

**For use with the following models:**  
**S900RL and S900RLFIRE**  
**SpectrAlert Strobe**

28 Tuanjie South Road  
 Xi'an Hi-tech Development Zone  
 710075, China

**SPECIFICATIONS**

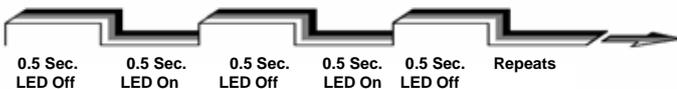
Size:	142.7mmX 126.2mm X 62mm
Weight :	129g
Operating Temperature Range :	-10°C to 55°C
Rated Supply Voltage:	24VDC
Operating Voltage Range :	19-30VDC
Max Operating Current:	30mA@24V
Flash Frequency :	1.0Hz
Location:	Non-residential construction (Indoor)
Software Ver.	A

**GENERAL DESCRIPTION**

The S900RL and S900RLFIRE SpectrAlert strobes by System Sensor are a series of visual signaling devices for use on fire alarm applications. The S900RLFIRE strobe has the word 'FIRE' printed in 25mm height lettering on the cover, whereas the S900RL has a plain cover. These strobes are designed to be used on 24 Volt DC systems and have low operating current. When these strobes operate on the rated supply voltage, they will flash once per second until the power supply is switched off.

**Note:** They are not compatible for use with MDL or MDL3 synchronization modules or coded power supplies.

**STROBE OPERATING CONSIDERATIONS:**



**POWER SUPPLY CONSIDERATIONS**

Power System supply DC filtered voltage. The system design engineer must calculate the number of units used in a zone based on the type of power supply.

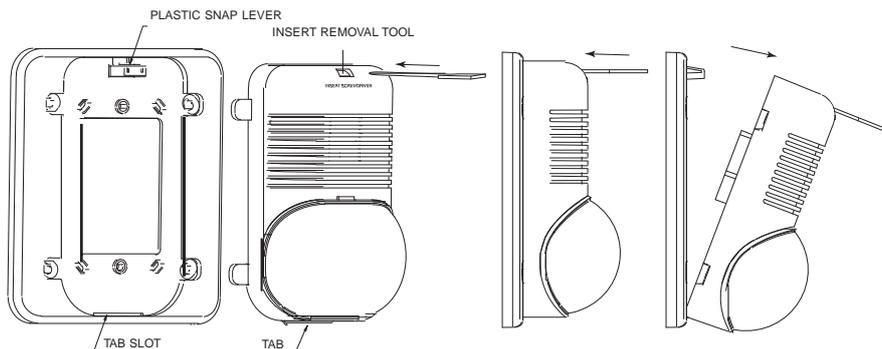
Be certain the sum of all the device currents do not exceed the current capability of the supply in order to assure the product can work normally.

**WIRE SIZE**

The designer must be sure that the last device on the circuit has sufficient voltage to operate the device within its rated voltage. When calculating the voltage available to the last device. It is necessary to consider the voltage drop due to the resistance of the wire. The thicker the wire, the less the voltages drop.

**REMOVAL OF THE UNIT FROM MOUNTING PLATES**

To remove units from mounting plates, insert Quick Click Removal Tool as shown to unlock snap. While pushing in Removal Tool to release the snap, pull back on the strobe. Hinge the horn/strobe module, disengage the locking Rib, and lift the horn/strobe away from the mounting plate.



Generally, for purposes of determining the wire size necessary for the system, it is best to consider all of the devices as "lumped" on the end of the supply circuit (simulates "worst case").

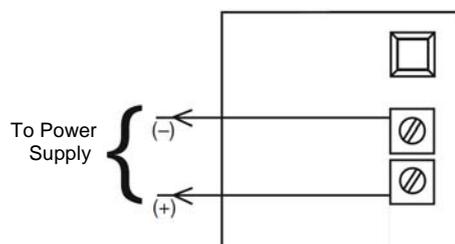
**Typical wire size resistance:**

18AWG Solid:	
16AWG Solid:	27Ω/1,000m
14AWG Solid:	17Ω/1,000m
12AWG Solid:	10Ω/1,000m
	7Ω/1,000m

Example: Assure you have 10 devices on a zone and each require 50mA average and 2,000m of 14 AWG wire (total length= outgoing + return). The voltage at the end of the loop is 0.050amps per device x 10 devices x 10ohms/1,000m x 2,000m =10 volts drop.

