

### Features

#### Individually addressed and controlled low power TrueAlert ES CHV (audible only) electronic chime-strobes:

- Advanced addressable notification controlled by IDNAC SLCs providing regulated 29 VDC allowing strobes on the same SLC to operate with lower current even under battery backup
- Wiring supervision to each appliance allows "T-tapped" connections for Class B circuits to simplify wiring; Class A circuits require in/out wiring
- Self-Test Mode facilitates an on-board sensor to detect the chime-strobe output and then report its status to the control panel
- You can control chimes separately from visible appliances on the same SLC with control panel selection of operation as: Temporal Code 3, March Time (selectable as 20 bpm, 60 bpm, or 120 bpm), Continuous, or Temporal Code 4
- Output of "high" or "low" (~6 dBA difference) selectable at the appliance or from the controller with FACU mode selected at the appliance
- Unobtrusive Magnet Test diagnostics are available to assist checkout and testing of appliances and wiring
- Electrical test point access without removing cover
- Listed to UL Standard 464, UL Standard 1638, and ULC Standard S525

#### LED Indicator and Magnet Test feature:

- Appliance LED can be selected to display each polling cycle to indicate appliance supervision
- When the controller is in diagnostic mode, the Magnet Test pulses the LED to indicate appliance address and is selectable to also briefly sound the chime to confirm operation

#### Mechanical design features include:

- Rugged, high impact, flame retardant thermoplastic housing in red with white letters or white with red letters available with a variety of lettering
- Separate covers are available to change application type on-site or for replacement; covers can be easily removed without disturbing the connected housing and avoiding trouble conditions
- A separate mounting plate allows wiring to be completed before appliance is mounted; use with single gang, double gang, or 4 in. square box, flush or surface mount
- In/out wiring terminals for 18 AWG to 12 AWG
- Optional mounting adapters are available to cover surface mounted electrical boxes and to adapt to Simplex 2975-9145 boxes
- Optional red wire guards, see [Product selection](#) for more information

### Description

#### TrueAlert ES addressable chime-strobes

TrueAlert ES addressable chime-strobes are individually addressed audible/visible notification appliances that receive power, supervision, and control signals from a Simplex fire alarm control unit providing IDNAC signaling line circuits (SLCs).

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 7135-0026:0334 for allowable values and/or conditions concerning material presented in this document. Additional listings may be applicable; contact your local Simplex product supplier for the latest status.



Figure 1: TrueAlert ES Addressable Chime-Strobe covers are available in red and white with a variety of lettering for applications

### TrueAlert ES operation advantage

TrueAlert ES addressable appliances on IDNAC SLCs provide separate audible and 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.

#### Reduced current facilitates efficient IDNAC SLC operation

With IDNAC SLCs, a constant 29 VDC source voltage is maintained, even during battery standby, allowing strobes on the same SLC 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 two to three times farther than with conventional notification, or support for more appliances for each 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 using Class B wiring, "T" tapped wiring is possible, allowing more savings in distance, wire, conduit size and utilization, and overall installation efficiency. Use of Self-Test and Magnet Test features improves installation efficiency. TrueAlert device reports conveniently identify information about each connected appliance.

## TrueAlert ES diagnostics

### Test features

When IDNAC SLCs are in diagnostic mode, Self-Test and Magnet Test features provide individual appliance testing. With the Self-Test feature, you can confirm appliance operation without leaving the control unit. Additionally, you can select each appliance's LED to pulse when it receives a supervision poll during normal operation.

### Self-Test details

Selecting Self-Test Mode from the control unit allows on-board sensors, depending on the device type, to detect its own strobe and chime output and then report their status to the control unit. Operation is by selected VNAC appliance groups and is either automatic, all briefly simultaneously activated, or individually activated by applying a magnet. Refer to control unit data sheet for more Self-Test information.

### Silent Appliance Magnet Test

In this test mode, in response to application of a magnet, the appliance LED pulses sequentially to conveniently indicate the appliance's address.

### Operational Appliance Magnet Test

In this test mode, after the address is indicated by pulsing the appliance LED, the chime will briefly sound 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 ES appliances to its ability to test IDCs, NACs, and IDNet communications before connection to the control unit. Please contact your local Simplex representative for additional information.

## 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. See data sheet [S4905-0001](#).

## Product selection

**Table 1: TrueAlert ES addressable electronic chime-strobes**

SKU	Description
49CHV-APPLW	Chime-strobe appliance only. Select cover and mounting plate separately.

