



## Features

Individually addressed and controlled multi-candela S/V (speaker/visible) notification appliances provide:

- Multi-candela xenon strobe with synchronized 1 Hz flash rate and with intensity *programmable from the control panel* or jumper selected as 15, 30, 75, or 110 cd
- Advanced addressable notification controlled by *IDNAC SLCs* providing *regulated 29 VDC* allowing strobes to operate with lower current even under battery backup
- Wiring supervision to each strobe allowing “T-tapped” connections for Class B circuits to simplify wiring (Class A circuits require in/out wiring)
- *TrueAlert Device Reports* at the control panel detailing appliance point ID, custom label, type, and candela setting (see sample on page 2)
- *Magnet test diagnostics* to assist checkout and testing of appliances and wiring
- Compatibility with ADA requirements; (refer to important installation information on page 3)
- Compatibility with legacy TrueAlert addressable systems for upgrade and replacement (see page 4)
- Strobe operation is listed to UL 1971 and ULC-S526\*

### LED indicator and magnet test feature:

- Appliance LED can be selected to display each polling cycle to indicate appliance supervision
- In diagnostic mode, the magnet test pulses the LED to indicate appliance address *AND pulses to indicate the intensity selection*; a brief output of the strobe is also selectable to confirm operation

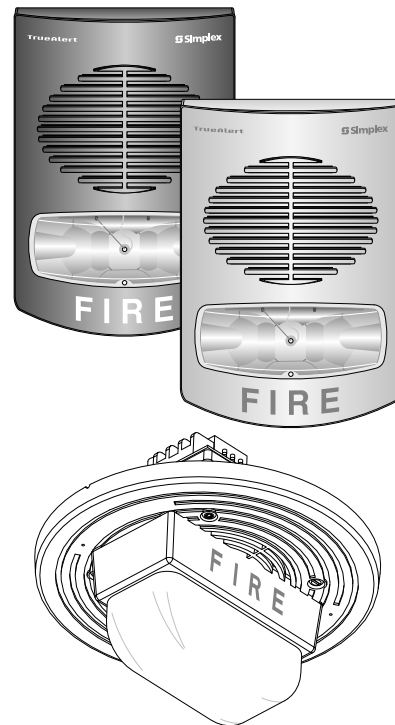
### Mechanical design features:

- Rugged, high impact, flame retardant thermoplastic housings are available for wall or ceiling mount
- Wall mount housings are available in red or white
- Wall mount options include electrical box adapters, separate covers to convert color, and red wire guards
- Ceiling mount housing is white

### Audible notification appliance (speaker):

- High quality voice and tone reproduction with taps for ¼, ½, 1, or 2 W, at 25 or 70.7 VRMS
- Speakers have capacitor input for connection to DC supervised NACs and are wired separately from strobes
- Listed to UL 1480 and ULC S541\*
- Compliant with NFPA 72, 520 Hz Low Frequency Signal Requirements for Sleeping Areas

\* See page 2 for additional listing details and wire guard listings. 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 7320-0026:322 for allowable values and/or conditions concerning material presented in this document. Accepted for use – City of New York Department of Buildings – MEA35-93E. Additional listings may be applicable; contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Fire Protection Products.



Wall and Ceiling Mount S/Vs with Addressable Strobes

## Description

**Multi-Candela TrueAlert S/Vs with speaker and addressable strobe** provide convenient installation to standard electrical boxes with extensions. The strobe is individually addressed and individually controlled with power, supervision, and control supplied from a Simplex fire alarm control panel providing **IDNAC** Signaling Line Circuits (SLCs). (See compatibility list on page 4.) Speakers are wired separately.

## Strobe Application Reference

Proper selection of visible notification is dependent on occupancy, location, local codes, and proper applications of: the *National Fire Alarm and Signaling Code* (NFPA 72), ANSI A117.1; the appropriate model building code: BOCA, ICBO, or SBCCI; and the application guidelines of the Americans with Disabilities Act (ADA).