The same number of devices using 12 AWG wire produce only 7 volts drop. The same devices using 18 AWG wire will produce 27 volts. Consult your panel manufacturer's specifications, as well as SpectrAlert's operating voltage range to determine acceptable voltage drop.

**Terminal Diagram:**

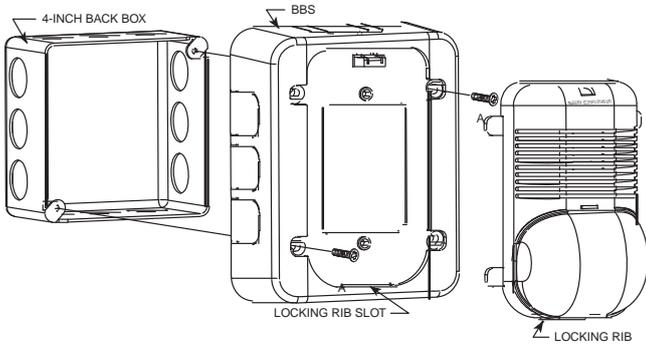


**MOUNTING DIAGRAMS:**

**Screw types used for mounting:**

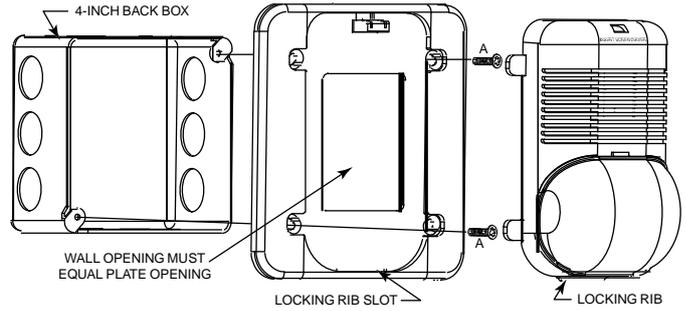
- A = 8-32 x 3/4 flat head
- B = 6-32 x 15/16 pan head

**STROBE SURFACE MOUNT:**



1. Mount skirt to back box with screws A.
2. Complete field wiring.
3. Insert locking rib on unit into slot on skirt.
4. Press into skirt; unit will make a "click" when it has locked into place.

**STROBE WITH UNIVERSAL MOUNTING PLATE:**



1. Mount plate to back box using screws A, making sure wall opening is equal to the plate opening.
2. Complete field wiring.
3. Insert locking rib into slot on plate.
4. Press into plate, unit will make a "click" when it has locked into place.

Note: Please dispose electronic waste following national or local regulations after being scrapped or replaced. Do not discard.

**Please refer to insert for the Limitations of Fire Alarm Systems**



**THE LIMITATIONS OF**

**The strobe will not work without power.** If power is cut off for any reason, the strobe will not provide the desired visual warning signal.

**The signal strobe may not be seen.** The electronic visual warning signal uses some high light LED indicators. It flashes at least once every second. The strobe must not be installed in direct sunlight or areas of high light intensity (over 60 foot candles) 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 positive photic response to visual stimuli with seizures, such as persons with epilepsy, should avoid prolonged exposure to environments in which strobe signals, including this strobe, are activated.

**The signal strobe cannot operate from coded power supplies.** The strobe must have an uninterrupted source of power in order to operate correctly. Xi'an System Sensor Electronics Ltd. recommends that the horn and signal strobe always be used in combination so that the risks from any of the above limitations are minimized.

**THREE-YEAR LIMITED WARRANTY**

Xi'an System Sensor Electronics Ltd. warrants its enclosed strobe product to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. Xi'an System Sensor Electronics Ltd. makes no other express warranty for this strobe product. 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 strobe product 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 contacting Xi'an System Sensor for a Return Authorization number, send defective units postage prepaid to: Xi'an System Sensor Electronics, Ltd. Repair Department, RA # \_\_\_\_\_,

28 Tuan Jie South Road, Xi'an Hi-tech Development Zone, 710075 China. 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.