



# Hardwired Smoke & Carbon Monoxide Voice Alarm, Interconnectable with AA Battery Backup

Model 900-CUAR-VCA

Part Number: 21032311

## 2-in-1 Detection with Voice

Alerts you to both smoke & carbon monoxide (CO) using a single alarm with voice warnings.

## Self-Testing

Smoke & CO alarm is equipped with components that are always checking to ensure the device is operating as expected.\*

## Whole-home Alarm Activation

Expand detection via hardwired connections to other Kidde alarms – when one alarm sounds, they all do.\*\*

## Easy-Install Mounting Bracket

Included in the box for simple, quick installation in 4 orientations.



*Images are representative only.  
Actual product may vary slightly.*

**ALERTS USER TO REPLACE ALARM AFTER 10 YEARS OF OPERATION**

## Description

The Hardwired Smoke & Carbon Monoxide Voice Alarm, Interconnectable with AA Battery Backup helps protect you and your family from two hazards – fire and potentially deadly CO – in one device. This smoke & carbon monoxide combo alarm features self-testing components that are always checking to make sure the alarm is on and working.\* Additionally, the included mounting bracket makes installation fast and easy. This smoke and CO alarm is capable of being hardwired to other select Kidde alarms,\*\* to provide whole-home alarm activation. This setup allows select Kidde alarms to sound in unison, helping to ensure that everyone in the house is alerted.

Leading authorities recommend that both ionization and photoelectric smoke alarms be installed to help ensure optimal detection of the various types of fires that can occur within the home. Ionization sensing alarms may detect invisible fire particles (associated with fast flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms can detect visible fire particles (associated with slow smoldering fires) sooner than ionization alarms.

## Alarm Warnings – featuring multi-color LEDs

**Fire:** The red LED will flash in sync with the alarm pattern (3 long beeps). The alarm will repeat this pattern until the unit is reset or smoke is eliminated.

**Carbon Monoxide:** The red LED will flash in sync with the alarm pattern (4 quick beeps). This continues until the smoke & carbon monoxide alarm is reset or the CO is eliminated.

**Low Battery:** One chirp and amber LED flash per minute.

**Alarm Memory:** Alerts a user if smoke or CO has been detected in the last 24 hours. If smoke has been detected, the red LED blinks every 15 sec. If CO has been detected, the red LED blinks twice every 15 sec.

## Features & Benefits

- **2-in-1 Detection** - Alerts you to both smoke & carbon monoxide (CO) using a single alarm.
- **Voice Warning** - Clearly alerts “Fire! Feu!” when a smoke or fire hazard is present, “Warning! Carbon monoxide! Attention! Monoxyde de carbone!” when CO is detected, or “Low battery. Pile faible”.
- **Self-Testing** - Smoke & CO alarm is equipped with components that are always checking to ensure the device is operating as expected.\*
- **Whole-home Alarm Activation** - Expand detection via hardwired connections to other Kidde alarms – when one alarm sounds, they all do.\*\*
- **Easy-Install Mounting Bracket** - Included in the box for simple, quick installation in 4 orientations.
- **AC-hardwired with 2 AA Battery Backup** - Powered by home’s electricity in order to provide reliable detection. AA batteries provide smoke & carbon monoxide alarm backup power during short-term power outages.
- **Photoelectric Smoke Sensor** - Can detect visible fire particles associated with slow smoldering fires sooner than an ionization sensor.
- **Electrochemical CO Sensor** - Provides accurate carbon monoxide detection 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.
- **One-Touch Button** - performs the following functions:
  - Activates the Hush™ feature to temporarily silence nuisance alarms.
  - Tests the unit’s electronics and verifies proper operation.
  - Silences a low battery chirp for up to 24 hours at a time for a maximum of 7 days.
  - Silences the end of life chirps for 24 hours at a time for a maximum of 7 days.
  - Resets the device during a CO alarm (unit will re-enter alarm within 6 minutes of reset if 70 ppm or more of CO is present).



SINGLE STATION  
CARBON MONOXIDE ALARM.

*\*Self-testing is not a substitute for a manual push test of the alarm. Perform a button test once per week to verify proper alarm operation.  
\*\*Alarms only connect with select Kidde alarms that have hardwired AC interconnect capability (see User Guide).*

## Installation of Alarm

This equipment should be installed in accordance with: (1) C22.1-12, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations; and (2) CAN/ULC-S553, Standard for Installation of Smoke Alarms. Make certain alarms are wired to a continuous (non-switched) power line. The maximum wire run distance between the first and last unit in an interconnected system is 305 m (1000 ft). NOTE: Use agency approved household wire (as required by local codes) available at all electrical supply stores and most hardware stores.

