

National Fire Equipment Ltd.



Worry-Free AC Wire-in Combination Smoke & Carbon Monoxide (CO) Alarm Sealed Lithium Battery Backup

Model i12010SCO-CA

Sealed 3V Lithium Battery Backup 10-year* tamper proof battery eliminates need for battery replacement. Alerts user to replace alarm after 10 years of operation. Voice Warning Warns of hazard by announcing "Fire!" or "Warning, Carbon Monoxide." Intelligent Sensor Technology Reduces nuisance alarms and offers fast response to real fires. **Test/Hush Button Functions** A single button that tests alarm circuitry and temporarily silences nuisance alarms. **Two LED Display** Red LED indicates alarm mode, Green LED indicates AC power is present Peak Level Memory Alerts user when the unit has detected CO concentrations of 100ppm or higher.

Description

The Kidde i12010S is an AC/DC powered, ionization smoke alarm that operates on a 120V power source with sealed-in lithium battery backup. This alarm uses ionization sensing technology. Ionization sensing alarms may detect invisible fire particles (associated with flaming fires) sooner than photoelectric

alarms. Photoelectric sensing alarms may detect visible particles (associated with smoldering fires) sooner than ionization alarms.

Leading authorities recommend that both ionization and photoelectric smoke alarms be installed to help insure maximum detection of the various types of fires that can occur within the home.

The i12010S contains a 10-year tamper proof battery that eliminates the need for battery replacement, and ends worry over unauthorized battery removal. The alarm provides continuous protection from smoke and fire, even during power outages. At the end of alarm life, the unit will chirp, indicating the alarm is in need of replacement. The customer can use a simple tool such as a screwdriver to deactivate the unit, stopping the chirp and making it safe for disposal. The end of life signal can be temporarily silenced to allow for replacement at a more convenient time.

Install Confidence: Easy Installation

• Battery backup automatically activates when the alarm is attached to mounting bracket

- Large mounting base makes mounting easier, protects surface paint from dirt and covers imperfections.
- Pre-stripped wiring harness with easy off cap does not require stripper tool. Tinned strands increase conductivity and wire nut grip.

Fewer Callbacks

- 10-year sealed battery substitutes need for routine 9V replacement
- Large centrally located Test/Hush® alarm control button silences nuisance alarms for approximately 9 minutes.
- Dust cover protects sensor from contaminates during construction, reducing nuisance alarms.

User-Friendly Features

• Red LED indicates alarm mode, Green LED indicates AC power is present.

• Interconnectable with up to 24 devices (of which 18 can be initiating) including smoke, CO and heat alarms. See user guide for complete instructions.

• End of Life Hush feature allows user to temporarily silence end of life chirp 3 days at a time for a maximum of 30 day life extension.







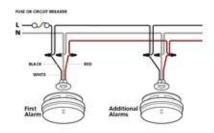
Worry-Free AC Wire-in Combination Smoke & Carbon Monoxide (CO) Alarm Sealed Lithium Battery Backup

Architectural and Engineering **Specifications**

The combination smoke and carbon monoxide alarm shall be Kidde model i12010SCO or approved equal. It shall be powered by 120VAC, 60Hz source with on 3V sealed lithium 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 10% - 95% relative humidity, non-condensing. The unit shall incorporate an ionization smoke sensor with nominal sensitivity of 0.50-1.22%/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 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!" The unit shall incorporate 2 LED's. A green LED will be steady on when AC power is present, flash every 60 seconds when in the battery only mode, every second 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 HushTM feature that silences the unit for approximately 9 minutes if a nuisance alarm condition occurs. The Green LED on the alarm will flash every 2 seconds while in HushTM and will automatically reset itself. It also provides voice annunciation of "Hush Mode Activated" when HushTM is activated and "Hush Mode 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 10-year manufacturer's limited warranty.

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).



