

## TrueAlert Multi-Candela Notification Appliances

Visible Notification Appliances with Speaker and Multi-Candela Strobe; Non-Addressable

### Features

#### Speaker/visible (S/V) notification appliances

- Multi-tapped speaker and multi-tapped high intensity xenon strobe with synchronized flash
- Rugged, high impact, flame retardant thermoplastic housings are available for wall-mount or ceiling-mount
- Operation is compatible with Americans with Disabilities Act (ADA) requirements. See [Wall mount installation reference](#)

#### Wall mount S/V

- Housings are available in red or white with clear lens and contrasting white or red FIRE lettering
- Covers are available separately to convert housing color

#### Ceiling mount S/V

- Housing is white with clear lens
- Red FIRE lettering is printed on two sides

#### Audible notification appliance (speaker)

- High quality voice and tone reproduction with taps for 1/4 W, 1/2 W, 1 W, or 2 W, at 25 VRMS or 70.7 VRMS
- Capacitor input for connection to supervised notification appliance circuits
- Speakers are wired separately from strobe wiring
- \* UL listed to Standard 1480 and ULC-S541
- Compliant with NFPA 72, 520 Hz low frequency signal requirements for sleeping areas

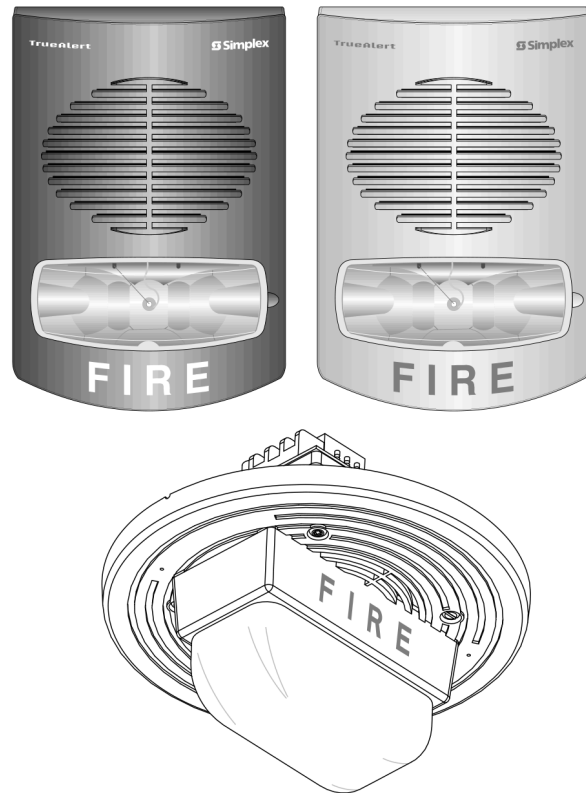
#### Visible notification appliance (strobe)

- 24 VDC xenon strobe. You can select the intensity as 15, 30, 75, or 110 candela with visible selection jumper secured behind strobe housing
- Strobes are activated from notification appliance circuits (NACs) selected to provide Simplex strobe synchronization signals or from separate strobe Synchronization Modules that are available for Class B or Class A operation
- Regulated circuit design ensures consistent flash output and provides controlled inrush current
- \* UL listed to Standard 1971 and ULC-S526

#### Options for wall mounted S/Vs

- Red or white adapters to cover surface mounted electrical boxes
- Red adapter for mounting to 2975-9145 boxes
- Red wire guard

Figure 1: Wall and ceiling mount S/Vs



### Description

#### Multi-Candela TrueAlert S/Vs with speaker and synchronized strobe

You can conveniently install these to standard electrical boxes with extensions. The enclosure designs are both impact and vandal resistant and provide a convenient strobe intensity selection. You can select each model for strobe intensity output. This minimizes on-site model inventory and easily accommodates changes encountered during construction.

#### Wall mount

S/V housings are a one-piece assembly, including lens, that mounts to a 4 in. square electrical box with extension, see [Wall mount installation reference](#). You can quickly remove the cover with a tool and covers are available separately for color conversion.

#### Ceiling mount

You can install S/Vs using 4 in. electrical boxes with an extension. See [Ceiling mount S/V installation reference and 2905-9946 tile bridge dimensions](#).

#### Strobe intensity selection

During installation, you can use the selection plug at the back of the housing to set the required strobe intensity. You can use the attached flag with black letters on a highly visible yellow background to see the selected intensity at the side of the strobe lens.

## Synchronized strobes

### Multiple strobes

When you can see multiple strobes and their reflections from one location, synchronized flashes reduce the probability of photo-sensitive reactions and the annoyance and distraction of random flashes. You can activate the multi-candela strobes of these S/Vs with NACs that use the Simplex synchronization format. For additional information, refer to datasheet *SmartSync Control Module and Strobe Synchronization Modules (S4905-0003)*.

