Simplex®

Multi-Application Peripherals

*UL, ULC Listed; FM, CSFM and MEA (NYC) Approved**

Audible Notification Appliances
Speakers, 25 or 70.7 VRMS, Wall or Ceiling Mount

Features

Fire alarm speakers with models for ceiling or wall mount:

- UL listed to Standard 1480
- Four inch cone (102 mm) provides high quality tone and voice reproduction
- Multi-tapped design provides output power of 1/4, 1/2, 1, or 2 W with either 25 or 70.7 VRMS input
- In/out wiring terminals for 18 AWG to 12 AWG
- Mounts to 4” square outlet box, 1-1/2” deep with 1-1/2” deep box extension
- Capacitor input for connection to supervised notification appliance circuits
- Rugged, high impact, flame retardant thermoplastic housings

Rectangular housing models feature:

- Appearance that complements TrueAlert® strobes and speaker/strobes
- Red or white housings with “FIRE” lettering for surface or semi-flush wall mount
- Optional matching adapter skirts for covering surface mounted electrical boxes
- Optional red wire guard

Round housing models feature:

- Off-white color (no lettering) for flush mount on ceiling or wall
- Compatible with optional tile bridge 2905-9946

Introduction

Simplex® 4902 Series speakers provide high quality sound for emergency fire alarm use as well as for background music. The moisture-repellent speaker is designed for smooth frequency response with minimal distortion.

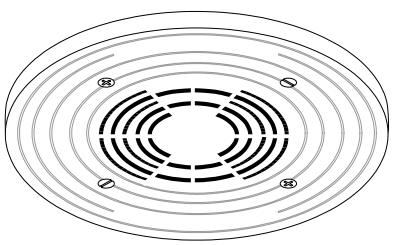
The multi-tapped speaker transformer accommodates either 25 or 70.7 VRMS and provides an output of from 1/4 to 2 W to provide flexibility for satisfying the requirements of the installed conditions.

Rectangular housing models are for surface or semi-flush wall mount applications. Round housing models are typically for ceiling applications but can be wall mounted if desired. The rectangular housing speakers are designed to compliment the TrueAlert family of strobes and speaker/strobes, providing conventional, non-addressable speaker operation.

* Refer to page 2 for guard listing. 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 7320-0026:242 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. 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 Safety Products Westminster.



Rectangular Wall Mount Speakers are Available as Red with White “Fire” Lettering and White with Red “Fire” Lettering



Round Speakers are Available in Off-White (no lettering)

Specifications

Dimensions, Rectangular Wall Mount Housings		
Housing Dimensions		5-1/8” H x 5” W x 1-1/2” D (130 mm x 127 mm x 38 mm)
Depth into Box		2-3/4” (70 mm)
Dimensions, Round Housings		
Housing Dimensions		7-1/2” Diameter, 1/2” D (191 mm x 13 mm)
Depth into Box		2-3/4” (70 mm)
General Specifications		
Input Voltage		25 or 70.7 VRMS
Power Taps		1/4, 1/2, 1, and 2 W
Input Terminal Ratings		18 to 12 AWG ($0.82\ mm^2$ to $3.31\ mm^2$)
Frequency Response	Fire Alarm	400 to 4000 Hz
	General Signaling	125 to 12 kHz
Sound Output		See information on page 4
Temperature Range		32° to 100° F (0° to 38° C)
Humidity Range		10% to 95% RH from 32° to 122° F (0° to 50° C)

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Product Selection

Speakers

Model*	Description		Dimensions
4902-9716(CA)	Rectangular housing, wall mount speaker	Red with white “FIRE” lettering	5-1/8” H x 5” W x 1-1/2” D (130 mm x 127 mm x 38 mm)
4902-9717(CA)		White with red “FIRE” lettering	
4902-9721(CA)	Round housing speaker, ceiling or wall mount	Off-white (no lettering)	7-1/2” Diameter x 1/2” D (191 mm x 13 mm)

* ULC listed model are designated with a CA suffix.

