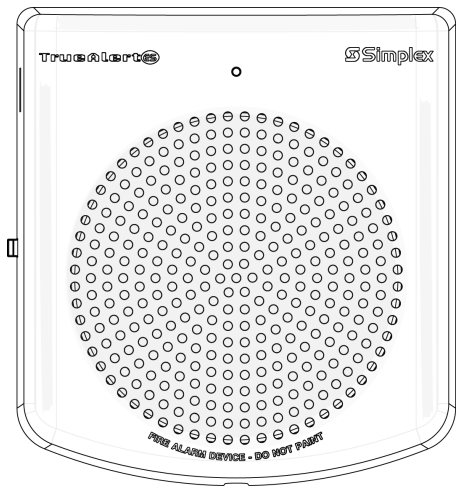


**Introduction**

**Wall Mount Indoor and Outdoor Addressable Speaker (S/O) Notification Appliances** are individually powered, addressed, and controlled from a Simplex fire alarm control panel IDNAC Signaling Line Circuit (SLC). Audio is supplied from a separate compatible Simplex Fire Alarm Control Panel audio NAC. Wiring supervision is electronically monitored allowing audio and IDNAC wiring to be T-tapped for Class B wiring, reducing wiring costs and wiring distances.

Installation on standard 4 inch square 2 1/8 inch deep USA electrical boxes for flush installations (provided by others) or surface/WP backboxes (order below) for surface or WP installations.

Appliances are available in 400 - 4000 Hz and 200 – 10000 Hz high fidelity models. Separate appliance and cover selection greatly simplifies the ordering and installation process. Model numbers ending in -BA are assembled in the USA. For more detailed information, please consult datasheet S49SWC-0001.



**Figure 1: Wall Mount Addressable Speaker Notification Appliance**

**Table 3: S/O Covers (Required when ordering APPLW models)**

Model	Color	Wording
49SOC-WRBLANK	Red	No Lettering
49SOC-WWBLANK	White	No Lettering
49SOC-WRBA	Red	حريق / FIRE
49SOC-WWBA	White	حريق / FIRE
49SOC-WRBC	Red	火警 / FIRE ALARM
49SOC-WWBC	White	火警 / FIRE ALARM
49SOC-WRBF	Red	FEU/FIRE
49SOC-WWBF	White	FEU/FIRE
49SOC-WRFEU	Red	FEU
49SOC-WWFEU	White	FEU
49SOC-WRFIRE	Red	FIRE
49SOC-WWFIRE	White	FIRE
49SOC-WRS	Red	Logo only
49SOC-WWS	White	Logo only
49SOC-WRALT	Red	ALERT
49SOC-WWALT	White	ALERT

**Wall Mount Addressable Speaker Product Selection**

**Table 1: Wall Mount Addressable Speaker S/O Appliances**

Model	Description	Installation instructions
49SO-APPLW	S/O Appliance Only. Select cover, mounting plate, and surface/WP box (if required) separately.	579-1190
49SO-APPLW-BA		

**Table 2: High Fidelity Appliances**

Model	Description	Installation instructions
49HF-APPLW	High fidelity S/O appliance only. Select cover, mounting plate, and surface/WP box (if required) separately.	579-1190
49HF-APPLW-BA		

\* Additional listings may be applicable, contact your local Simplex® product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co.

**Weatherproof Product Selection**
**Table 4: Weatherproof Wall Mount Addressable Speaker S/O Appliances**

Model	Description	Installation instructions
49SO-APPLW-O	S/O Appliance only. Select cover, mounting plate and surface/WP back box separately.	579-1237
49SO-APPLW-O-BA		

**Table 5: S/O Covers (Required when ordering APPLW-O models)**

Model	Color	Wording
49SOC-WRBLANK-O	Red	No Lettering
49SOC-WWBLANK-O	White	
49SOC-WRBA-O	Red	حريق /FIRE
49SOC-WWBA-O	White	
49SOC-WRBC-O	Red	火警 /FIRE ALARM
49SOC-WWBC-O	White	
49SOC-WRBF-O	Red	FEU/FIRE
49SOC-WWBF-O	White	
49SOC-WRFEU-O	Red	FEU
49SOC-WWFEU-O	White	
49SOC-WRFIRE-O	Red	FIRE
49SOC-WWFIRE-O	White	
49SOC-WRS-O	Red	Logo only
49SOC-WWS-O	White	
49SOC-WRALT-O	Red	ALERT
49SOC-WWALT-O	White	

**Table 6: S/O Wall Mount Plate (non-weatherproof and weatherproof)**

Model	Description	Installation instructions
49MP-SOWR	Mounting back plate in red.	579-1193
49MP-SOWW	Mounting back plate in white.	

**Table 7: Surface/WP Back Boxes**

Model	Color	Description	Installation instructions
49WPBB-SOWR	Red	Surface/WP back box in red.	579-1239
49WPBB-SOWW	White	Surface/WP back box in white.	

