Mechanical Systems

Part IV – Fire Suppression System

SMOKE ALARM

ᶜᴬᵀ 9120 Series

(Model 9120B only)

DUAL IONIZATION

Dual Ionization sensing chamber. Generally more effective at detecting small particles produced by flaming fires. Sources may include paper or kitchen grease.

LATCHING ALARM INDICATOR

Remembers which unit initiated an alarm.

SINGLE BUTTON TEST/ SILENCE

Silences and tests alarm with a single button.

TWO LOCKING FEATURES

Pins are provided to lock battery drawer and/or alarm to base. Perfect for apartment, dormitory or hotel applications.

Available in the following versions:

9120	AC Alarm with silence
9120B	AC Alarm with silence and battery backup
9120AB	Same as 9120B but with alkaline battery
9120LB	Same as 9120B but with lithium battery
9120B-48P	48 pack of Boxed 9120B
9120B-48B	48 pack of Bulk 9120B
9120B-GFD	18 count Gravity Feed Display
9120CP	Contractor Bulk 6-pack of 9120 Alarm
9120B6CP	Contractor Bulk 6-pack of 9120B Alarm

LIMITED **10** YEAR WARRANTY

IONIZATION

Listed to **UL 217** Standard

BRK®

THE PROFESSIONAL STANDARD

120VAC, 60Hz Wire-in with 9V Battery Backup (9120B)

Description:

The BRK Brands, Inc. Model Numbers 9120 and 9120B are wire-in, 120VAC 60Hz single and/or multiple station smoke alarms specifically designed for residential and institutional applications including sleeping rooms of hospitals, hotels, motels, dormitories and other multi-family dwellings as defined in standard NFPA 101. Models 9120 and 9120B comply with UL217, CSFM, NFPA 72, HUD, FHA and other agencies that model their codes after the above agencies. They meet building codes where AC and AC/DC with Silence smoke alarms are required. The alarms are interconnectable with up to 18 devices, of which 12 can be smoke alarms.

The BRK® 9120 Series alarms feature a dual ionization smoke sensing chamber screened for insect protection, an 85dB horn, 9V battery back-up (all versions except model 9120) and a "silence" feature. The "Smart Technology" system is designed to reduce nuisance alarms. "Latching Alarm Indication" remembers which unit initiated an alarm. When interconnected in a series, the unit that triggered the alarm rapidly flashes its red LED indicator. After the alarm condition subsides, the initiating unit will store in memory or "latch" the information and begin to flash the green LED indicator 2 seconds on, 2 seconds off. The "Perfect Mount" system features a gasketless base and a mounting bracket that keeps the alarm secure over a wide rotation range to allow for true alignment. This will allow fine-tuning on the positioning to compensate for out of aligned wall studs and to keep the wording level when wall mounting. A Single button test/silence button eliminates confusion. Depending on what mode the alarm is in, pushing the button will test, silence, re-test the alarm when in silence and clear the latching feature. Battery installation and removal can occur while the unit is mounted to the ceiling or wall via the side load battery compartment. Other Contractor Preferred features include a dust cover to keep alarm clean during construction, keyhole slots in the mounting bracket eliminate the need to remove the electrical box screws for installation. Two locking features are provided to prevent battery theft and/or theft of the unit. Connection to AC power is made with a "Quick-Connect" wiring harness. Installation is quick, easy and cost effective.

(Model 9120B only)

TOP VIEW   **SIDE VIEW**   **MOUNTING BRACKET**

5.6"

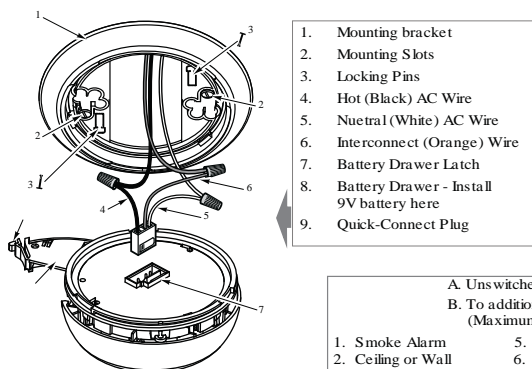⊢ 2.0" ⊣
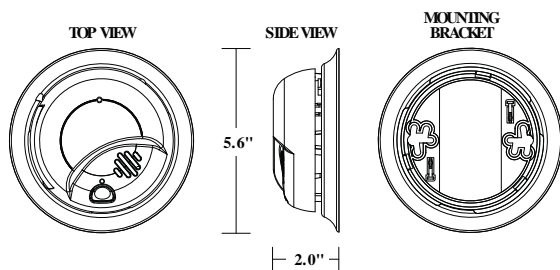
ARCHITECTURAL AND ENGINEERING SPEC

