Features

- Separate models are available with 4 1/2 in. or 8 in. speakers, and with 25 VRMS or 70 VRMS input
- You can select output power as 1/4 W, 1/2 W, 1 W, 2 W, or 4 W. See Table 1 and Table 2 for listings and application guidance.
- One inch speaker coil provides high-quality sound
- Satin white baked enamel finish
- Heavy gauge steel grills
- Speakers mount into square or round backboxes, see Table 1 for models and compatible backboxes
- ULC listed to Standard CAN/ULC-S541*
- Fire alarm listed frequency response is 400 Hz to 4000 Hz

Description

2902-93xx series speakers provide voice and tone notification for Simplex Emergency Voice/Alarm Communication fire alarm control units (FACUs). Heavy-gauge steel grills provide resistance against warping. You can use standard screws to mount the speaker into its compatible backbox.

Convenient wattage selection

Input line matching transformers are pre-installed and a jumper switch selects the desired output wattage. The cone is moisture proof and treated with an antifungal, tropical environment-compatible agent.

Note: Do not paint or alter the finish of the speakers in any way for fire alarm applications.

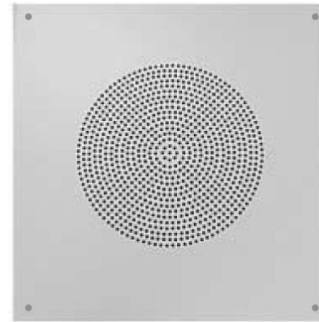**Figure 1: Round 2902 series speaker, 12 3/4 in. diameter grill shown**

Figure 2: Square 2902 series speaker, 12 1/2 in. grill shown

Product selection

See Figure 3 and Figure 4 for dimension reference A, B, and C.

Table 1: Product selection

Speaker model		Grill dimensions (A)	Speaker size	Compatible backboxes with dimensions (B x C)	
25 V input	70 V input			Semi-flush mount	Surface mount
2902-9310	2902-9311	Round grill, 8 9/16 in. (217 mm) diameter	4 1/2 in. (114 mm)	2975-9302; 6 in. round x 3 7/16 in. deep (152 mm x 87 mm)	Not available
2902-9312	2902-9313, see note	Square grill, 6 3/8 in. (162 mm)	4 1/2 in. (114 mm)	2975-9303; 5 9/16 in. square x 4 11/16 in. deep (141 mm x 119 mm)	2975-9304; 6 5/8 in. square x 4 in. deep (168 mm x 104 mm), see note
2902-9314	2902-9315	Round grill, 12 3/4 in. (324 mm) diameter	8 in. (203 mm)	2975-9305; 10 in. round x 4 in. deep, with 11 5/8 in. lip (254 mm x 102 mm x 295mm)	Not available
2902-9316	2902-9317	Square grill, 12 1/2 in. (318 mm)	8 in. (203 mm)	2975-9306; 11 3/4 in. square x 4 in. deep (298 mm x 102 mm)	2975-9307; 12 7/8 in. square x 4 in. deep (327 mm x 102 mm)

Note: The combination of speaker 2902-9313 and backbox 2975-9304 requires use of the 1 W tap to achieve 85 dB per ULC sound chamber testing.
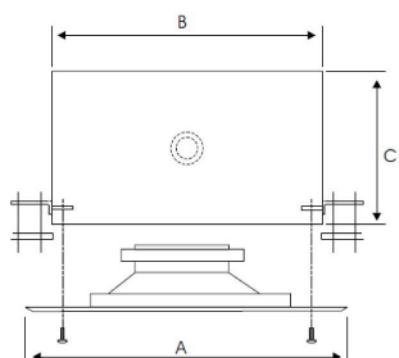
Installation reference
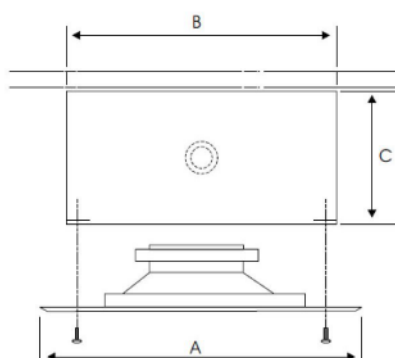

Figure 3: Semi-flush mounting reference

Figure 4: Surface mounting reference

Speaker placement

The placement of notification appliances must conform to the following regulations:

- Canadian Building Code
- Sound (Sound Pressure Level) Analysis of Intended Protected Areas
- Local Authority Having Jurisdiction (AHJ) Requirements
- Standard CAN/ULC-S524, "Installation of Fire Alarm Systems"

Notification appliances are not intended for installation within hazardous locations as defined by the Canadian Building code.

Sound output ratings

Table 2: Sound output ratings

—				Sound pressure level (dBA) in Anechoic Chamber at 3 m (~10 ft) per ULC-S541					Sound pressure level directional losses (dBA), see note	
Speaker model		Grill shape and size	Speaker size	1/4 W tap	1/2 W tap	1 W tap	2 W tap	4 W tap	-3 dBA	-6 dBA
25 V input	70 V input									
2902-9310	2902-9311	Round grill, 8 9/16 in. diameter	4 1/2 in.	79	82	85	88	91	± 30°	± 60°
2902-9312	2902-9313	Square grill, 6 3/8 in. square	4 1/2 in.							
2902-9314	2902-9315	Round grill 12 3/4 in. diameter	8 in.	80	83	86	89	92	± 30°	± 35°
2902-9316	2902-9317	Square grill, 12 1/2 in. square	8 in.							

Note: 0 dBA (reference) is on-axis. Angular losses apply equally for horizontal and vertical axis.
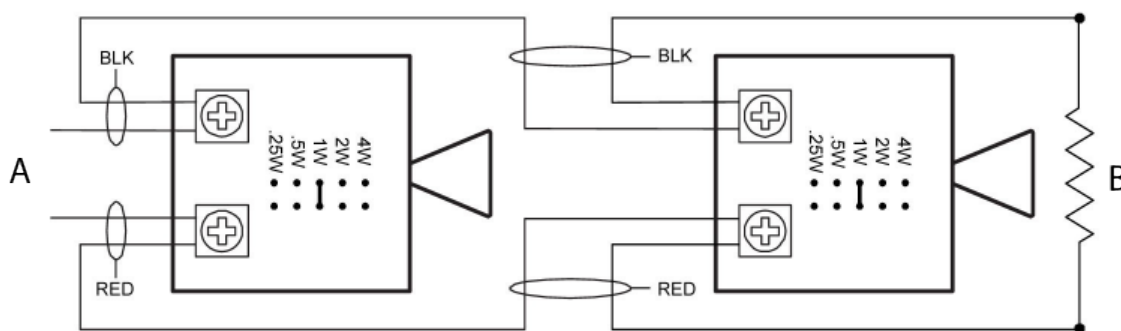
Wiring reference

Figure 5: Wiring reference

Table 3: Figure reference

Callout	Description
A	25 VRMS or 70 VRMS audio input from FACU
B	If last appliance on circuit, connect end of line resistor (EOLR)

Note:

- Refer to field wiring diagrams supplied with the FACU for additional NAC wiring information. Terminals are suitable for wires sizes 18 AWG to 12 AWG (0.82 mm^2 to 3.31 mm^2).
- Notification appliances are rated for each individual nameplate label.
- Maintain correct polarity on terminal connections. Do not loop wires under terminals.
- Wiring shall be in accordance with CSA C22.1. Canadian Electrical Code, Safety Standard for Electrical Installations, Section 32.