



Features

Individually addressed wall mount audible/visible notification appliances with efficient electronic horn and high intensity xenon strobe provides:

- Supervision of each individual appliance's wiring and connections
- Ability to connect using "T" tapping for Class B/Style 4 circuits to simplify wiring (Class A/Style 6 circuits require in/out wiring)
- Horns controlled separately from strobes on the same two-wire circuit allowing "on-until-silenced" and "on-until-reset" using a single address
- Compatibility with ADA requirements (refer to important installation information on page 3)
- In/out wiring accessibility from front of housing providing easy access for installation, inspection, and testing
- Magnetic test diagnostics to assist checkout and testing of appliances and wiring
- Rugged, high impact, flame retardant thermoplastic housings available in red or white (covers are available separately to convert color)

LED indicator and magnetic test feature:

- LED indicator can be selected to display each polling cycle to indicate appliance supervision
- When the TrueAlert addressable controller is in diagnostic mode, the magnetic test pulses the LED to indicate appliance address and is selectable to also briefly flash the strobe to confirm operation

TrueAlert two-wire addressable control of visible and audible notification activates appliances with:

- Visible appliances connected to the same circuit operated at a synchronized 1 Hz flash rate
- Horns sounded as Temporal or March Time pattern, or on continuously, controlled separately from visible appliances on the same two-wire circuit

TrueAlert addressable notification appliance design provides flexible, easy, and convenient flush or surface wall box mounting:

- Rear of housing does not extend into box and easily mounts to single gang, double gang, or 4-inch box
- In/out wiring terminals, 18 AWG to 12 AWG
- Optional mounting adapters are available to cover surface mounted electrical boxes and to adapt to Simplex 2975-9145 boxes

* These products have 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 or approved by FM as of document revision date. Additional listings may be applicable, contact Simplex for the latest status.



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

Features (Continued)

Visible notification appliance (strobe):

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

Audible notification appliance (horn):

- Low current electronic horn with harmonically rich output sound for either coded or steady operation
- Controller can be selected for "high" output or a "low" output sound level (~5 dBA difference)
- UL listed to Standard 464

Description

TrueAlert addressable audible/visible (A/V) notification appliances are individually addressed and receive power, supervision, and control signals from a TrueAlert addressable Signaling Line Circuit (SLC) channel. When activated, the strobes flash at a synchronized rate and the horns sound with synchronized output. (Refer to the specific TrueAlert addressable SLC Control source for additional information.)

TrueAlert addressable operation allows strobes to be wired onto the same two-wire SLC circuit as horns but with separately controlled operation. Typical applications are audible notification appliances activated as "on-until-silenced" and visible notification appliances activated as "on-until-reset." (TrueAlert addressable operation is patent pending.)

TrueAlert Addressable Advantage

Background. Fire alarm control panels typically 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).

TrueAlert addressable operation provides separate audible and visible appliance control functions 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.

Opportunities for Reducing Installation and Testing Time. Allowing separate controls to be carried on the same two-wire SLC can significantly reduce installation time and expense for both retrofit and new construction. When Class B (Style 4) wiring is used, *wiring can be "T" tapped*, allowing even more savings in distance, wire, junction boxes, and overall installation efficiency. The magnetic test feature (see next paragraph) also can provide improved installation efficiency.

Product Selection

TrueAlert Addressable Audible/Visible Notification Appliances

Model Number	Strobe Output Rating			Housing Color
	15 cd	75 cd	110 cd	
4903-9450	✓			Red with white "FIRE" lettering
4903-9451		✓		
4903-9452			✓	
4903-9453	✓			White with red "FIRE" lettering
4903-9454		✓		
4903-9455			✓	

Mounting Adapters

Model	Description	Dimensions
4905-9937	Surface mount red adapter skirt	Use to cover 1 1/2" deep surface mounted boxes 5 3/8" H x 5 1/4" W x 1 5/8" D (136 mm x 133 mm x 41 mm) Total depth with horn = 3 1/8" (79 mm)
4905-9940	Surface mount white adapter skirt	
4905-9931	Adapter plate, red, for mounting to Simplex 2975-9145 Box (typically for retrofit, may be mounted vertical or horizontal)	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 4905-9931 adapter plate	7 7/8" x 5 1/8" x 2 3/4" D (200 mm x 130 mm x 70 mm)

Optional Covers and Guard

Model	Description	Dimensions
4905-9994	Red A/V cover with white "FIRE" lettering	For replacement or color conversion 5 1/8" H x 5" W x 1 1/2" D (130 mm x 127 mm x 38 mm)
4905-9995	White A/V cover with red "FIRE" lettering	
4905-9961	Wire guard with mounting plate, red, compatible with surface or semi-flush mounted boxes*	6 1/16" H x 6 1/16" W x 3 1/8" D (154 mm x 154 mm x 79 mm)

* UL listing in process as of document revision date (by Space Age Electronics Inc.).

