

UL, ULC, CSFM Listed; FM Approved*

TrueAlert Addressable Notification Appliances

Audible Notification Appliances, Electronic Chimes, Model Series 49CHO

Features

Individually addressed and controlled low power TrueAlert ES CHO (audible only) chimes:

- 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 facilitates "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 output and then report its status to the control unit
- Chimes are controlled 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 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 chimes

TrueAlert ES addressable chimes are individually addressed audible notification appliances that receive power, supervision, and control signals from a Simplex fire alarm control panel 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 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 allows 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 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 Self-Test and Magnet Test features improves installation efficiency. TrueAlert device reports conveniently identify information about each connected appliance.

^{*} Additional listings may be applicable; contact your local Simplex product supplier for the latest status.



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, appliance operation can be confirmed 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/or 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, see TrueAlert ES Chime LEGACY Compatibility Reference for more 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 panel. 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 **\$4905-0001**.

Product selection

Table 1: TrueAlert ES Addressable Electronic Chimes

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

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

SKU	Color	Description	
49MP-AVVOWR	Red	Mounting plate, select color to match cover	
49MP-AVVOWW	White	would find plate, select color to match cover	

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

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

Table 4: Mounting adapters and wire guard

SKU	Color	Description	Dimensions (H x W x D)	
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 vert	retrofit, mount vertical or horizontal)		
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		n mounting plate, compatible with semiflush or sur	face 6 1/16 in. x 6 1/16 in. x 3 1/8 in.	
	mount boxes		154 mm x 154 mm x 79 mm	

Page 2 S49CHO-0001 Rev. 3 6/2021



TrueAlert ES Chime specifications

Table 5: Appliance general specifications

Specification	Rating		
Dimensions (H x W x D)	5 1/8 in. x 5 in. x 1 1/2 in. (130 mm x 127 mm x 38 mm)		
Environmental	32°F to 120°F (0°C to 49°C)		
	10% to 93%, non-condensing at 104°F (40°C)		
Connections	Terminal blocks for 18 AWG to 12 AWG (0.82 mm² to 3.31 mm²); two wires for each terminal for in/out wiring. Use Unshielded Twisted Pair (UTP) for IDNAC wiring.		
Installation instructions	579-1265		
	49CHO-APPLW is suitable for ceiling-mounting. See installation instructions for details.		
CHO rated current over the voltage range:	19 mA		

Table 6: Sound pressure level measurement (dBA)

Reverberant room at 10 feet in accordance with UL464	Voltage (VDC)	SPL rating
See ote 1		
High volume setting using Addressable Controller	23	60 dBA
See note 2	30 max	61
Low volume setting using Addressable Controller	23	48
See note 2	30 max	51
Reference: Anechoic room at 10 feet (3 meters)	Output level	
High volume setting	23	62
	30 max	63
Low volume setting	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 49CHO chime-strobe

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

Note:

- \cdot 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.
- \cdot These appliances do not meet the requirements for Canadian Two-Stage Operation.

Page 3 S49CHO-0001 Rev. 3 6/2021



IDNAC SLC controller compatibility reference

Table 8: 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			
4009 IDNAC Repeater	S4009-0004	-IDNAC SLC	129 VDC, regulated	23 VDC,
4007ES with IDNAC Notification	S4007-0002	-IDIVAC SEC		with 6 VDC drop
4010ES with ESS Enhanced System Supply	S4010-0011			

Installation reference

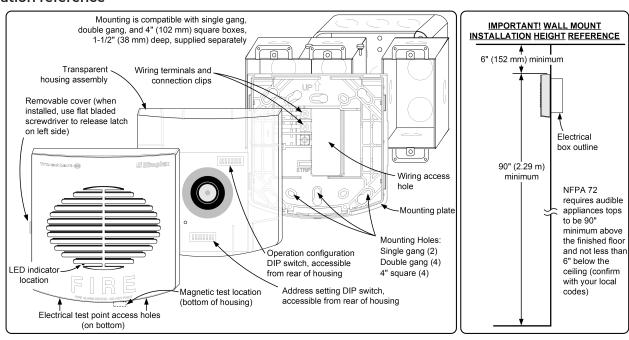


Figure 2: 49CHO install reference

Adapter plate and surface mount installation reference

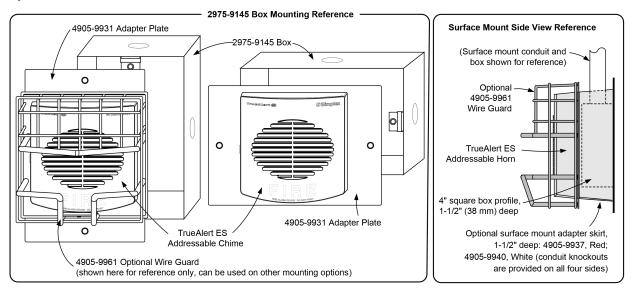


Figure 3: Adapter plate and surface mount installation reference

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