### Strobe application selection

Correct selection of visible notification is dependent on occupancy, location, local codes, and correct applications of the following codes and guidelines:

- *National Fire Alarm and Signaling Code (NFPA 72)*, ANSI A117.1
- The appropriate model building code: BOCA, ICBO, or SBCCI
- The application guidelines of the Americans with Disabilities Act (ADA)

## Product selection

Table 1: Wall mount multi-candela S/Vs

Model	Housing color	FIRE letters	Listings	Description	Housing dimensions in. (mm) with lens, H x W x D
4906-9151	Red	White	UL and ULC	Multi-tapped speaker with multi-candela synchronized strobe. You can select the strobe intensity as: 15 cd, 30 cd, 75 cd, or 110 cd	7 1/4 x 5 x 2 5/8 (184 mm x 127 mm x 67 mm)
4906-9153	White	Red			

Table 2: Ceiling mount multi-candela S/V

Model	Housing color	Lettering	Listings	Description	Dimensions, in. (mm)
4906-9154	White	Red (FIRE)	UL	Multi-tapped speaker with multi-candela synchronized strobe. You can select the strobe intensity as: 15 cd, 30 cd, 75 cd, or 110 cd	Housing is 7 1/2 (191) diameter, 1/2 (13) deep Strobe lens protrusion is 2 5/8 (67) above speaker housing. Depth into box is 2 3/4 (70)
4906-9157	White	Red (FIRE)	ULC		
4906-9158	White	Red (ALERT)	UL		
4906-9159	White	Blank	UL		
4906-9160	Red	White (FIRE)	UL		

Table 3: Wall mount S/V adapters

Model	Description	Dimensions, in. (mm), H x W x D
4905-9946	Surface mount red adapter skirt	Required when mounting to surface mounted electrical box, 4 in. square, 1 1/2 in. deep with 1 1/2 in. deep extension 7 3/4 x 5 3/8 x 3 3/16 (197 x 137 x 81) Depth with S/V is 5 7/8 (149)
4905-9947	Surface mount white adapter skirt	
4905-9903	Adapter plate, red, required to mount S/V on 2975-9145	8 5/16 x 5 3/4 x 0.06 thick (211 x 146 x 1.5)
2975-9145	Mounting box, red, for surface or flush mount, requires adapter plate 4905-9903. This box may be available for retrofit applications.	7 7/8 x 5 1/8 x 2 3/4 (200 x 130 x 70)

Table 4: Wall mount S/V replacement covers

Model	Descriptions	Dimensions, in. (mm), H x W x D
4905-9996	Red S/V cover with white <b>FIRE</b> lettering	7 1/4 x 5 x 1 3/8 (184 x 127 x 35)
4905-9997	White S/V cover with red <b>FIRE</b> lettering	

Table 5: Synchronized flash control modules

Model	Description	Dimensions, in. (mm), W x L x H
4905-9914 See note.	Synchronized flash module, Class B operation	Epoxy encapsulated with in/out 18 AWG (0.82 mm <sup>2</sup> ) wire leads, rated for 2 A NAC, requires 5 mA for power 1 3/8 x 2 7/16 x 13/16 (35 x 62 x 21)
4905-9922 See note.	Synchronized flash module, Class A operation	

**Note:** Refer to datasheet (*S4905-0003*) for additional flash control module information.

Table 6: Wall mount S/V wire guard

Model	Description	Dimensions, in. (mm), H x W x D
4905-9998	Wire guard with mounting plate, red, compatible with surface and semi-flush boxes. UL listed by Space Age Electronics Inc.	8 3/8 x 6 5/16 x 3 1/4 (213 x 160 x 83)

Table 7: Ceiling mount tile bridge

Model	Description	Dimensions
2905-9946	Tile bridge	See <a href="#">Ceiling mount S/V installation reference and 2905-9946 tile bridge dimensions</a>

## S/V specifications

**Table 8: Common specifications**

Specification	Rating
<b>Environmental</b>	32°F to 122°F (0°C to 50°C). 10% to 93%, non-condensing at 100°F (38°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.

