

Introduction

Wall Mount Indoor and Outdoor Addressable Speaker (S/O)

Notification Appliances are individually powered, addressed, and controlled from a Autocall 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 AC49SWC-0001.

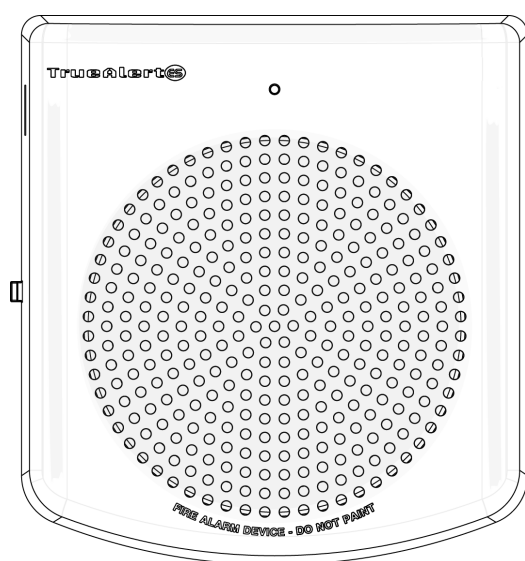


Figure 1: Wall Mount Addressable Speaker Notification Appliance

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

SKU	Color	Wording
A49SOC-WRBLANK	Red	No Lettering
A49SOC-WWBLANK	White	No Lettering
A49SOC-WRBA	Red	حريق/FIRE
A49SOC-WWBA	White	حريق/FIRE
A49SOC-WRBC	Red	火警/FIRE ALARM
A49SOC-WWBC	White	火警/FIRE ALARM
A49SOC-WRBF	Red	FEU/FIRE
A49SOC-WWBF	White	FEU/FIRE
A49SOC-WRFEU	Red	FEU
A49SOC-WWFEU	White	FEU
A49SOC-WRFIRE	Red	FIRE
A49SOC-WWFIRE	White	FIRE
A49SOC-WRS	Red	Logo only
A49SOC-WWS	White	Logo only
A49SOC-WRALT	Red	ALERT
A49SOC-WWALT	White	ALERT

Wall Mount Addressable Speaker Product Selection

Table 1: Wall Mount Addressable Speaker S/O Appliances

SKU	Description	Installation instructions
A49SO-APPLW A49SO-APPLW-BA	S/O Appliance Only. Select cover, mounting plate, and surface/WP box (if required) separately.	579-1190AC

Table 2: High Fidelity Appliances

SKU	Description	Installation instructions
A49HF-APPLW A49HF-APPLW-BA	High fidelity S/O appliance only. Select cover, mounting plate, and surface/WP box (if required) separately.	579-1190AC

Weatherproof Product Selection

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

SKU	Description	Installation instructions
A49SO-APPLW-O	S/O Appliance only. Select cover, mounting plate and surface/WP back box separately.	579-1237AC
A49SO-APPLW-O-BA		

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

SKU	Color	Wording
A49SOC-WRBLANK-O	Red	No Lettering
A49SOC-WWBLANK-O	White	
A49SOC-WRBA-O	Red	حريق/FIRE
A49SOC-WWBA-O	White	
A49SOC-WRBC-O	Red	火警/FIRE ALARM
A49SOC-WWBC-O	White	
A49SOC-WRBF-O	Red	FEU/FIRE
A49SOC-WWBF-O	White	
A49SOC-WRFEU-O	Red	FEU
A49SOC-WWFEU-O	White	
A49SOC-WRFIRE-O	Red	FIRE
A49SOC-WWFIRE-O	White	
A49SOC-WRS-O	Red	Logo only
A49SOC-WWS-O	White	
A49SOC-WRALT-O	Red	ALERT
A49SOC-WWALT-O	White	

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

SKU	Description	Installation instructions
A49MP-SOWR	Mounting back plate in red.	579-1193AC
A49MP-SOWW	Mounting back plate in white.	

