Introduction

Wall mount indoor and outdoor Addressable Speaker Visible (S/V) 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 Autocall 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, consult datasheet AC49SWC-0001.
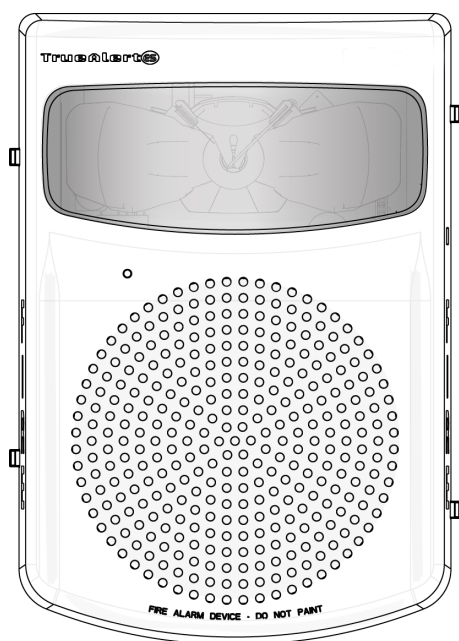

Figure 1: Wall Mount Addressable Speaker/Visible Notification Appliance

Product Selection

Table 1: TrueAlert ES Wall Mount Addressable Speaker S/V Appliances

SKU**	Description	Installation instructions
A49SV-APPLW A49SV-APPLW-BA	Select cover, mounting plate, and surface/WP box (if required) separately.	579-1190AC

Table 2: High Fidelity H/F Appliances

SKU**	Description	Installation instructions
A49HFV-APPLW A49HFV-APPLW-BA	High Fidelity S/V Appliance Only. Select cover, mounting plate, and surface/WP box (if required) separately.	579-1190AC

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

SKU	Color	Wording
A49SVC-WRALT	Red	Alert
A49SVC-WWALT	White	
A49SVC-WRBA	Red	حريق/FIRE
A49SVC-WWBA	White	
A49SVC-WRBC	Red	火警/FIRE ALARM
A49SVC-WWBC	White	
A49SVC-WRBF	Red	FEU/FIRE
A49SVC-WWBF	White	
A49SVC-WRFEU	Red	FEU
A49SVC-WWFEU	White	
A49SVC-WRFIRE	Red	FIRE
A49SVC-WWFIRE	White	
A49SVC-WRS	Red	Autocall logo only
A49SVC-WWS	White	

Table 4: S/V Wall Lens

Lens	Color	Installation instructions
A49LENS-AMBER	Amber	579-1192AC
A49LENS-BLUE	Blue	
A49LENS-GREEN	Green	
A49LENS-RED	Red	

Note: Use colored lenses only with indoor appliances.

* Additional listings may be applicable; contact your local product supplier for the latest status.

Weatherproof Product Selection

Table 5: Weatherproof Wall Mount Addressable Speaker S/V Appliances

SKU	Description	Installation instructions
A49SV-APPLW-O A49SV-APPLW-O-BA A49SV-APPLW-CO	S/V Appliance only. Select cover, mounting plate and surface/WP back box separately.	579-1237AC

Table 6: S/V Covers (Required when ordering APPLW-O models)

SKU	Color	Wording
A49SVC-WRBA-O	Red	حريق/FIRE
A49SVC-WWBA-O	White	
A49SVC-WRBC-O	Red	火警/FIRE ALARM
A49SVC-WWBC-O	White	
A49SVC-WRBF-O	Red	FEU/FIRE
A49SVC-WWBF-O	White	
A49SVC-WRFEU-O	Red	FEU
A49SVC-WWFEU-O	White	
A49SVC-WRFIRE-O	Red	FIRE
A49SVC-WWFIRE-O	White	
A49SVC-WRALT-O	Red	ALERT
A49SVC-WWALT-O	White	
A49SVC-WRS-O	Red	Autocall logo only
A49SVC-WWS-O	White	

Table 7: Surface/WP Back Boxes

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

Table 8: Wire Guards and Wire Guard Back Boxes

SKU	Description
A49WGBB-SVWR-O	Wire Guard Back Box, Wall, Red, WP
A49WGBB-SVCR-O	Wire Guard Back Box, Ceiling, Red, WP
A49WG-SVWCR	Wire Guard, Wall, Red

Table 9: S/V Wall Mount Back Plate

SKU	Description	Installation instructions
A49MP-SVWR	Mounting back plate in red	579-1193AC
A49MP-SVWW	Mounting back plate in white	

Wall Mount S/V Specifications

Table 10: Appliance General Specifications

Dimensions	7 3/8" H x 5" W x 1 3/4" D (139mm x 128mm x 42mm)
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 mm² to 3.31 mm²); two wires per terminal for in/out wiring. Use Unshielded Twisted Pair (UTP) for IDNAC and audio wiring.