**Table 8: Wire Guard Back Box and Wire Guard**

Model	Description
49WGBB-SOWR-O	Wire Guard Back Box, Wall, Red, WP
49WG-SOWR	Wire Guard, Wall, Red

**Wall Mount Speaker Specifications**
**Table 9: Appliance General Specifications**

Specification	Rating
<b>Dimensions</b>	5 ½" H x 5" W x 1 ½" D (139 mm x 128 mm x 38 mm)
<b>Environmental</b>	32° to 120° F (0° to 49° C); 10% to 93%, non-condensing at 104° F (40° 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 per terminal for in/out wiring. Use Unshielded Twisted Pair (UTP) for IDNAC and audio wiring.

**Table 10: Speaker Audio Specifications**

Specification	Rating
<b>Input Voltage</b>	25 or 70.7 Vrms
<b>Power Taps</b>	¼, ½, 1, and 2 W
<b>Frequency Response</b>	400 to 4000 Hz (S/O), 200 to 10000 Hz (H/F)      General Signaling = 125 to 12 kHz

**Table 11: Speaker Output Ratings 25 or 70.7 Vrms @ 10 ft (3 m)**

Wattage Tap Model	¼ W		½ W		1 W		2 W	
	S/O	H/F	S/O	H/F	S/O	H/F	S/O	H/F
Reverberant Chamber Test, per UL 1480 (dBA)	79	76	83	80	87*	83	90*	86*
Anechoic Chamber Test, per ULC-S541 (dBA)	80	76	84	79	88*	82	91*	85*

\* Select taps as indicated to satisfy the ULC fire alarm applications requirement of 85 dBA minimum

**Table 12: Polar Dispersion Reference (per ULC-S541 Anechoic Chamber Testing)**

Attenuation	Angle	Attenuation	Angle
-3 dB	70°	-6 dB	80°

**Table 13: IDNAC SLC Specifications**

Specification	Rating
<b>Typical Operating Voltage Range</b>	23 VDC to 30 VDC, Special Application
<b>Appliance Voltage Design Reference</b>	23VDC (with 6VDC drop)
<b>Current Consumption @ 23 VDC on IDNAC Addressable SLC</b>	9mA
<b>Supervisory Requirements</b>	1 unit load (= 0.8 mA control panel current)
<b>IDNAC SLC Loading</b>	Maximum of 127 addresses per SLC, 139 unit loads. See device and compatible Fire Panel Installation Instructions for circuit current load limits.
<b>IDNAC SLC Wiring Specifications</b> (refer to control panel installation instructions for more information)	UTP, unshielded twisted pair recommended Maximum wire length allowed with "T-Taps" for Class B wiring per SLC = 10,000 ft (3048 m) Maximum wire length to any appliance = 4000 ft (1219 m). This can be doubled to 8000ft (2438m) by using a 4009 IDNAC Repeater.

### Equipment Compatibility Reference

Compatible Equipment	Data Sheet Reference
4100ES with EPS+ or EPS Power Supply	S4100-0100
4009 IDNAC Repeater	S4009-0004
4100ES Flex 35 and 50 Watt Amplifiers	
4100ES 100 Watt Amplifiers	S4100-0034
4100ES Constant Supervision and Audio NACs	

### Wall Mount S/O Installation Reference

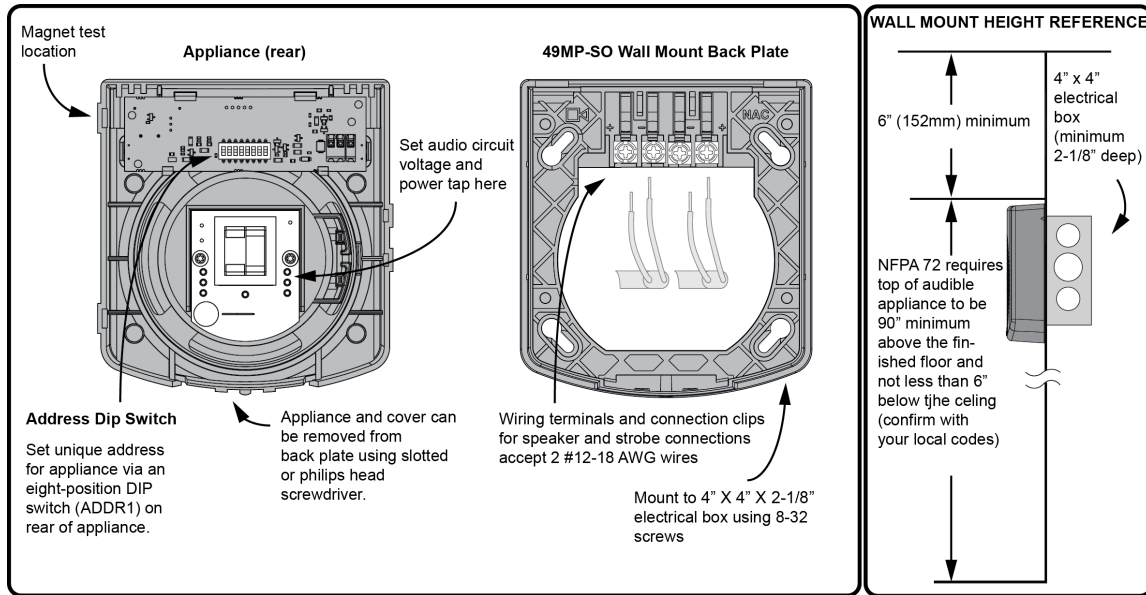


Figure 2: Installation reference