## IDNAC SLC Operation Advantage

**TrueAlert S/V Appliances with Addressable Strobes on IDNAC SLCs** provide visible notification using a single two-wire circuit that also *confirms connection to the individual notification appliance's electronic circuit*. This operation increases circuit supervision integrity by providing supervision that extends beyond the appliance wiring connections.

## IDNAC SLC Operation Advantage (Cont'd)

**Reduced current allows efficient IDNAC SLC operation.** With *IDNAC SLCs*, a *constant 29 VDC* source voltage is maintained, even during battery standby, allowing strobes to operate at higher voltage with lower current and ensuring a consistent current draw and voltage drop margin under both primary power and secondary battery standby. Efficiencies include wiring distances up to 2 to 3 times farther than with conventional notification, or support for more appliances per IDNAC SLC, or use of smaller gauge wiring, or combinations of these benefits, all providing installation and maintenance savings with high assurance that appliances that operate during normal system testing will operate during worst case alarm conditions.

**Reducing Installation and Testing Time.** With separate controls on the same two-wire SLC, installation time and expense for both retrofit and new construction can be significantly reduced. When Class B wiring is used, *wiring can be "T" tapped*, allowing more savings in distance, wire, conduit (size and utilization), and overall installation efficiency. Use of the magnet test feature improves installation efficiency. TrueAlert device reports conveniently identify information about each connected appliance.

## Product Selection

### Multi-Candela Addressable S/Vs

Model	Lettering	Listings	Housing Color	Mounting	Dimensions	Description
4906-9251	White FIRE	UL & ULC	Red	Wall	7 ¼" H x 5" W x 2 ⅝" D (184 mm x 127 mm x 67 mm)	Multi-Tapped Speaker with Multi-Candela Addressable Strobe; intensity selectable as: 15, 30, 75, or 110 candela
4906-9253	Red FIRE		White			
4906-9254	Red FIRE	UL	White	Ceiling	7 ½" (191 mm) diameter speaker housing, ½" (13 mm) deep; lens extends 2 ⅝" (67 mm) above housing; extension into box = 2 ¾" (70 mm)	
4906-9255	Blank					
4906-9256	Red ALERT					
4906-9257	Red FIRE	ULC				

### Wall Mount S/V Adapters, Replacement Covers, Wire Guard; Ceiling Mount Tile Bridge

Model	Description	Dimensions
4905-9946	Surface Mount Red Adapter Skirt	7 ¾" H x 5 ⅝" W x 3 ⅜" D (197 mm x 137 mm x 81 mm) depth with S/V = 5 ⅞" (149 mm)
4905-9947	Surface Mount White Adapter Skirt	
4905-9903	Adapter Plate, red, required to mount S/V on 2975-9145 mounting box (typically for retrofit)	8 ⅝" H x 5 ¾" W x 0.060" Thick (211 mm x 146 mm x 1.5 mm)
2975-9145	Mounting Box, red, for surface or flush mount, requires adapter plate 4905-9903 (this box may be available for retrofit applications)	7 ⅞" H x 5 ⅞" W x 2 ¾" D (200 mm x 130 mm x 70 mm)
4905-9996	Red Wall Mount S/V Replacement Cover with white "FIRE" lettering	7 ¼" H x 5" W x 1 ⅜" D (184 mm x 127 mm x 35 mm)
4905-9997	White Wall Mount S/V Replacement Cover with red "FIRE" lettering	
4905-9998	Red Wire Guard for Wall Mount S/V; with mounting plate, compatible with surface and semi-flush boxes (UL listed by Space Age Electronics Inc.)	8 ⅝" H x 6 ⅛" W x 3 ¼" D (213 mm x 154 mm x 79 mm)
2905-9946	Tile Bridge for Ceiling Mount S/Vs	See diagram on page 3

## TrueAlert Device Reports Reference

Service Port		Page 1	
REPORT 5 : TrueAlert Device Report		12:34:56am TUE 27-Jan-14	
POINT ID	CUSTOM LABEL	DEVICE TYPE	CANDELA
T14-1-1	Location Label . . . up to 40 characters	V/O	15
T14-1-2	Break Room 5	S/V	110
T14-1-3	Boiler Room	S/V	75
T14-1-4	Elec. Room 7	S/V	30

## TrueAlert Addressable Wiring Isolator

**Isolator Model 4905-9929** is available for remote mounting on TrueAlert addressable circuits to isolate short circuited wiring from functioning wiring. (Refer to data sheet S4905-0001 for additional information.)

