5 Simplex

UL Listed; FM, CSFM and MEA (NYC) Approved*

True Alert™ Notification Appliances

Non-Addressable Audible/Visible Notification Appliances with SmartSync™ Operation of Strobes and Horns

Features

Wall mount audible/visible notification appliances with efficient electronic horn and high output xenon strobe

Compatible with ADA requirements (refer to important installation instructions on page 5)

Operates over a two-wire SmartSync circuit to provide:

- Horns that are controlled separately from strobes on the same two-wire circuit
- "On-until-silenced" and "on-until-reset" operation on the same two-wire pair
- Horn control that can be selected to be temporal coded, march time coded, or on continuously
- Strobe appliances on the same circuit operating at a synchronized 1 Hz flash rate
- Class B (Style Y) operation requires connection to a compatible Simplex SmartSync NAC or to SmartSync Control Module (SCM) 4905-9938
- Class A (Style Z) operation is supported by using the 4905-9938 SCM

Available housing colors:

- Red cover with white "FIRE" lettering
- White cover with red "FIRE" lettering
- Covers are available separately to convert housing color

Flexible, easy, and convenient semi-flush or surface wall mounting:

- Easily mounts to single gang, double gang, or 4-inch square outlet box
- Optional mounting adapters are available to cover surface mounted electrical boxes and to adapt to Simplex 2975-9145 boxes
- In/out wiring terminals for 18 AWG to 12 AWG, accessible from front of housing, providing easy access for installation, inspection, and testing
- Rear of housing assembly does not extend into box
- Rugged, high impact, flame retardant thermoplastic housing
- Optional UL listed red wire guard is available for semi-flush or surface mounting
- This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7125-0026:239 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. Accepted for use City of New York Department of Buildings MEA35-93E. This product was not ULC listed as of document revision date. Additional listings may be applicable, contact Simplex for the latest status. Refer to page 2 for guard listing.





TrueAlert Non-Addressable A/V Notification Appliances are Available in Red with White Lettering and White with Red Lettering

Features (Continued)

Visible notification appliance (strobe):

- 24 VDC xenon strobe available with 15, 75, or 110 candela output (strobe candela rating is clearly indicated on reflector)
- UL listed to Standard 1971

Audible notification appliance (horn):

- Low current, 24 VDC electronic horn with harmonically rich output sound suitable for either coded or steady operation
- UL listed to Standard 464

Description

TrueAlert non-addressable audible and visible notification. For applications requiring audible/visible notification with horn tones, these Simplex 4903 series appliances combine a high intensity strobe with a low current electronic horn in a compact package that is easy and quick to install. The horn provides a loud and penetrating, harmonically rich sound suitable for either coded or steady operation as determined by the selected SmartSync mode.

SmartSync two-wire advantage. With both audible and visible controls carried on the same two-wire NAC circuit, using the SmartSync operation (patent pending) can provide the opportunity for significantly reduced installation time and expense for both retrofit and new construction.

Multiple model choices. These A/V notification appliances are available with three strobe intensity levels and with red or white housings. Mounting can be semiflush or surface mounted on a standard single gang, double gang, or 4" square (102 mm) electrical box. Optional accessories are available to increase mounting and application flexibility.

Smart Sync Two-Wire Control

Background. Typically, fire alarm control panels activate both audible and visible notification upon receipt of an alarm. At the direction of an authorized operator (or by pre-determined program), audible notification appliances may be silenced before the alarm condition is reset (on-until-silenced) while the visible notification appliances are kept activated until the alarm condition is reset (on-until-reset). This operation has traditionally required two different circuits (four-wire operation). The Simplex SmartSync operation mode provides this function using a single circuit (two-wire operation).

SmartSync output control is available from:

- **4009 IDNet™ NAC Extender**, models 4009-9201 and 4009-9301 (refer to data sheet S4009-0002)
- **4010 Fire Alarm Control Panel** with operating software Revision 2.X or higher (refer to data sheet \$4010-0001)
- SmartSync Control Module (SCM) 4905-9938, provides a SmartSync interface to conventional NACs and also is used with the 4009 IDNet NAC extender or 4010 Control Panel to provide Class A operation (refer to page 6 for more information)

Product Selection

Audible/Visible Notification Appliances (Horn/Strobe)

Model Number	Visible Notification Appliance Output			Housing Color
	15 cd	75 cd	110 cd	riousing Color
4903-9417	~			
4903-9418		✓		Red with white "FIRE" lettering
4903-9419			V	
4903-9428	~			
4903-9429		v		White with red "FIRE" lettering
4903-9430			V	3