**Table 9: Speaker specifications**

Specification	Rating					
<b>Input voltage</b>	25 VRMS or 70.7 VRMS. See note 1.					
<b>Power taps</b>	1/4 W, 1/2 W, 1 W, and 2 W					
<b>Frequency response</b>	Fire alarm	400 Hz to 4000 Hz				
	General signaling	125 kHz to 12 kHz				
<b>Speaker output ratings</b> at 10 ft (3 m) See note 1.	Wattage tap	<b>1/4 W</b>	<b>1/2 W</b>	<b>1 W</b>	<b>2 W</b>	
	UL listed models, Reverberant Chamber Test, as in UL 1480	76 dBA	79 dBA	82 dBA	85 dBA	
	Wall mount models 4906-9151 and 4906-9153, Anechoic Chamber Test, as in ULC-S541	77 dBA	80 dBA	83 dBA	86 dBA	
	Ceiling Mount Model 4906-9157, as in ULC-S541	25 VRMS input	81.6 dBA	84.3 dBA	87.1 dBA	89.7 dBA
		70.7 VRMS input	80.9 dBA	84.1 dBA	87.3 dBA	90.2 dBA
<b>Polar Dispersion Reference</b> as in ULC-S541 Anechoic Chamber Testing	<b>Attenuation</b>	<b>Angle</b>	<b>Attenuation</b>	<b>Angle</b>		
	-3 dB	+/- 30° off-axis	-6 dB	+/- 55° off-axis		

**Table 10: Strobe specifications**

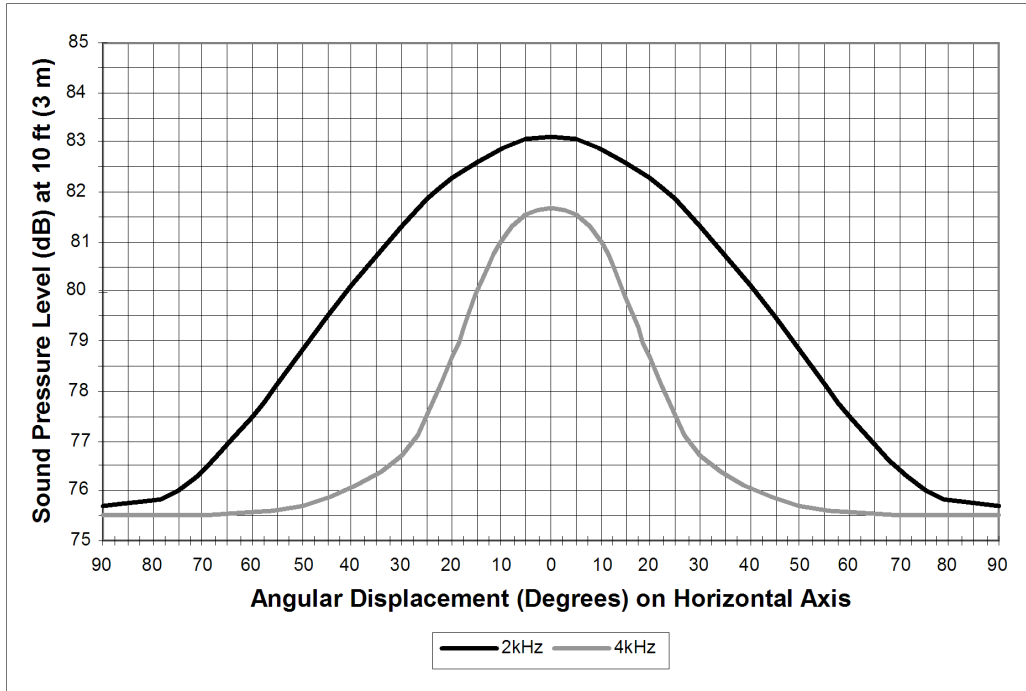
Specification	Rating				
<b>Rated voltage range</b>	Regulated 24 VDC. 16 VDC to 33 VDC. See note 2.				
<b>Flash rate and synchronized NAC loading</b>	1 Hz, with up to 35 synchronized strobes maximum for each NAC				
<b>Wall mount</b>	Housing dimensions with lens	7 1/4 in. H x 5 in. W x 2 5/8 in. D (184 mm x 127 mm x 67 mm)			
	Maximum root mean square (RMS) current rating for each strobe setting	15 cd	30 cd	75 cd	110 cd
	Reference RMS currents at 18 VDC	<b>53 mA</b>	<b>84 mA</b>	<b>165 mA</b>	<b>224 mA</b>
	Reference RMS currents at 24 VDC	<b>40 mA</b>	<b>63 mA</b>	<b>124 mA</b>	<b>168 mA</b>
<b>Ceiling mount</b>	Housing dimensions	Speaker housing is 7 1/2 in. (191 mm) diameter, 1/2 in. deep (13 mm). Lens protrusion above speaker housing is 2 5/8 in. (67 mm). Depth into the box is 2 3/4 in. (70 mm)			
	Maximum RMS current rating for each strobe setting	<b>15 cd</b>	<b>30 cd</b>	<b>75 cd</b>	<b>110 cd</b>
	Reference RMS currents at 18 VDC	<b>67 mA</b>	<b>111 mA</b>	<b>207 mA</b>	<b>281 mA</b>
	Reference RMS currents at 24 VDC	<b>50 mA</b>	<b>83 mA</b>	<b>155 mA</b>	<b>211 mA</b>

**Note:**

- Speakers are for connection to conventional fire alarm audio circuits. Anechoic speaker output ratings are typically more representative of actual installed sound output.
- RMS refers to the effective value of a varying current waveform. The maximum RMS strobe current listed is the device nameplate rating. Strobe designs are constant wattage and the maximum RMS current rating occurs at the lowest allowable operating voltage.

