



3825 Ohio Avenue, St. Charles, Illinois 60174
 1-800-SENSOR2, FAX: 630-377-6495
 www.systemsensor.com

SSM and SSV BELL Series

Specifications

SSM Series:

Voltage: Regulated 24 VDC
 Operating Voltage Limit: 16 - 33 VDC
 Maximum Current: DC - 31.1mA/FWR - 53.5mA
 Operating Temperature: -31° to 150°F (-35° to +66°C)

SSV Series:

Voltage: Regulated 120 VAC
 Operating Voltage Limit: 96 - 132 VAC
 Maximum Current: 53mA
 Operating Temperature: -31° to 150°F (-35° to +66°C)

**UL Reverberant Room
 Sound Output per UL 464 (dBA)**

24 VDC SSM

SSM24-6	(6", 24 VDC, P, S)	82
SSM24-8	(8", 24 VDC, P, S)	80
SSM24-10	(10", 24 VDC, P, S)	81

120 VAC SSV

SSV120-6	(6", 120 VAC)	85
SSV120-8	(8", 120 VAC)	82
SSV120-10	(10", 120 VAC)	82

P = Polarized
 S = Suppressed

Important

Please Read Carefully and Save

This instruction manual contains important information about the installation and operation of bells. Purchasers who install bells for use by others must leave this manual or a copy of it with the user.

System Sensor supplies bells for nearly all sprinkler/fire alarm/burglar applications.

These instructions apply to all System Sensor bells in the series. Read all instructions carefully before beginning. Follow only those instructions that apply to the model you are installing.



**Do not use in potentially explosive atmospheres.
 Do not leave any unused wires exposed.**

NOTE: All SSM Series DC bells were only tested at the 16–33 Volt-DC/FWR limits. All SSV Series AC bells were only tested at the 96–132 Volt AC limits. This does not include the 80% low-end or 110% high-end voltage limits.

General Description

The National Fire Protection Association has published codes, standards, and recommended practices for the installation and use of the above appliances. It is recommended that the installer be familiar with these requirements, with local codes, and any special requirements of the authority having jurisdiction.

These bells are intended to be connected to alarm indicating circuits of UL listed fire alarm control panels. The SSM series is polarized to enable supervision of the installation wiring. The SSM bells require 24 VDC and the SSV bells require 120 VAC.

Before installing any alarm device, be thoroughly familiar with:

- NFPA 72: *National Fire Alarm Code*
- NFPA 13: *Installation of Sprinkler Systems*
- NFPA 25: *Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*

Other applicable NFPA standards, local codes, and the requirements of the authority having jurisdiction.

Failure to follow these directions may result in failure of the device to report an alarm condition. System Sensor is not responsible for devices that have been improperly installed, tested, or maintained.

Installation



High voltage. Electrocution Hazard. Do not handle live AC wiring or work on a device to which AC power is applied. Doing so may result in severe injury or death.

1. Remove the gong.
 2. Wire the bell in the circuit. See Figure 1, page 3.
 3. Mount the bell mechanism on a 4" square electrical box with the striker facing down. See Figures 2-4, page 3.
 4. Replace the gong.
 5. The top of the bell must be mounted a minimum of 90" above the floor, or within 6" of the ceiling.
-



Do not loop wire under terminals. Break wire runs to provide supervision of connections.

Audibility Rating Measurement

Sound level measurements are made in accordance with UL Standard 464. The sound power output is measured in a reverberant room.

Operational Testing

Always notify a central station monitoring the system before repairing, maintaining, or testing alarm devices.

Upon completion of initial installation, all bells shall be tested per NFPA 72. Periodic testing should be performed at least annually. Test more often if required by the authority having jurisdiction. Under normal conditions, System Sensor bells should provide years of trouble-free service; however, after extended service, parts of the bell may become worn. In this case, bell should be replaced.

Do not repair or replace any bell components in the field. If bell does not perform properly, replace the entire unit. Failure to follow this instruction may result in failure of the bell to report an alarm condition.

Figure 1. Typical SSM and SSV bell wiring diagrams:

