

## BRK SMCO100V-AC

# BRK SMCO100V-AC Hardwire Combination Smoke & Carbon Monoxide Alarm

User Manual

Model: SMCO100V-AC | Brand: BRK

## 1. INTRODUCTION

This manual provides important information regarding the installation, operation, and maintenance of your BRK SMCO100V-AC Hardwire Combination Smoke and Carbon Monoxide Alarm. This device is designed to detect both smoke and carbon monoxide, providing early warning through audible alarms and voice alerts. It features hardwire connectivity with battery backup and can interconnect with compatible BRK/First Alert alarms.

Please read this manual thoroughly before installation and keep it for future reference. Proper installation and regular maintenance are crucial for the effective operation of this alarm.

**BRK**<sup>®</sup>  
**THE PROFESSIONAL STANDARD**



**HARDWIRE**

## **Smoke + Carbon Monoxide Alarm**

AC POWERED SMOKE + CARBON MONOXIDE  
ALARM WITH VOICE & LOCATION

**SMCO100V-AC**

CAT. 1046781



**VOICE WARNING  
WITH LOCATION**

**ADVANCED SMOKE  
& CO PROTECTION**

**EASY INSTALL & BATTERY  
REPLACEMENT**



**PRECISION  
DETECTION™**

Advanced Sensing Technology



Image: Front view of the BRK SMCO100V-AC Combination Smoke and Carbon Monoxide Alarm, highlighting its features and model number.

## **2. SAFETY INFORMATION**

**DANGER:** This alarm will not work without power. Ensure continuous power supply (hardwire and battery backup) for proper operation.

**WARNING:** This unit is designed for residential use only. It is not intended for marine or recreational vehicle use.

**CAUTION:** Do not paint over the alarm. Paint can clog the sensing chambers and prevent the alarm from operating correctly.

Regular testing of your alarm is essential. Test the alarm weekly to ensure it is functioning properly. Never ignore an alarm. Investigate the cause and take appropriate action immediately.

Early Warning



Less Nuisance



Image: Graphic illustrating Precision Detection Advanced Sensing Technology, designed for early warning and reduced nuisance alarms.

### 3. PACKAGE CONTENTS

Verify that all items are present in the package:

- BRK SMCO100V-AC Combination Smoke & Carbon Monoxide Alarm Unit
- Mounting Bracket
- Wiring Harness
- 2 AA Batteries (pre-installed or separate)
- Screws and Anchors for mounting
- User Manual (this document)

### 4. SETUP AND INSTALLATION

#### 4.1 Location Selection

Proper placement of your alarm is critical for effective detection. Install at least one alarm on every level of your home, including basements and finished attics. For optimal protection, install an alarm in every sleeping area and outside each separate sleeping area.

- **Smoke Alarms:** Avoid placing within 20 feet of a furnace or cooking appliance, or in areas with high humidity like bathrooms.
- **Carbon Monoxide Alarms:** Place near sleeping areas and on every level of the home. Avoid placing directly above or next to fuel-burning appliances.
- **Interconnected Alarms:** For homes with multiple alarms, interconnecting them ensures that when one alarm sounds, all compatible alarms sound, providing earlier warning.

## Recommended Placement

Add peace of mind to every level and every bedroom.

