

Features

Speaker/visible (S/V) notification appliances with multi-tapped speaker and multi-tapped high intensity xenon strobe with synchronized flash:

- Rugged, high impact, flame retardant thermoplastic housings are available for wall or ceiling mount
- Operation is compatible with ADA requirements (see [Wall mount installation reference](#))

Wall mount S/V features:

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

Ceiling mount S/V features:

- 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; intensity is selectable as 15, 30, 75, or 110 candela with visible selection jumper secured behind strobe housing
- Strobes are activated from 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

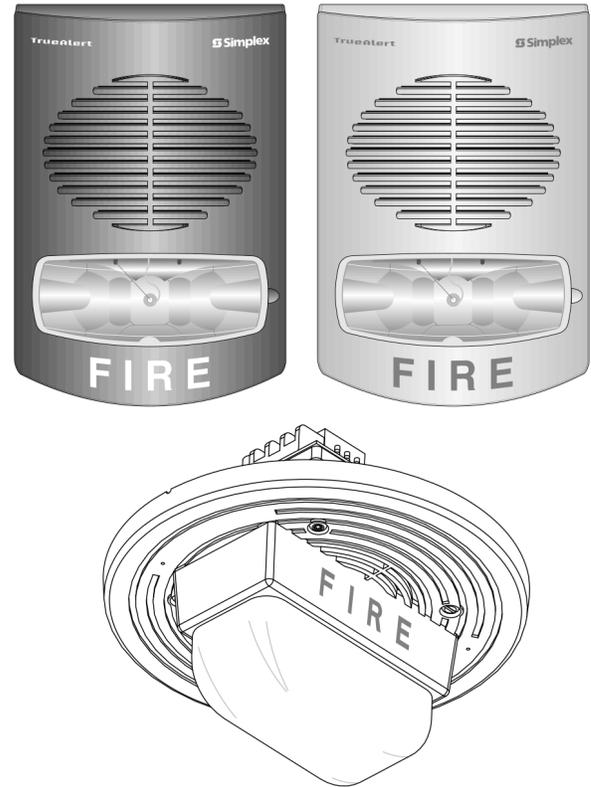


Figure 1: Wall and ceiling mount S/Vs

Description

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

Provide convenient installation 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

S/Vs also install 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, a selection plug at the back of the housing determines the desired strobe intensity. An attached flag with black letters on a highly visible yellow background allows the selected intensity to be seen at the side of the strobe lens.

Synchronized strobes

Multiple strobes

When multiple strobes and their reflections can be seen from one location, synchronized flashes reduce the probability of photo-sensitive reactions as well as the annoyance and possible distraction of random flashing. The multi-candela strobes of these S/Vs are activated by NACs that provide the Simplex synchronization format. For additional information, refer to data sheet [S4905-0003](#).

Strobe application selection

Proper selection of visible notification is dependent on occupancy, location, local codes, and proper applications of: the *National Fire Alarm and Signaling Code* (NFPA 72), ANSI A117.1; the appropriate model building code: BOCA, ICBO, or SBCCI; and the application guidelines of the Americans with Disabilities Act (ADA).

Product selection

Table 1: Wall mount multi-candela S/Vs

Model	Housing Color	FIRE Lettering	Listings	Description	Housing dimensions with lens
4906-9151	Red	White	UL and ULC	Multi-tapped Speaker with Multi-Candela Synchronized Strobe; strobe intensity selectable as: 15 cd, 30 cd, 75 cd, or 110 cd	7 1/4 in. H x 5 in. W x 2 5/8 in. D or 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
4906-9154	White	Red (FIRE)	UL	Multi-tapped Speaker with Multi-Candela Synchronized Strobe; strobe intensity selectable as: 15 cd, 30 cd, 75 cd, or 110 cd	Housing = 7 1/2 in. or 191 mm diameter, 1/2 in. or 13 mm deep
4906-9157	White	Red (FIRE)	ULC		Strobe lens protrusion = 2 5/8 in. or 67 mm above speaker housing
4906-9158	White	Red (ALERT)	UL		Depth into box = 2 3/4 in. or 70 mm
4906-9159	White	Blank	UL		
4906-9160	Red	White (FIRE)	UL		

Table 3: Wall mount S/V adapters

Model	Description	Dimensions
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
4905-9947	Surface mount white adapter skirt	
4905-9903	Adapter Plate, red, required to mount S/V on 2975-9145	8 5/16 in. H x 5 3/4 in. W x 0.060 in. Thick or 211 mm x 146 mm x 1.5 mm
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 in. H x 5 1/8 in. W x 2 3/4 in. D or 200 mm x 130 mm x 70 mm

