

EBS

Intelligent Sounder Base

Specifications

Base Diameter:	6.85 in (17.4 cm)
Base Height (less sensor):	1.61 in (4.1 cm)
Operating Temperature Range:	Refer to applicable sensor Operating Temperature Range using the Base/Sensor Cross Reference Chart at systemsensor.com
Operating Humidity Range:	10% to 93% relative humidity (Non-condensing)
External Supply Electrical Ratings	
External Supply Voltage:	16 to 33 VDC (VFWR)
Standby Current:	500 µA maximum
Alarm Current:	35 mA maximum
SLC Electrical Ratings	
SLC Operating Voltage:	15 to 32 VDC
SLC Standby Current:	300 µA maximum
Sound Output	Greater than 85 dBA minimum measured in a UL reverberant room at 10 feet, 24 Volts (in continuous tone)

BEFORE INSTALLING

Read System Sensor's *Applications Guide for System Smoke Detectors* (SPAG91), which provides detailed information on detector spacing, placement, zoning, wiring, and special applications. This document is available online from System Sensor. NFPA 72 guidelines should be observed.

NOTICE: This manual should be left with the owner/user of this equipment.
IMPORTANT: The detector used with this base must be tested and maintained regularly following NFPA 72 requirements. The detector should be cleaned at least once a year.

GENERAL DESCRIPTION

The sounder base was designed specifically to meet the needs of dwelling unit applications. It offers maximum flexibility in configuration and operation to meet or exceed the requirements of UL268 and UL464.

The sounder base is capable of producing either the distinctive three-pulse temporal pattern (ANSI Temporal 3) fire alarm signal now required by NFPA 72 for commercial and residential applications or a continuous tone by simply removing the included jumper from the device.

The sounder base is intended for use with intelligent systems. The sounder base requires an external 24 VDC power supply. The connections for the external power supply and the communication loop are isolated to prevent electrical interaction between them. Refer to the panel manual for maximum allowable number of units per loop.

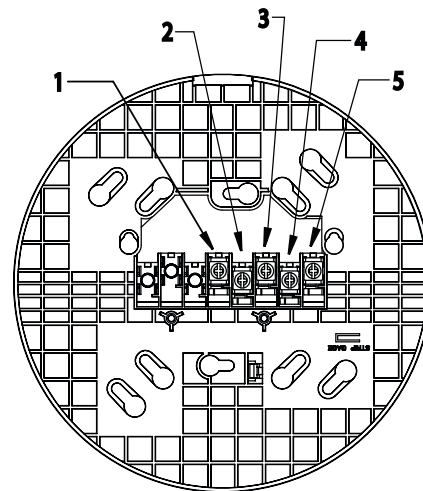
NOTE: For NFPA72 Installations, the Temporal 3 tone should be used for public mode evacuation.

NOTE: When not used as a supplementary evacuation system, the external 24 VDC supply shall be treated as a component of the main power supply system and shall fall under the requirements of the main power supply system per NFPA 72.

BASE TERMINALS

No.	Function
1.	Comm (-)
2.	Positive (+) Comm. Line In and Out
3.	Positive (+) Comm. Line Out and In
4.	External Supply Positive (+)
5.	External Supply Negative (-)

FIGURE 1: TERMINAL LAYOUT:



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MOUNTING

Mount the mounting plate directly to an electrical box. The plate will mount directly to 4-inch square, 4-inch octagon, 3 1/2-inch octagon, single gang and double gang junction boxes.

1. Connect field wiring to terminals, as shown in Figure 1 and 3.
2. Attach the mounting plate to the junction box as shown in Figure 2.
3. To mount the sounder base, hook the tab on the sounder base to the groove on the mounting plate.
4. Then, swing the sounder base into position to engage the pins on the product with the terminals on the mounting plate.
5. Secure the sounder base by tightening the mounting screws.
6. Install a compatible smoke detector as described in the installation manual for the detector.

INSTALLATION AND WIRING GUIDELINES

All wiring must be installed in compliance with all applicable local codes and any special requirements of the authority having jurisdiction. Proper wire gauges should be used. The conductors used to connect smoke detectors to control panels and accessory devices should be color-coded to reduce the likelihood of wiring errors. Improper connections can prevent a system from responding properly in the event of a fire.

For signal wiring (the wiring between interconnected sensors or modules), it is recommended that the wire be no smaller than 18 AWG (0.823 square mm). Wire sizes up to 12 AWG (3.31 square mm) may be used with the base. The base will be shipped with the screw terminals set for 14 AWG wiring. If 12 AWG wire is used, back out the screws to allow the wire to fit beneath the clamping plates.

Make electrical connections by stripping about 3/8 inch (10 mm) of insulation from the end of the wire (use strip gauge molded in base). Then slide the wire under the clamping plate and tighten the clamping plate screw. Do not loop the wire under the clamping plate. (See Figure 4)

Check the zone wiring of all bases in the system before installing the detectors. This includes checking the wiring for continuity, correct polarity, ground fault testing and performing a dielectric test.