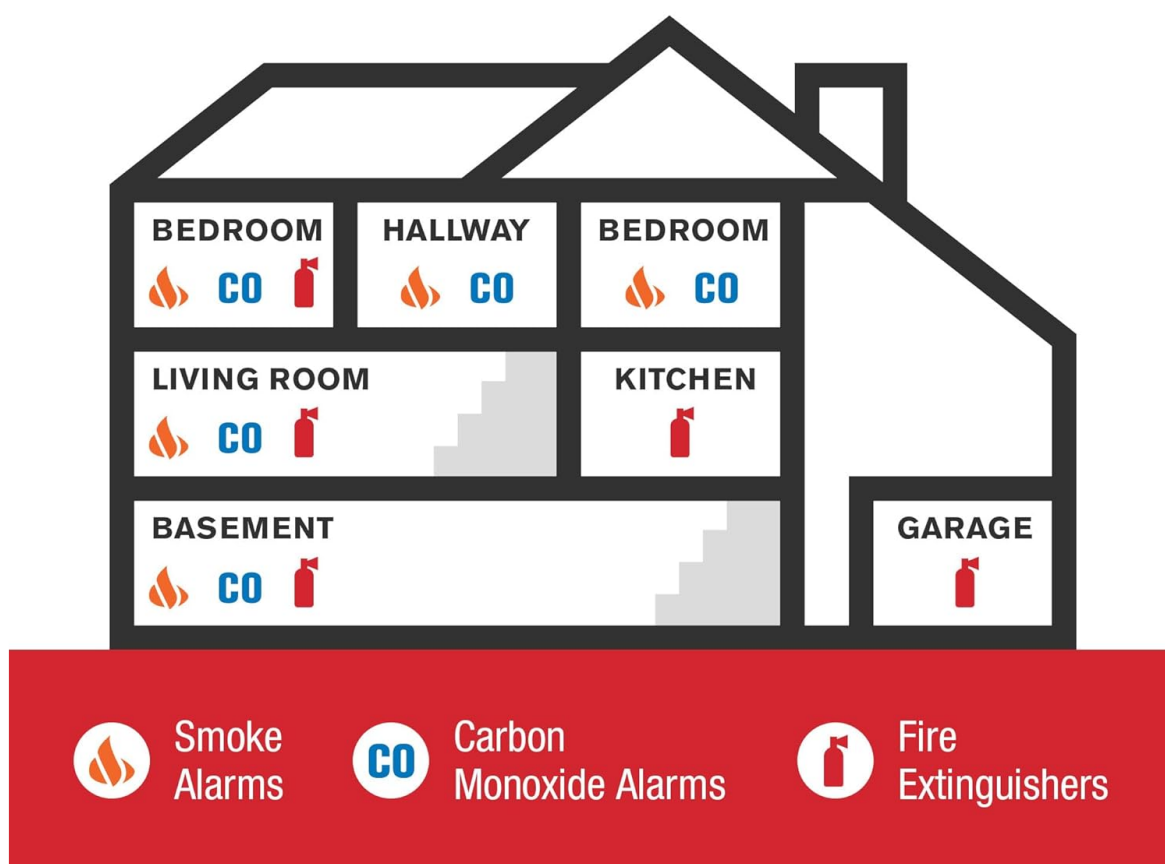


Image: Recommended placement diagram for smoke alarms, carbon monoxide alarms, and fire extinguishers throughout a typical home layout.

### 4.2 Mounting the Alarm

1. **Turn off power:** Before beginning installation, turn off the AC power to the circuit where you will be installing the alarm.
2. **Install Mounting Bracket:** Secure the mounting bracket to the ceiling or wall using the provided screws and anchors. Ensure the bracket is firmly attached.
3. **Connect Wiring Harness:** Connect the alarm's wiring harness to your household wiring. Match the black wire to black, white to white, and the red/orange wire (if present) to the interconnect wire from other compatible alarms.
4. **Install Batteries:** Open the battery compartment and insert the two AA batteries, matching the polarity (+ and -) as indicated. Close the compartment securely.

5. **Attach Alarm to Bracket:** Align the alarm with the mounting bracket and twist clockwise until it locks into place.
6. **Restore Power:** Turn the AC power back on at the circuit breaker. The alarm should chirp once and the green LED should illuminate, indicating it is receiving AC power.



Image: Components included for installation: the alarm unit, mounting bracket, wiring harness, screws, and anchors.





**Most trusted brand in fire safety\***

Image: The BRK SMC0100V-AC alarm unit installed on a ceiling, demonstrating its wired connection.

## 5. OPERATING INSTRUCTIONS

### 5.1 Normal Operation

Under normal operating conditions, the green LED indicator will be steadily lit, indicating that the alarm is receiving AC power. The alarm performs self-diagnostics periodically.

### 5.2 Testing the Alarm

Test your alarm weekly. Press and hold the Test/Silence button on the alarm cover for a few seconds. The alarm will sound a series of beeps and voice announcements. If the alarm does not sound, refer to the Troubleshooting section.

