Innovair™

SSK451 Multi-Signaling Accessory

SYSTEM SENSOR®

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www.systemsensor.com

Specifications

Dimensions:	4.8″ W x 4.7″ H x 1.5″ D
	(12.2 cm W x 11.9 cm H x 3.8 cm D)
Weight:	0.35 lb. (160 g)
Operating Voltage:	24 VDC
Power Requirements:	
Standby	8 mA
Trouble	16 mA
Alarm w/o strobe	40 mA
Alarm with strobe	65 mA
Connections:	Strip terminal, 14 AWG to 22 AWG wire
Sounder:	87 dBA at ten feet
Temperature:	14°F to 140°F (-10°C to 60°C)
Humidity:	95% relative humidity; non-condensing
Listing:	UL 268A

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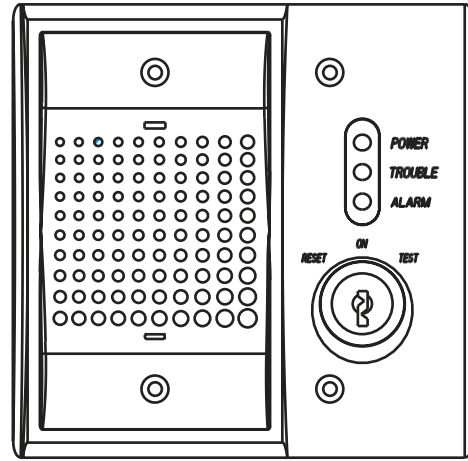
Notice:

This manual should be left with the owner/user of this equipment.

General Information

The National Fire Protection Association (NFPA) has published codes, standards, and recommended practices for the installation and use of this product. It is recommended that the installer be familiar with these requirements, with local codes, and any special requirements of the local authority having jurisdiction. For further information, consult NFPA 72 and 90A requirements.

The System Sensor SSK451 multi-signaling accessory is designed for use with System Sensor DH100ACDC and DH400ACDC duct smoke detector models and combines a horn feature with the key-activated test and reset functions. Green, yellow and red LEDs provide a visual indication of power, trouble and alarm conditions, respectively.

To meet special code requirements of certain jurisdictions, an optional PS24LO strobe can be easily added to the SSK451 to provide visual alarm signaling. A "SMOKE" lens can be added to the strobe.

The SSK451 can be wired such that its horn produces either a continuous or a temporal tone. The SSK451 conveniently installs to a double-gang electrical box.

Contents

1   SSK451 Multi-Signaling Accessory
1   Mounting Hardware Kit (contains 4 mounting screws, and 2 spacers for optional PS24LO strobe)
1   Installation and Maintenance Instructions

Installation

Wire the SSK451 as shown in Figure 1, for DH100ACDC duct smoke detectors, or Figure 2, for DH400ACDC smoke detectors. Limit wire runs to 25 ohms or less per interconnecting wire.