The smoke alarm shall be a BRK Model 9120B (battery backup) or 9120 (no battery backup) and shall provide at a minimum the following features and functions:

1. A Ionization smoke sensing chamber.
2. The unit shall be capable of self restoring.
3. Fully screened sensing chamber to resist entry of small insects thereby reducing the probability of unwanted alarms.
4. Powered by 120VAC, 60Hz and have a monitored 9V battery backup model (9120B only). and a solid state piezo horn rated at 85dB at 10 ft.
5. A visual green LED power-on indicator to confirm unit is receiving power or is in alarm.
6. A full function test button should check all alarm functions by simulating a smoke condition, causing the unit to alarm.
7. Silence feature - Temporarily silence unwanted nuisance alarms.
8. Two Locking features - tamper resistant locking pins that lock battery drawer and/or alarm to mounting bracket.
9. The unit shall be capable of operating between 40°F (4°C) and 100°F (38°C) and relative humidity between 10% and 90%.
10. The unit shall have a gasketless base for easy installation and be capable of keeping alarm secure over a wide rotation range to allow for true alarm alignment.
11. The unit shall have a plug in connector and be capable of interconnection of up to 18 alarms, 12 of which can be smoke alarms.
12. The unit shall at a minimum meet the requirements of UL217, CSFM, NFPA72, NFPA101, ICC

INSTALLATION OF ALARM

Installation of this smoke alarm must conform to all local electrical codes and Article 760 of the National Electrical Code (NFPA 70) and NFPA 72. Interconnected units must meet the following requirements: Total length of wire interconnecting units should be less than 1000 feet, be #18 gauge or larger and be rated at least 300V. It is recommended that all units be on the same fuse or circuit breaker. If local codes do not permit, be sure the neutral wire is common to both phases.

THE PARTS OF THIS SMOKE ALARM

1. Mounting bracket
2. Mounting Slots
3. Locking Pins
4. Hot (Black) AC Wire
5. Nuetral (White) AC Wire
6. Interconnect (Orange) Wire
7. Battery Drawer Latch
8. Battery Drawer - Install 9V battery here
9. Quick-Connect Plug

A. Unswitched 120VAC 60 Hz source
B. To additional units; Maximum = 18 total
(Maximum 12 Smoke Alarms)

1. Smoke Alarm
2. Ceiling or Wall
3. Power Connector
4. Wire Nut
5. Junction Box
6. Neutral Wire (White)
7. Interconnect Wire (Orange)
8. Hot Wire (Black)

TECHNICAL SPECS

Alarm Dimensions:	5.6" dia x 2.0"H
Weight:	6.5 oz (9120); 7.8 oz (9120B)
......g Voltage:	120VAC 60Hz w/ 9V battery backup (9120B only)
Operating Current:	.04 amps (standby/alarm)
Temperature Range:	40°F (4°C) to 100°F (38°C)
Humidity Range:	10% to 90% relative humidity (RH)
Audio Alarm:	85dB at 10 feet
Test/Silence:	Electronically simulates smoke condition, causing the unit to alarm Press and hold test/silence button
Alarm Reset:	Automatic when smoke clears
Interconnections:	Up to 18 units of First Alert or BRK Smoke, CO and Heat Alarms. Maximum of 12 smoke alarms. See user's manual for details.
Smoke Sensor:	Dual chamber ionization
Indicator Lights/Sounds:	
AC Power:	Constant Green LED
DC Power:	Intermittent Red LED (9120B only)
Local Alarm:	Red LED flashes rapidly
Remote Alarm:	Red LED out.
Latching Alarm:	Green LED flashes 2 sec. on/2 sec. off after local alarm
Listing:	Listed to UL217 Standard

SHIPPING SPECS:

Individual Carton Dimensions	5.69"L x 2.25"W x 5.59"H
Weight	0.53 lbs. (9120); .61 lbs. (9120B)
Cube	0.041 ft3
UPC	9120: 0 29054 51300 7
	9120B: 0 29054 51301 4
	9120AB: 0 29054 51302 1
	9120LB: 0 29054 51303 8
Master Carton Dimensions	14.43"L x 6.19"W x 12.63"H
Master Pack	12 (9120, 9120B, 9120AB, 9120LB)
	18 (9120B-GFD)
	48 (9120B-48P, 9120B-48B)
Weight	7.0 lbs. (9120)
	7.9 lbs. (9120B)
	12.8 lbs: (9120B-GFD)
	25.0 lbs (9120B-48P, 9120B-48B)
Cube:	0.653 ft3 (9120, 9120B, 9120AB, 9120LB)
	1.20 ft3 (9120B-GFD)
	2.36 ft3 (9120B-48P, 9120B-48B)
I2of5:	9120: 100 29054 51300 4
	9120B: 100 29054 51301 1
	9120AB: 100 29054 51302 8
	9120LB: 100 29054 51303 5
Pallet Information	
Cases per Layer	19 (9120, 9120B, 9120AB, 9120LB)
	21 (9120B-GFD)
	6 (9120B-48P, 9120B-48B)
Number of Layers:	3 (9120, 9120B, 9120AB, 9120LB)
	2 (9120B-GFD)
	3 (9120B-48P, 9120B-48B)
Cases per Pallet:	57 (9120, 9120B, 9120AB, 9120LB)
	42 (9120B-GFD)
	18 (9120B-48P, 9120B-48B)
Units per Pallet:	684 (9120, 9120B, 9120AB, 9120LB)
	756 (9120B-GFD)
	864 (9120B-48P, 9120B-48B)
Cube:	42.2 ft3 (9120, 9120B, 9120AB, 9120LB)
	55.8 ft3 (9120B-GFD)
	43.4 ft3 (9120B-48P, 9120B-48B)
Weight:	393 lbs. (9120)
	439 lbs. (9120B, 9120AB, 9120LB)
	601 lbs: (9120B-GFD)
	479 lbs (9120B-48P)
	649 lbs. (9120B-48B)

BRK®
THE PROFESSIONAL STANDARD
brkelectronics.com

AC Wire-in Combination
Carbon Monoxide & Smoke Alarm

– *120VAC Direct Wire with Battery Backup*
– *Alarm/Voice message warning system*
– *Intelligent Sensor Technology*

Part Number 900-0114A   Model KN-COSM-IBA

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

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

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

Two LED's
Red LED indicates alarm mode, Green LED indicates AC power is present.

Test/Reset Button Functions
• Tests the units electronics and resets the unit during CO alarm.
• Activates Hush Feature and Peak Level Memory.

Adjustable Mounting Bracket
Allows for easy installation and alignment.

Front Load Battery Door
Replace the 2 AA batteries without disconnecting from mounting bracket.

Alerts user to replace CO alarm after 10 years of operation

Description

The Kidde 900-0114A uses breakthrough technology to offer a fast response to real fires, including smoldering and fast-flaming, as well as protect you from carbon monoxide and dramatically reduce the chance of nuisance alarms. The Intelligent sensor technology 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.

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. Ionization sensing alarms may detect invisible fire particles (associated with fast flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms may detect visible fire particles (associated with slow smoldering fires) sooner than ionization alarms.

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.

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

Features and Benefits

• **Smart Interconnect™** – Interconnects up to 24 Kidde devices (of which 18 can be initiating).

• **Battery Backup (2-AA batteries included)** – Provides protection during power outages.

• **Front Loading Battery Door** – Replace the backup batteries without disconnecting from mounting bracket

• **Battery Lockout System** – The battery door will not close unless the batteries are properly installed.

• **Alarm Tamper Resist** – Helps deter from tampering and theft.

• **Adjustable Mounting Bracket** – Makes installation fast and easy. Works with existing smoke and combination smoke and CO mounting brackets.

• **Peak Level Memory** – Announces "CARBON MONOXIDE PREVIOUSLY DETECTED" if alarm has detected a CO level of 100ppm or higher since it was last reset.

• **Hush™ Feature** – Silences nuisance alarms for approximately 9 minutes. (Smoke must be present before Hush™ is activated)

• **Ionization Sensor Technology** – Ideal for detecting fast flaming and other types of fires.

• **Test Button Functions:**   – Tests the unit for proper operation
 – Peak Level memory   – Resets the Carbon Monoxide alarm

• **Green LED** – Illuminates to indicate the unit is receiving AC power. Flashes once every 60 seconds to indicate battery only mode. Flashes once per second during alarm to indicate initiating alarm. Flashes once every 16 seconds to indicate smoke or CO previously detected. Flashes every 2 seconds while the alarm is in HUSH™ mode.

• **Red LED** – When a dangerous level of smoke or carbon monoxide is detected the red LED will flash. If the unit malfunctions, the red LED will flash and the unit will chirp every 30 seconds.