Table 11: Speaker Audio Specifications

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

Table 12: S/V Speaker Output Ratings 25 or 70.7 Vrms @ 10 ft (3 m)

Wattage Tap	¼ W		½ W		1 W		2 W	
Model	S/V	H/F	S/V	H/F	S/V	H/F	S/V	H/F
Reverberant Chamber Test, per UL 1480 (dBA)	79	76	83	80	86*	82	89*	86*
Anechoic Chamber Test, per ULC-S541 (dBA)	81	78	84	81	88*	84	90*	87*
* Note: Select taps as indicated to satisfy the ULC fire alarm applications requirement of 85 dBA minimum								

Table 13: Polar Dispersion Reference (per ULC-S541 Anechoic Chamber Testing)

Attenuation	Angle	Attenuation	Angle
-3 dB	75°	-6 dB	85°

Table 14: Percentage of rated light output at room temperature

Angle	On-Axis	Vertical, Below Axis		Horizontal, Left/Right of Axis	
	0°	45°	90°	45°	90°
UL required output	100%	34%	12%	75%	25%
Typical output	194%	90%	45%	121%	41%

Table 15: IDNAC SLC Specifications

Typical Operating Voltage Range	23 - 30 VDC, Special Application
Appliance voltage design reference	23VDC (with 6VDC drop)
Supervisory Requirements	1 unit load (= 0.8 mA control panel current)
Flash Rate and Synchronized SLC Loading	1 Hz; with up to 63 synchronized strobes maximum per NAC
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.
IDNAC SLC Wiring Specifications (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.

Table 16: Current Consumption***

Candela Setting	15 cd	30 cd	75 cd	110 cd	135 cd	185 cd
Clear/White Lens	47 mA	57 mA	100 mA	132 mA	160 mA	208 mA
Tinted Lens	54 mA	78 mA	128 mA	184 mA	211 mA	N/A
Outdoor private mode	69 mA	N/A	240 mA	300 mA	N/A	445 mA
***Measured at 23 VDC on IDNAC Addressable SLC						
Note: Speakers are for connection to compatible fire alarm audio circuits. Anechoic ratings are representative of actual installed sound output.						

Equipment Compatibility References

Table 17: Equipment Compatibility References

Compatible Controllers	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/V Installation Reference

Magnet test location

Appliance (rear)

Wall Mount Back Plate

WALL MOUNT HEIGHT REFERENCE

185
135
FACP
15
30
75
110

Candela Setting
Set flag to FACP to control candela rating from an FACP providing IDNAC notification. To set candela manually, move flag to the desired candela

Address Dip Switch
Set unique address for appliance via an eight-position DIP switch on rear of appliance

Set audio circuit voltage and power tap selection here

Appliance and cover can be removed from backplate using slotted or philips head screwdriver

Wiring terminals for speaker and strobe connections accept 2 #12-18 AWG wires

Mount to 4" X 4" X 2-1/8" electrical box using 8-32 screws

Bottom of lens is even with or slightly above bottom of compatible boxes

4" x 4" electrical box (minimum 2-1/8" deep)

FIRE

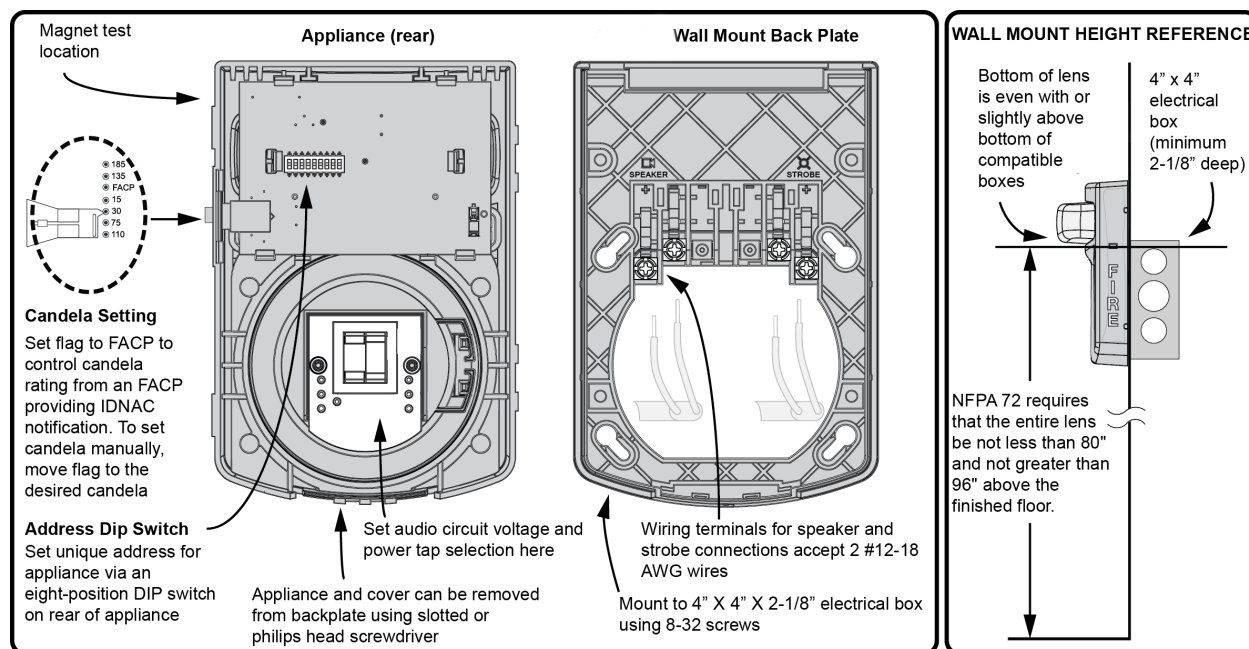NFPA 72 requires that the entire lens be not less than 80" and not greater than 96" above the finished floor.

Figure 2: Installation reference