

SMOKE ALARM

FOR THE
HEARING IMPAIRED

120V AC 60Hz

**Meets the requirements
of the Americans with
Disabilities Act**



Features

Bright Xenon Strobe

Screened Ionization Sensing Chamber

Interconnectable--up to 18 devices, of which 12 can be smoke alarms

85dB Piezoelectric Alarm Horn

Red LED Alarm Indicator

Manual Test Button

"Quick-Connect" wiring harness

Benefits

Provides visible notification of fire. Meets requirements of the Americans with Disabilities Act (ADA) and UL 1971 - Signaling Devices for the hearing impaired.

Generally more effective at detecting fast flaming fires. Prevents insects from entering sensing chamber reducing unwanted alarms.

Can be interconnected with up to 12 smoke alarms and the remaining six be a combination of BRK CO alarms and / or RM4 relays.

Provides audible notification of fire. Reminds user to replace battery.

Confirms unit is receiving AC Power. Turns off on unit that initiates an alarm.

Tests all detector functions.

Provides quick and easy connection to AC power. Fits inside any standard electrical junction box.

Cat. No. 100SA

SMOKE ALARM FOR THE HEARING IMPAIRED 120V AC

APPLICATION

BRK Electronics® Model 100SA is a single and / or multiple station smoke alarm 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. Model 100SA has been fully tested and complies with Americans with Disabilities Act (ADA), Underwriters Laboratories of Canada, Inc. (ULC) Single and Multiple Station Smoke Alarms CAN/ULC S531-02, Underwriters Laboratories, Inc. Signaling Devices for the Hearing Impaired UL 1971, NFPA 72, and NFPA 101.

Model 100SA is designed to give reliable early warning of fire by providing a visual and audible alarm when the unit senses smoke from fire. The 177 candela Xenon strobe meets UL 1971 requirements and flashes an average of 60-70 times a minute. The unit also features an 85dB piezo electric horn. The 100SA operates on 120V AC and features a red LED that signals the unit is receiving power. The unit features an Ionization sensing chamber which operates on the ionization principle, a generally more effective method of detecting smoke from fast flaming fires. The sensing chamber consists of two electrically charged plates and a source of Americium 241 to ionize the air molecules in the space between the plates. As particles of combustion enter the ionization chamber, they collide and combine with ionized air molecules reducing the number of ionized air particles resulting in a decrease in current between the two plates. Electronic circuitry monitors the change in current. When smoke inside the chamber reaches a level of 1.14%/ft. the unit triggers an audible alarm. A manual test feature checks all detector functions by stimulating the chamber to simulate a 1.14%/ft. smoke condition, causing the unit to alarm.

Model 100SA is designed for both single and multiple station applications. When interconnected in series, the smoke alarm sensing smoke sends a signal to all other units to sound an audible alarm. The unit that triggers the alarm identifies itself by turning its red LED power indicator off. Red LED indicators remain on with all other interconnected units. A maximum of 18 multiple station alarms (smoke alarms and CO detectors) can be interconnected (refer to NFPA 72 and / or local building codes for further information on interconnection).

Model 100SA was designed with quick and easy installation in mind. Designed to cover most drywall cut-outs, the specially designed mounting bracket mounts on any junction box up to 4" octagonal and does not require screw removal. A foam gasket is provided to protect the sensing chamber from drafts in the electrical box. Connection to AC power is made with a "Quick Connect" wiring harness.

ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

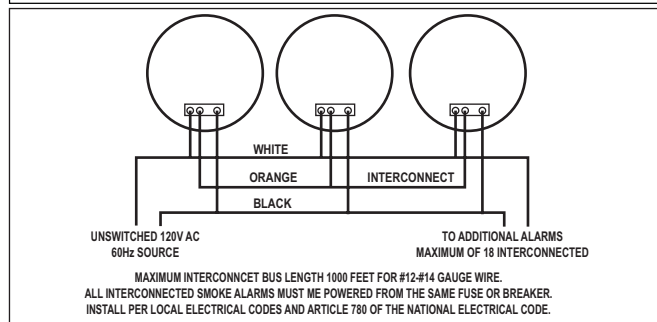
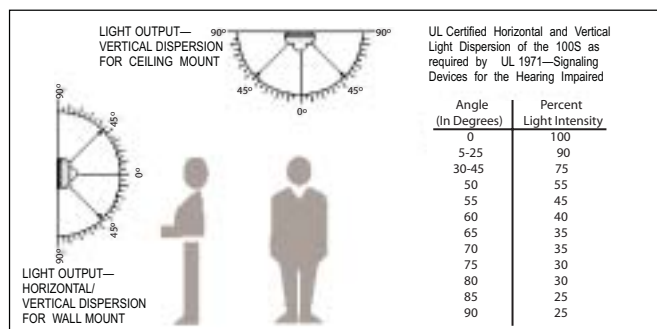
The smoke alarm for the hearing impaired shall be BRK Electronics® Model 100SA or approved equal and shall provide, at a minimum, the following features and functions:

1. A 177 candela Xenon strobe.
2. An ionization sensing chamber with nominal sensitivity of 1.14%.
3. The unit shall be capable of self-restoring.
4. A fully screened sensing chamber to prevent entrance of small insects thereby reducing probability of unwanted alarms.
5. The smoke alarm shall be powered by 120V AC.
6. A visual LED (red) power-on indicator to confirm the unit is receiving AC power.
7. A manual test button to check all detector functions by stimulating the chamber to simulate a 1.14% smoke condition, causing the unit to alarm.
8. A solid state piezo alarm horn rated at 85dB at 10 ft.
9. The unit shall be capable of operating between 40°F (4°C) and 100°F (38°C).
10. The unit shall mount to any standard electrical junction box up to 4" octagonal without screw removal and shall be listed for ceiling or wall mounting.
11. The unit shall have a gasket to prevent the intrusion of outside air that might otherwise infiltrate the unit and clear smoke from the sensing chamber.
12. The unit shall have a plug-in connector and be capable of interconnection up to 18 multiple station alarms per NFPA 72. In multiple station alarm configurations, the unit sensing smoke will identify itself as well as send a signal to sound an alarm to all other units connected in series.

13. The unit shall at a minimum meet the requirements of the Americans with Disabilities Act (ADA), Underwriters Laboratories of Canada, Inc. Single and Multiple Station Smoke Alarms CAN/ULC-S531-02, Underwriters Laboratories, Inc. Signaling Devices for the Hearing Impaired UL 1971, NFPA 72 and NFPA 101.

TECHNICAL SPECIFICATIONS

Operating Voltage	120V AC 60 Hz
Operating Current	.053 amps standby, .412 amps alarm
Operating Ambient Temp. Range	40°F (4°C) to 100°F (38°C)
Operating Humidity Range	10% to 90% relative humidity (RH)
Nominal Sensitivity	1.14%/Ft. ± 0.34%/Ft.
Visual alarm Rating	177 candela Xenon Strobe, 60-70 flashes/minute
Alarm Horn Rating	85dB at 10 ft.
Alarm Reset	Automatic when smoke clears
Interconnections	Up to 18 units of which 12 can be smoke alarms
Test Button	Stimulates the chamber to simulate smoke condition, causing the unit to alarm
LED Indicators	
AC Power	Constant red LED
Local alarm Condition	Red LED off
Remote alarm Condition	Red LED on
Unit Dimensions	3-1.4" H x 5-5/8" D
Unit Weight	10 oz.
Units Per Case	3 units



Dicon Global Inc.
88B East Beaver Creek Road, Unit 6
Richmond Hill, Ontario Canada L4B 4W2
info@diconglobal.com
Tel: 905-482-3270 Fax: 905-731-8267