**Table 2: Separate mounting plate, required when ordering SKU 49CHV-APPLW**

SKU	Color	Description
49MP-AVOWR	Red	Mounting plate, select color to match cover
49MP-AVOWW	White	

**Table 3: Separate covers, required when ordering SKU 49CHV-APPLW(-BA)**

SKU*	Color	Wording
49AVC-WRFIRE	Red	FIRE
49AVC-WWFIRE	White	
49AVC-WRFEU	Red	FEU
49AVC-WWFEU	White	
49AVC-WRBLNG	Red	FEU/FIRE
49AVC-WRS	Red	
49AVC-WWS	White	Simplex logo only
49AVC-RBLANK	Red	
49AVC-WBLANK	White	Blank

**Table 4: Mounting Adapters and Wire Guard**

SKU	Color	Description	Dimensions
4905-9937	Red	Surface Mount Adapter Skirt	5 3/8 in. x 5 1/4 in. x 1 5/8 in.
4905-9940	White		136 mm x 133 mm x 41 mm
			Total depth with chime = 3 1/8 in. (79 mm)
4905-9931	Red Adapter Plate for mounting to Simplex 2975-9145 Box (typically for retrofit, mount vertical or horizontal)		8 5/16 in. x 5 3/4 in. x 0.060 in.
			211 mm x 146 mm x 1.5 mm
2975-9145	Red Mounting Box, requires 4905-9931 Adapter Plate		7 7/8 in. x 5 1/8 in. x 2 3/4 in.
			200 mm x 130 mm x 70 mm
4905-9961	Red wire guard with mounting plate, compatible with semiflush or surface mount boxes		6 1/16 in. x 6 1/16 in. x 3 1/8 in.
			154 mm x 154 mm x 79 mm

**TrueAlert ES Chime specifications**
**Table 5: Appliance general specifications**

Specification	Rating
<b>Dimensions (H x W x D)</b>	5 1/8 in. x 5 in. x 1 1/2 in. (130 mm x 127 mm x 38 mm)
<b>Environmental</b>	32°F to 120°F (0°C to 49°C) 10% to 93%, non-condensing at 104°F (40°C)
<b>Connections</b>	Terminal blocks for 18 AWG to 12 AWG (0.82 mm <sup>2</sup> to 3.31 mm <sup>2</sup> ); two wires for each terminal for in/out wiring. Use Unshielded Twisted Pair (UTP) for IDNAC wiring.
<b>Installation instructions</b>	579-1265

**Table 6: Sound pressure level measurement (dBA)**

Reverberant room at 10 feet in accordance with UL464 See note 1	Voltage (VDC)	SPL rating
<b>High volume setting using Addressable Controller</b>	23	60 dBA
<b>See note 2</b>	30 max	61
<b>Low volume setting using Addressable Controller</b>	23	48
<b>See note 2</b>	30 max	51
Reference: Anechoic room at 10 feet (3 meters)		Output level
<b>High volume setting</b>	23	62
	30 max	63
<b>Low volume setting</b>	23	50
	30 max	52

**Note:**

1. Reverberant dBA measurements are a minimum UL rating based on sound power level measurements made in UL's reverberant test chamber.
2. High and low volume settings are configured with DIP Switch (CFIG1) on the Controller.

**Table 7: Directional characteristics for 49CHV chime**

Axis	Angle	dBA
<b>Horizontal</b>	50° left and right	-3dBA
	63° left and right	-6dBA
<b>Vertical</b>	20° above / 48° below	-3dBA
	65° above / 60° below	-6dBA

**Note:**

- The appliances are available in red and white. Do not paint or otherwise alter the factory finishes in any way.
- These appliances, with anechoic dBA levels below 85, do not meet ULC requirements for public notification.
- These appliances do not meet the requirements for Canadian Two-Stage Operation.

**Table 8: Maximum RMS operating current**

Candela selection†	Appliance type	UL1638/CSA No.205 clear/white	UL1638/CSA No.205 colored lens
		23V*	
15 cd	CHV	64 mA	71 mA
30 cd	CHV	76 mA	97 mA
75 cd	CHV	115 mA	145 mA
110 cd	CHV	150 mA	202 mA
135 cd	CHV	172 mA	225 mA
185 cd	CHV	225 mA	-NA-

\* For connection to IDNAC SLCs

† The use of optional colored lenses can affect the device's candela output. See *TrueAlert ES A/V and VO Colored Lens Kit installation instructions 579-1046* to find the candela output for each lens color.

**Table 9: Ratio of light output at various angles relative to labeled candela, at any candela setting (room temperature)**

Vertical dispersion			Horizontal dispersion		
Y-Plane angle	UL Req output	Typical output	X-Plane angle	UL req output	Typical output
0	100%	194%	0	100%	194%
5	90%	192%	±5	90%	203%
10	90%	132%	±10	90%	168%
15	90%	129%	±15	90%	155%
20	90%	145%	±20	90%	166%
25	90%	150%	±25	90%	169%
30	90%	112%	±30	75%	164%
35	65%	124%	±35	75%	151%
40	46%	114%	±40	75%	145%
45	34%	90%	±45	75%	121%
50	27%	91%	±50	55%	97%
55	22%	78%	±55	45%	83%
60	18%	72%	±60	40%	79%
65	16%	68%	±65	35%	70%
70	15%	75%	±70	35%	59%
75	13%	74%	±75	30%	50%
80	12%	68%	±80	30%	51%
85	12%	63%	±85	25%	45%
90	12%	45%	±90	25%	41%

