

Features

Simplex® 24 VDC multi-tone horns provide:

- Per appliance tone selection of: 520 Hz Horn, Broadband Horn, Bell, Chime, High/Low, Slow Whoop, or Siren; selected using an on-board DIP Switch (refer to sound output details on page 4)
- 520Hz tone is compliant with NFPA 72 Low Frequency Signal Requirements for Sleeping Areas
- For wall *or ceiling* mount applications (blank covers are recommended for ceiling mount applications)
- Operation is selectable for SmartSync two-wire control or asynchronous, free-run operation
- Output level is selectable as high or low
- Diode polarized input for connection to reverse polarity, supervised Notification Appliance Circuits (NACs)
- Electrical test point access without removing cover

SmartSync two-wire control of audible and visible notification appliance provides:

- Control of Horn, Bell, and Chime tones as Temporal Pattern, March Time pattern, or on continuously; controlled separately from visible appliances on the same circuit
- Slow Whoop, Siren, and High/Low tone selections sound their tones continuously, synchronized to each other, when receiving Temporal Pattern, March Time, or continuous SmartSync commands
- SmartSync March Time pattern is selectable per appliance to produce 60 bpm or 20 bpm
- Visible appliances on the same SmartSync circuit operate at a synchronized 1 Hz flash rate
- Refer to page 2 for SmartSync control list and additional operation information

Mechanical design features include:

- Rugged, high impact, flame retardant thermoplastic housing in red with white letters or white with red letters available with FIRE, FEU, FEU/FIRE or blank 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-inch 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

Listing reference:

- UL listed to Standard 464
- ULC listed to Standard S525



TrueAlert Multi-Tone Horns are Available as White with Red Lettering or Red with White Lettering

Description

TrueAlert non-addressable multi-tone horns

provide a flexible selection of output tones for fire alarm audible notification. Tone selection and output level is set per appliance, allowing notification needs to be tailored to specific area requirements. (Refer to tone output details on page 4.)

Local Tone Selection. DIP Switch selection determines the local tone choice. A separate DIP Switch position allows selection of a standard or a high output sound level, selectable appropriate to the location. (See page 4 for sound output ratings.)

Canadian two-stage alarm applications. A DIP Switch selection per appliance allows the SmartSync March Time pattern input to be produced as 60 bpm or 20 bpm. The 20 bpm rate is typically required for Canadian two-stage alarm applications as the pre-signal, followed by the Temporal Pattern. Two-stage alarm operation requires a 4010, 4010ES, 4100ES, or 4100U as the control panel.

Flexible mounting. Multi-tone horns can be semi-flush or surface mounted on a standard single gang, double gang, or 4" square (102 mm) electrical box. Optional accessories are available to increase mounting and application flexibility.

* This product was not listed by CSFM or approved by FM as of document revision date. 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.

SmartSync Two-Wire Control

SmartSync operation mode allows a two-wire circuit to provide the ability to activate both the horn and strobe on the same NAC and then allow the horn to be silenced while the strobe remains flashing. The horn operates as “on-until-silenced” while the strobe operation is “on-until-reset.”

SmartSync Control Sources

SmartSync two-wire control is available from:

- 4006, 4008, 4010, 4010ES, and 4100ES/4100U Fire Alarm Control Panels (refer to individual product data sheets for more information)
- 4009 IDNet NAC Extenders (refer to data sheet S4009-0002)
- SmartSync Control Module (SCM) Model 4905-9938 (refer to data sheet S4905-0003)

Product Selection

Multi-Tone Horns

Model*	Cover Color	Wording	Description	Dimensions with Cover
49CMT-WRF(-BA)	Red	FIRE	Multi-Tone horn for SmartSync or Free-run control; includes cover and matching mounting plate	5 1/8" H x 5" W x 1 1/2" D (130 mm x 127 mm x 38 mm)
49CMT-WWF(-BA)	White			
49CMT-APPLW	Select cover and mounting plate separately			

Separate Mounting Plate (Required when ordering model 49CMT-APPLW)

Model*	Color	Description
49CMP-MTWR	Red	Mounting plate, select color to match cover
49CMP-MTWW	White	

Separate Covers (Required when ordering model 49CMT-APPLW)

Model*	Color	Wording	Model*	Color	Wording
49CMT-C-WRFIRE	Red	FIRE	49CMT-C-WRS	Red	Logos Only
49CMT-C-WWFIRE	White		49CMT-C-WWS	White	
49CMT-C-WRFEU	Red	FEU	49AOC-RBLANK	Red	Blank
49CMT-C-WWFEU	White		49AOC-WBLANK	White	
49CMT-C-WRBLNG	Red	FEU/FIRE			
49CMT-C-WWBLNG	White				

* **Note:** (-BA) indicates model is available either with or without the -BA suffix. Model numbers ending in -BA, APPLW models, and separate mounting plates are assembled in the USA.