## TrueAlert Addressable Diagnostics

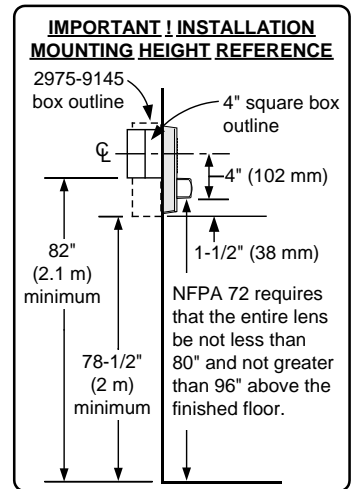
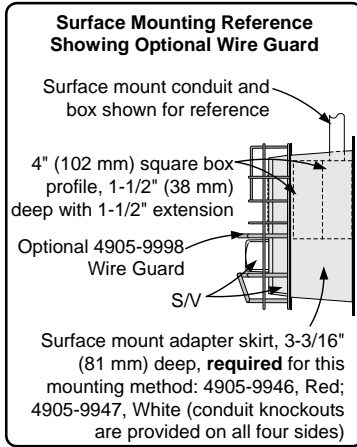
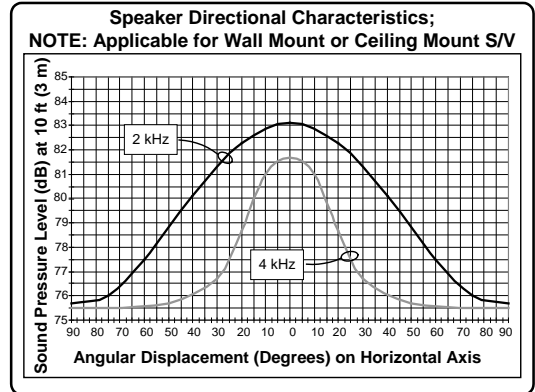
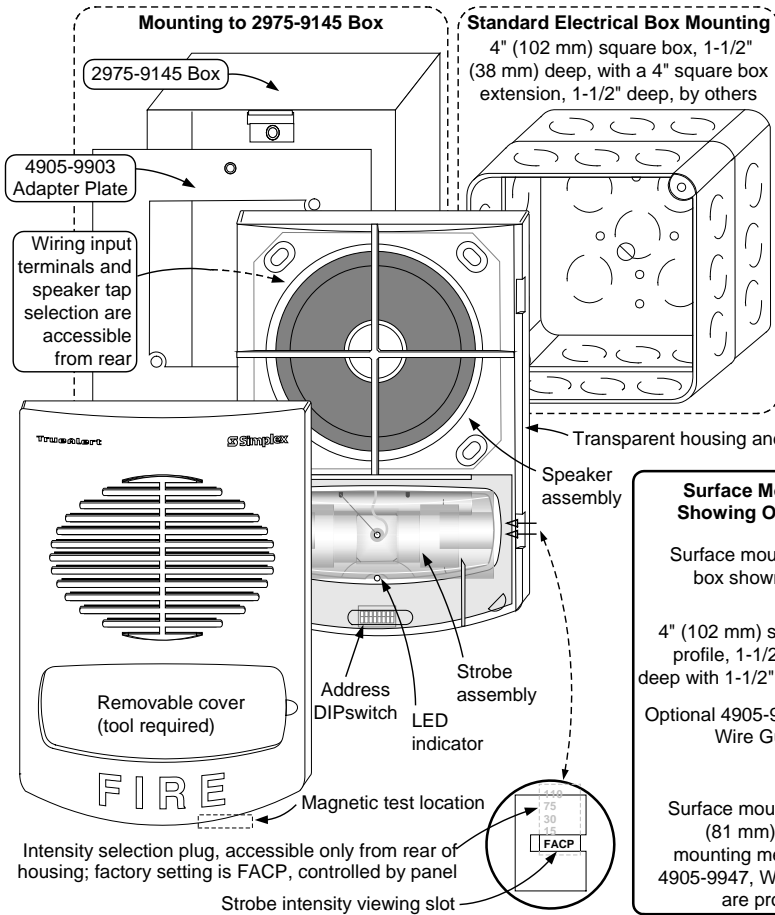
**Test Features.** Controllers can be selected to pulse each appliance's LED when it receives a supervision poll. When the controller is selected for diagnostic mode, the appliance magnet test feature provides a response at the individual appliance being tested.