TrueAlert Addressable Controller

TrueAlert addressable notification appliances are controlled by the 4009-9401 TrueAlert Addressable Controller, an intelligent interface panel connected between the host fire alarm control panel and the TrueAlert addressable notification appliances. (Refer to data sheet S4009-0003 for further information about the TrueAlert Addressable Controller.)

TrueAlert Addressable Diagnostics

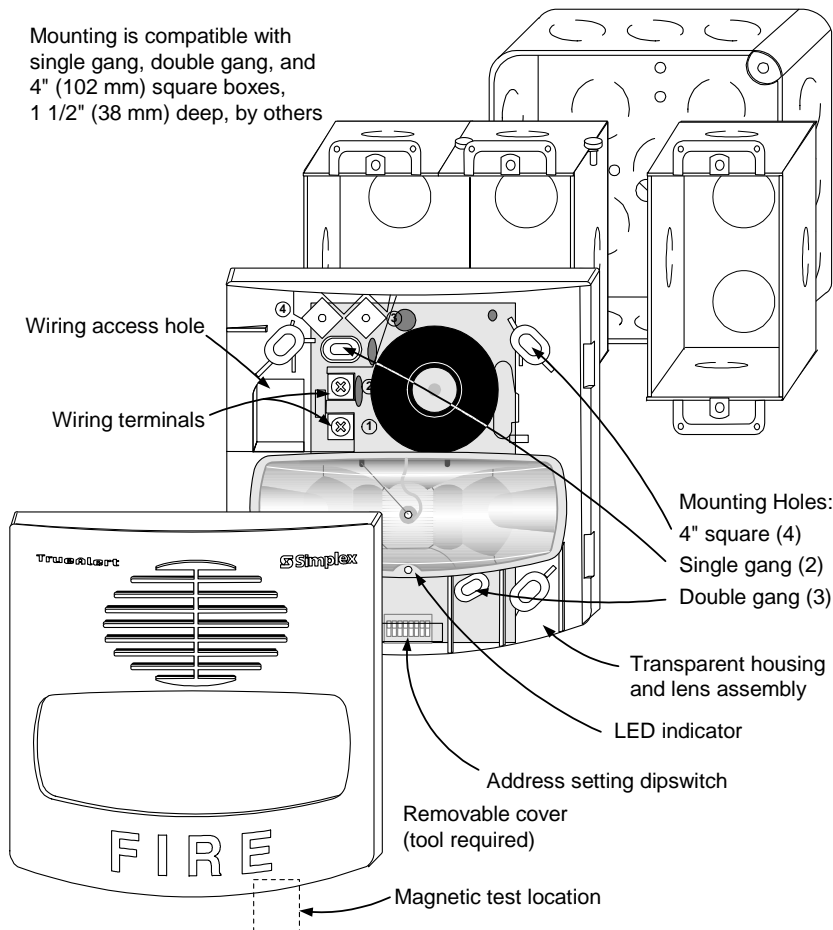
Test Features. The TrueAlert Addressable Controller can be selected to pulse each appliance's LED when that appliance receives a supervision poll. When the TrueAlert Addressable Controller is selected for diagnostic mode, the TrueAlert addressable appliance magnetic test feature provides a response at the individual appliance being tested.

Silent Appliance Testing. In this test mode, in response to the magnetic test, the appliance LED pulses sequentially to conveniently indicate the appliance's address.

Operational Appliance Testing. The LED diagnostic test mode can be selected at the TrueAlert Addressable Controller such that after the address is indicated, the strobe will briefly flash and the horn will briefly sound to indicate proper operation.

Installation Reference

Mounting is compatible with single gang, double gang, and 4" (102 mm) square boxes, 1 1/2" (38 mm) deep, by others



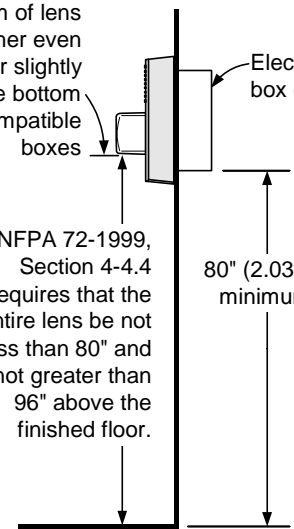
IMPORTANT ! INSTALLATION MOUNTING HEIGHT REFERENCE