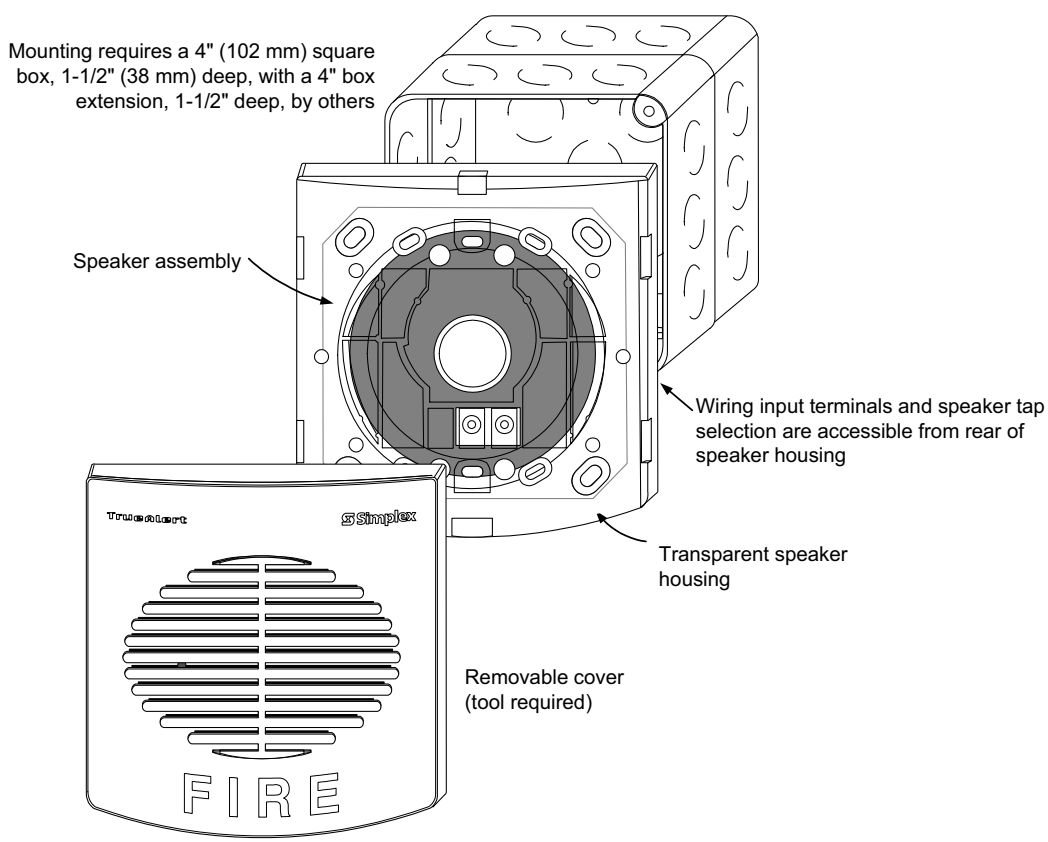
Mounting Adapters

Model	Description			Dimensions
4905-9941	Red	Surface mount adapter skirt	Use to cover surface mounted 1-1/2” deep box with 1-1/2” deep extension external to wall (see diagram on page 3)	5-3/8” H x 5-1/4” W x 3-3/16” D (136 mm x 133 mm x 81 mm) Total surface depth with speaker = 4-5/8” (117 mm)
4905-9942	White			
2905-9946	Tile bridge for 4902-9721 Speaker			See diagram on page 3
4905-9931	Adapter Plate, red, for mounting to 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			7-7/8" x 5-1/8" x 2-3/4" D (200 mm x 130 mm x 70 mm)

Covers and Guard

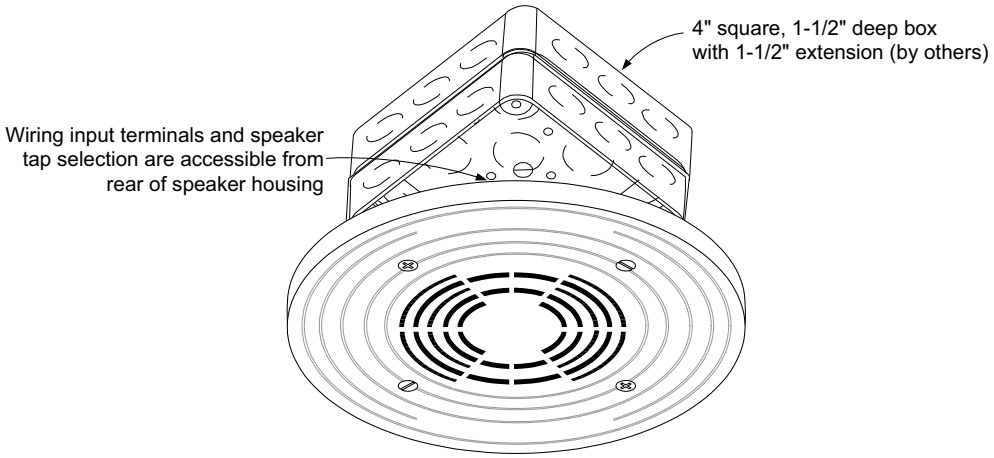
Model	Description		Dimensions
4905-9988	Red speaker cover with white “FIRE” lettering	Interchangeable with TrueAlert horns	5-1/8” H x 5” W x 1-1/2” D (130 mm x 127 mm x 38 mm)
4905-9989	White speaker cover with red “FIRE” lettering		
4905-9999	Red wire guard with mounting plate; compatible with semi-flush or surface mounted boxes; for use with 4” square electrical box mounting hole patterns only (UL listed by Space Age Electronics Inc.)		6-1/16” H x 6-1/16” W x 3-1/8” D (154 mm x 154 mm x 79 mm)