Technical Specifications

Power Source:	120VAC, 60Hz 45mA max per alarm Saled lithium battery backup
Smoke Sensor:	Ionization
CO Sensor:	Electrochemical
Audio Alarm:	85dB at 10ft
Temperature Range:	40°F (4.4°C) to 100°F (37.8°C)
Humidity Range:	10%-95% relative humidity,
	non-condensing
Size:	5.5" in diameter x 1.75" depth
Weight:	11b
Wiring:	Quick connect plug with 6" pigtails
Interconnects:	Up to 24 Kidde devices
	(of which 18 can be initiating)
Warranty:	Ten year limited

5.5

Ordering Number	UPC	12F5	Pack Config.	Pack. Quantity	Dimensions {w x d x h inches}	Weight	Cartons/ Pallet
21010408	0-47871-10408-6	100-47871-10408-3	BOX	Master Pack (6 Units)	6.0 x 13.0 x 6.0	2.7	126

1-800-267-8508 • www.nationalfire.com

Moncton • Ottawa • Toronto • Windsor • Regina • Edmonton • Calgary • Vancouver



120 V AC Talking Smoke & Carbon Monoxide Alarm

with 2 AA Front-Loading Battery Backup

Part Number 900-0119 Model KN-COSM-IBACA 10-Year Limited Warranty

Combined Smoke & Carbon Monoxide Alarm

Intelligent Sensor Technology

Voice Warning

120 V AC Direct Wire • Interconnects with up to 24 devices

Hush[®]/Test/Reset Button

Front-Loading Battery Door • 2 AA Battery Backup

Features and Benefits

- Combined Smoke & Carbon Monoxide Alarm A single unit can be installed where previously, two were needed. Reduces installation time and protects against both fire and carbon monoxide dangers.
- Intelligent Sensor Technology Combines the detection capabilities of an ionization smoke sensor with that of an electrochemical carbon monoxide sensor. When either sensor notices a potential hazard, the alarm will adjust its smoke sensitiivity to differentiate between a real hazard and a false one.
- Voice Warning Announces the hazard type detected (in English and French). Alarm announces "FIRE!" when a smoke or fire hazard is detected and announces "WARNING! CARBON MONOXIDE!" when a CO hazard is detected. Also announces "LOW BATTERY" when it is time to replace the batteries.
- 120 V Interconnectable Will interconnect with up to 24 other devices (18 of which can be initiating), including smoke alarms (limit of 12), CO and heat alarms.
- AA Front-Loading Battery Backup Change batteries without the need to remove the unit from the ceiling, providing continuous protection in the case of a power outage.
- **Tamper Resistant** Unit will lock to mounting bracket to deter theft or tampering.
- End of Life Notification Ten (10) years after unit is first powered, this alarm will beep two times every 30 seconds to indicate it is time to replace the alarm.
- Alarm Memory: The green LED will flash every second during alarm. When the alarm condition goes away, the originating alarm unit will flash the green LED every 16 seconds until the Test/Reset button is pressed, thus resetting the alarm.

- Multi-function One Button Design includes:
 - **Test Feature** Tests the alarm circuitry and triggers the voice announcement
 - Hush[®] Feature Temporarily silences nuisance alarms for approximately 9 minutes (will announce "HUSH MODE ACTIVATED," or "HUSH MODE CANCELLED.").
 - **Reset Feature** Resets the carbon monoxide alarm
 - Peak Level Memory If alarm has detected a CO level of 100ppm or higher since it was last reset, the voice alarm will announce "CAUTION, CARBON MONOXIDE PREVIOUSLY DETECTED"

Alarm Warnings

- Fire: The red LED will flash and be accompanied by three long alarm beeps followed by a verbal warning message "FIRE!". The alarm pattern will repeat until 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 at least seven days. Under battery power, the "LOW BATTERY" voice only occurs once every 15 minutes.
- Voice Hush Indication: "HUSH MODE ACTIVATED" and "HUSH MODE CANCELLED" voice announcement.