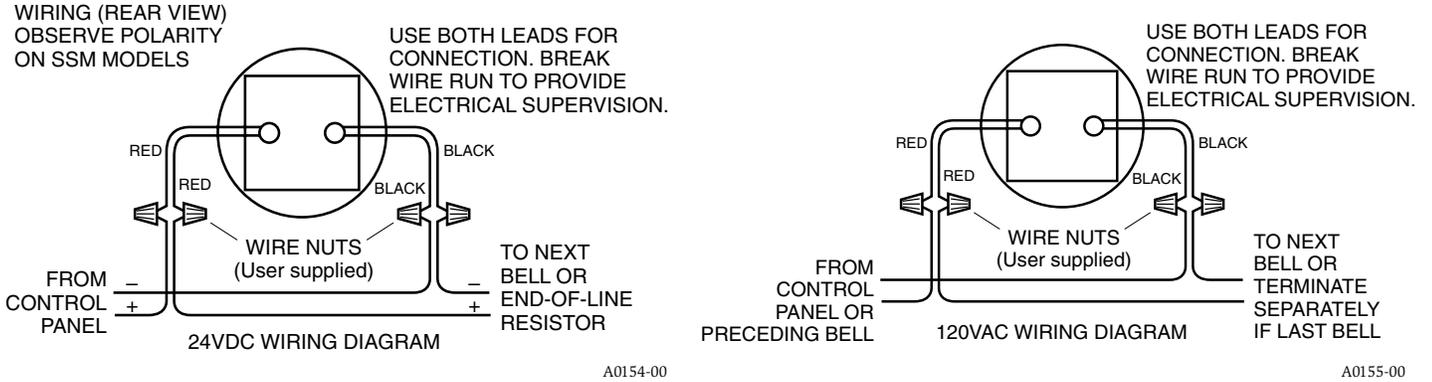
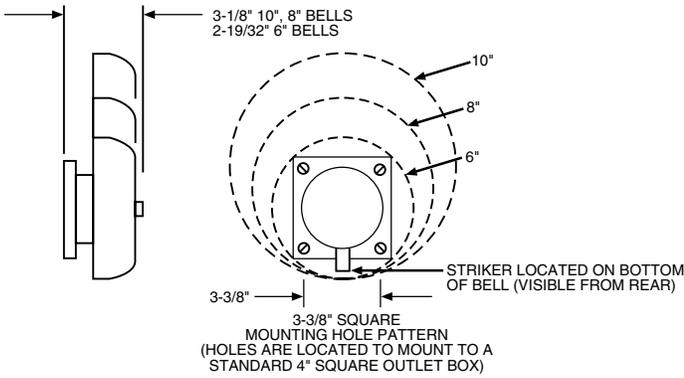
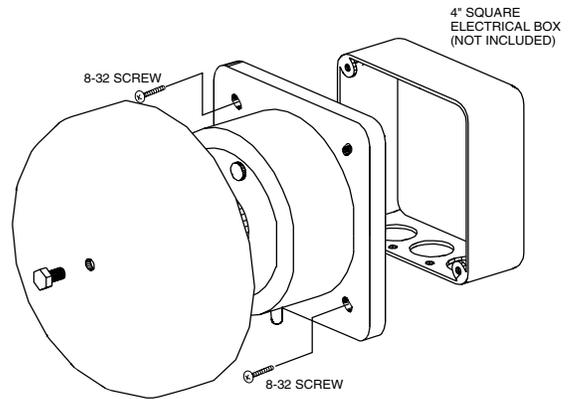


Figure 2. Basic mechanism and gongs:



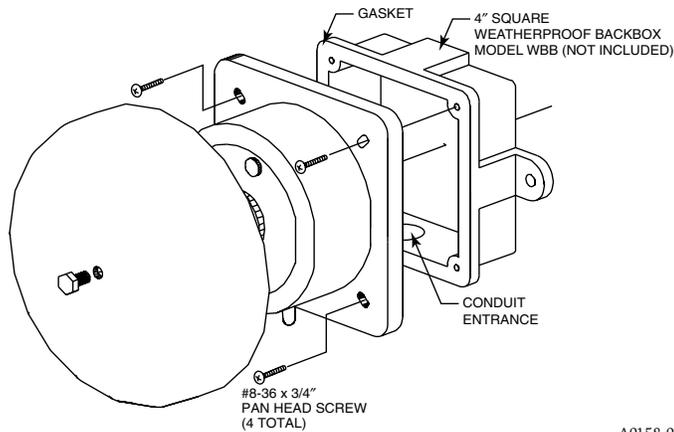
A0156-00

Figure 3. Surface installation:



A0157-00

Figure 4. Weatherproof installation:



A0158-00

Please refer to insert for the Limitations of Fire Alarm Systems

WARNING

The Limitations of Alarm Devices

System Sensor bells are designed to provide fire and security hazard warning.

Bells may not work or operate properly if sprinkler piping being monitored for water flow is plugged with pipe scale, mud, stones, or other foreign material. Sprinkler systems should be checked regularly for such blocking material following the instructions in Chapter 10 of NFPA 25.

BELLS WILL NOT WORK WITHOUT POWER. Bells get their power from the fire or security panel monitoring the alarm system or AC circuit. If power is cut for any reason, the device will not provide the desired audible warning.

Alarms generated by the activation of waterflow detectors or supervisory switches may not be received by a central station if telephone or other communication lines to the detector are out of service, disabled, or open.

BELLS MAY NOT BE HEARD. The loudness of the alarm device meets or exceeds current Underwriters Laboratories' standards. However, the bell may not alert a sound sleeper or one who has recently used drugs or has been drinking alcoholic beverages. The bell may not be heard on a different floor from the person in hazard or if placed too far away to be heard over the ambient noise such as traffic, air conditioners, machinery, or music appliances that may prevent alert persons from hearing the alarm. **THE BELL MAY NOT BE HEARD BY PERSONS WHO ARE HEARING IMPAIRED.**

If valves controlling the water supply to a sprinkler system are closed, vane-type waterflow detectors will not work and bells will not sound. All valves controlling a sprinkler water supply should be sealed or locked in the normally open position. The normally open position of the valve should be monitored by a valve supervisory switch.

Three-Year Limited Warranty

System Sensor warrants its enclosed SSM or SSV bell 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 SSM or SSV bell. 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 SSM or SSV bell 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, Returns

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.