Wall Mount Speakers, Installation Reference

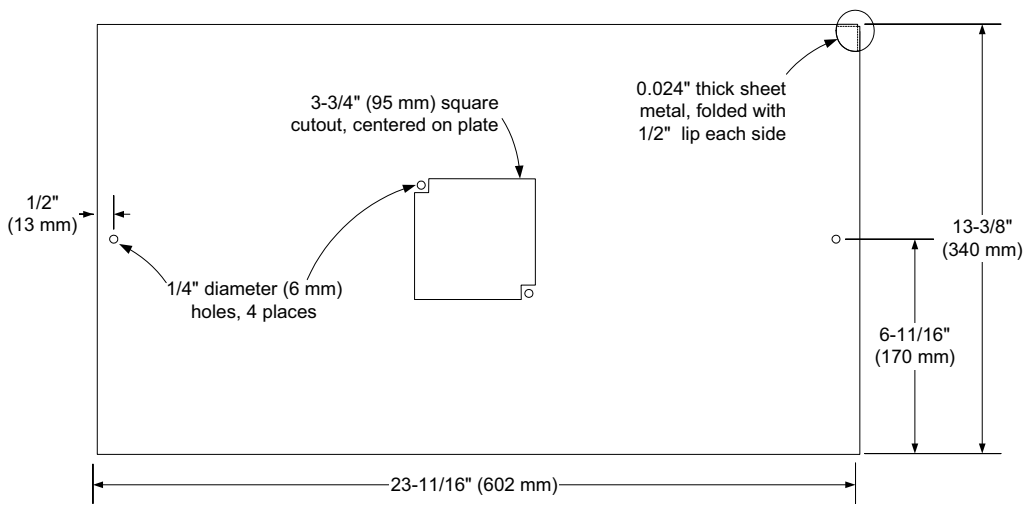


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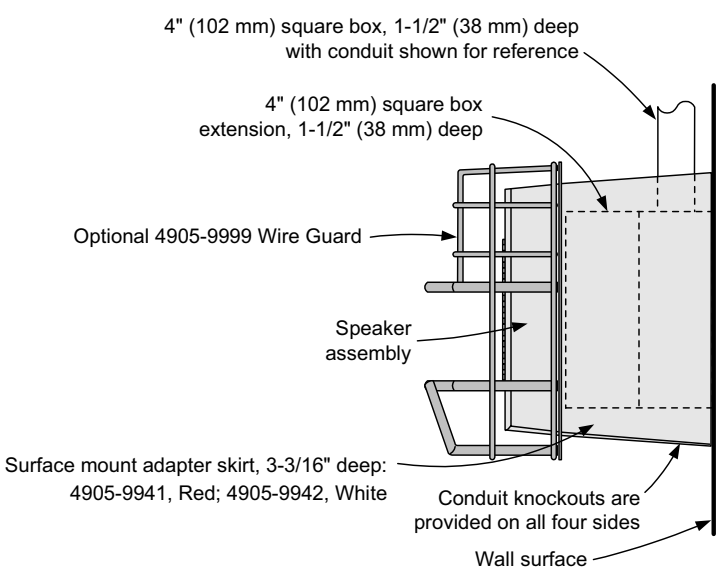
Ceiling Mount Speaker Installation Reference



2905-9946 Tile Bridge Dimensions



Surface Mounted Speaker Reference



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Speaker Sound Output Specifications

