SILENT KNIGHT

INSTALLATION INSTRUCTION FOR SILENT KNIGHT SD505 ANALOG SMOKE SENSORS

These instructions apply to all Silent Knight SD-505 (Digital Communication Protocol) analog sensors and bases.

These units must be installed and maintained in accordance with applicable N.F.P.A. standards, local codes and any authority having jurisdiction. Please refer to N.F.P.A. 72 Standard for Automatic Fire Detectors for installation guidelines and testing Procedures. Also refer to Technical Bulletin HA-96 for testing, cleaning, and maintenance.

Smoke detectors should be tested upon completion of installation and at least semiannually thereafter, in accordance with N.F.P.A. 72, section on "Inspections, Tests and Maintenance".

BASE BOX MOUNTING		
3"—O	4"—O	4"—S
YES	YES	YES

To install the detector insert the detector into the base. Turn the the detector clockwise until it stops. Tighten tamper screw.

Use "3M" Weatherban #606 non-flammable sealing compound to seal field wiring conduit openings in the mounting back box. Compliance with this request may reduce the occurrence of the "STACK EFFECT".

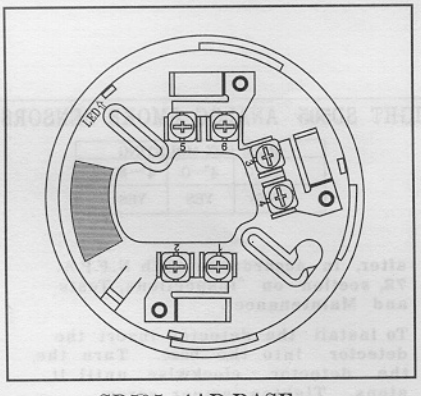
SPECIFICATIONS

CATEGORY	SD505-APS	SD505-AIS	SD505-AHS	SD505-4AB	SD505-6AB
Absolute Maximum Applied Voltage	41.0 VDC	41.0 VDC	41.0 VDC	41.0 VDC	41.0 VDC
Operating Voltage Range (V+)(S-SC)	24 – 40.7 VDC	24 – 40.7 VDC	24 – 40.7 VDC	24 – 40.7 VDC	24 – 40.7 VDC
Sensitivity Range	0.88-3.57 %/ft.	0.55-1.15 %/ft.	135°-150°F.	N/A	N/A
Average Current Consumption (S-SC) Normal Mode	390µA Typical 540µA Maximum	390µA Typical 540µA Maximum	390µA Typical 540µA Maximum	N/A	N/A
Average Current Consumption (S-SC) Low Power Mode	120µA @ 0.75s 110µA @ 1.50s	120µA @ 0.75s 110µA @ 1.50s	120µA @ 0.75s 110µA @ 1.50s	N/A	N/A
Average Current Consumption (S-SC) When Called	2mA	2mA	2mA	N/A	N/A
Alarm Current (S- SC)	(See Base)	(See Base)	(See Base)	8mA (Typical)	8mA (Typical)
Remote LED Current	(See Base)	(See Base)	(See Base)	8mA (Typical)	8mA (Typical)
Device Type Code	88 Hex	AB Hex	88 Hex	N/A	N/A
Operating Temperature	0° – 49° C	0° – 49° C	0° – 49° C	0° – 49° C	0° – 49° C
Storage Temperature	-20° – 60° C	-20° – 60° C	-20° – 60° C	-20° – 60° C	-20° – 60° C
Test	*	*	*	N/A	N/A
Dimensions	3-15/16"D X 1-1/2"H	3-15/16"D X 1-3/4"H	3-15/16"D X 1-9/16"H	3-15/16"D X 15/32"H	5-7/8"D X 15/32"H
Environment	Indoor Use Only	Indoor Use Only	Indoor Use Only	Indoor Use Only	Indoor Use Only
Visual Alarm/Power Indicator	Bi-Directional	Bi-Directional	Bi-Directional	See Sensor	See Sensor
Address Setting	*	*	*	N/A	N/A