Table 4: Wall mount S/V replacement covers

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

Table 5: Synchronized flash control modules

Model	Description	Dimensions
4905-9914*	Synchronized Flash Module, Class B operation	Epoxy encapsulated with in/out 18 AWG or 0.82 mm ² wire leads, rated for 2 A NAC, requires 5 mA for power
4905-9922*	Synchronized Flash Module, Class A operation	

Table 6: Wall mount S/V wire guard

Model	Description	Dimensions
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 in. H x 6 5/16 in. W x 3 1/4 in. D or 213 mm x 154 mm x 79 mm

Table 7: Ceiling mount tile bridge

Model	Description	Dimensions
2905-9946	Tile Bridge	See Ceiling mount S/V installation reference and 2905-9946 tile bridge dimensions

* Refer to data sheet [S4905-0003](#) for additional flash control module information

S/V specifications

Table 8: Common specifications

Specification	Rating
Environmental	32°F to 122°F or 0°C to 50°C; 10% to 93%, non-condensing at 100°F or 38°C
Connections	Terminal blocks for 18 AWG to 12 AWG or 0.82 mm ² to 3.31 mm ² ; two wires for each terminal for in/out wiring

Table 9: Speaker specifications

Specification	Rating					
Input voltage	25 VRMS or 70.7 VRMS, see Note 1					
Power taps	1/4 W, 1/2 W, 1 W, and 2 W					
Frequency response	Fire Alarm	400 Hz to 4000 Hz				
	General signaling	125 kHz to 12 kHz				
Speaker output Ratings @ 10 ft or 3 m (see Note 1)	Wattage tap		1/4 W	1/2 W	1 W	2 W
	UL Listed Models, Reverberant Chamber Test, per UL 1480		76 dBA	79 dBA	82 dBA	85 dBA
	Wall Mount Models 4906-9151 and 4906-9153, Anechoic Chamber Test, per ULC-S541		77 dBA	80 dBA	83 dBA	86 dBA
	Ceiling Mount Model 4906-9157, per 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
Polar Dispersion Reference (per ULC-S541 Anechoic Chamber Testing)	Attenuation	Angle		Attenuation	Angle	
	-3 dB	+/- 30° off-axis		-6 dB	+/- 55° off-axis	

Table 10: Strobe specifications

Specification	Rating					
Rated voltage range	Regulated 24 VDC; 16 VDC to 33 VDC, see Note 2					
Flash rate and synchronized NAC loading	1 Hz; with up to 35 synchronized strobes maximum for each NAC					
Wall mount	Housing dimensions (with lens)	7 1/4 in. H x 5 in. W x 2 5/8 in. D or 184 mm x 127 mm x 67 mm				
	Maximum RMS current rating per strobe setting		15 cd	30 cd	75 cd	110 cd
			60 mA	94 mA	186 mA	252 mA
	Reference RMS currents at other voltages	18 VDC	53 mA	84 mA	165 mA	224 mA
24 VDC		40 mA	63 mA	124 mA	168 mA	
Ceiling mount	Housing dimensions	Speaker housing = 7 1/2 in. or 191 mm diameter, 1/2 in. deep or 13 mm; lens protrusion above speaker housing = 2 5/8 in. or 67 mm; depth into box = 2 3/4 in. or 70 mm				
	Maximum RMS Current rating per strobe setting		15 cd	30 cd	75 cd	110 cd
			75 mA	125 mA	233 mA	316 mA
	Reference RMS currents at other voltages	18 VDC	67 mA	111 mA	207 mA	281 mA
24 VDC		50 mA	83 mA	155 mA	211 mA	

Note:

- Speakers are for connection to conventional fire alarm audio circuits. Anechoic speaker output ratings are typically more representative of actual installed sound output.
- 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. RMS is root mean square and refers to the effective value of a varying current waveform.