**Silent Appliance Magnet Test.** In this test mode, in response to the magnet test, the appliance LED pulses sequentially to conveniently indicate the appliance's address.

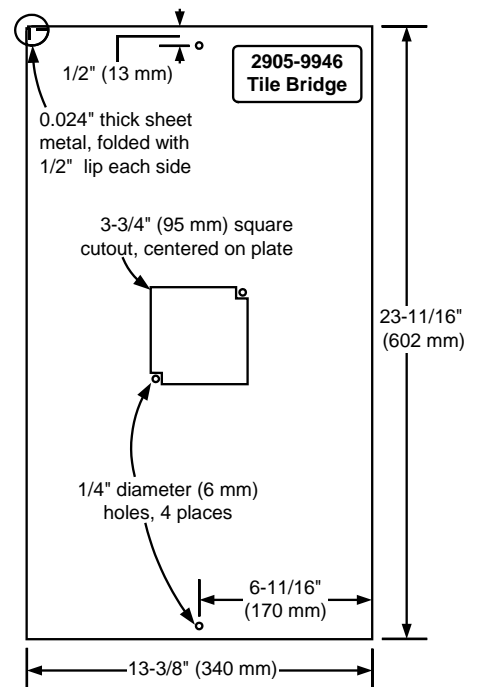
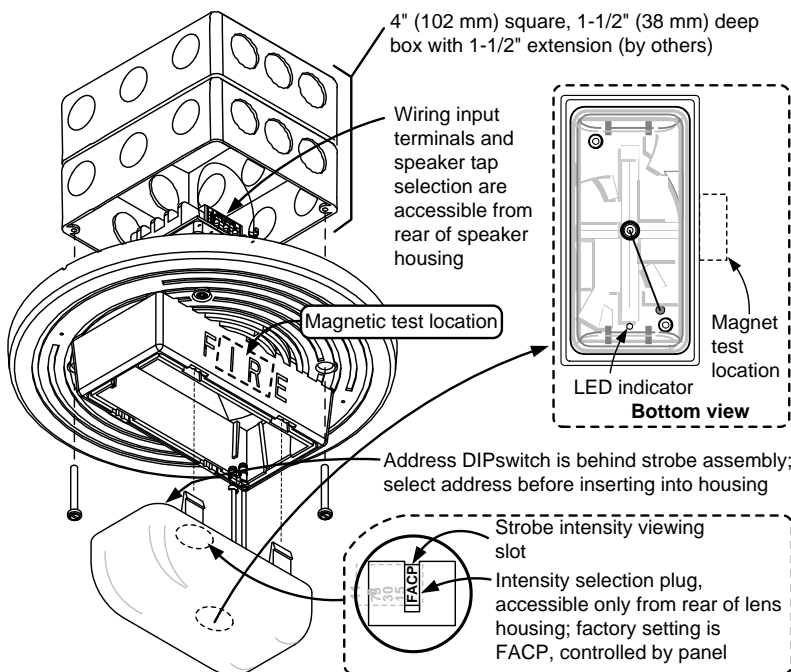
**Operational Appliance Testing.** In this test mode, after the address is indicated by pulsing the appliance LED, the strobe will briefly flash to indicate proper operation.

**TrueStart Instrument Two (TSIT).** The 2nd generation of the Simplex TrueStart Test Instrument adds testing of IDNAC SLC wiring and TrueAlert (and TrueAlert ES) appliances to its ability to test IDCs, NACs, and IDNet communications *before connection to the control panel*. Please contact your local Simplex representative for additional information.