Architectural and Engineering Specifications

The combination smoke and carbon monoxide alarm shall be Kidde model KN-COSM-IBACA or approved equal. It shall be powered by 120 V AC, 60 Hz source with two AA battery backup. 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 an ionization smoke sensor with nominal sensitivity of 0.77 \pm 0.26 %/ft. The CO sensor shall be of a fuel cell design and shall meet the sensitivity requirements of CAN/CSA 6.19-01 (R2011) - Residential carbon monoxide alarming devices.

The alarm can be installed on any standard single gang electrical box or 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 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 Concentration60 – 240 minutes150 ppm CO Concentration10 – 50 minutes400 ppm CO Concentration4 – 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 four (4) short beeps followed by the verbal warning message "Warning Carbon Monoxide!". This continues until the unit is reset or the CO is eliminated. In a Smoke incident, the horn will sound three (3) long alarm beeps followed by the verbal warning message "FIRE!" This pattern is repeated until the smoke is eliminated. The red LED light will flash while in alarm/voice mode.

The unit shall incorporate an LED display. A green LED will be steady on when AC power is present, flash every 60 seconds when in battery only mode, every second to indicate alarm memory, and every 2 seconds to indicate the Hush" mode is active. A red LED will flash in unison with the alarm sounder pattern.

The unit shall include the Hush® feature that silences the unit for approximately 9 minutes if a nuisance alarm condition occurs. The Green LED on the alarm will flash every 2 seconds while in Hush® and will automatically reset itself. It also provides voice annunciation of "HUSH MODE ACTIVATED" when Hush® is activated and "HUSH MODE CANCELLED" when the Hush cycle ends.

The unit shall also indicate a low battery warning utilizing each of the following methods: the red LED will flash and the unit will "chirp" one time, followed by the warning message "Low Battery!".

The unit shall at a minimum meet the requirements of CAN/CSA 6.19-01 and CAN/ULC-S531. It shall also include a 10-year manufacturer's limited warranty.

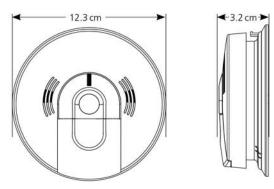
Ordering Information

UPC: 0-47871-10119-1

Technical Specifications

Power Source:	120 V AC, 60 Hz 45 mA max per alarm 2 AA battery backup
Sensors:	Smoke: Ionization, CO: Electrochemical
Audio Alarm	85 dB at 10 ft
Temperature Range:	4.4°C (40°F) to 37.8°C (100°F)
Humidity Range:	10%-95% relative humidity, non-condensing
Size:	12.3 cm in diameter x 3.2 cm depth
Weight:	0.2 kg
Wiring:	Quick connect plug with 15.2 cm (6") pigtails
Interconnects:	Up to 24 Kidde devices (of which 18 can be initiating)

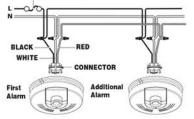
Warranty: 10-year limited



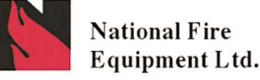
Installation of Alarm

The combination alarm should be installed to comply with all local codes having jurisdiction in your area. 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 305 m (1000') of wire can be used in the interconnect system. Use standard CSA listed household wire (18 gauge or larger as required by local codes).

FUSE OR CIRCUIT BREAKER



Part Number	12 of 5	Pack Quantity	Case Dimensions (w x d x h centimeters)	Case Weight	Case/ Skid
900-0119	100-47871-10119-8	6 units	17cm x 35cm x 16cm	2.70kg	126











AC Wire-in Combination Carbon Monoxide & Photoelectric Smoke Alarm

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

Part Number 900-0213CA

Model KN-COPE-ICA

Voice Alarm

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.

Hush Feature

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.



Description

The Kidde Front-Loading Smoke and Carbon Monoxide alarm (part # 900-0213CA) offers protection from two hazards – fire and CO – in one unit. 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", "HUSH CANCELLED" and "LOW BATTERY" 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 Ten 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. 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 CSA-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 Model Number KN-COPE-ICA (part number 900-0213CA) or approved equal. It shall be powered by 120 V AC, 60Hz source with a 9 V battery backup. The temperature operating range shall be between 4°C and 38°C (40°F and 100°F) and the humidity operating range shall be 5% to 95% relative humidity.