Test Coil Installation

NOTE: When the SSK451 is used with a DH400ACDC duct smoke detector, a test coil, part number COIL, must be ordered separately. When the SSK451 is used with a DH100ACDC duct smoke detector, a test coil is not required.
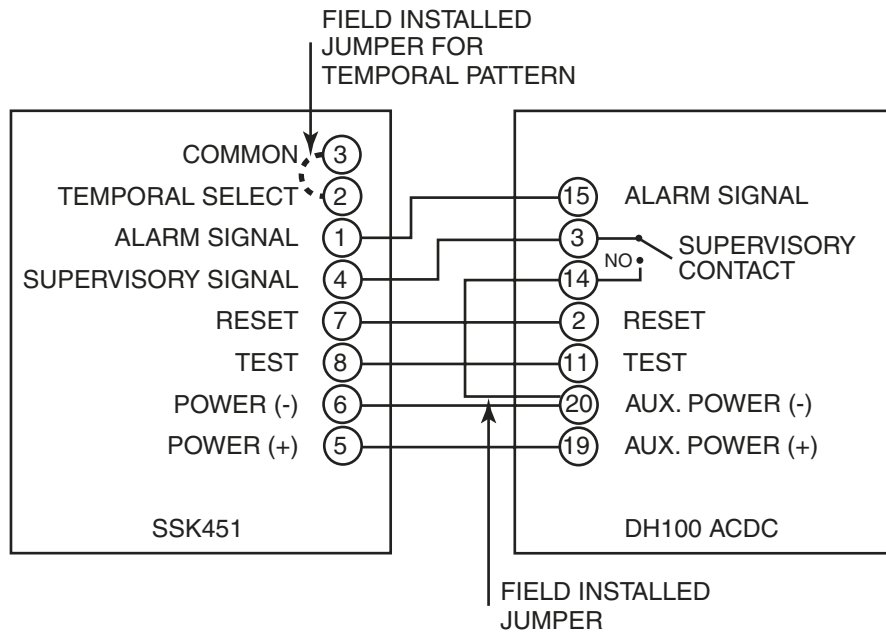
Figure 3: Test Coil Installation
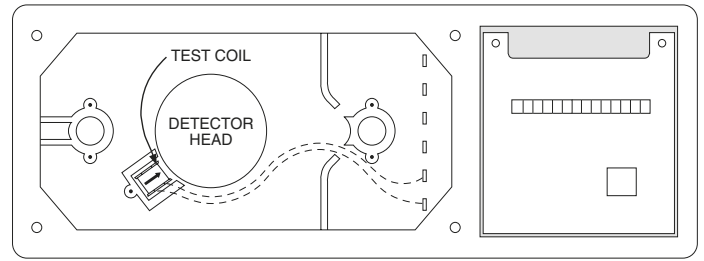
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The COIL is installed in the DH400ACDC duct smoke detector housing as shown in Figure 3. Please follow the instructions enclosed with the COIL for proper installation of the COIL to the DH400ACDC duct smoke detector.
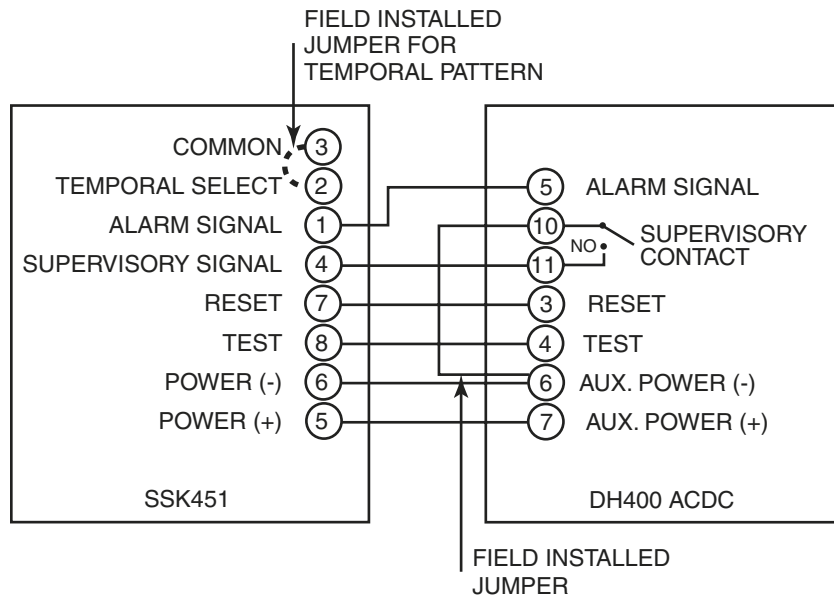
Figure 1: SSK451 with DH100ACDC Duct Smoke Detector

NOTE: Wiring diagram shown is for DH100ACDC 4-wire duct smoke detector system equipped without a control panel.

H0483-00

Figure 2: SSK451 with DH400ACDC Duct Smoke Detector

NOTE: Wiring diagram shown is for DH400ACDC 4-wire duct smoke detector system equipped without a control panel.

H0484-00

Temporal Sounder

The SSK451 accessory provides the option of sounding a continuous or temporal pattern. The SSK451 will default to sound in a continuous pattern. For a temporal pattern, wire a field-installed jumper between terminals 2 and 3 on the SSK451.

