

Features

Low current, 24 VDC Simplex SmartSync electronic multi-tone horns provide the following features:

- A selection of tones for each appliance including: Horn, Slow Whoop, Bell, Siren and 500 Hz Horn

Note: The 500Hz horn tone is not compliant with NFPA 72 Low Frequency Signal Requirements for Sleeping Areas

- Output level selectable as standard or high
- Rugged, high impact, flame retardant thermoplastic housings, available in red with white **FIRE** lettering or white with red **FIRE** lettering
- Diode polarized input for connection to reverse polarity, supervised SmartSync control Notification Appliance Circuits (NACs)

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

- Control of horn and bell tones as Temporal Pattern, March Time pattern, or on continuously; controlled separately from visible appliances on the same circuit
- Slow Whoop, Siren, and High or Low tone selections sound their tones continuously, synchronized to each other, when receiving SmartSync continuous commands
- SmartSync March Time pattern produces a 60 BPM output for the Horn, 500 Hz Horn, and the Bell tone
- Visible appliances on the same circuit operate at a synchronized 1 Hz flash rate

Note: See [SmartSync control sources](#) for the SmartSync control list. See [Product selection](#) for additional operation information.

TrueAlert notification appliance design provides flexible, easy, and convenient semi-flush or surface wall mounting:

- Easily mounts to single gang, double gang, or 4 in. square electrical box
- In and out wiring terminals, 18 AWG to 12 AWG
- Rear of housing does not extend into box

Optional accessories:

- Mounting adapters to cover surface mounted electrical boxes and to adapt to Simplex 2975-9145 boxes
- UL listed wire guard
- UL/ULC listed sound damper for locations requiring attenuation of 5 to 6 dBA, such as stairwells, small rooms or highly reverberant areas.
- Covers are available separately to change color or for replacement

Listing reference

UL Listed to Standard 464

ULC Listed to Standard S525



Figure 1: TrueAlert multi-tone horns are available as white with red lettering or as red with white lettering

Description

TrueAlert non-addressable multi-tone horns: These horns provide a flexible selection of output tones for fire alarm audible notification. See Table 6 for tone output 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 Table 6 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 or 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 for the following models:

- 4006, 4007ES Hybrid, 4008, 4010, 4010ES, 4100ES, and 4100U Fire Alarm Control Units (FACUs). 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

Table 1: Product selection

Model	Cover	FIRE Lettering	Description	Dimensions (H x W x D)
4901-9856	Red	White	TrueAlert non-addressable multi-tone horn	5 1/8 in. x 5 in. x 1 1/2 in.
4901-9857	White	Red		(130 mm x 127 mm x 38 mm)

Table 2: Sound damper and adapters

Model	Description		Dimensions (H x W x D)
4905-9838	Optional Sound Damper; package of 20; field installed adhesive backed horn output attenuator; reduces output 5 to 6 dBA Note: After Sound Damper installation, measure sound level to ensure compliance with applicable code requirements		1 3/4 in. Diameter (44.5 mm) with 0.31 in. (8 mm) sound opening
4905-9937	Surface mount red adapter skirt	Use to cover 1 1/2 in. deep surface mounted boxes	5 3/8 in. x 5 1/4 in. x 1 5/8 in. (136 mm x 133 mm x 41 mm) Total depth with horn = 3 1/8 in. (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 in. x 5 3/4 in. x 0.060 in. Thick (211 mm x 146 mm x 1.5 mm)
2975-9145	Red mounting box, requires Adapter Plate 4905-9931		7 7/8 in. x 5 1/8 in. x 2 3/4 in. (200 mm x 130 mm x 70 mm)

Table 3: Synchronization control module

Model	Description	Dimensions (H x W x D)
4905-9938	SmartSync Control Module, Class A or Class B, installs in 4 in. square box	4 in. x 4 1/8 in. x 1 1/4 in. (102 mm x 105 mm x 32 mm)

Table 4: Covers and guard

Model	Description	Dimensions (H x W x D)
4905-9988	Red horn cover with white FIRE lettering	5 1/8 in. x 5 in. x 1 1/2 in. (130 mm x 127 mm x 38mm)
4905-9989	White horn cover with red FIRE lettering	
4905-9961	Red wire guard with mounting plate, compatible with semi-flush or surface mounted boxes	6 1/16 in. x 6 1/16 in. x 3 1/8 in. (154 mm x 154 mm x 79 mm)

* UL listed by Space Age Electronics Inc.

