

Introduction

Wall Mount Indoor and Outdoor Addressable Speaker (S/O) Notification Appliances are individually powered, addressed, and controlled from a Simplex fire alarm control unit IDNAC Signaling Line Circuit (SLC). Audio is supplied from a separate compatible Simplex Fire Alarm Control Unit 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 Hz to 4000 Hz and 200 Hz to 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**.

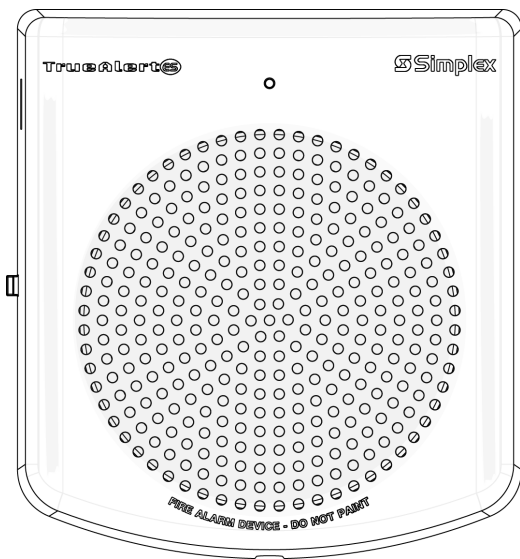


Figure 1: Wall mount addressable speaker notification appliance

Wall mount addressable speaker product selection

Table 1: Wall mount addressable speaker S/O appliances

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

Table 2: High fidelity appliances

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

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

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

* 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 49SO-APPLW-O-BA	S/O appliance only. Select cover, mounting plate and surface/WP back box separately.	579-1237

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	火警/FIRE ALARM
49SOC-WRBC-O	Red	
49SOC-WWBC-O	White	FEU/FIRE
49SOC-WRBF-O	Red	
49SOC-WWBF-O	White	FEU
49SOC-WRFEU-O	Red	
49SOC-WWFEU-O	White	FIRE
49SOC-WRFIRE-O	Red	
49SOC-WWFIRE-O	White	Logo only
49SOC-WRS-O	Red	
49SOC-WWS-O	White	ALERT
49SOC-WRALT-O	Red	
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
Dimensions	5 1/2 in. H x 5 in. W x 1 1/2 in. D or 139 mm x 128 mm x 38 mm
Environmental	32°F to 120°F or 0°C to 49°C; 10% to 93%, non-condensing at 104°F or 40°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. Use Unshielded Twisted Pair (UTP) for IDNAC and audio wiring.

Table 10: Speaker audio specifications

Specification	Rating
Input voltage	25 VRMS or 70.7 VRMS
Power taps	1/4 W, 1/2 W, 1 W, and 2 W
Frequency response	400 Hz to 4000 Hz (S/O), 200 Hz to 10000 Hz (H/F) General signaling = 125 kHz to 12 kHz

Table 11: Speaker output ratings 25 Vrms or 70.7 Vrms @ 10 ft or 3 m

Wattage tap Model	1/4 W		1/2 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

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
Typical operating voltage range	23 VDC to 30 VDC, special application
Appliance voltage design reference	23 VDC (with 6 VDC drop)
Current consumption @ 23 VDC on IDNAC addressable SLC	9 mA
Supervisory requirements	1 unit load (= 0.8 mA control unit current)
IDNAC SLC loading	Maximum of 127 addresses for each SLC, 139 unit loads. See device and compatible Fire Alarm Control Unit Installation Instructions for circuit current load limits.
IDNAC SLC wiring specifications (refer to the control unit installation instructions for more information)	UTP, unshielded twisted pair recommended Maximum wire length allowed with T-Taps for Class B wiring for each SLC = 10,000 ft or 3048 m Maximum wire length to any appliance = 4000 ft or 1219 m. This can be doubled to 8000 ft or 2438 m 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	S4100-0034
4100ES 100 Watt Amplifiers	
4100ES Constant Supervision and Audio NACs	

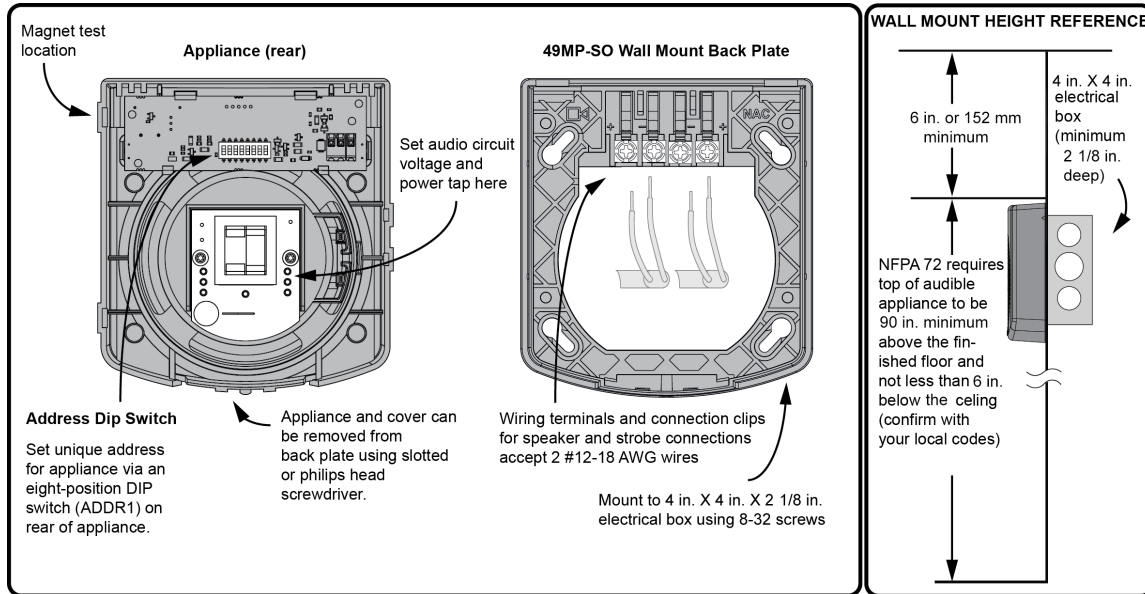
Wall mount S/O installation reference


Figure 2: Installation reference