

# AC Wire-in Combination Carbon Monoxide & Photoelectric Smoke Alarm

- 120VAC Direct Wire with Battery Backup
- Alarm/Voice message warning system
- Front loading battery

Part Number 21007624

Model KN-COPE-I

## Voice Warning

Warns of hazard by announcing "Fire, Fire" or "Warning, Carbon Monoxide".

## Peak Level Memory

Alerts user when the unit has detected CO concentrations of 100ppm or higher.

## Smart Hush™

Silences the unit during nuisance alarm situations. (Smoke must be present before hush is activated)

## Two LED's

- Red – Alarm mode.
- Green – Indicates that AC power is present.

## Front Load Battery Door

**Adjustable Mounting Bracket**  
Allows for easy installation and alignment.

**Alerts user to replace CO alarm after 7 years of operation**



## Description

The Kidde Front-Loading Smoke and Carbon Monoxide alarm (part # 21007624) offers protection from two hazards – fire and CO – in one unit. Sold under the FireX brand, this AC-wire with battery backup alarm emits a beeping tone followed by a voice warning that clearly announces the danger by saying, "Fire! Fire!" or "Warning! Carbon Monoxide!". The uniquely designed front-loading battery compartment makes battery replacement quick and easy, and ensures proper installation. Manufactured with photoelectric sensors for detecting smoke and fire, this alarm also includes the world's most accurate CO sensing technology based on claims by major manufacturers.

## Alarm Warnings

**Fire:** The red LED will flash and be accompanied by three long alarm beeps followed by a verbal warning message "FIRE! FIRE!". The alarm will repeat pattern until unit is reset or smoke is eliminated.

**Carbon Monoxide:** Four short alarm beeps followed by a verbal warning "WARNING! CARBON MONOXIDE!" This continues until the unit is reset or the CO is eliminated.

**Low Battery:** One chirp followed by warning "LOW BATTERY". The red LED light will flash. This pattern will continue every minute for the first hour. After the first hour the red LED light will flash once every minute accompanied by the chirp sound. The "LOW BATTERY" warning will only sound once every fifteen minutes.

**Voice Hush Indication:** "HUSH ACTIVATED" and "HUSH CANCELLED" voice announcement

**Alarm Memory:** The green LED will blink once every 16 seconds to alert a user when the unit has alarmed for smoke or has detected a concentration of CO. If the alarm has detected a CO level of 100ppm or greater, when the Test/Reset button is pressed the unit will announce "CO PREVIOUSLY DETECTED".

If the alarm has detected abnormal levels of smoke since its last test, it will produce three rapid beeps.



## Features and Benefits

- **AC-Wire with battery backup** – Powered by home's electricity in order to provide continuous protection. An included 9V battery protects during short-term power outages.
- **Front-Loading Battery** – Speeds up replacement by eliminating the need to remove the unit from the ceiling or wall.
- **Unique Battery Door Design** – Will not close if battery is not installed properly.
- **Voice Warning** – Supplements warning from the traditional 85-decibel alarm by clearly stating the danger present, fire or carbon monoxide.
- **Photoelectric smoke sensor** – May detect visible fire particles associated with slow smoldering fires sooner than an ionization sensor.
- **Electrochemical CO sensor** – Provides accurate and continual CO protection during the product's life, remains stable during temperature and humidity changes and resists reactions to household gases that may cause false readings or reduce sensitivity.
- **Smart Touch Button** – One button performs the following functions:
  - Activates the Hush® feature to temporarily silence nuisance alarms (will announce "Hush mode activated," or "Hush mode cancelled.")
  - Simultaneously tests the unit's electronics and verifies proper operation
  - Activates the peak level memory feature (will announce "CO previously detected" if unit has detected levels of 100 ppm or higher)
  - Resets the unit during a CO alarm (Unit will re-enter alarm within 6 minutes of reset if 70ppm or more of CO is present).
  - Silences a low battery chirp for up to 12 hours
  - Silences the end of life chirp for two days
- **Tamper Resistant** – Unit will lock to mounting bracket and battery door will lock to deter theft or tampering.
- **Green LED** – Will flash every 30 seconds to indicate proper operation.
- **Red LED** – Flashes in conjunction with the alarm sounding.
- **End of Life Signal** – Seven years after initial power, the unit will "chirp" twice every 30 seconds to indicate the need to immediately replace the alarm.
- **Low Battery Signal** – Will chirp every minute and red LED will flash to indicate low battery condition.
- **Interconnectable** – Will interconnect with up to 24 other devices (18 of which can be initiating) including smoke, CO and heat alarms.

