

UL, ULC, CSFM Listed; FM Approved\* Multi-Tone Horns; SmartSync Controlled or Free-run; with 520 Hz output, Non-Addressable

## **Features**



Figure 1: TrueAlert Multi-Tone Horns are Available in White with Red Lettering or Red with White Lettering

## TrueAlert 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 onboard DIP Switch (refer to sound output details on Multi-Tone Horn Specifications for details)
- 520 Hz tone is compliant with NFPA 72 Low Frequency Signal Requirements for Sleeping Areas
- Listed for wall or ceiling mount applications (blank covers are recommended for ceiling mount applications)
- Operation is selectable for SmartSync two-wire control or 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 High/Low tones as Temporal Pattern, March Time pattern, or on continuously, controlled separately from visible appliances on the same circuit
- Control of Slow Whoop, Siren, and Chime tones as synchronized continuous signals when receiving SmartSync continuous commands
- Visible appliances on the same SmartSync circuit operate at a synchronized 1 Hz flash rate
- Refer to SmartSync Two-Wire Control 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 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 2975-9145 boxes

**TrueAlert Notification Appliances** 

## Listing reference:

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

## 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 for each appliance, allowing notification needs to be tailored to specific area requirements (Refer to Multi-Tone Horn Specifications for details).

#### **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 Multi-Tone Horn Specifications for sound output ratings.

#### Flexible mounting

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

## **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:

4007ES Hybrid, 4010ES, 4100ES, 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)

<sup>\*</sup> 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 7135-0026:0379 for allowable values and/or conditions concerning material presented in this document. Additional listings may be applicable; contact your local product supplier for the latest status.



## **Product Selection**

#### Table 1: Multi-tone horns

Model	Cover Color	Wording	Description	Dimensions with Cover			
49CMT-WRF	Red		MARIE I G G G G				
49CMT-WRF-BA	Reu	FIRE	Multi-Tone horn for SmartSync or Free-run control; includes cover and matching mounting plate	5 1/8 in. H x 5 in. W x 1 1/2 in. D			
49CMT-WWF	White			(130 mm x 127 mm x 38 mm)			
49CMT-WWF-BA	vville		piace				
49CMT-APPLW							
49CMT-APPLW-BA	Select cover and mounting plate separately						
Note: Model numbers endi	ote: Model numbers ending in -BA, APPLW models, and separate mounting plates are assembled in the USA.						

## Table 2: Separate mounting plate (required when ordering model 49CMT-APPLW or 49CMT-APPLW-BA)

SKU	Color	Description
49CMP-MTWR	Red	Mounting plate, select color to match cover
49CMP-MTWW	White	infounting place, select color to match cover

## Table 3: Separate covers (required when ordering model 49CMT-APPLW or 49CMT-APPLW-BA)

SKU	Color	Wording	SKU	Color	Wording	
49CMTC-WRFIRE	Red	FIRE	49CMTC-WRS	Red	Logos Only	
49CMTC-WWFIRE	White	ITINL	49CMTC-WWS	White	Logos Offiy	
49CMTC-WRFEU	Red	FEU	49AOC-RBLANK	Red	-Blank	
49CMTC-WWFEU	White	IFEU	49AOC-WBLANK	White	Dialik	
49CMTC-WRBLNG	Red	FEU/FIRE	_	_	_	_
49CMTC-WWBLNG	White	FEU/FIRE	_	_	_	_

## **Table 4: Mounting adapters**

SKU	Description	Dimensions
4905-9937	Surface mount red adapter skirt	5 3/8 in. H x 5 1/4 in. W x 1 5/8 in. D (136 mm x 133 mm x 41 mm)
	Use to cover 1 1/2 in. deep surface mounted boxes	Total depth with horn = 3 1/8 in. (79 mm)
4905-9940	Surface mount white adapter skirt	
	Use to cover 1 1/2 in. deep surface mounted boxes	
4905-9931	Adapter Plate, red, for mounting to Simplex 2975-9145 box (typically for retrofit, may be mounted vertical or horizontal)	8 5/16 in. H x 5 3/4 in. W x 0.060 in. D (211 mm x 146 mm x 1.5 mm)
2975-9145	Red mounting box, requires Adapter Plate 4905-9931	7 7/8 in. H x 5 1/8 in. W x 2 ¾ in. D (200 mm x 130 mm x 70 mm)

## Table 5: Synchronization control module

SKU	Description	Dimensions
	SmartSync Control Module, Class A or Class B, installs in 4 in. square box; for use with control panels not providing SmartSync control	4 in. H x 4 1/8 in. W x 1 1/4 in. D (102 mm x 105 mm x 32 mm)

