⚡ Simplex

True*Alert*® Addressable Notification Appliances

Features

Individually addressable, low power electronic horn 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)
- Harmonically rich output sound suitable for either coded or steady operation
- Magnetic test diagnostics to assist checkout and testing of appliances and wiring
- Sound level that can be chosen at the controller to be activated as a "high" output or a "low" output (~5 dBA difference)
- Rugged, high impact, flame retardant thermoplastic housing available in red or white (covers are available separately to convert color)

UL listed to Standard 464

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 sound the horn to confirm operation

TrueAlert two-wire addressable control of audible (and visible notification) provides:

- Horns sounded as Temporal or March Time pattern, or continuous, controlled separately from visible appliances on the same two-wire circuit
- Addressable March Time rates are 60 or 120 beats per minute
- Visible appliances connected to the same circuit operated at a synchronized 1 Hz flash rate

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 square outlet 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 7135-0026:238 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. 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 Safety Products Westminster.

TrueAlert Addressable Horns are Available in Red with White Lettering and White with Red Lettering

Description

TrueAlert addressable horns are individually addressed audible notification appliances that receive power, supervision, and control signals from a TrueAlert addressable Signaling Line Circuit (SLC) channel. When activated, they produce an audible output that is a loud and penetrating, harmonically rich sound.

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

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 notification is protected under U.S. Patent Nos. 6,313,744; 6,426,697; and 6,693,532.

TrueAlert Addressable Advantage *(Continued)*

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 (described below) also can provide improved installation efficiency.

TrueAlert Addressable Control

Compatible controllers include the following:

- **4100U Series TrueAlert Power Supply** (refer to data sheet S4100-0031 for additional information)

- **TrueAlert Addressable Controller**, an intelligent interface panel that connects between the host fire alarm control panel and the TrueAlert addressable notification appliances (refer to data sheet S4009-0003 for additional information.)

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 horn will briefly sound to indicate proper operation.

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.)

Product Selection

TrueAlert Addressable Electronic Horns

Model	Description		Dimensions
4901-9850	TrueAlert Addressable Electronic Horn	Red with white "FIRE" lettering	5-1/8" H x 5" W x 1-1/2" D (130 mm x 127 mm x 38 mm)
4901-9853		White with red "FIRE" lettering	