## IDNAC SLC controller compatibility reference

**Table 10: 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			

**Installation reference**

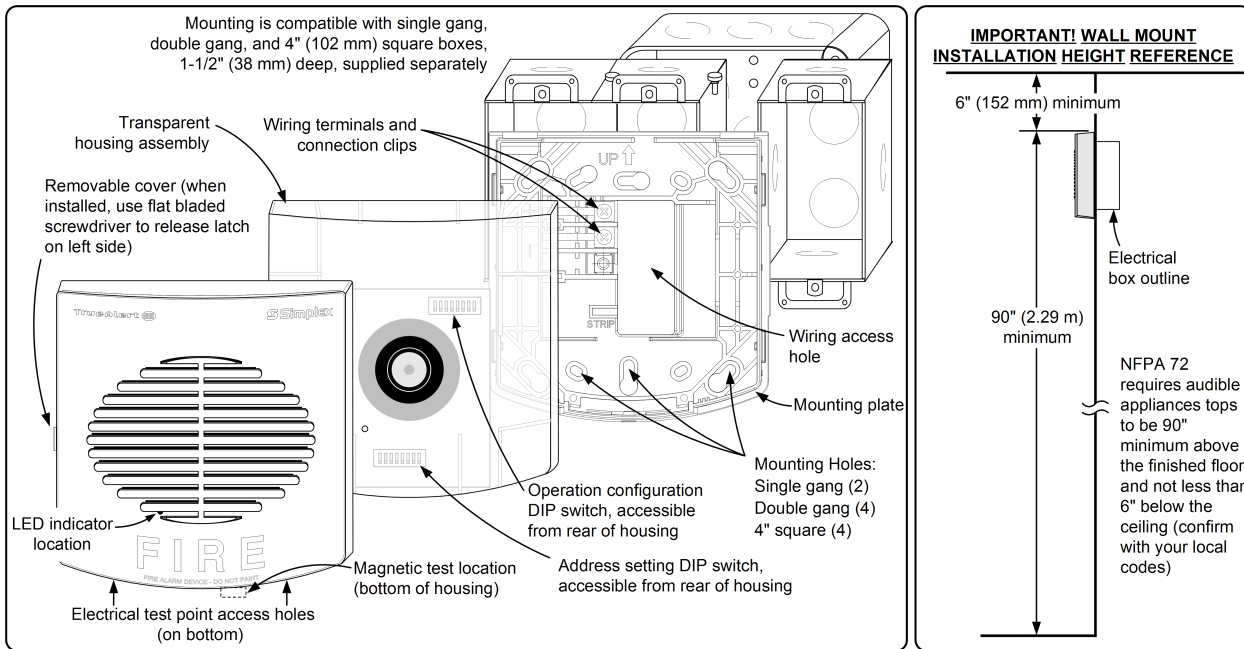


Figure 2: 49CHV install reference

**Adapter plate and surface mount installation reference**

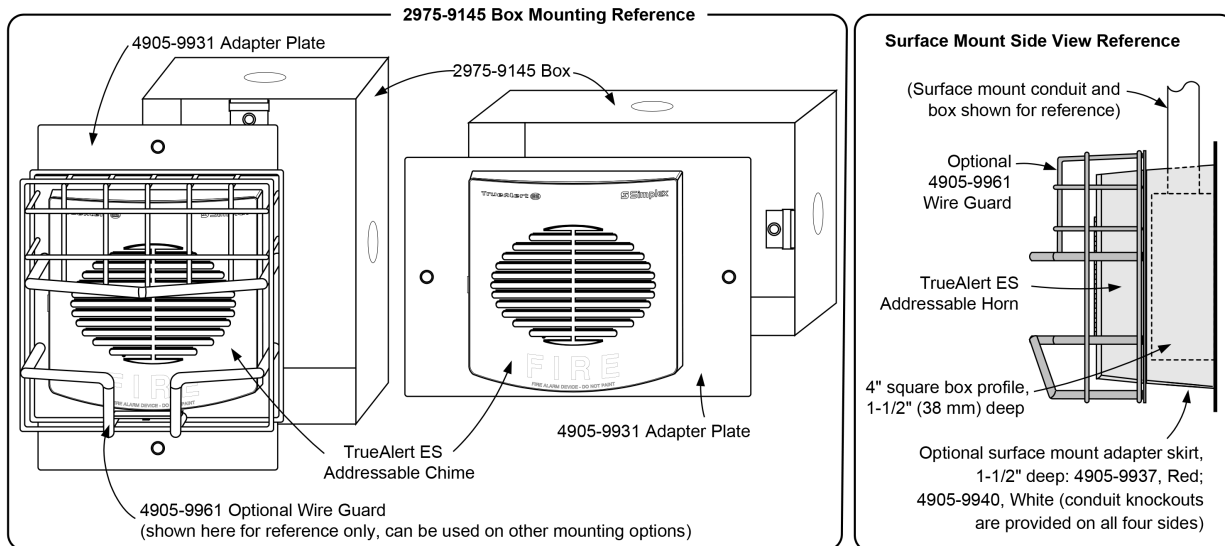


Figure 3: Adapter plate and surface mount installation reference