Table 7: Surface/WP Back Boxes

SKU	Color	Description	Installation instructions
A49WPBB-SOWR	Red	Surface/WP back box in red.	579-1239AC
A49WPBB-SOWW	White	Surface/WP back box in white.	

Table 8: Wire Guard Back Box and Wire Guard

SKU	Description
A49WGBB-SOWR-O	Wire Guard Back Box, Wall, Red, WP
A49WG-SOWR	Wire Guard, Wall, Red

Wall Mount Speaker Specifications

Table 9: Appliance General Specifications

Specification	Rating
Dimensions	5 1/2" H x 5" W x 1 1/2" D (139 mm x 128 mm x 38 mm)
Environmental	32° to 120° F (0° to 49° C); 10% to 93%, non-condensing at 104° F (40° C)
Connections	Terminal blocks for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²); 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
Input Voltage	25 or 70.7 Vrms
Power Taps	1/4, 1/2, 1, and 2 W
Frequency Response	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	1/4 W		1/2 W		1 W		2 W	
SKU	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
Typical Operating Voltage Range	23 VDC to 30 VDC, Special Application
Appliance Voltage Design Reference	23VDC (with 6VDC drop)
Current Consumption @ 23 VDC on IDNAC Addressable SLC	9mA
Supervisory Requirements	1 unit load (= 0.8 mA control panel current)
IDNAC SLC Loading	Maximum of 127 addresses per SLC, 139 unit loads. See device and compatible Fire Panel Installation Instructions for circuit current load limits.
	UTP, unshielded twisted pair recommended
IDNAC SLC Wiring Specifications (refer to control panel installation instructions for more information)	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	AC4100-0100
4009 IDNAC Repeater	AC4009-0004
4100ES Flex 35 and 50 Watt Amplifiers	AC4100-0034
4100ES 100 Watt Amplifiers	
4100ES Constant Supervision and Audio NACs	

Wall Mount S/O Installation Reference

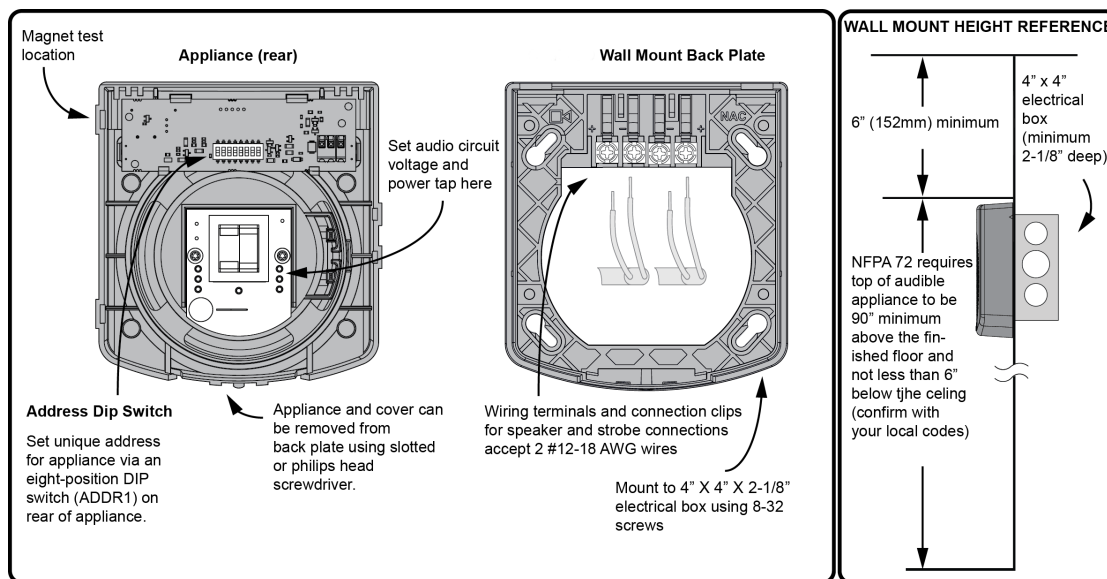


Figure 2: Installation reference