Bottom of lens is either even with, or slightly above bottom of compatible boxes

Electrical box outline

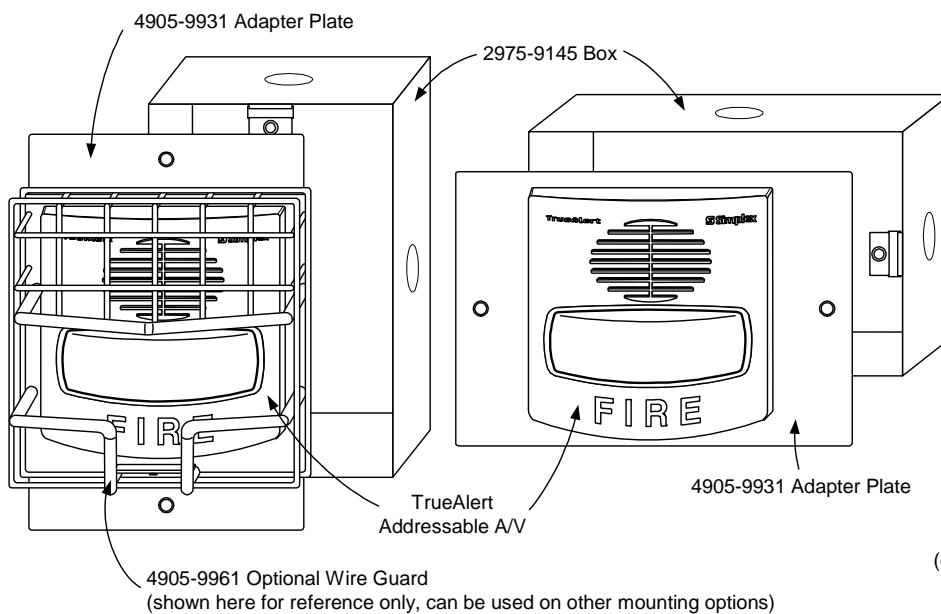
NFPA 72-1999, Section 4-4.4 requires that the entire lens be not less than 80" and not greater than 96" above the finished floor.

80" (2.03 m) minimum



Adapter Plate and Wire Guard Installation Reference

2975-9145 Box Mounting



Side View, Adapter Skirt and Wire Guard

(Surface mount conduit and box shown for reference)

4" square box profile, 1 1/2" (38 mm) deep

Optional 4905-9961 Wire Guard

TrueAlert Addressable A/V

Optional surface mount adapter skirt, 1 1/2" deep: 4905-9937, Red; 4905-9940, White (conduit knockouts are provided on all four sides)

TrueAlert Addressable Wiring Isolator

The **4905-9929 Isolator Module** is available for use on TrueAlert addressable circuits to isolate short circuited wiring from functioning wiring.

(Refer to data sheet S4905-0001 for further information about the TrueAlert addressable isolator module.)

Specifications

Electrical Specifications

Rated Voltage Range	17 VRMS to 31 VRMS, see notes below					
Supervisory Requirements	1 unit load					
Strobe Flash Rate	1 Hz					
Synchronized SLC Loading	Up to 43 TrueAlert addressable synchronized strobes maximum per SLC					
Operating Current, Strobe Flashing with Horn on "High" Setting, Nominal Average Values (See Note 2)		17 VRMS	18 VRMS	19 VRMS	20 VRMS	24 VRMS
	15 cd	86 mA	82 mA	79 mA	76 mA	74 mA
	75 cd	208 mA	193 mA	177 mA	167 mA	148 mA
	110 cd	256 mA	239 mA	223 mA	210 mA	180 mA

Horn Output Specifications

Sound Output Characteristics	2400 to 3700 Hz sweep, modulated at 120 Hz								
Horn Sound Output Ratings (dBA) @ 10 ft (3 m)									
UL 464 Reverberant Chamber Test Results (See Note 3)		17 VRMS				24 VRMS			
	Sound Type	Steady		Coded		Steady		Coded	
	Setting	High	Low	High	Low	High	Low	High	Low
	Output	84.6	79.1	80.6	75.5	86.3	81.5	82.4	77.2
Anechoic Chamber Test Results (see Note 3)		22 VRMS				24 VRMS			
	Sound Type	Steady		Coded		Steady		Coded	
	Setting	High	Low	High	Low	High	Low	High	Low
	Output	91	84	87	79	93	87	90	83

General Specifications

Housing Dimensions (including lens)	5 1/8" H x 5" W x 2 5/8" D (130 mm x 127 mm x 67 mm)
Temperature Range	32° to 122° F (0° to 50° C)
Humidity Range	10% to 93%, non-condensing at 100° F (38° C)
Connections	Terminal blocks for 18 to 12 AWG

NOTES:

- TrueAlert addressable appliances are required to be connected to a TrueAlert addressable channel where both power and communications are supplied. Refer to TrueAlert Addressable Controller data sheet S4009-0003 for additional information about wiring rules and distance limitations.
- 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 17 VRMS is the lowest operating voltage that is allowed at the last appliance on the TrueAlert signaling line circuit under worst case conditions. Voltage drops and standby battery calculations should be made using anticipated operating conditions. "Low" horn setting draws approximately 5 mA less current at each voltage listed.
- Coded horn values are typical of the output measured with a Temporal or March Time pattern 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.

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