SIGNALING

10 YEAR LIMITED WARRANTY

UL LISTED

Architectural and Engineering Specifications

The combination smoke and carbon monoxide alarm shall be Kidde model KN-COSM-IBA or approved equal. It shall be powered by 120VAC, 60Hz source with two AA 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 0.89%/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 a 2 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: 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.

Technical Specifications

Power Source:	120VAC, 60Hz 45mA max per alarm 2 AA 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:	5.6" in diameter x 1.8" depth
Weight:	.75 lb
Wiring:	Quick connect plug with 6" pigtails
Interconnects:	Up to 24 Kidde devices (of which 18 can be initiating)
Warranty:	10 year limited
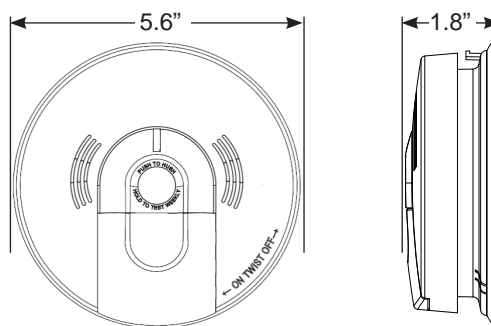
Installation of Smoke Alarm

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).
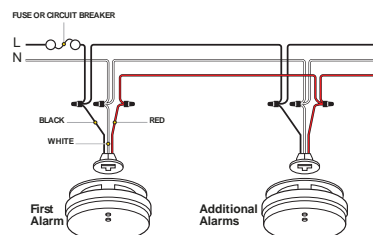
Ordering Information

Ordering Number	UPC	I 2 of 5	Pack Config	Pack Qty	Dimensions (w x d x h inches)	Weight	Cartons/ Pallet
21006377-N	0-47871-16377-9	100-47871-16377-6	BOX	Master Pack (6 Units)	6.6 x 13.5 x 6.2	6.7	126
21008495-N	0-47871-18495-8	100-47871-18495-5	CLAM	PDQ (2 Units)	7.8 x 4.5 x 11.8	1.5	180

Distributed by:

![Kidde logo - United Technologies]

1016 Corporate Park Drive
Mebane NC 27302

1-800-880-6788   www.Kidde.com

HOMEOWNER'S QUICK REFERENCE CARD

KNOW YOUR RAPID RESPONSE™ HOME FIRE SPRINKLER SYSTEM*

A Main Water Control Valve

B Water Meter

C "T" Connection to Water Main

D Control Valve (for plumbing system)

E Water Supply to Sprinkler System

F Water Supply to Plumbing System

G Backflow Valve (not on all systems)

H Sprinkler Control Valve (not on all systems)

I Flow Switch (optional)

J Test and Drain Assembly

K Pressure Gauge

*Your system may contain different components than the one pictured.
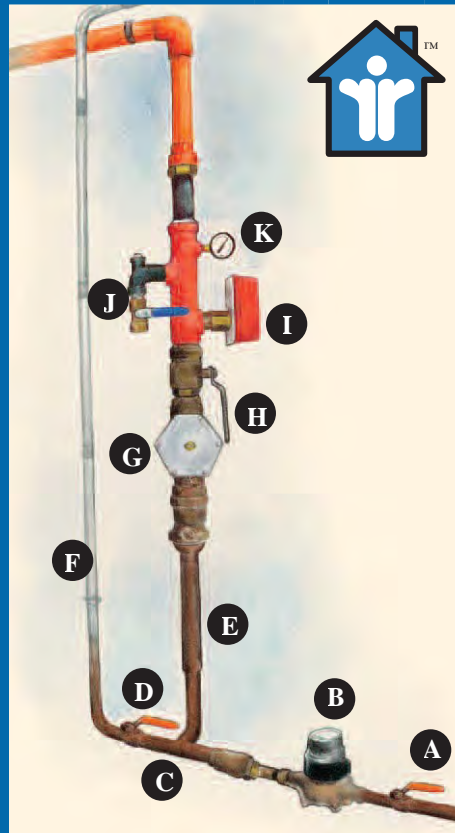
Your home has a **Rapid Response**™ **fire sprinkler system. If you have a fire, the sprinklers will control or extinguish it with water. Always remember, in the event of a fire be calm and leave your home immediately. Call the fire department from a neighbor's house. The system protects your family and home from the dangers of fire, 24 hours a day.**

In most cases, sprinkler systems are supplied by the **Water Main,** where water comes into a home. The fire sprinkler system connects to the water main. In some systems the water flows through a **Backflow Valve.** A water control valve is on the pipe that supplies the sprinkler system. This **Control Valve** turns the water flow on and off. Your system may have additional or different features.