Multi-tone horn specifications

Table 5: Multi-tone horn specifications

Specification	Description
Rated voltage range	16 VDC to 33 VDC
Rated current	35 mA
Temperature range	32°F to 122°F or 0° C to 50°C
Humidity range	10% to 93%, non-condensing at 100°F or 38°C
Connections	Terminal blocks for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²); two wires for each terminal for in and out wiring

Table 6: Multi-tone sound output characteristics

Tone	Description	Sound output ratings for each UL 464 Reverberant chamber test at 10 ft or ~3 m		Sound Output Ratings per ULC S525 Anechoic Chamber test at 3 m or ~10 ft	
		Standard output	High output	Standard output	High output
Horn	2400 to 3700 Hz sweep, modulated at 120 Hz rate	77 dBA	86 dBA	92 dBA	102 dBA
Bell	1560 Hz modulated at 7 ms intervals	73 dBA*	87 dBA	84 dBA**	99 dBA
500 Hz horn	500 Hz tone	77 dBA	86 dBA	84 dBA**	99 dBA
Slow Whoop	500 Hz to 1200 Hz sweep	73 dBA*	83 dBA	90 dBA	103 dBA
Siren	600 Hz to 1200 Hz, 1 sec on then repeat	67 dBA*	79 dBA	87 dBA	100 dBA
High or Low	Alternating tones of 1000 Hz and 800 Hz, 250 ms duration	77 dBA	86 dBA	91 dBA	102 dBA
Sound dispersion for each ULC S525 testing	-3 dBA at +/-30° off-axis -6 dBA at +/- 50° off-axis				

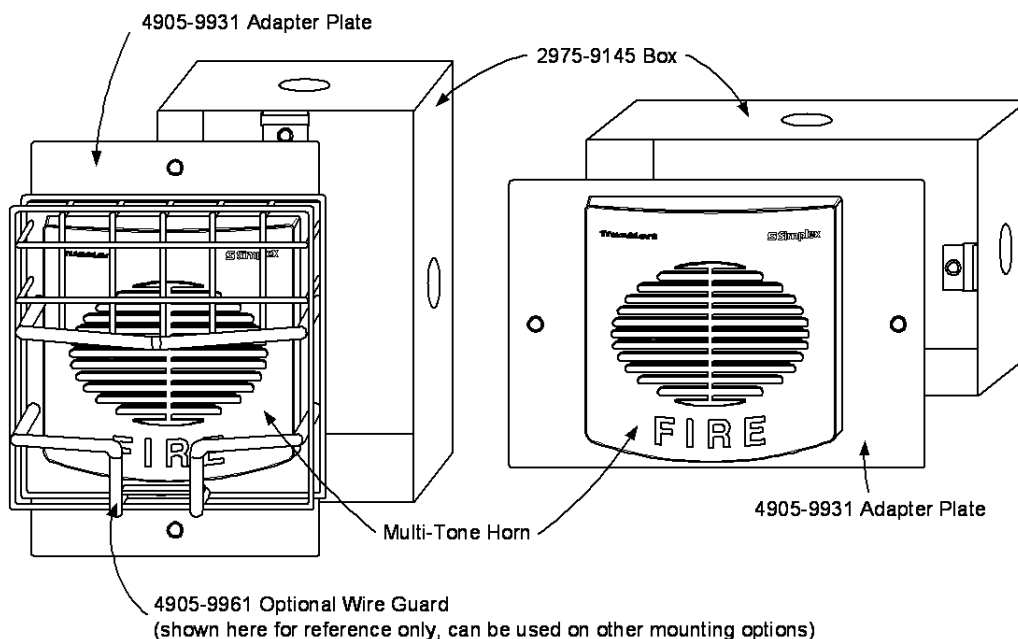
* UL output ratings below 75 dBA are for NFPA 72 Private Mode applications.