The unit shall incorporate a photoelectric smoke sensor with nominal sensitivity of 2.05 ± 1.05 %/ft. The CO sensor shall be of a fuel cell design and shall meet the sensitivity requirements of CAN/CSA-6.19-01 for 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 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.

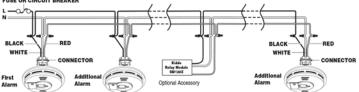
The alarm shall include a test button that will electronically simulate the presence of smoke and CO and cause the unit to go into both modes of alarm. This sequence tests the unit's electronics to ensure proper operation. The CO sensor will not alarm to levels of CO below 30 ppm and will alarm in the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

70 ppm CO Concentration 60 - 240 minutes 150 ppm CO Concentration 400 ppm CO Concentration

10 - 50 minutes 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!"

FUSE OR CIRCUIT BREAKER



Ordering Information UPC: 0-47871-09213-0

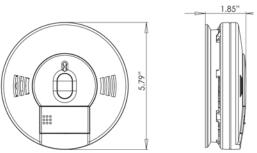
Part # 900-0213CA Model KN-COPE-ICA

Technical Specifications

Part Number:	900-0213CA
Model:	KN-COPE-ICA
Power Source:	120VAC, 60Hz 30mA max per alarm 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:	14.7 cm in diameter x 3.7 cm depth
Weight:	0.45 kg
Wiring:	Quick connect plug with 8" pigtails
Interconnects:	Up to 24 Kidde devices (of which 18 can be initiating)

Warranty:

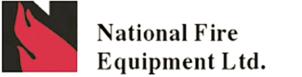
10 year limited



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 annunciation 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!" It shall also include a 10-year manufacturer's limited warranty.

Part Number	l2 of 5	Pack Quantity	Case Dimensions (w x d x h centimeters)	Case Weight	Case/ Skid	Skid/ Weight
900-0213	100-47871-09213-7	CUT CASE (6 units)	17 x 35 x 16	2.70kg	126	410 kg







CSA-6.19-01



LASTS / DUBE

Intelligent Talking Alarm

Battery Operated Combination Smoke and Carbon Monoxide Alarm

Part Number 900-0220CA

Model KN-COSMXTR-BCA

Voice Alarm

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

Test/Reset Button

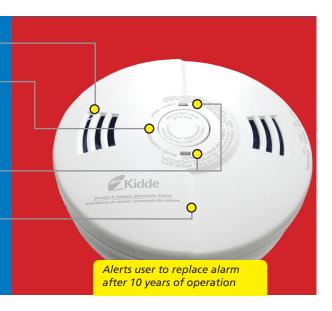
Tests alarm circuitry and triggers the voice announcement.

Combined Smoke and Carbon Monoxide Alarm A single unit can be installed where previously, two were needed. Reduces installation time and helps to keep home décor attractive.

Two LED's

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

Hush[®] Feature Temporarily silences nuisance alarms.



Description

The Kidde 900-0220CA uses breakthrough technology to offer a fast response to real fires, including smouldering and fast-flaming, as well as protect you from carbon monoxide and dramatically reduce the chance of nuisance alarms. In addition, the Intelligent Alarm contains a voice warning that clearly states the present danger - smoke or carbon monoxide and announces "Fire! Fire!" or "Warning! Carbon Monoxide!" The Intelligent Alarm combines the detection capabilities of an ionization smoke sensor - which is more likely to detect smaller, less visible fire particles, like those produced by flaming fires with that of an electrochemical sensor, which is used to detect CO. Since carbon monoxide is present in all fires, having both detection chambers work together in one alarm is a breakthrough in the fire safety industry. When either sensor notices a potential hazard, it will communicate with the other. Depending on what is detected, the alarm will adjust its smoke sensitivity in order to better discriminate between a real hazard and a false one. This constant communication enhances the alarm's overall performance in all fires, and significantly reduces the potential for a nuisance alarm.