Turning off the water to your home will also turn off the water to your sprinkler system.

A

QUESTIONS?

Contact your sprinkler contractor or if you have any questions.

_____
Fire Sprinkler Contractor

_____
Phone Number

rapid response™
HOME FIRE SPRINKLER SYSTEM

1. **Have your system tested once a year.**
2. **Know the location of the system shutoff valve.**
   Be sure all other adult occupants are aware of its location as well.
3. **Make certain the system control valve is open at all times.**
4. **Be careful when you are moving large or tall items.**
5. **Teach children not to touch or play with sprinklers.**
6. **Keep pictures and large furniture away from sprinklers on walls.**
7. **Contact the fire department when any activation occurs, even if the fire has apparently been extinguished.**

1. **Paint the sprinklers or sprinkler cover plates.**
2. **Hang objects from the sprinklers or sprinkler pipe.**
3. **Obstruct the sprinklers in any way.**
4. **Cover the sprinklers.**
5. **Remove the sprinklers.**
6. **Turn off or disconnect the system.**
7. **Bump sprinklers or exposed pipes.**
8. **Shut off the system in the event of a fire.**
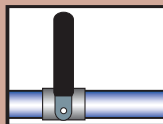9. **Stack items close to fire sprinklers.**

Control Valves
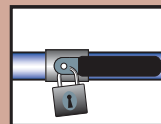
Control Valves must be OPEN or turned ON

The control is **OPEN** when the valve handle is in line with the pipe.
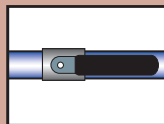
The control is **CLOSED** (turned off) when it makes a 90 degree angle to the pipe.

Use a padlock to keep the valve LOCKED OPEN.
(Tape the key to the pipes or a wall nearby)

Keep the area around your water controls clear.
(Do not store anything within 1 foot of your water controls)

If sprinkler water control valves are ever turned "off", be sure to turn them back on.

Write down the date of each test here:

_____   _____   _____

_____   _____   _____

_____   _____   _____

rapidresponse™
HOME FIRE SPRINKLER SYSTEM

KIDDE™

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

Model 900-CUAR

2-in-1 Detection
Alerts you to both smoke & carbon monoxide (CO) using a single alarm.

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 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 may 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.

- **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 smoke 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** - May 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).

10 YEAR LIMITED WARRANTY

SIGNALING UL LISTED

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

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).

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 or approved equal. It shall be powered by 120VAC, 60Hz source with two (2) AA backup batteries. The temperature operating range shall be between 40°F and 100°F (4.4°C and 37.8°C) 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 1.74 +/- 0.78 %/ft OBS. The CO sensor shall be of an electrochemical design and shall meet the sensitivity requirements of Underwriters Laboratories UL 2034 Single and Multiple Station Carbon Monoxide Alarms. 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.

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

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

The combination alarm shall warn of danger using a piezoelectric horn that is rated at 85 decibels at 10 feet. 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 four (4) 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. The unit shall at a minimum meet the appropriate requirements of UL 2034, UL 217, NFPA 72, The State of California Fire Marshal, NFPA 101 (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.

⚠ **WARNING:** *This product is intended for use in indoor residential locations. It is not designed to measure compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards. This device is designed to help 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

Model:	900-CUAR
Power Source:	120VAC, 60Hz 42mA max per alarm, 2 AA 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:	10%-95% relative humidity, non-condensing
Size:	5.60" in diameter x 1.93" depth
Weight:	0.550 lb
Wiring:	Quick connect plug with pigtails
Interconnects:	Up to 24 Kidde devices (of which 18 can be initiating)
Warranty:	10 year limited (batteries excluded)
Replacement batteries:	Energizer E91, Gold Peak 15A, Golden Power GLR6A. Replacement batteries are available where you purchased this alarm. *Note: Do not use lithium batteries in this unit.*

Ordering Information

Ordering Number	UPC	GTIN	Pack Config	Pack Qty	Case Dimensions (w x d x h inches)	Case Weight (lbs)	Cartons/Pallet
21032250	047871322503	10047871322500	Box	Tray/Lid (6 Units)	15.1 x 6.26 x 6.0	6.360	108
21032252	047871322527	10047871322524	Box	Tray/Lid (4 Units)	10.34 x 6.26 x 6.0	4.490	150

KIDDE™

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