The base includes an area for recording the zone, address, and type of detector being installed. This information is useful for setting the detector head address and for verification of the detector type required for that location.

Once all detector bases have been wired and mounted, and the loop wiring has been checked, the detector heads may be installed in the bases.

TESTING AND MAINTENANCE

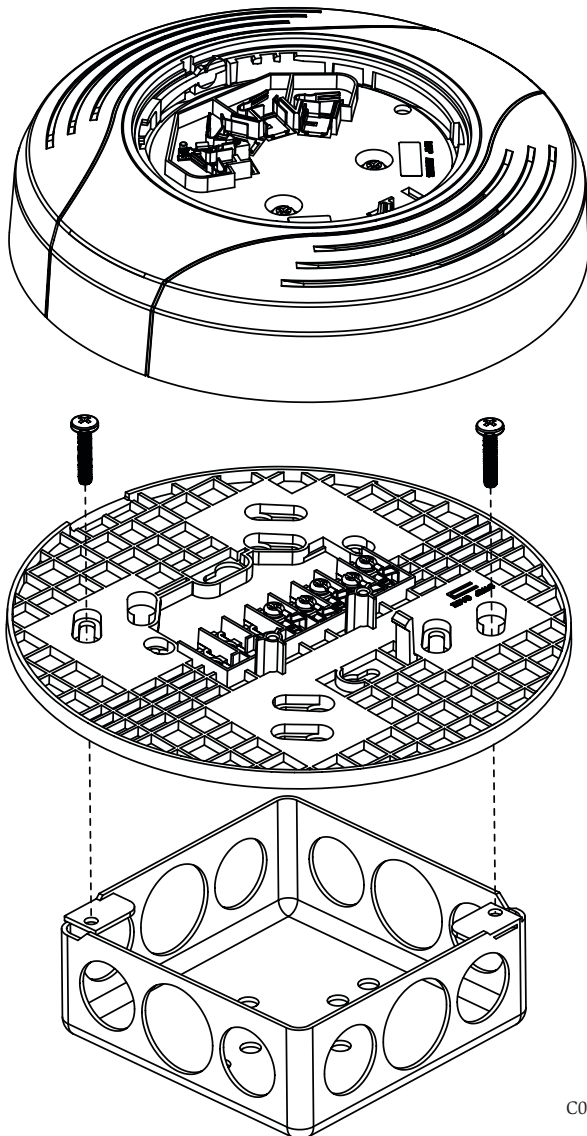
Detectors and bases must be tested after installation and as an integral part of a periodic maintenance program. Test as follows:

NOTE: Before testing, notify the proper authorities that the smoke sensor system is undergoing maintenance and, therefore, will be temporarily out of service. Disable the system undergoing maintenance to prevent unwanted alarms.

1. If configured as in Figure 3, reverse the polarity of the external 24VDC supply. All EBS bases on the loop should sound.
2. Latch the detector LED on from the control panel. That individual detector's EBS should sound.

When performing maintenance on connected smoke detectors, carefully note the location and address of each removed detector.

FIGURE 2: MOUNTING



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Horn Grouping

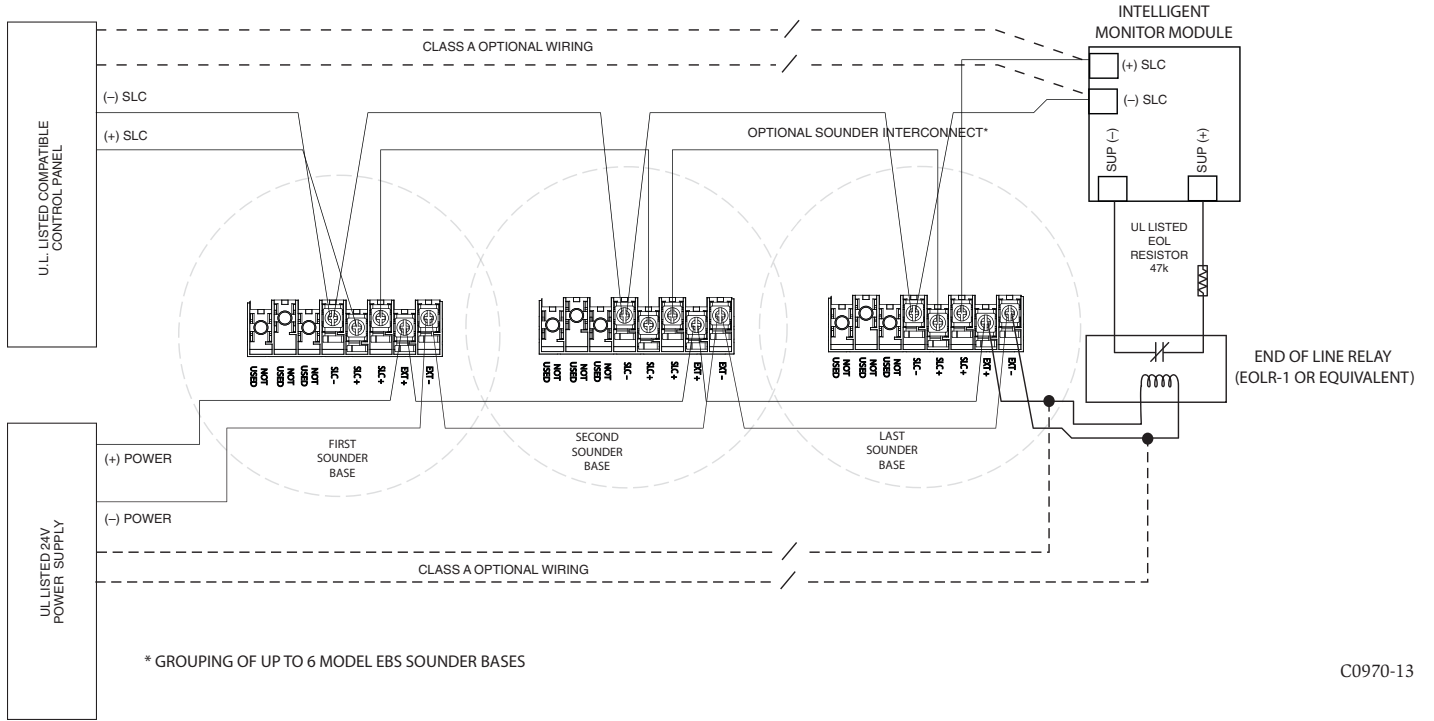
No extra connections are required for grouping. However, the panel must be configured to set up a group to sound their horns together. The panel can be set up for a device to activate only the remote annunciator of the device that sensed the alarm or to activate the remote annunciators of all the devices on the loop. The latter will provide horn grouping for a loop.

