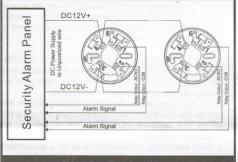
#### INSTALL THE DETECTOR BASE

- 1. Open area smoke or heat detectors are intended for mounting on a ceiling or a wall in accordance with the fire standard in your country.
- 2. Attach mounting base to ceiling or wall. The base of the detector can be mounted directly onto an electrical junction box such as an octagonal (75mm, 90mm or 100mm), a round (75mm), or a square (100mm) box without using any type of mechanical adapter
- 3. Position all wires flat against terminals, and fasten the wires on the terminals, See Figure 1.
- 4. Terminals function description:

Terminal 1: Relay Output -COM

Terminal 2: Relay Output – NO/NC (default NO)

Terminal 3: DC Power -Terminal 4: DC Power +



## FIGURE1 Terminal Wiring

#### INSTALL THE DETECTOR HEAD

- 1. Align detector head alignment mark line with the base's start alignment mark line as shown in Figure 2
- 2. Push the detector head into the base while turning it clockwise to secure it in place.
- 3. Do not install the detector head until the area is thoroughly cleaned of construction debris, dusts, etc.
- 4. After all detectors have been installed, apply power to
- the control panel. 5. Test the detector(s) as described in the TESTING
- section of this manual. 6. Notify the proper authorities that the system is in
- operation.

## ADJUSTING THE RELAY FOR NO/NC

The default condition for the relay is "normally open"

- 1. To adjust the normal condition of the relay to "normally closed" (NC), use a flat head screwdriver to open the detector head form the bottom.
- 2. There is a jumper head next to the relay on the PCB. Remove the jumper head and reinsert it in the NC
- 3. Carefully reinstall the head front cover.