### 5.3 Silence Feature

To silence a nuisance alarm (e.g., from cooking smoke), press the Test/Silence button. The alarm will temporarily silence for up to 8 hours. If the smoke or CO concentration is still high after the silence period, the alarm will reactivate.

### 5.4 Alarm Signals and Voice Alerts

The alarm provides distinct audible patterns and voice announcements to differentiate between smoke

and carbon monoxide events:

- **Smoke Alarm:** Three long beeps, pause, three long beeps. Voice: "Fire! Fire!" followed by the location (if programmed).
- **Carbon Monoxide Alarm:** Four quick beeps, pause, four quick beeps. Voice: "Warning! Carbon Monoxide!" followed by the location (if programmed).
- **Low Battery:** A single chirp every minute. Voice: "Low Battery."
- **Malfunction:** A single chirp every 30 seconds. Voice: "Malfunction."



Image: Side view of the alarm, highlighting the Voice & Location Alerts feature, which provides clear verbal warnings.

## 6. MAINTENANCE

### 6.1 Cleaning Your Alarm

Clean your alarm at least once a month. Use a soft brush or vacuum cleaner nozzle to remove dust and debris from the alarm's vents and openings. Do not use cleaning solvents or spray directly onto the alarm.

### 6.2 Battery Replacement

The alarm uses two AA batteries for backup power. When the batteries are low, the alarm will chirp

once every minute and announce "Low Battery." Replace the batteries immediately. To replace:

1. Turn off AC power to the alarm circuit.
2. Twist the alarm counter-clockwise to remove it from the mounting bracket.
3. Open the battery compartment.
4. Remove the old batteries and dispose of them properly.
5. Insert two new AA batteries, ensuring correct polarity.
6. Close the battery compartment and reattach the alarm to the mounting bracket.
7. Restore AC power and test the alarm.

6.3 End of Life

This alarm has a 10-year operational life. After 10 years from the date of manufacture, the alarm will indicate its end-of-life by chirping periodically and announcing "Replace Alarm." Replace the unit immediately with a new BRK SMCO100V-AC alarm.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Alarm chirps once every minute, voice says "Low Battery."	Batteries are low.	Replace both AA batteries immediately (refer to Section 6.2).
Alarm chirps once every 30 seconds, voice says "Malfunction."	Unit malfunction or end-of-life.	Clean the alarm (Section 6.1). If chirping persists, replace the unit.
Alarm sounds randomly without apparent smoke or CO.	Dust or debris in sensing chamber, high humidity, or nuisance alarm.	Clean the alarm thoroughly (Section 6.1). Relocate if consistently triggered by steam or cooking fumes. Press Test/Silence button to temporarily silence.
Alarm does not sound during test.	No power, dead batteries, or unit malfunction.	Check AC power connection. Replace batteries. If still no sound, replace the unit.
Voice alerts are unclear or out of sync (with interconnected alarms).	Interference or multiple alarms speaking simultaneously.	Ensure proper wiring for interconnectivity. While voice alerts may overlap, the primary alarm will indicate the source.

8. SPECIFICATIONS

- **Model:** SMCO100V-AC
- **Brand:** BRK
- **Alarm Type:** Combination Smoke & Carbon Monoxide



- **Power Source:** 120V AC Hardwire with 2 AA Battery Backup
- **Smoke Sensor:** Photoelectric
- **CO Sensor:** Electrochemical
- **Interconnect:** Yes, with compatible BRK/First Alert alarms
- **Voice Alerts:** Yes
- **Dimensions:** Approximately 2.47 x 5.76 x 5.76 inches
- **Weight:** Approximately 12.2 ounces
- **Operating Life:** 10 Years

## 9. WARRANTY AND SUPPORT

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### 9.1 Limited Warranty

This BRK SMCO100V-AC alarm comes with a 10-year limited warranty from the date of purchase. This warranty covers defects in material and workmanship under normal use and service. For full warranty details, please refer to the documentation included with your product or contact customer support.

### 9.2 Customer Support

If you have any questions regarding the installation, operation, or maintenance of your alarm, or if you require warranty service, please contact BRK/First Alert customer support. Contact information can typically be found on the product packaging or the manufacturer's official website.