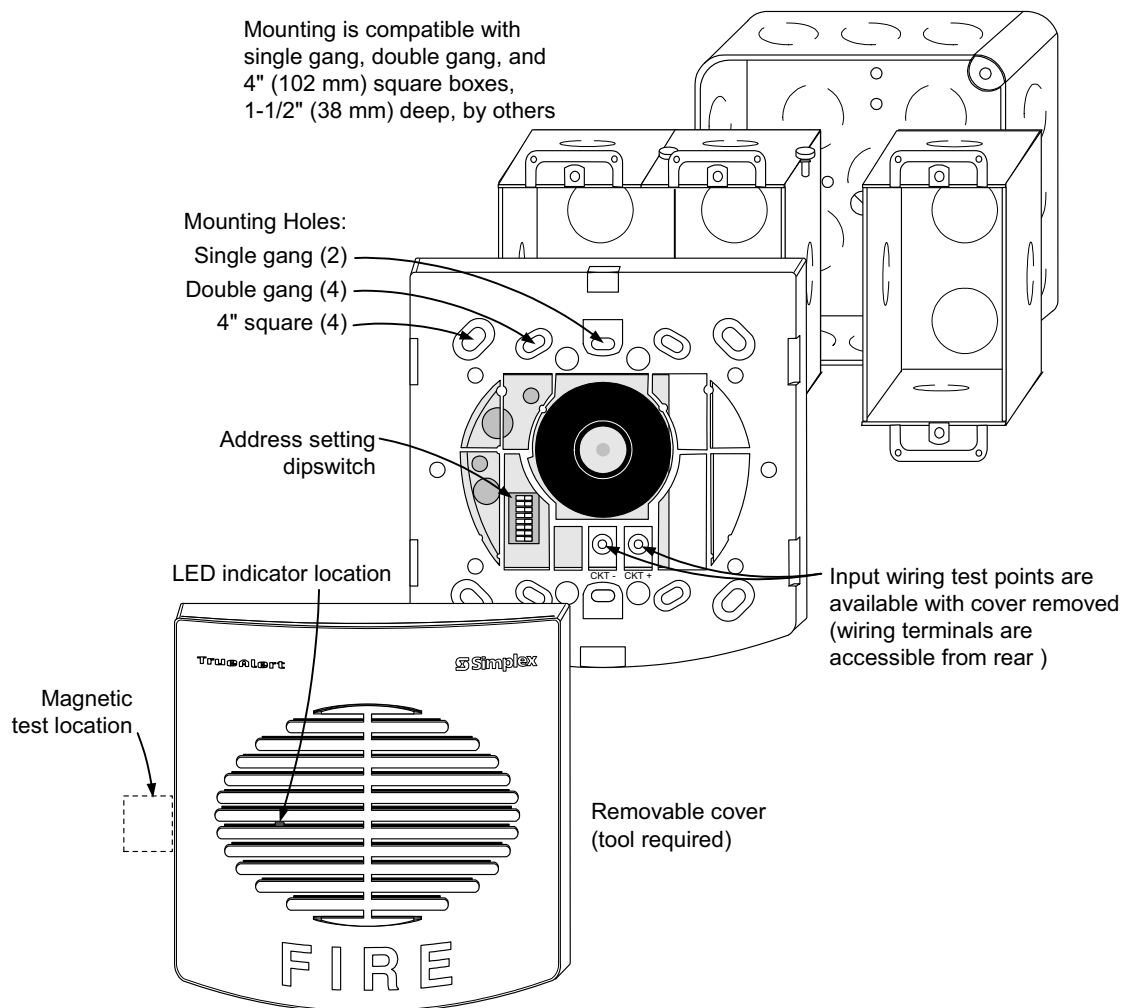### Mounting Adapters

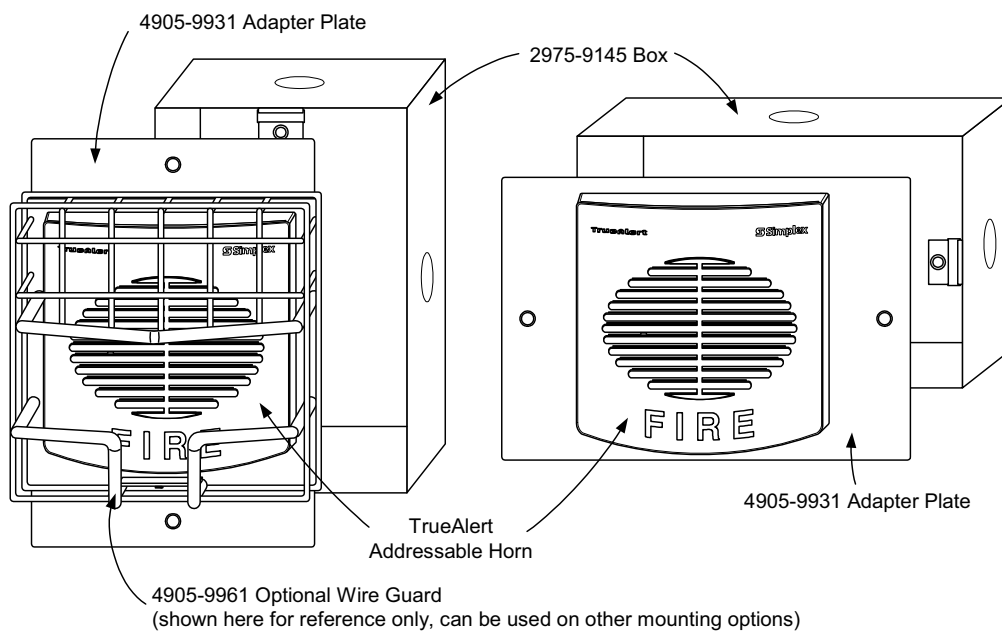| Model	Description		Dimensions
4905-9937	Red Surface Mount Adapter Skirt	Use to cover 1-1/2" deep surface mounted boxes	5-3/8" H x 5-1/4" W x 1-5/8" D (136 mm x 133 mm x 41 mm) Total depth with horn = 3-1/8" (79 mm)
4905-9940	White Surface Mount Adapter Skirt		
4905-9931	Adapter Plate, red, for mounting 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
4905-9988	Red horn 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)
4905-9989	White horn cover with red "FIRE" lettering		
4905-9961	Red Wire guard with mounting plate, 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 listed by Space Age Electronics Inc.