## Installation of Smoke Alarm

The combination alarm should be installed to comply with all local codes having jurisdiction in your area, Article 760 of the National Electric Code, and NFPA 72. Make certain all alarms are wired to a single, continuous (non-switched) power line, which is not protected by a ground fault interrupter. A maximum of 1000 ft. of wire can be used in the interconnect system. Use standard UL listed household wire (18 gauge or larger as required by local codes).

## Architectural and Engineering Specifications

The combination smoke and carbon monoxide alarm shall be Kidde Unit Number KN-COPE-I (part number 900-0213) or approved equal. It shall be powered by 120VAC, 60Hz source with a 9V battery backup. The temperature operating range shall be between 40°F and 100°F (4°C and 38°C) and the humidity operating range shall be 5% - 85% relative humidity.

The unit shall incorporate a photoelectric smoke sensor with nominal sensitivity of 2.05%/ft. The CO sensor shall be of a fuel cell design and shall meet the sensitivity requirements of Underwriters Laboratories UL2034 Single and Multiple Station Carbon Monoxide Detectors. The unit shall qualify for UL-approved wording on the package: "World's Most Accurate Carbon Monoxide Alarm" \*.

The combination alarm can be installed on the surface of any wall or ceiling following the UL/NFPA/Manufacturer's recommended placement guidelines. The alarm can be installed on any standard single gang electrical box, up to a 4" octagon junction box. The electrical connection (to the alarm) shall be made with a plug-in connector. The unit shall provide optional tamper resistance that deters removal of the unit from the wall or ceiling. No additional pieces shall be required to activate this feature.

A maximum of 24 Kidde devices can be interconnected in a multiple station arrangement. The interconnect system must not exceed the NFPA (National Fire Protection Association) limit of 18 initiating devices, of which 12 can be smoke alarms. With 18 initiating devices (smoke, heat, CO, etc), interconnected, it is still possible to interconnect 6 strobe lights and or relay modules.

The alarm shall include a test button that will electronically simulate the presence of smoke and CO and cause the unit to go into both modes of alarm. This sequence tests the unit's electronics to ensure proper operation. The CO sensor will not alarm to levels of CO below 30 ppm and will alarm in the following time range when exposed to the corresponding levels of CO.

- 70 ppm CO Concentration 60 – 240 minutes
- 150 ppm CO Concentration 10 – 50 minutes
- 400 ppm CO Concentration 4 – 15 minutes

The combination alarm shall have two methods of warning for danger: a piezoelectric horn that is rated at 85 decibels at 10 feet and a voice warning that identifies the danger. For a CO incident, the horn will sound in the repetitive manner – four (4) fast beeps, a short pause, four (4) fast beeps, a short pause. In between, the unit will announce "Warning Carbon Monoxide!" In a Smoke incident, the horn will sound in the repetitive manner – three (3) beeps, a pause, three (3) beeps, a pause. In between, the unit will announce "Fire! Fire!" The unit shall incorporate 2 LED's. A green LED will be steady on when AC power is present, flash every 30 seconds when in the