Mounting

Secure the SSK451 to a double-gang electrical box with the four mounting screws provided.

Installation of the Optional Add-On PS24LO Strobe

This optional strobe can be purchased separately and is easily added to the SSK451 accessory.

RED TERMINAL ON TOP

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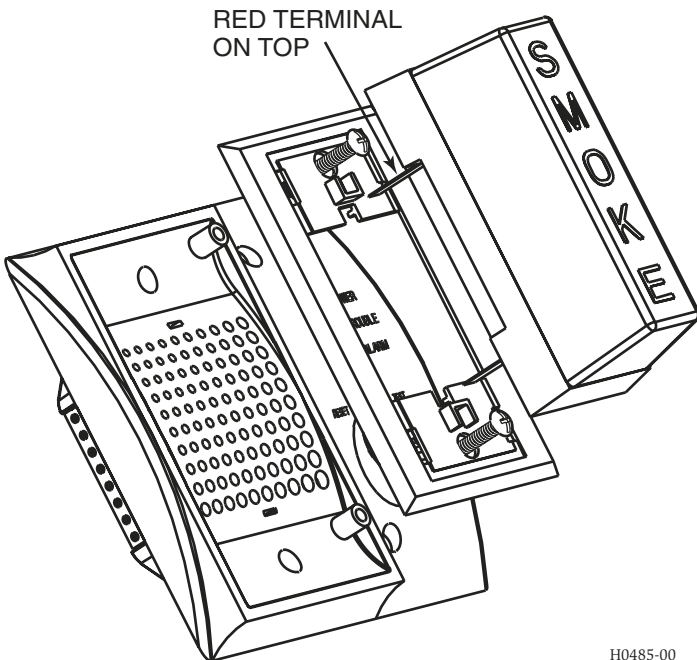
The PS24LO strobe will be mounted on top of the sounder, on the left-hand side of the SSK451. Place one mounting spacer between the SSK451 and the strobe adapter plate at each screw attachment location. Attach the adapter plate, spacer and SSK451 to the left-hand side of the double-gang electrical outlet box with two mounting screws.

Slide the strobe terminals directly into the two slots in the adapter plate and SSK451. The positive lug, which will be colored **red**, must be installed into the **top** slot.

Grasp the catch area on the top of the strobe and squeeze while applying inward force. Repeat for the catch area on the bottom of the strobe.

Make sure the strobe catches fully engage into the slots in the adapter plate and that no gap appears at the interface between the strobe and adapter plate.

Optional SMOKE Strobe Lens

NOTE: To meet the code requirements of certain jurisdictions, an optional SMOKE lens can be purchased separately.

SMOKE lens, wall mount	PS12/24SLENSW
SMOKE lens, ceiling mount	PS12/24SLENSC

Please follow the instructions enclosed with the lens for proper installation of the lens to the strobe.

Operation

The green "POWER" LED is illuminated whenever the duct smoke detector is receiving power. With a DH100ACDC duct smoke detector, the yellow "TROUBLE" LED is lit when the sensor board is missing or the cover is removed for more than twenty minutes. With a DH400 ACDC duct smoke detector, the yellow "TROUBLE" LED is lit when the detector head is missing. The red "ALARM" LED is displayed and the horn will sound whenever the duct smoke detector is in alarm.

No LEDs will be illuminated if the duct smoke detector is not receiving power.

Test Function

Insert the key and turn clockwise to the "TEST" position. The red LED will illuminate and the horn will sound. If an optional strobe is installed, it will pulse.

Alarm Indication

With the key in the "TEST" position, some time will elapse (40 seconds maximum), depending on the duct smoke detector type, before the red alarm LED will illuminate and the horn will sound.

Reset Function

Turn the key counterclockwise to the "RESET" position and hold. The red alarm LED should turn off and the horn will cease sounding. Then, turn the key back to the "ON" position and remove.