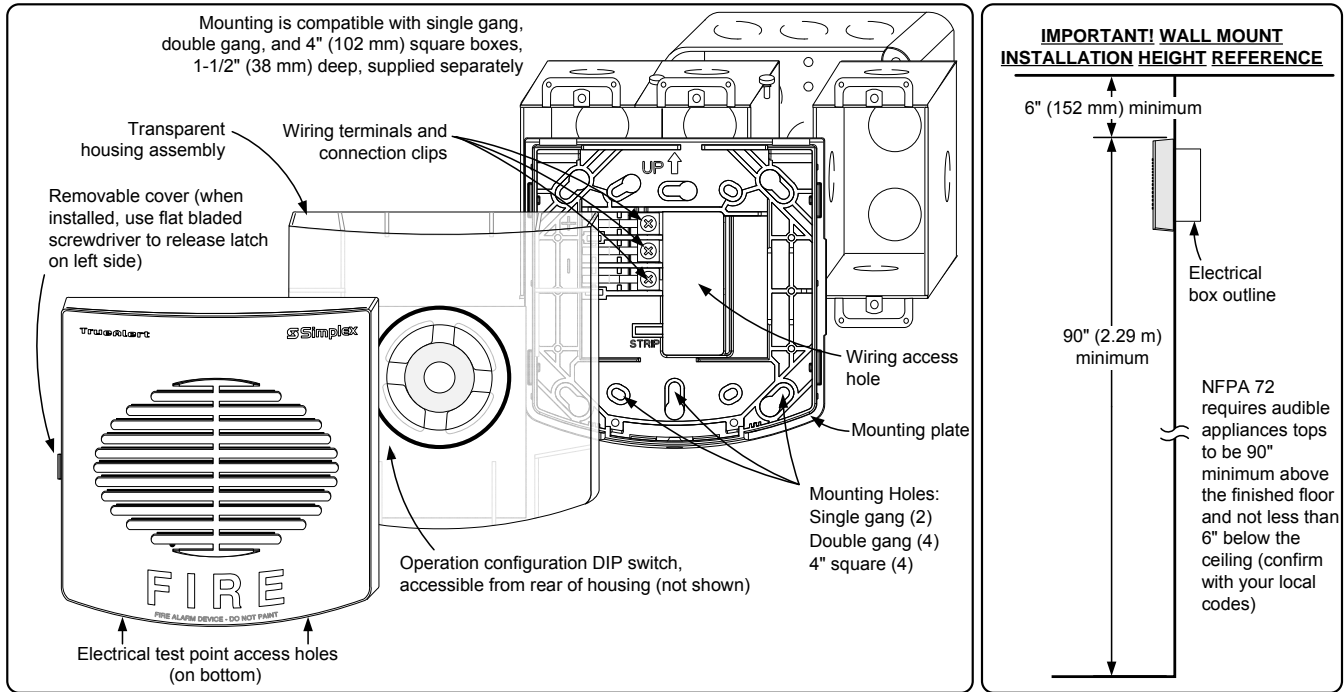
Mounting Adapters

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 Adapter Plate 4905-9931	7 1/8" x 5 1/8" x 2 3/4" D (200 mm x 130 mm x 70 mm)