## Wall Mount Installation Reference



## Ceiling Mount S/V Install Reference and Tile Bridge Dimensions



## IDNAC SLC Controller Compatibility Reference

Compatible Controllers	Data Sheet Reference	Controller Output	IDNAC SLC Output Voltage	Appliance Voltage Design Reference
4100ES with EPS+ or EPS Power Supply	S4100-0100	IDNAC SLC	29 VDC (regulated)	23 VDC (with 6 VDC drop)
4009 IDNAC Repeater	S4009-0004			
4007ES with IDNAC Notification	S4007-0002			
4010ES with ESS Enhanced System Supply	S4010-0011			

## S/V Specifications

### Common Specifications (see page 2 for appliance dimensions)

Environmental	32° to 122° F (0° to 50° C); 10% to 93%, non-condensing at 100° F (38° C)
Connections	Terminal blocks for 18 AWG to 12 AWG (0.82 mm <sup>2</sup> to 3.31 mm <sup>2</sup> ); two wires per terminal for in/out wiring
Installation Instructions	579-808

### Speaker General Specifications

Input Voltage	25 or 70.7 VRMS, see Note 1 below	
Power Taps	¼, ½, 1, and 2 W	
Frequency Response	Fire Alarm = 400 to 4000 Hz	General Signaling = 125 to 12 kHz

### Speaker Output Ratings @ 10 ft (3 m) (see Note below)

Wattage Tap	¼ W	½ W	1 W	2 W
UL Listed Models, Reverberant Chamber Test, per UL 1480	76 dBA	79 dBA	82 dBA	85 dBA
Wall Mount Models <b>4906-9251</b> and <b>4906-9253</b> , Anechoic Chamber Test, per ULC-S541	77 dBA	80 dBA	83 dBA	86 dBA*
Ceiling Mount Model <b>4906-9257</b> , Anechoic Chamber Test per ULC-S541	25 VRMS Input	81.6 dBA	84.3 dBA	87.1 dBA*
	70.7 VRMS Input	80.9 dBA	84.1 dBA	87.3 dBA*

\* NOTE: Select taps as indicated to satisfy the ULC fire alarm applications requirement of 85 dBA minimum

Polar Dispersion Reference (per ULC-S541 Anechoic Chamber Testing)	Attenuation	Angle	Attenuation	Angle
	-3 dB	+/- 30° off-axis	-6 dB	+/- 55° off-axis

### Strobe Specifications

Typical Operating Voltage Range	23 VDC to 31 VDC, Special Application (see below for 17 VDC rating)				
Supervisory Requirements	1 unit load (= 0.8 mA control panel current)				
Flash Rate and Synchronized SLC Loading	1 Hz; with up to 46 synchronized strobes maximum per NAC				
Wall Mount Appliances	Candela Setting	15 cd	30 cd	75 cd	110 cd
	23 VDC RMS Current Ratings, for connection to IDNAC Addressable SLCs	50 mA	75 mA	137 mA	190 mA
Ceiling Mount Appliances	23 VDC RMS Current Ratings, for connection to IDNAC Addressable SLCs	60 mA	92 mA	180 mA	240 mA

Note: Speakers are for connection to conventional fire alarm audio circuits. Anechoic speaker output ratings are typically more representative of actual installed sound output.

## TrueAlert Strobe LEGACY Compatibility Reference

Compatible Controller	Data Sheet Reference	Controller Output	Available Strobe Intensity	Appliance Voltage Minimum
4100ES or 4100U with TrueAlert Power Supply	S4100-0031	TrueAlert Addressable SLC	15, 30, 75, and 110 cd	17 VDC
4009 TPS, Remote TrueAlert Power Supply	S4100-0037			
TrueAlert Addressable Controller (4009T)	S4009-0003			

### Electrical Ratings Difference for Retrofit Applications

Voltage Range	17 VDC to 31 VDC, Special Application				
Candela Setting	15 cd	30 cd	75 cd	110 cd	
17 VDC RMS Current Ratings, use when connected to TrueAlert Addressable SLCs per above	Wall Mount Appliances	64 mA	98 mA	187 mA	253 mA
	Ceiling Mount Appliances	76 mA	128 mA	242 mA	328 mA

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