S4901-0012-3 6/2005

Installation Reference

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

Mounting Holes:

Single gang (2)

Double gang (4)

4" square (4)

Address setting dipswitch

LED indicator location

Magnetic test location

CKT -   CKT +

Input wiring test points are available with cover removed (wiring terminals are accessible from rear)

Removable cover (tool required)

Truealert   Simplex

FIRE

Adapter Plate Installation Reference

4905-9931 Adapter Plate

2975-9145 Box

TrueAlert Addressable Horn

4905-9961 Optional Wire Guard (shown here for reference only, can be used on other mounting options)

4905-9931 Adapter Plate

FIRE

Specifications

Electrical Ratings

Rated Voltage Range	17 VRMS to 31 VRMS, see notes below
Supervisory Requirements	1 unit load

Current Ratings, Horn Activated		17 VRMS		24 VRMS		31 VRMS	
	Setting	**High**	**Low**	**High**	**Low**	**High**	**Low**
	Current	19 mA	14 mA	27 mA	22 mA	37 mA	29 mA

Sound Output Ratings (dBA) @ 10 ft (3 m)

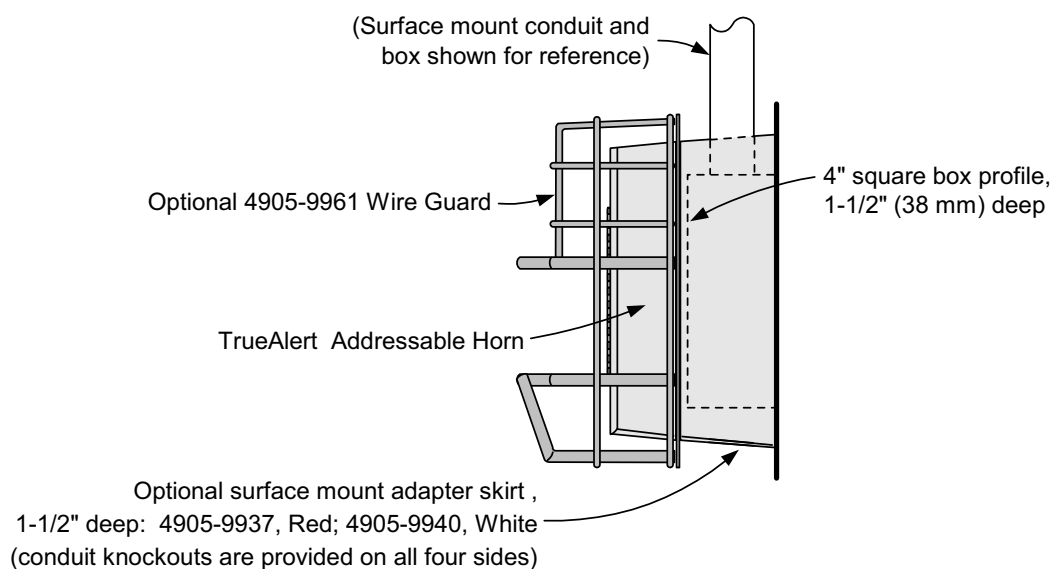|	17 VRMS				24 VRMS				31 VRMS			
Sound Type (see Note 3)	**Steady**		**Coded**		**Steady**		**Coded**		**Steady**		**Coded**	
Setting	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
Reverberant Chamber, UL 464 Test	84.6	79.1	80.6	75.5	86.3	81.5	82.4	77.2	88.4	84.3	84.5	79.2
Anechoic Chamber (see Note 3)	90	84	86	80	93	87	89	83	94	90	90	86

General Specifications

Sound Output Characteristics	2400 to 3700 Hz sweep, modulated at 120 Hz rate
Temperature Range	32° to 122° F (0° to 50° C)
Humidity Range	10% to 93%, non-condensing @ 100° F (38° C)
Connections	Terminal blocks for 18 AWG to 12 AWG (0.82 mm^2 to 3.31 mm^2); two wires per terminal for in/out wiring

NOTES:

1. 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.

2. The rated voltage range listed is the absolute operating range. Operation outside of this range may cause permanent damage to the horn. 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.

3. Coded values are typical of the output measured with a Temporal or a 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. Anechoic horn output ratings are typically more representative of actual installed sound output.

Side View, Horn with Surface Mount Adapter Skirt

(Surface mount conduit and box shown for reference)

Optional 4905-9961 Wire Guard

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

TrueAlert Addressable Horn

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