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## Installation Reference

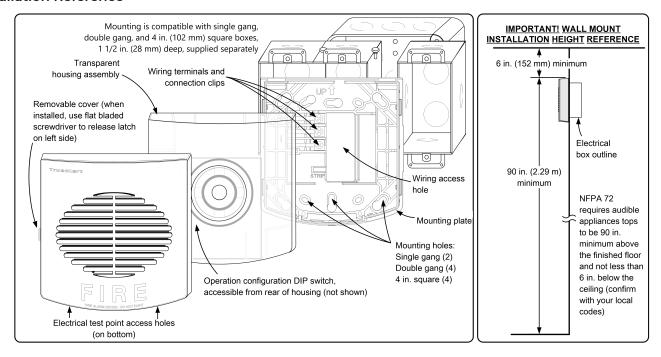


Figure 2: Installation Reference

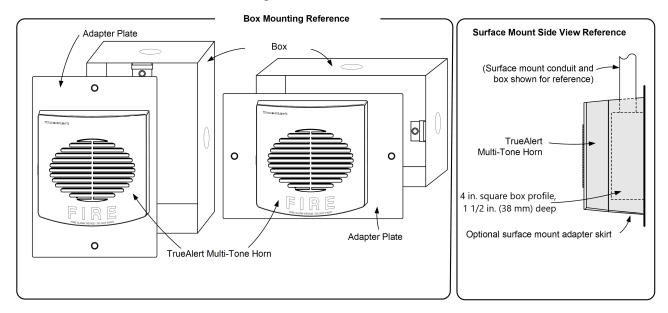


Figure 3: 4905-9931 Adapter Plate Installation Information

## Note: Figure 3 shows:

- 1. 4905-9931 Adapter Plate
- 2. 2975-9145 Box
- 3. Surface Mount Side View Reference shows optional surface mount adapter skirt, 1 ½ in. deep: 4905-9937, Red; 4905-9940, White (conduit knockouts are provided on all four sides)

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## **Multi-Tone Horn Specifications**

#### **Table 6: Electrical specifications**

Specification	Rating
Rated Voltage Range	16 VDC to 33 VDC, Special Application
NAC Loading	Maximum of 13 49CMT Series appliances for each NAC
Temperature Range	32°F to 122°F (0°C 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 <sup>2</sup> to 3.31 mm <sup>2</sup> ); two wires per terminal for in/out wiring

#### **Table 7: Installation Instructions**

Document	Description
Installation Instructions	579-1157 for 49CMT Series Horn
Installation instructions	579-1159 for 49CMP Mounting Plates

#### **Table 8: Tone Characteristics**

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

#### Table 9: TrueAlert Multi-Tone Horn Current Ratings @ 16 VDC

, C	Low
139 mA	70 mA
120 mA	62 mA

## TrueAlert Multi-Tone Horn Output Ratings

### Table 10: UL 464 Output Ratings @ 16 VDC and 33 VDC (dBA)\*

		Steady High		Steady Low		Coded I	Coded High		Coded Low	
Tone	Voltage	16	33	16	33	16	33	16	33	
520 Hz Horn		80	80	74**	75	76	76	70**	71**	
High/Low		81	82	77	77	75	76	70**	71**	
Broadband Horn		84	84	79	79	81	81	74**	75	
Bell		80	80	75	75	76	76	71**	71**	
Slow Whoop		79	80	74†	75	These to	nes are not u	sed for coded	operation	
Siren		79	80	74†	75					
Chime**		67**	67**	62**	62**					

## Table 11: ULC S525 Output Ratings @ 16 VDC and 33 VDC (dBA)\*

		Steady High		Steady	Steady Low		Coded High		Coded Low	
Tone	Voltage	16	33	16	33	16	33	16	33	
520 Hz Horr	<del>'</del>	83†	<u> </u>	79†		83†		78†		
High/Low		87		82†		86†		82†		
Broadband	Horn	88		84†		87†		83†		
Bell		85		80†		85†		80†		
Slow Whoop	)	85		80†		these to	these tones are not used for coded operation			
Siren		85		80†						
Chime**		82†		77†						

#### Note:

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<sup>\*</sup> Output 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.

<sup>\*\*</sup> UL output ratings below 75 dBA are for NFPA 72 Private Mode applications.

<sup>†</sup> ULC output ratings below 85 dBA are for use in applications per applicable local codes.



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## Table 12: Sound Output Dispersion per ULC S541 Anechoic Testing

Specification	Rating		
Horizontal from Center	-3 dBA @ ±37°	-6 dBA @ ±40°	-9.4 dBA @ ±90°
Vertical from Center	-3 dBA @ -24° +42°	-6 dBA @ -59° +50°	-8.6 dBA @ +90°

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