**Speaker directional characteristics reference**

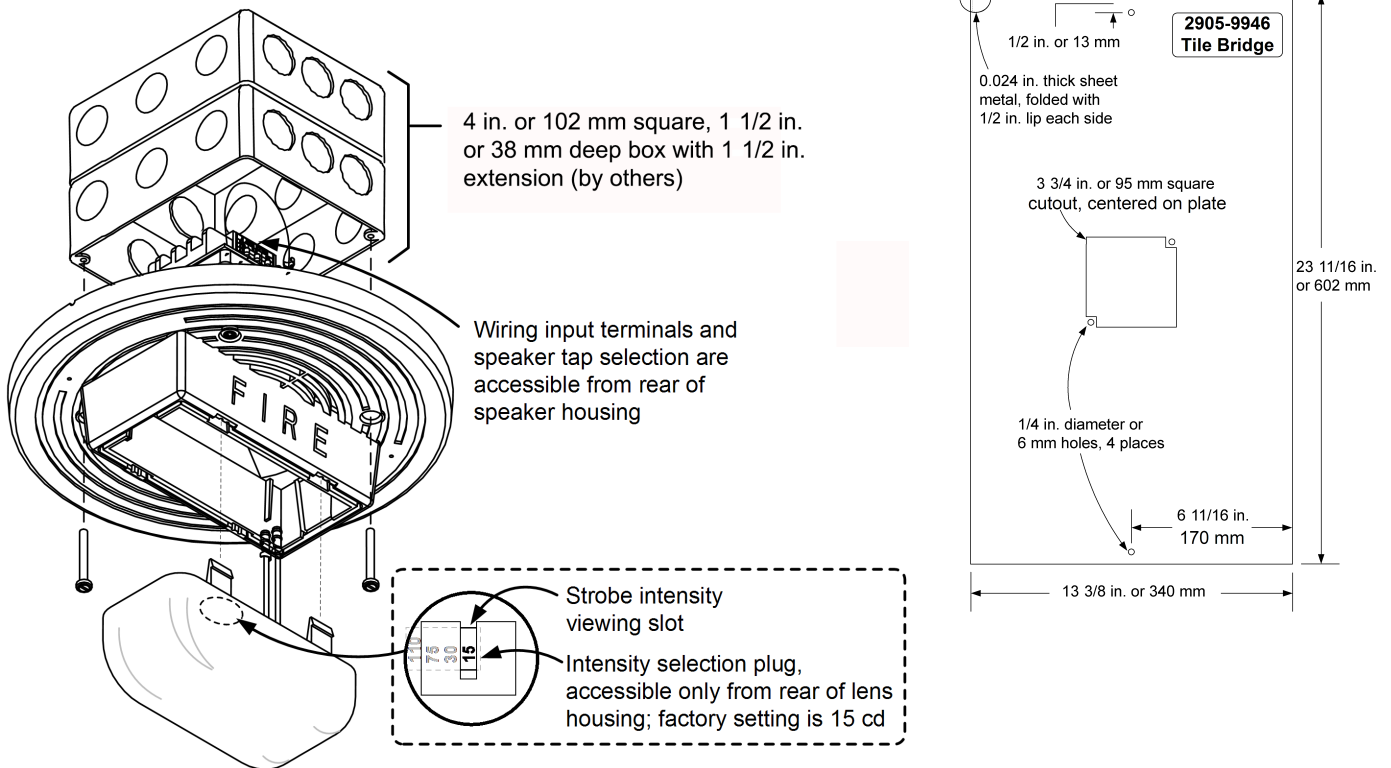
**Figure 2: Speaker directional characteristics reference**



**Ceiling mount S/V installation reference and 2905-9946 tile bridge dimensions**

Figure 3 shows the mounting of a 4905-9903 Adapter Plate to the 2975-9145 box.

**Figure 3: Ceiling mount S/V installation reference and tile bridge dimensions**



The surface mount adapter skirts are available in red (4905-9946) or white (4905-9947).

**Wall mount installation reference**

**Figure 4: Wall mount installation reference**