Speaker directional characteristics reference

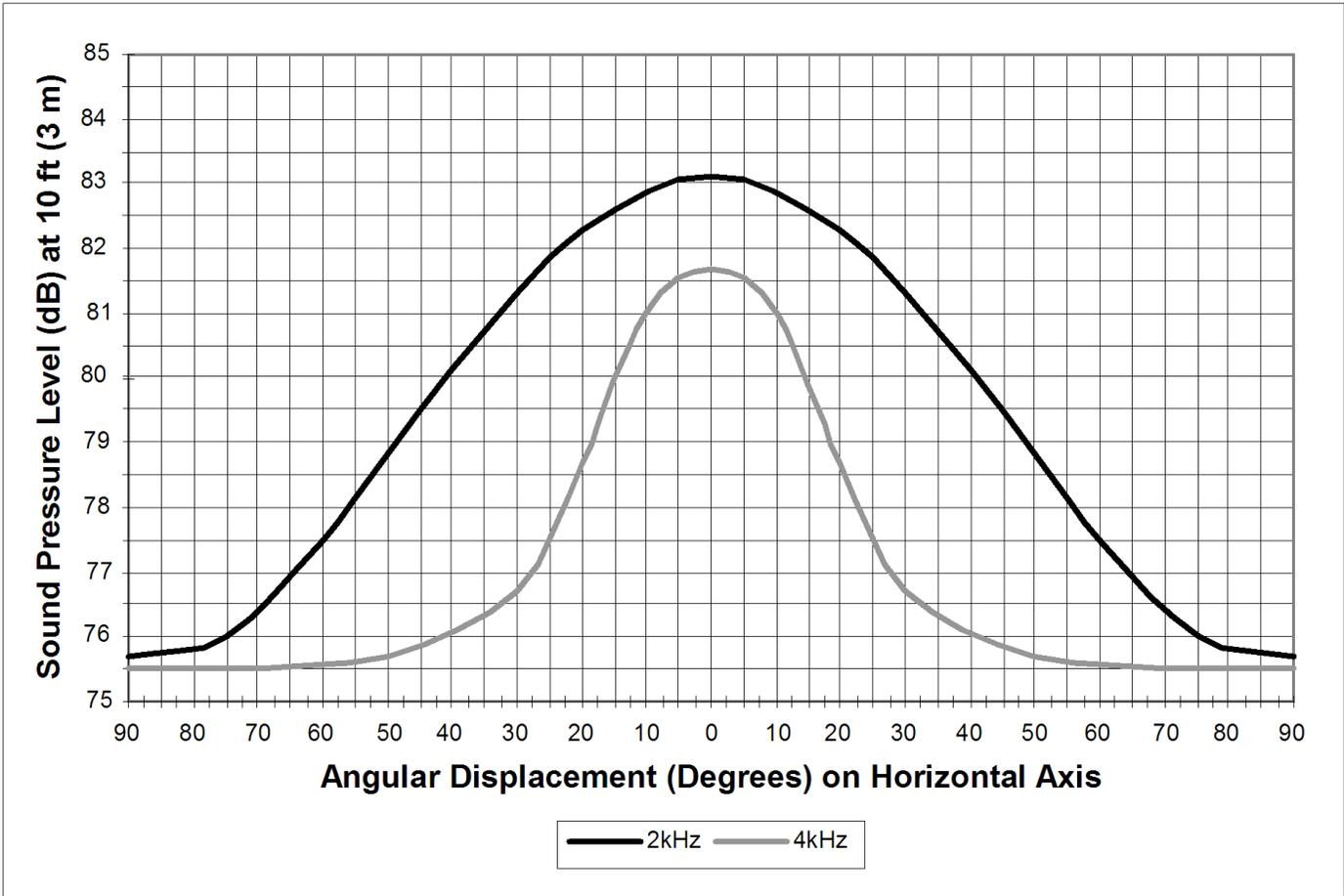


Figure 2: Speaker directional characteristics reference

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.