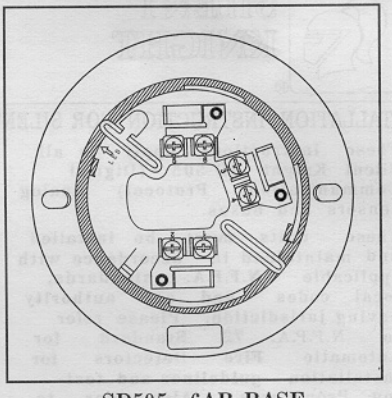
*** = See Control Panel For proper address setting and testing procedure.**

WARNING!!!!

Failure to follow these instructions may result in the failure of the detector to to initiate an alarm condition. Silent Knight is not responsible for detectors that have been improperly installed, tested or maintained.



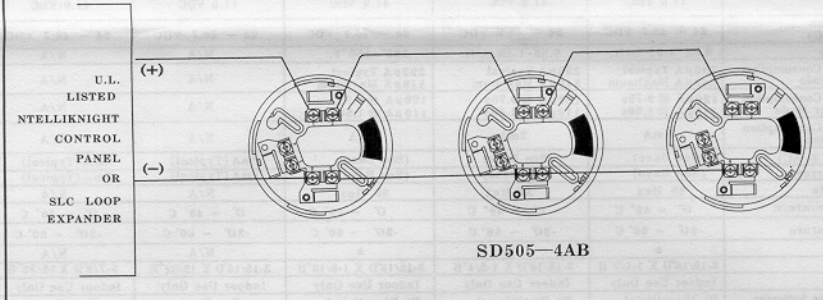
SD505-4AB BASE



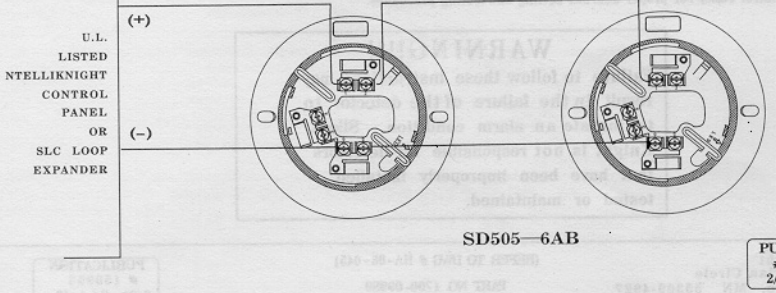
SD505- 6AB BASE

ATTENTION!!!!

INSTALLATION WIRING SHALL NOT EXCEED
50 OHMS (14-18 AWG.)



SD505—4AB



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Instructions For Implementing The Security Feature

The following instructions will enable the user to activate the security feature and to release the base security locking tab so as to remove the sensor from the base.