Ordering Information

SSK451	Multi-Signaling Accessory
PA400B	Mini-Alert™ Sounder, beige
PA400W	Mini-Alert™ Sounder, white
PS24LOB	Mini-Alert™ Add-On Strobe, beige
PS24LOW	Mini-Alert™ Add-On Strobe, white
PS12/24SLENSW	Smoke Lens Wall Mount

Innovair Duct Smoke Detectors

DH100ACDCP	4-Wire Photoelectric Duct Smoke Detector
DH100ACDCI	4-Wire Ionization Duct Smoke Detector

Other Accessories

RTS451	Remote Test/Reset Station
RTS451KEY	Key-Activated Remote Test/Reset Station
APA451	Piezo Annunciator
RA400Z	Remote Annunciator Alarm

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H0488-00

H0489-00   H0486-00   H0487-00
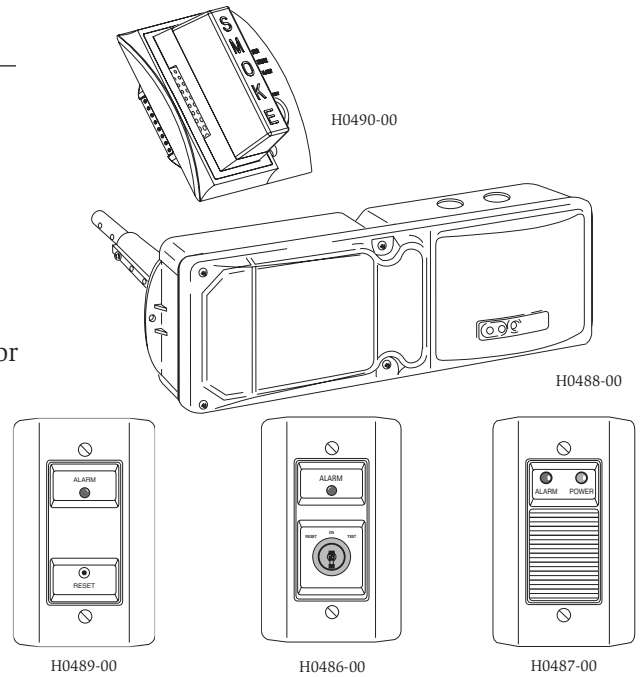
⚠WARNING

The sounder or sounder/strobe combination will not operate if the power is cut off for any reason.
If power is cut off for any reason, the sounder or strobe/sounder combination will not provide the desired audible or visual warning.

The sounder may not be heard. The loudness of the sounder meets or exceeds the current Underwriters Laboratories' standards. However, the sounder may not alert a sound sleeper or one who has recently used drugs or has been drinking alcoholic beverages. This sounder may not be heard if it is placed in an area that is separated by a closed door, or if it is located on a different floor from the person in a hazardous situation, or if it is placed too far to be heard over ambient noise, such as, traffic, air conditioners, machinery or musical appliances that may prevent alert persons from hearing the alarm. For these reasons, Pittway recommends that sounders (85dBA minimum at 10 feet) used in a residence shall be placed on every level and in every bedroom that does not have a smoke detector with a built-in sounder.)

The sounder may not be heard by persons who are hearing-impaired.

In this case, a visual indicator shall also be used.

The Sounder and add-on strobe are for supplemental signaling only.

The signal strobe may not be seen. The electronic visual warning signal meets or exceeds current Underwriters Laboratories' standards. The visual warning signal is suitable for direct viewing and must be installed within an area where it can be seen by building occupants. The strobe must not be installed in direct sunlight or areas of high light intensity where the visual flash might be disregarded or not seen.

The strobe may not be seen by the visually impaired.

The signal strobe may cause seizures. Individuals who have a positive photic response to visual stimuli with seizure, such as epileptics, should avoid prolonged exposure to environments in which strobe signals, including this strobe, are activated.

Three-Year Limited Warranty

System Sensor warrants its enclosed multi-signaling accessory to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for this multi-signaling accessory. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the repair or replacement of any part of the multi-signaling accessory which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: System Sensor, Repair Department, RA #_____, 3825 Ohio Avenue, St. Charles, IL 60174. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to repair or replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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