Sound Output Ratings @ 10 ft (3 m) per UL 1480 Reverberant Chamber Testing

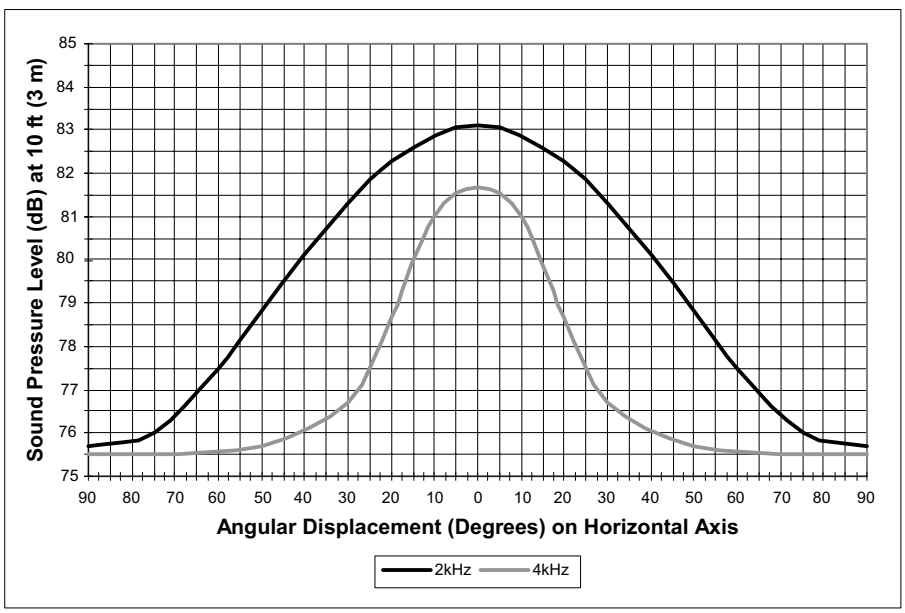
Model	Type	Input Voltage	Selected Tap			
			1/4 W	1/2 W	1 W	2 W
4902-9716 4902-9717	Rectangular Housing	25 VRMS	80 dBA	83 dBA	85 dBA	88 dBA
		70.7 VRMS	79 dBA	82 dBA	85 dBA	88 dBA
4902-9721	Round Housing	either 25 or 70.7 VRMS	79 dBA	82 dBA	85 dBA	88 dBA

Sound Output Ratings @ 10 ft (3 m) per ULC S-541 Testing and per Anechoic Chamber Testing

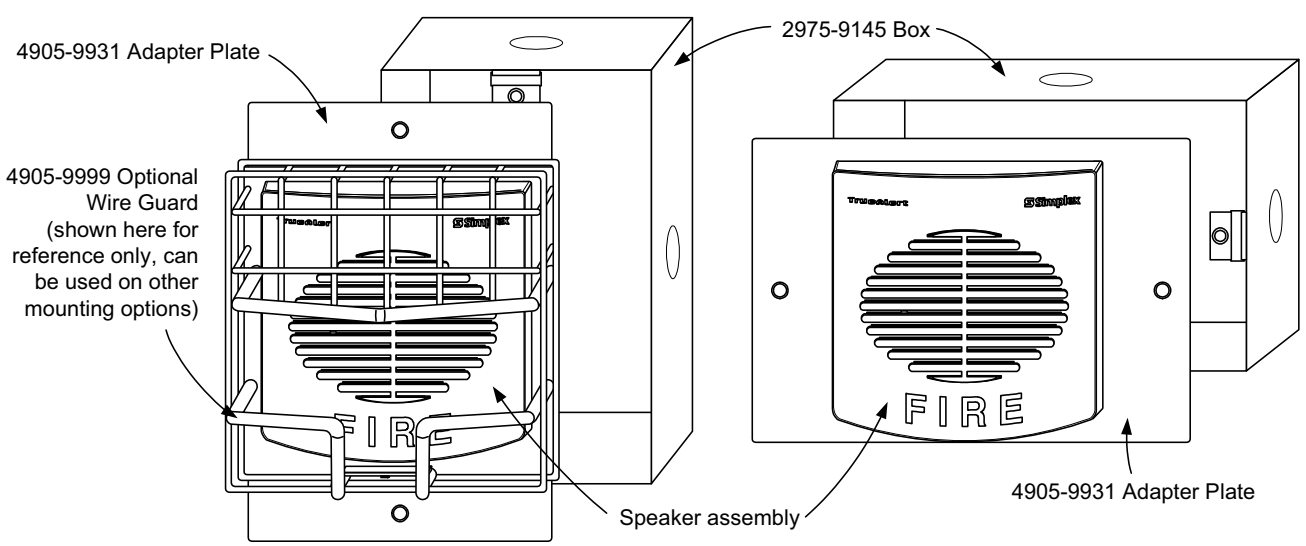
Model	Test	Selected Tap			
		1/4 W	1/2 W	1 W	2 W
4902-9716, 4902-9717, & 4902-9721; with either 25 VRMS or 70.7 VRMS input voltage	Output Test per ULC S-541	78 dBA	81 dBA	84 dBA	87 dBA
	Anechoic Chamber, 1 kHz input, on-axis*	87 dBA	90 dBA	93 dBA	96 dBA

* Anechoic speaker output ratings are typically more representative of actual installed sound output.

Speaker Directional Characteristics



4905-9931 Adapter Plate Installation Reference



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