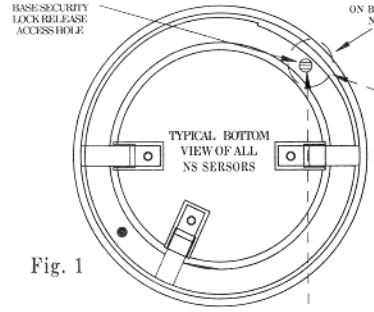

Fig. 1

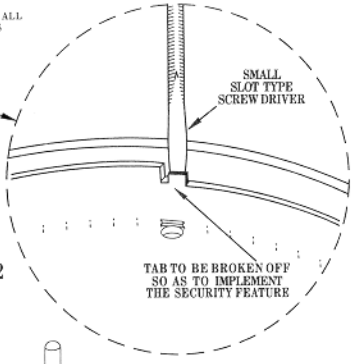

Fig. 2

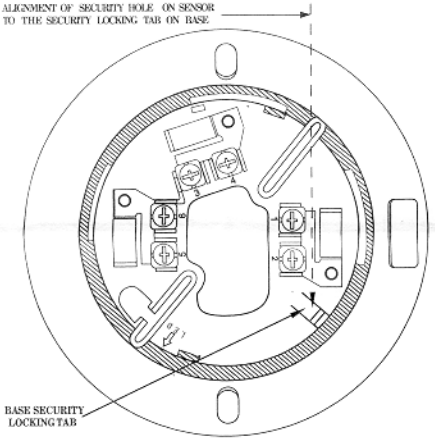

Fig. 3

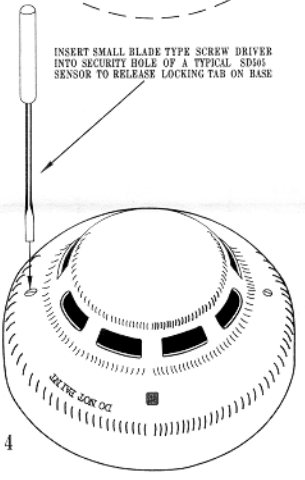

Fig. 4

1) Take any sensor and turn it over to view the bottom as shown in Fig 1. Using a small blase type screw driver break the tab as shown in Fig. 2. This will allow the base security locking tab, as shown in Fig. 3 to stay elevated. This will prevent the sensor from being removed from it's base.

2) To remove the sensor from it's base, take a small diameter screw driver and insert it into the large hole on the outer rim of the sensor (see Fig. 4). Use caution when pushing the base security locking tab down. Only use enough force to remove the sensor. While pushing the tab down rotate the sensor counter clockwise enough to clear the base security locking tab. Once this is accomplished the sensor can be completely removed.

CAUTION!!! DO NOT USE EXCESSIVE FORCE WHEN UNLOCKING THE BASE SECURITY LOCKING TAB

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SILENT KNIGHT by Honeywell

SD505-AHS Addressable Heat Detector

IntelliKnight® addressable heat detectors combine accurate heat detection with pin-point location ID. An essential combination for any installation.

IntelliKnight heat detectors are an essential component in virtually any IntelliKnight installation. The IntelliKnight panel recognizes each detector by its specific address, so precious seconds are not wasted in determining location of an alarm.

Like other IntelliKnight detector models, the SD505-AHS offers a low profile for pleasing aesthetics.

The IntelliKnight family of detectors has been designed to use a common base, Model SD505-6AB, allowing complete application and placement flexibility. Combine all this with the features you've come to expect from Silent Knight detectors—easy installation, stable operation, RF/transient protection, and vandal-resistant locking—and it adds up to a flexible solution for all your fire protection needs.

Model SD505-AHS Addressable Heat Detector

The SD505-AHS is a heat detector suited to virtually any commercial setting. The SD505-AHS is an absolute temperature device. This means that it responds in alarm if the temperature goes above the trip point (programmed at the panel).

The SD505-AHS provides accurate temperature measurement data to the fire alarm control panel. This heat detector is particularly suited to environments where smoke detectors cannot be used because of the presence of steam or cooking fumes, such as in a kitchen.

Operation

The SD505-AHS unit is made up of an externally mounted thermistor with a specially designed cover that protects the thermistor while allowing maximum air flow. The thermistor reads the temperature from the air it takes in. It then transmits a signal representing the temperature to the IntelliKnight panel.

If the temperature exceeds the trip point (programmed at the panel), an alarm occurs. The status LED lights continuously during the alarm period.

Under normal conditions, the status LED blinks approximately every 15 seconds, indicating that the head is communicating with the loop.