Industry experts recommend specific locations for smoke alarms, such as every level and sleeping area of the dwelling. They also recommend a CO alarm be installed on each level of the home – ideally on any level with fuel-burning appliances and outside of sleeping areas. See User Guide for further information.

## Architectural and Engineering Specifications

The combination smoke and carbon monoxide alarm shall be Kidde Model 900-CUAR-VCA or approved equal. It shall be powered by 120VAC, 60Hz source with two (2) AA backup batteries. The temperature operating range shall be between 4.4°C (40°F) to 37.8°C (100°F) and the humidity operating range shall be 10%-95% relative humidity, non-condensing.

The unit shall incorporate a photoelectric smoke sensor with nominal sensitivity of 1.52 ± 1.02 %/ft OBS. The CO sensor shall be of an electrochemical design and shall meet the sensitivity requirements of CSA 6.19-17 Residential carbon monoxide alarming devices.

The combination alarm can be installed on the surface of any wall or ceiling following the manufacturer's recommended placement guidelines. The alarm can be installed on any standard single gang electrical box, up to a 10.2 cm (4 in) octagon junction box. The electrical connection (to the alarm) shall be made with a plug-in connector.

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. This alarm is not designed to be interconnected with other manufacturer's products, unless otherwise specified.

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 warn of danger using a piezoelectric horn that is rated at 85 decibels at 3 m (10 ft). For a CO incident, the horn will sound in the repetitive manner – four (4) fast beeps, a short pause, four (4) fast beeps. In a Smoke incident, the horn will sound in the repetitive manner – three (3) beeps, a pause, three (3) beeps. The unit shall incorporate three (3) LEDs. A green LED will be steady on when AC power is present, or flash every 60 seconds when in the battery only mode. A red LED will flash once or twice every 15 seconds to indicate smoke or CO alarm memory, and will flash in unison with the sounder pattern. An amber LED indicates fault conditions. The unit shall include the Hush™ feature that silences a smoke alarm for approximately 8-10 minutes if a nuisance alarm condition occurs. The red LED on the alarm will flash every 2 seconds while in Hush™ and the unit will automatically reset itself.

The unit shall also indicate a low battery warning utilizing a brief alarm chirp and voice. The unit shall at a minimum meet the appropriate requirements of ULC S-531 and CSA 6.19-17. It shall also include a 10-year manufacturer's limited warranty.

**▲ WARNING:** *This product is intended for use in indoor residential locations. It is not designed to measure compliance with commercial or industrial standards. This device is designed to protect individuals from acute effects of Carbon Monoxide exposure. It will not fully safeguard individuals with specific medical conditions. If in doubt, consult a medical practitioner. Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm.*

## Technical Specifications

<b>Model:</b>	900-CUAR-VCA
<b>Power Source:</b>	120VAC, 60Hz 42mA max per alarm, 2 AA battery backup
<b>Smoke Sensor:</b>	Photoelectric
<b>CO Sensor:</b>	Electrochemical
<b>Audio Alarm:</b>	85dB at 3 meters
<b>Temperature Range:</b>	4.4°C (40°F) to 37.8°C (100°F)
<b>Humidity Range:</b>	10%-95% relative humidity, non-condensing
<b>Size:</b>	12.6 cm in diameter x 4.9 cm depth
<b>Weight:</b>	0.24 kg
<b>Wiring:</b>	Quick-connect plug with pigtails
<b>Interconnects:</b>	Up to 24 Kidde devices (of which 18 can be initiating)
<b>Warranty:</b>	10-year limited (batteries excluded)
<b>Replacement batteries:</b>	Energizer E91, Gold Peak 15A, Golden Power GLR6A. Replacement batteries are available where you purchased this alarm. <i>Note: Do not use lithium batteries in this unit.</i>

## Ordering Information

Ordering Number	UPC	1 of 5	Pack Config	Pack Qty	Case Dimensions (w x d x h cm)	Case Weight (kg)	Cartons/Pallet
21032311	047871323111	10047871323118	Box	Tray/Lid (6 Units)	15.9 x 38.3 x 15.2	2.88	108



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