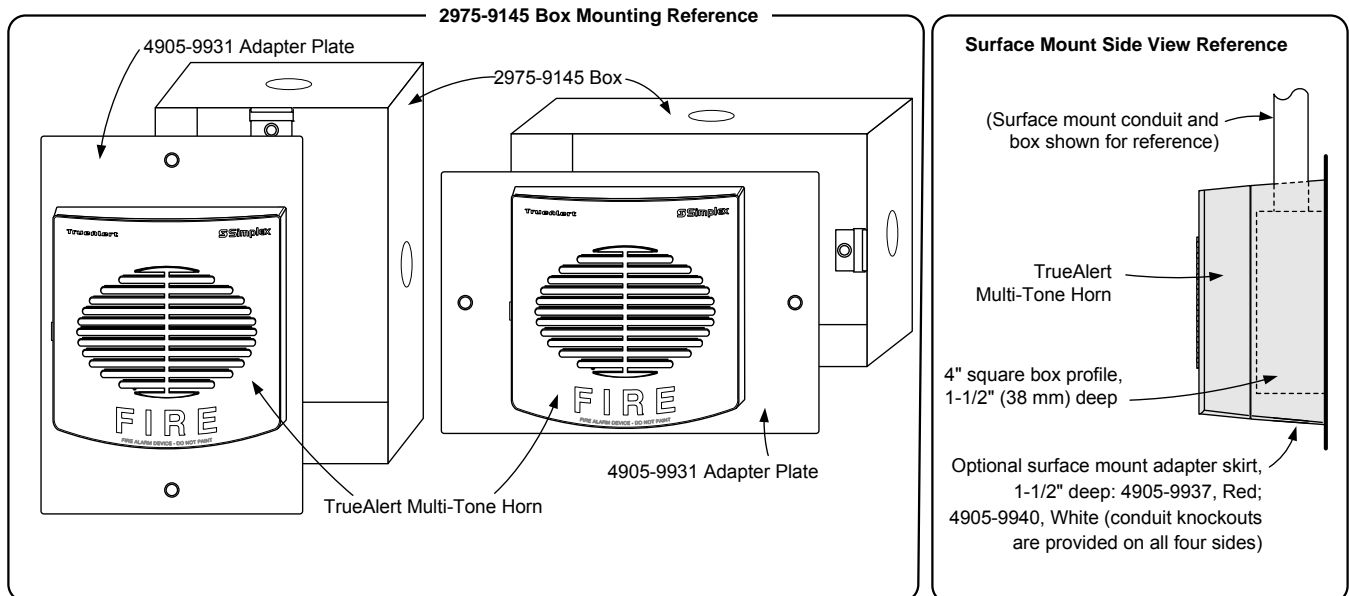
Synchronization Control Module

Model	Description	Dimensions
4905-9938	SmartSync Control Module, Class A or Class B, installs in 4" square box; for use with control panels not providing SmartSync control	4" x 4 1/8" x 1 1/4" D (102 mm x 105 mm x 32 mm)

Installation Reference



4905-9931 Adapter Plate Installation Information



Multi-Tone Horn Specifications

Rated Voltage Range	16 VDC to 33 VDC, Special Application
NAC Loading and Wiring Reference	Maximum of 16 active appliances per NAC Maximum of 16 Ω between appliances
Temperature Range	32° to 122° F (0° to 50° C)
Humidity Range	10% to 93%, non-condensing @ 104° F (40° C)
Connections	Terminal blocks on mounting plate for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²); two wires per terminal for in/out wiring
Installation Instructions	579-1157 for 49CMT Series Horn 579-1159 for 49CMP Mounting Plates

Tone Characteristics

520 Hz Horn	520 Hz tone	Tones compatible with control panel SmartSync commands for operation as Temporal Code 3, March Time (selected at appliance for 20 or 60 bpm), or Continuous operation
Broadband Horn	Combination 600/3000 Hz signal	
Bell	Synthesized Bell tone	
Chime*	Multi-phase signal with a peak and decay time of 1 s	
Slow Whoop	Modulated 520 Hz to 1200 Hz sweep with 2 s duration	Tones that operate as Continuous with synchronization with control panel SmartSync commands
Siren	Modulated 600 Hz to 1200 Hz to 600 Hz sweep, with 2 s duration	
High/Low	Alternating modulated tones with fundamentals of 1000 Hz and 800 Hz, 250 ms duration each	

TrueAlert Multi-Tone Horn Output and Current Ratings

Tone	Voltage	UL 464 Output Ratings @ 16 VDC and 33 VDC (dBA)**								ULC S525 Output Ratings @ 16 VDC and 33 VDC (dBA)**								Current Ratings @ 16 VDC	
		Steady High		Steady Low		Coded High		Coded Low		Steady High		Steady Low		Coded High		Coded Low		High	Low
		16	33	16	33	16	33	16	33	16	33	16	33	16	33	16	33		
520 Hz Horn		80	80	74 [†]	75	76	76	70 [†]	71 [†]	83 [†]	79 [†]	83 [†]	78 [†]	139 mA	70 mA				
High/Low		81	82	77	77	75	76	70 [†]	71 [†]	87	82 [†]	86	82 [†]						
Broadband Horn		84	84	79	79	81	81	74 [†]	75	88	84 [†]	87	83 [†]	120 mA	62 mA				
Bell		80	80	75	75	76	76	71 [†]	71 [†]	85	80 [†]	85	80 [†]						
Slow Whoop		79	80	74 [†]	75	these tones are not used for coded operation				85	80 [†]	these tones are not used for coded operation							
Siren		79	80	74 [†]	75					85	80 [†]								
Chime*		67 [†]	67 [†]	62 [†]	62 [†]					82 [†]	77 [†]								

* Chime tone is for Private Mode use only.

** Ratings are at 10 ft (3 m); UL 464 ratings are per UL Reverberant Chamber testing; ULC S525 ratings are per ULC Anechoic Chamber testing. The tone generator circuit is DC-DC converter powered and provides essentially constant output over the rated voltage range.

[†] UL ratings below 75 dBA and ULC ratings below 85 dBA do not meet requirements for Public Notification.

Sound Output Dispersion per ULC S541 Anechoic Testing	Horizontal from Center	-3 dBA @ $\pm 37^\circ$	-6 dBA @ $\pm 40^\circ$	-9.4 dBA @ $\pm 90^\circ$
	Vertical from Center	-3 dBA @ $-24^\circ, +42^\circ$	-6 dBA @ $-59^\circ, +50^\circ$	-8.6 dBA @ $\pm 90^\circ$

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