Features

- Low profile, 2 inches, including base
- Absolute temperature device
- Simple and reliable addressing
- Uses digital communication protocol
- The SD505-AHS is UL Listed and meets the requirements outlined in NFPA 72 Inspection Testing and Maintenance, Chapter 7.
- CFSM listed
- MEA listed
- FM approved

SD505-AHS Heat Detector

Specifications

Operating Voltage:	17 to 41 VDC
Current Consumption:	
Standby:	.55 mA
Alarm:	.55 mA
Detection Temperature Range:	135°F to 150°F (57°C TO 65°C)
Ambient Temperature:	32ºF to 120ºF (0ºC to 49ºC)
Mounting:	4" SQR, 4" OCT Single gang mud ring
Rated Spacing:	70’ between sensors on smooth ceilings.
Compatible Bases: (Sold Separately)	SD505-6AB SD505-6SB SD505-6IB SD505-6RB

Model SD505-AHS
Addressable Heat Detector

Engineering Specifications

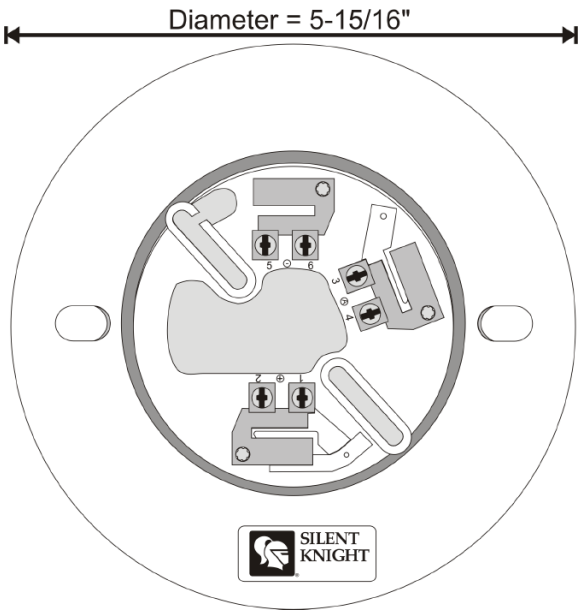
The contractor shall furnish and install where indicated on the plans, addressable heat detector Silent Knight SD505-AHS. The combination detector head, and twist-lock base, shall be UL® listed compatible with Silent Knight's IntelliKnight fire alarm control panels.

The base shall permit direct interchange with Silent SD505-APS Photoelectric Smoke Detector, or SD505-AIS Ionization Smoke Detector. Base shall be the appropriate twist-lock base SD505-6AB.

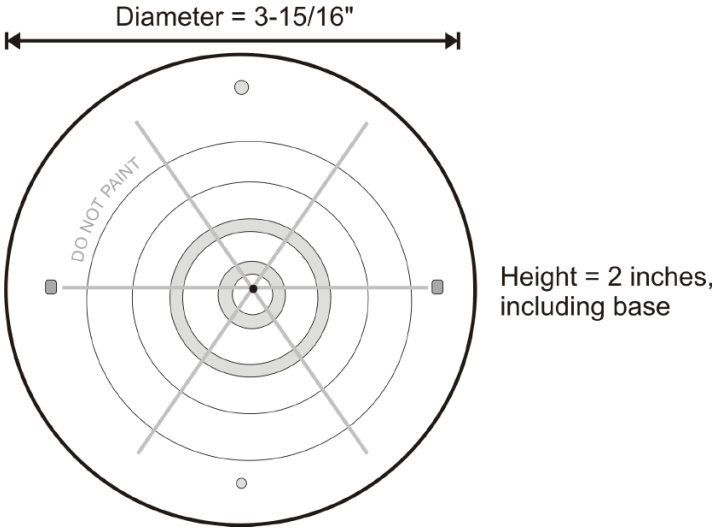
The heat detector shall have a flashing status LED for visual supervision. When the detector is actuated, the flashing LED will latch on steady at full brilliance. The detector may be reset by actuating the control panel reset switch.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field removable when not required.

Voltage and RF/transient suppression techniques shall be employed to minimize false alarm potential.



Model SD505-6AB Detector Base (Front View)



Model SD505-AHS Detector Head (Front View)

SILENT KNIGHT by Honeywell

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610 Phone: (800) 328-0103, Fax: (203) 484-7118. www.silentknight.com

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