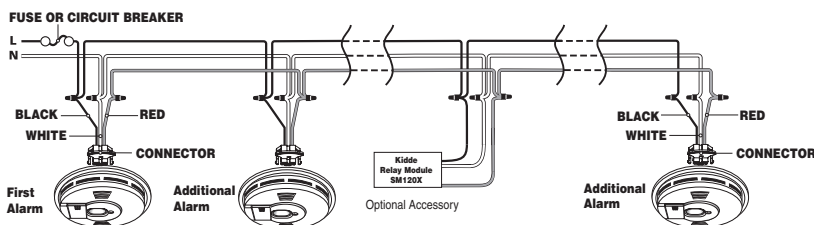
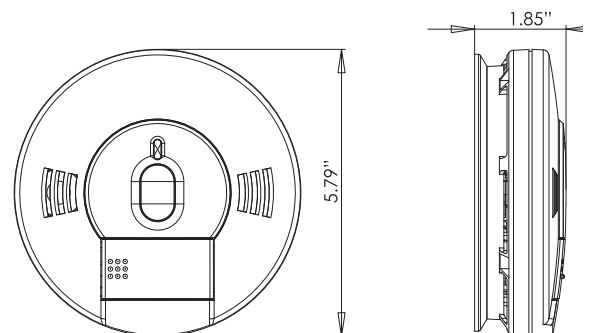
battery only mode, every 16 seconds to indicate alarm memory, and every 2 seconds to indicate the Hush™ mode is active. A red LED will flash in unison with the sounder pattern. The unit shall include the Smart Hush™ feature that silences the unit for approximately 8 minutes if a nuisance alarm condition occurs. The Green LED on the alarm will flash every 2 seconds while in Smart Hush™ and will automatically reset itself. It also provides voice announcement of "Hush Activated" when Smart Hush™ is activated and "Hush Cancelled" when the Hush cycle ends.

The unit shall also indicate a low battery warning utilizing each of the following methods: a brief alarm chirp, the voice announcement of "Low Battery!" The unit shall at a minimum meet the requirements of UL 2034, UL217, NFPA72, (chapter 11 2002 edition) The State of California Fire Marshall, NFPA101 (One and two family dwellings) Federal Housing Authority (FHA), Housing and Urban Development (HUD). It shall also include a 7-year manufacturer's limited warranty.

\*Claim approved by UL, based on manufacturer's reported testing.

## Technical Specifications

|                    |   |
|--------------------|---|
| Part Number:       | 21007624  |
| Model:             | KN-COPE-I   |
| Power Source:      | 120VAC, 60Hz 25mA max per alarm<br>9V battery backup      |
| Smoke Sensor:      | Photoelectric   |
| CO Sensor:         | Electrochemical   |
| Audio Alarm:       | 85dB at 10ft  |
| Temperature Range: | 40°F (4.4°C) to 100°F (37.8°C)                            |
| Humidity Range:    | 5%-95% relative humidity                                  |
| Size:              | 5.79" in diameter x 1.85" depth                           |
| Weight:            | .7lb  |
| Wiring:            | Quick connect plug with 8" pigtails                       |
| Interconnects:     | Up to 24 Kidde devices<br>(of which 18 can be initiating) |
| Warranty:          | 7 year limited  |



## Ordering Information

Individual UPC: 0-47871-07624-6 \*not for sale by individual unit

| Ordering Number | 1 2 of 5          | Pack Quantity         | Dimensions (w x d x h inches) | Weight | Cases/Skid | Cases/Layer | Layers/Skid | Skid Weight | Units/Skid |
|-----------------|-------------------|-----------------------|-------------------------------|--------|------------|-------------|-------------|-------------|------------|
| n/a             | n/a               | individual*           | 5.8 x 2 x 5.8                 | .7lb   | n/a        | n/a         | n/a         | n/a         | n/a        |
| 21007624        | 100 47871 07624 3 | Master Pack (6 units) | 6.5 x 13.6 x 6.25             | 5.6lbs | 126        | 21          | 6           | 706lbs.     | 756        |



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