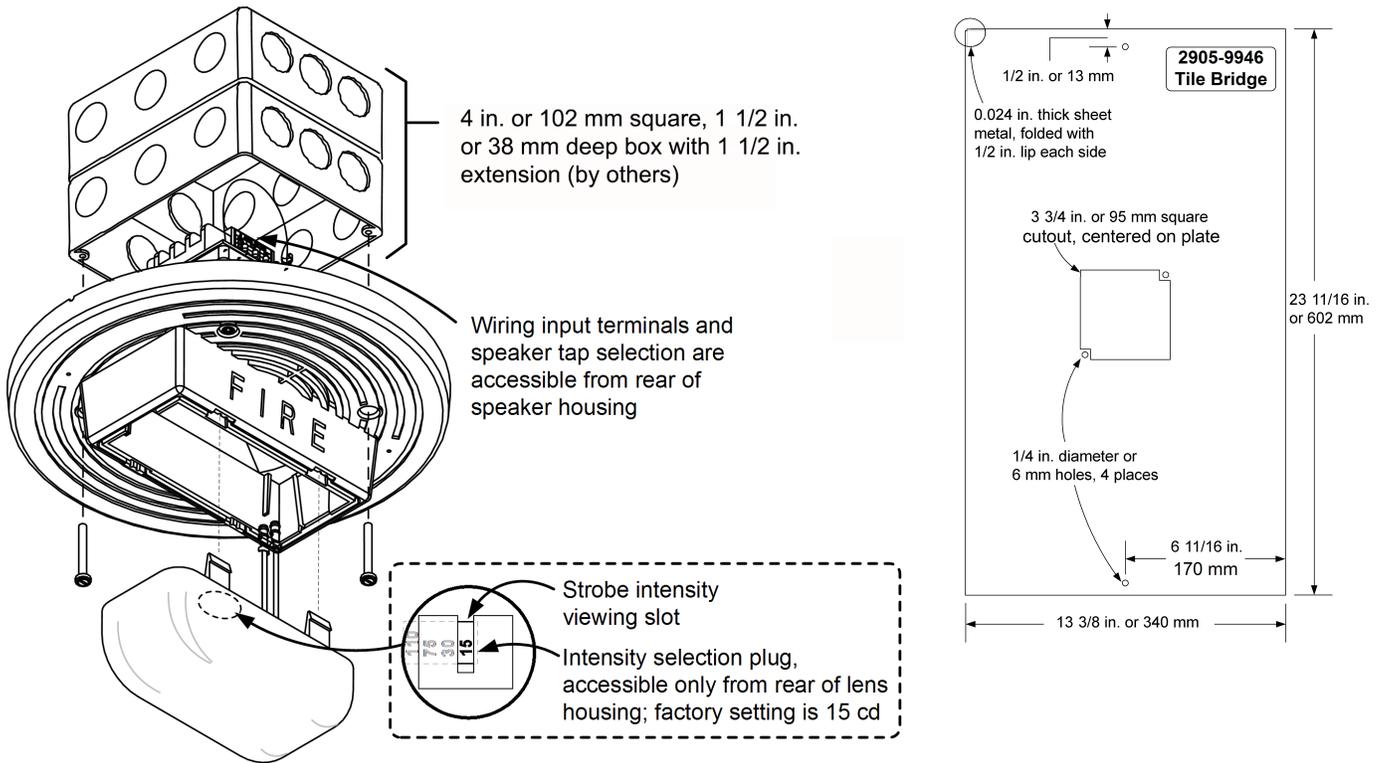


Figure 3: Ceiling mount S/V installation reference and tile bridge dimensions

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

Wall mount installation reference

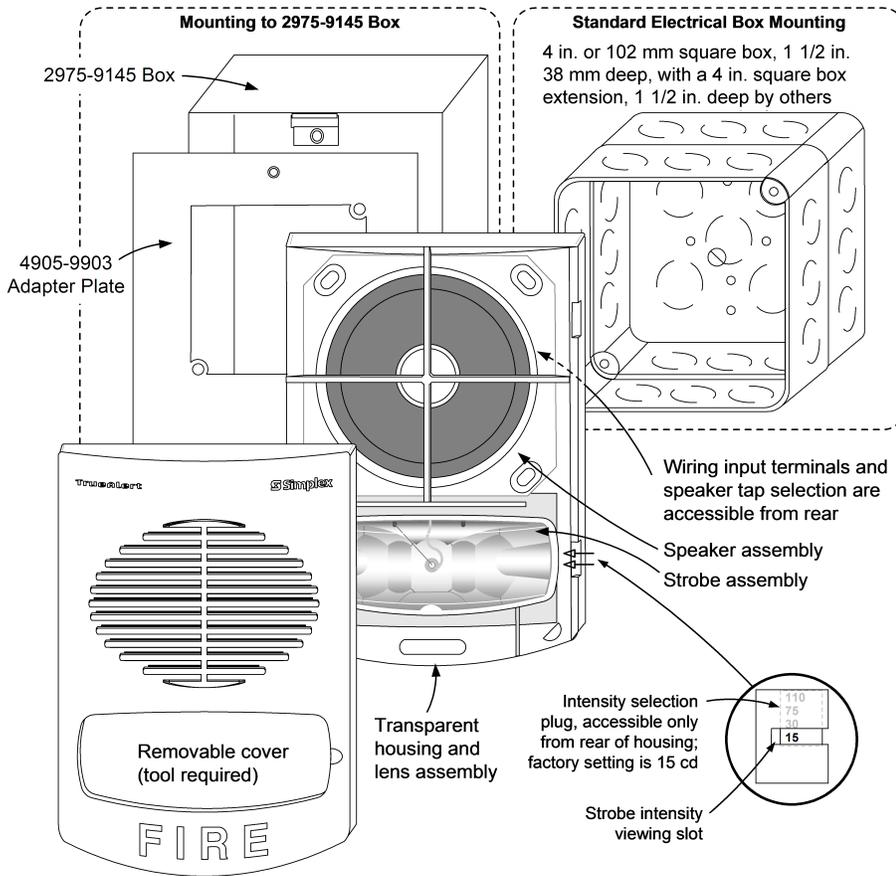


Figure 4: Wall mount installation reference