** ULC output ratings below 85 dBA are for use in applications for each applicable local code.

Note:

- Horn, Bell, and 500 Hz Horn are controlled by SmartSync commands to produce Temporal Pattern, March Time Pattern, or Continuous. The 500Hz tone is not compliant with NFPA 72 Low Frequency Signal Requirements for Sleeping Areas.
 - Horn, 500 Hz Horn, and Bell provide a 60 BPM March Time Pattern when receiving the SmartSync March Time command.
- Slow Whoop, Siren, and High orLow tones are for use with SmartSync Continuous commands. As with the horn and bell tones, they are synchronized to the controlling SmartSync timing commands, allowing synchronization across multiple NACs.

Adapter plate installation information


Figure 2: 4905-9931 adapter plate installation information

Installation reference

For additional information, refer to *4901 TrueAlert Non-Addressable Wall Mount Multi-tone Horn Installation Instructions 579-869*.

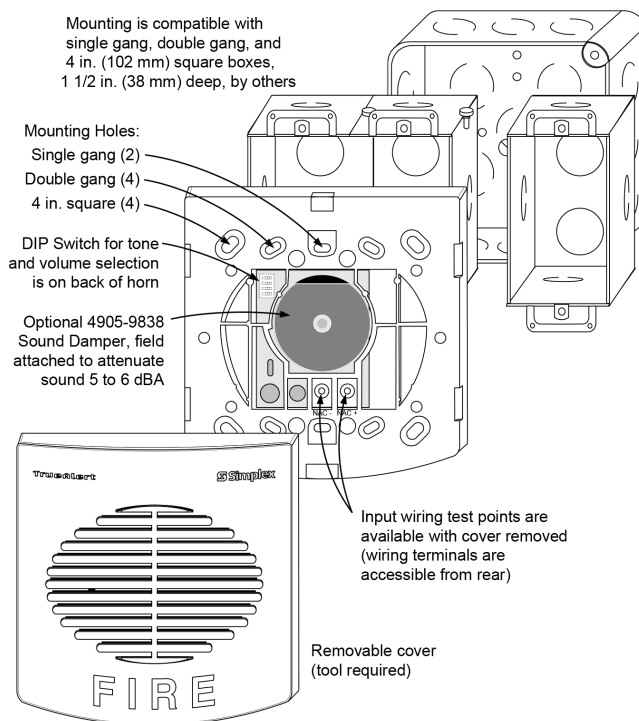


Figure 3: Surface or semi-flush multi-tone horn mounting

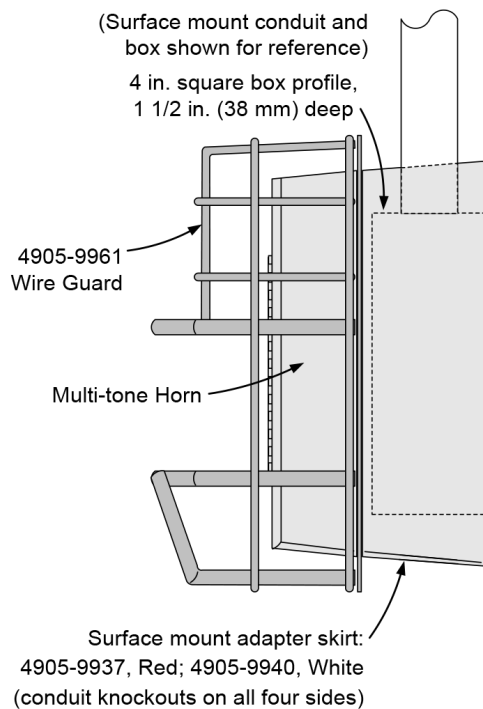


Figure 4: Side view of multi-tone horn with surface mount adapter