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 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", "HUSH CANCELLED" and "LOW BATTERY" voice announcement.

Peak Level Memory: If the alarm had detected a CO level of 100ppm or higher, the unit will announce "CO PREVIOUSLY DETECTED" to warn of the CO incident, when the Test/Reset button is pressed.

Features and Benefits

- Voice Alarm Announces the hazard type detected (in both English and French) thereby helping to speed up the correct reaction to the hazard detected. Alarm announces "Fire Fire" when a smoke or fire hazard is detected and announces "Warning Carbon Monoxide" when a CO hazard is detected.
- Combined Smoke Alarm and Carbon Monoxide Alarm

 A single unit can be installed where previously, two were needed. Reduces installation time and helps to keep home décor attractive.
- **Test/Reset Button** Tests alarm circuitry and triggers the voice announcement.
- **LEDs** Two LEDs are provided. Flashing green for normal operation and flashing red for alarm condition.
- Low Battery Warning The unit warns of a low battery condition by announcing "low battery" and by initiating an alarm chirp and activating a flashing red LED.
- **Battery Powered** Provides protection even during power outages when many fire and carbon monoxide incidents occur.
- **Battery Safeguard** Ensures the unit cannot be accidentally mounted without batteries installed.
- Hush[®] Feature Temporarily silences nuisance alarms.

Part # 900-0220CA Model KN-COSMXTR-BCA

Architectural and Engineering Specifications

The combination smoke and carbon monoxide alarm shall be Kidde Model Number KN-COSMXTR-BCA (part number 900-0220CA) or approved equal. It shall be powered by 3 AA batteries. The unit shall incorporate an ionization smoke sensor with nominal sensitivity of $1.10 \pm 0.34\%$ /ft. The CO sensor shall be of a fuel cell design and provide accuracy of +/-20% + 15ppm. The temperature operating range shall be between 4°C and 38°C (40°F and 100°F) and the humidity operating range shall be 5% - 95% related humidity.

The combination alarm can be installed on the surface of any wall or ceiling following the Manufacturer's recommended placement guidelines. The alarm shall provide optional tamper resistance that deters removal of the unit from the wall or ceiling.

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 150 ppm CO Concentration 10 – 50 minutes 400 ppm CO Concentration 4 – 15 minutes

60 - 240 minutes

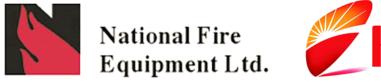
The combination alarm shall have two methods of warning for danger: a piezoelectric horn that is rated at 85 decibels at 10 feet and a voice warning that identifies the danger. For a CO incident, the horn will sound in the repetitive manner - four (4) fast beeps, a short pause, four (4) fast beeps, a 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 also indicate a low battery warning utilizing each of the following methods: a brief alarm chirp, the voice announcement of "Low Battery!" and the red LED will flash once per minute. The unit shall incorporate 2 LED's. A green LED will flash when power is present. A red LED will flash once every 30-40 seconds to indicate the alarm is operating properly and will flash once per second when the unit is alarming and will remain so until the air is cleared. It shall also include a 10-year manufacturer's limited warranty.

Ordering Information

UPC: 0-47871-07451-8

Part Number	12 of 5	Pack Quantity	Case Dimensions (w x d x h centimeters)	Case Weight	Case/ Skid	Skid/ Weight
900-0220	100-47871-07451-5	CUT CASE (8 units)	20 x 44 x 28	3.86kg	288	208kg





Technical Specifications

Part Number:	900-0220
Model:	KN-COSMXTR-BCA
Power Source:	3 AA Batteries
Sensors:	Smoke: Ionization, CO: Electrochemical
Audio Alarm	85 dB at 10 ft
Temperature Range:	4.4°C (40°F) to 37.8°C (100°F)
Humidity Range:	5%-95% relative humidity
Size:	14.6 cm in diameter x 3.8 cm depth
Weight:	0.36 kg
Interconnects:	No
Warranty:	10 year limited

10 year limited