Detectors and bases must be tested after installation and as an integral part of periodic maintenance. Test the EBS as follows:

1. Single Horn Test: Configure the panel to only activate the remote annunciator of the alarm (test) detector. Activate the detector's base will sound in less than 1 second.
2. Multiple Horn Test: Configure the panel to activate all remote annunciators on the loop when the panel detects an alarm or test. Initiate a test and all horns on the loop will sound simultaneously.

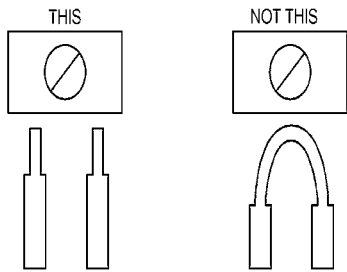
NOTE: Grouping horns together can only be used as a supplementary evacuation system. It is not acceptable to group horns for primary alarm signaling.

FIGURE 3: WIRING DIAGRAM
DETECTOR ACTIVATES SOUNDER BASE(S) - (COMPLIES WITH UL268 AND UL464)



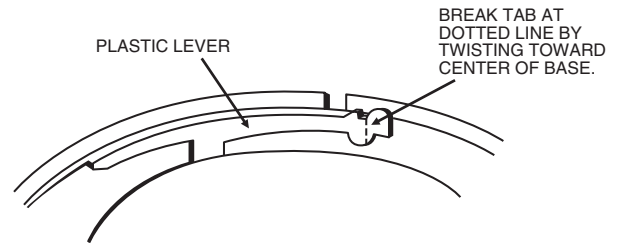
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FIGURE 4:



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FIGURE 5A. ACTIVATING THE TAMPER-RESIST FEATURE:



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TAMPER-RESIST FEATURE

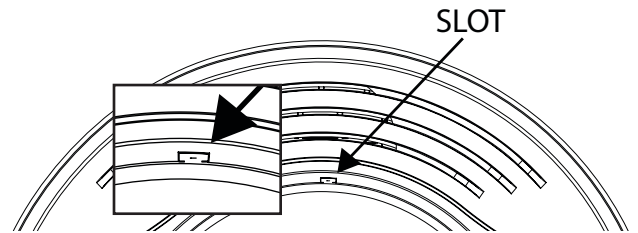
NOTE: Do not use the tamper-resist feature if the removal tool will be used. The detector base includes a tamper-resist feature that prevents removal of the detector from the base without using a small screwdriver or similar tool.

To activate this feature, use needle-nose pliers to break the tab on the detector base as shown in Figure 5A. Then, install the detector.

To remove the detector from the base once the tamper-resist feature has been activated, insert a small-bladed screwdriver into the slot from the top and press down on the lever (see Figure 5B). This allows the detector to be rotated counterclockwise for removal.

The tamper-resist feature can be defeated by breaking and removing the plastic lever from the base. However, this prevents the feature from being used again.

FIGURE 5B. REMOVING THE DETECTOR HEAD FROM THE BASE:



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Please refer to insert for the Limitations of Fire Alarm Systems

THREE-YEAR LIMITED WARRANTY

System Sensor warrants its enclosed smoke detector base 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 smoke detector base. 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 smoke detector base 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: Honeywell,

12220 Rojas Drive, Suite 700, El Paso TX 79936, USA. 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.