Adapters

Model	Description	Dimensions		
4905-9937	Surface mount red adapter skirt	Use to cover 1 1/2"	5 3/8" H x 5 1/4" W x 1 5/8" D	
4905-9940	Surface mount white adapter skirt	deep surface mounted boxes	(136 mm x 133 mm x 41 mm) Total depth with strobe = 4 3/8" (111 mm)	
4905-9931	Adapter plate, red, for mounting to Sir (typically for retrofit, may be mounted	8 5/16" x 5 3/4" x 0.060" Thick (211 mm x 146 mm x 1.5 mm)		
2975-9145	Red mounting box, requires Adapter I	7 7/8" x 5 1/8" x 2 3/4" D (130 mm x 200 mm x 70 mm)		

Covers and Guard

Model	Description	Dimensions		
4905-9964	Red cover with white "FIRE" lettering	5 1/8" H x 5" W x 1 1/2" D		
4905-9965	White cover with red "FIRE" lettering	(130 mm x 127 mm x 38 mm)		
4905-9961	Wire guard with mounting plate, red, compatible with semi-flush or surface mounted boxes (UL listed by Space Age Electronics Inc.)	6 1/16" H x 6 1/16" W x 3 1/8" D (154 mm x 154 mm x 79 mm)		

Synchronization Modules

Model	Description	Dimensions
4905-9938	SmartSync Control Module, Class A or Class B (Style Z/Y), installs in 4" square box (refer to diagram on page 6)	4" x 4 1/8" x 1 1/4" D (102 mm x 105 mm x 32 mm)

Strobe Specifications							
Rated Voltage Range	16 VDC to 33 VDC, see Note 1 below						
Flash Rate		1 Hz					
		16 VDC	17 VDC	18 VDC	19 VDC	20 VDC	24 VDC
Current Ratings, Strobe Flashing and Horn On, Nominal Average	15 cd	92 mA	89 mA	86 mA	83 mA	80 mA	75 mA
Current (see Note 2 below)	75 cd	217 mA	207 mA	196 mA	186 mA	175 mA	147 mA
	110 cd	275 mA	261 mA	248 mA	234 mA	220 mA	185 mA
Horn Specifications							
Rated Voltage Range		16 VDC to 33 VDC, see Note 1 below					
Sound Output Characteristics		2400 to 3700 Hz sweep, modulated at 120 Hz rate					
Horn Sound Output Ratings @ 10	0 ft (3 m)						
	Voltage	16 \	/DC	24 \	VDC	33 \	/DC
Sound Type (see Note 3)		Steady	Coded	Steady	Coded	Steady	Coded
Reverberant Chamber, UL 464 Test		85 dBA	82 dBA	88 dBA	84 dBA	91 dBA	87 dBA
Anechoic Chamber		90 dBA	86 dBA	91 dBA	86 dBA	91 dBA	87 dBA
4905-9938 SmartSync Contro	ol Modu	le (SCM)					
Rated Input Voltage Range		17 VDC to 33 VDC with maximum ripple of 2 V peak-to-peak					
SmartSync NAC Output Capacity		2 A maximum (total device quantity is control panel dependent)					
(for use only with SmartSync compa	atible	Up to 35 maximum SmartSync appliances with strobes					
appliances)		Up to 40 maximum SmartSync horns-only appliances					
Strobe Control NAC Input Current		Output NAC current, plus 30 mA @ 24 VDC for SCM operating power					
Horn Control NAC Current		4 mA @ 24 VDC					
Class A Operation Mounting Requirement		Mount SCM within 20 ft (6 m) of control panel, use metal conduit					
General Specifications							
Housing Dimensions (including lens)		5 1/8" H x 5" W x 2 3/4" D (130 mm x 127 mm x 70 mm)					
Temperature Range		32° to 122° F (0° to 50° C)					
Humidity Range		10% to 93%, non-condensing at 100° F (38° C)					
		T : 111 1 (10 MVC : 10 MVC					

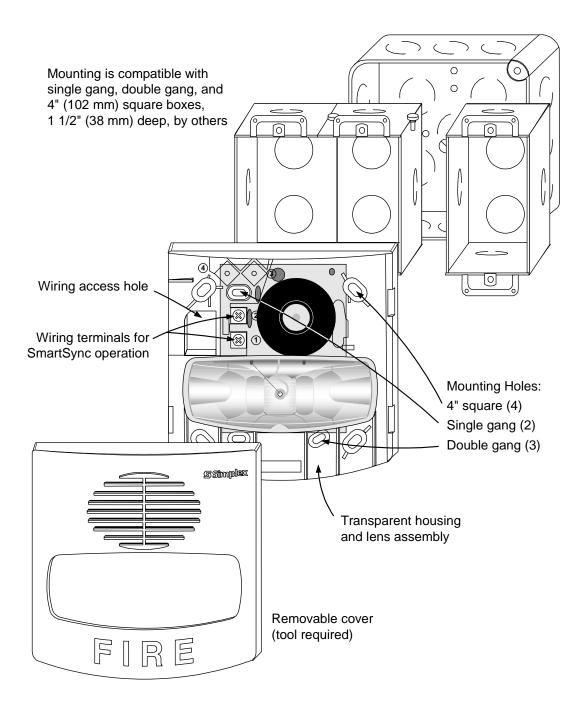
NOTES:

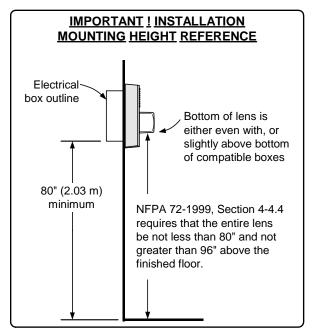
Connections

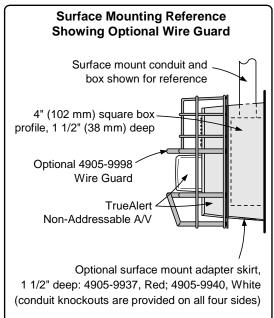
The rated voltage range listed is the absolute operating range. Operation outside of this range may cause permanent damage
to the appliance. Please note that 16 VDC is the lowest operating voltage that is allowed at the last appliance on the
notification appliance circuit under worst case conditions.

Terminal blocks for 18 AWG to 12 AWG

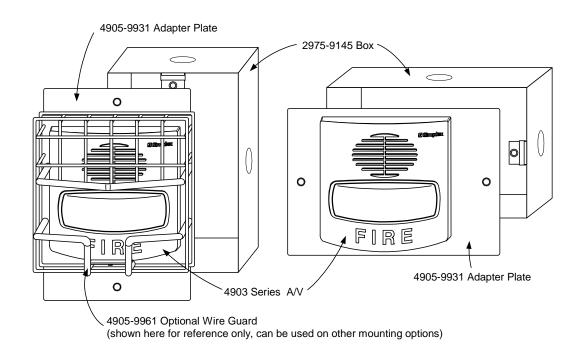
- 2. Voltage drops and standby battery calculations should be made using anticipated operating conditions. Operation above 24 VDC draws less current.
- Coded values are typical of the output measured with a Temporal coded or a March Time coded pulse and with a sound level
 meter reading on a "fast" setting. Under the same test conditions, coded horn output "peak" sound level readings are typically
 4 dBA higher.







4905-9931 Adapter Plate Installation Information



SmartSync Control Module (SCM)

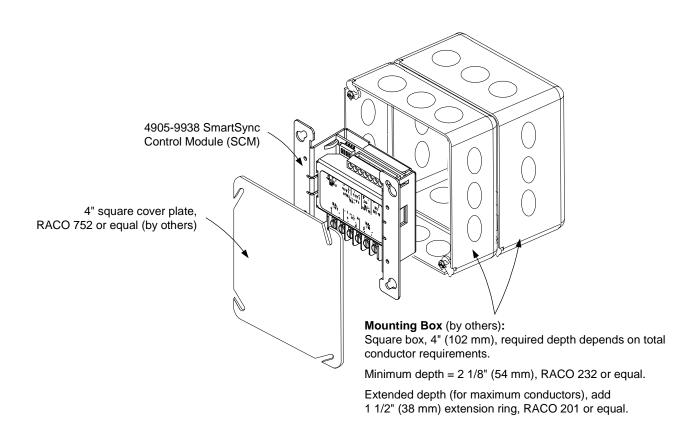
Model 4905-9938 SCM (SmartSync Control Module) provides an interface between standard NAC output and SmartSync two-wire controlled notification appliances. One NAC can be programmed to operate as "on-until-silenced" and would be designated as the horn control (non-coded, on continuously during alarm). A second NAC would be programmed to provide "on-until-reset" operation and would be for the visible appliance (strobe) control (also non-coded, on continuously during alarm).

Coded Horns and Synchronized Strobes. In addition to operating the strobe and the horn independently, the SCM can be switch selected to operate the horns as temporal coded, march time coded (60 beats/minute), or on continuously. Strobes are activated with 1 Hz synchronized flashes.

Additional SCM features:

- Multi-Sync Mode. Up to eight SCMs can be interconnected to synchronize system notification.
- NAC Powered. The SCM is powered from the strobe control NAC. Dedicated power wiring is not required.
- **Isolated NAC Inputs.** NAC inputs to the SCM are isolated from each other and can be supplied from different control panels.
- Class B (Style Y) and Class A (Style Z) operation are both supported. (SmartSync Class A operation requires the 4905-9938 SCM.)
- **Earth fault detection** protection is provided by the strobe control NAC during supervision mode.
- Multi-Sync Isolation. The horn input NAC powers the Multi-Sync function and is isolated from the strobe NAC wiring.
- Multi-Sync Supervision. Multiple SCMs which are interconnected are supervised for proper circuit connection.

4905-9938 SmartSync Control Module Installation Information



TrueAlert Housing Size Reference

The Simplex TrueAlert wall mount family of notification appliances share a common overall size and appearance. This A/V drawing is shown approximately full size for reference.

