

Introduction

Wall mount indoor and outdoor Addressable Speaker Visible (S/V) 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 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 S49SWC-0001.

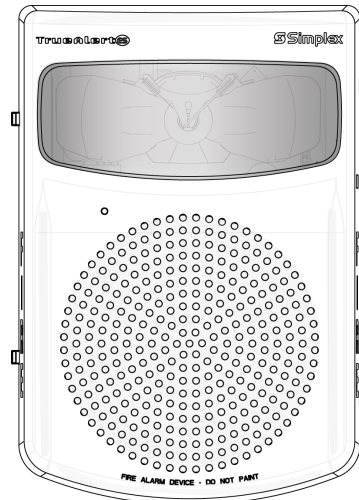


Fig 1: Wall Mount
Addressable Speaker/
Visible Notification Appliance

Product Selection

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

| SKU** | Description |
|---------------|--|
| 49SV-APPLW | Select cover, mounting plate, and weatherproof box (if required) separately. |
| 49SV-APPLW-BA | |

Table 2: High Fidelity H/F Appliances

| SKU** | Description |
|----------------|--|
| 49HFV-APPLW | High Fidelity S/V Appliance Only. Select cover, mounting plate, and weatherproof box (if required) separately. |
| 49HFV-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.

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

| SKU | Color | Wording |
|--------------|-------|-------------------|
| 49SVC-WRALT | Red | Alert |
| 49SVC-WWALT | White | |
| 49SVC-WRBA | Red | حريق /FIRE |
| 49SVC-WWBA | White | |
| 49SVC-WRBC | Red | 火警 /FIRE ALARM |
| 49SVC-WWBC | White | |
| 49SVC-WRBF | Red | FEU/FIRE |
| 49SVC-WWBF | White | |
| 49SVC-WRFEU | Red | FEU |
| 49SVC-WWFEU | White | |
| 49SVC-WRFIRE | Red | FIRE |
| 49SVC-WWFIRE | White | |
| 49SVC-WRS | Red | Simplex logo only |
| 49SVC-WWS | White | |

Table 4: S/V Wall Lens

| Lens | Color |
|-----------------|-------|
| 49SV-LENS-AMBER | Amber |
| 49SV-LENS-BLUE | Blue |
| 49SV-LENS-GREEN | Green |
| 49SV-LENS-RED | Red |

Weatherproof Product Selection

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

| SKU | Description |
|--|--|
| 49SV-APPLW-O 49SV-APPLW-O-BA 49SV-APPLW-CO | S/V Appliance only. Select cover, mounting plate and weatherproof back box separately. |

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

| SKU | Color | Wording |
|----------------|-------|-------------------|
| 49SVC-WRBA-O | Red | حريق /FIRE |
| 49SVC-WWBA-O | White | |
| 49SVC-WRBC-O | Red | 火警 /FIRE ALARM |
| 49SVC-WWBC-O | White | |
| 49SVC-WRBF-O | Red | FEU/FIRE |
| 49SVC-WWBF-O | White | |
| 49SVC-WRFEU-O | Red | FEU |
| 49SVC-WWFEU-O | White | |
| 49SVC-WRFIRE-O | Red | FIRE |
| 49SVC-WWFIRE-O | White | |
| 49SVC-WRALT-O | Red | ALERT |
| 49SVC-WWALT-O | White | |
| 49SVC-WRS-O | Red | Simplex logo only |
| 49SVC-WWS-O | White | |

Wall Mount Addressable Speaker Visible (S/V) Notification Appliances

Table 7: Weatherproof Back Boxes

| SKU | Color | Description |
|-------------|-------|--------------------------------|
| 49WPBB-SVWR | Red | Weatherproof back box in red |
| 49WPBB-SVWW | White | Weatherproof back box in white |

Table 8: Wire Guards and Wire Guard Back Boxes

| SKU | Description |
|---------------|---------------------------------------|
| 49WGBB-SVWR-O | Wire Guard Back Box, Wall, Red, WP |
| 49WGBB-SVCR-O | Wire Guard Back Box, Ceiling, Red, WP |
| 49WG-SVWCR | Wire Guard, Wall, Red |

Table 9: S/V Wall Mount Back Plate

| SKU | Description |
|-----------|------------------------------|
| 49MP-SVWR | Mounting back plate in red |
| 49MP-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 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. |
| Installation Instructions | 579-1190 (Wall Mount S/V Appliance), 579-1193 (Wall Mount back plate), 579-1192 (Wall Mount S/V Colored Lens kit) |

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***

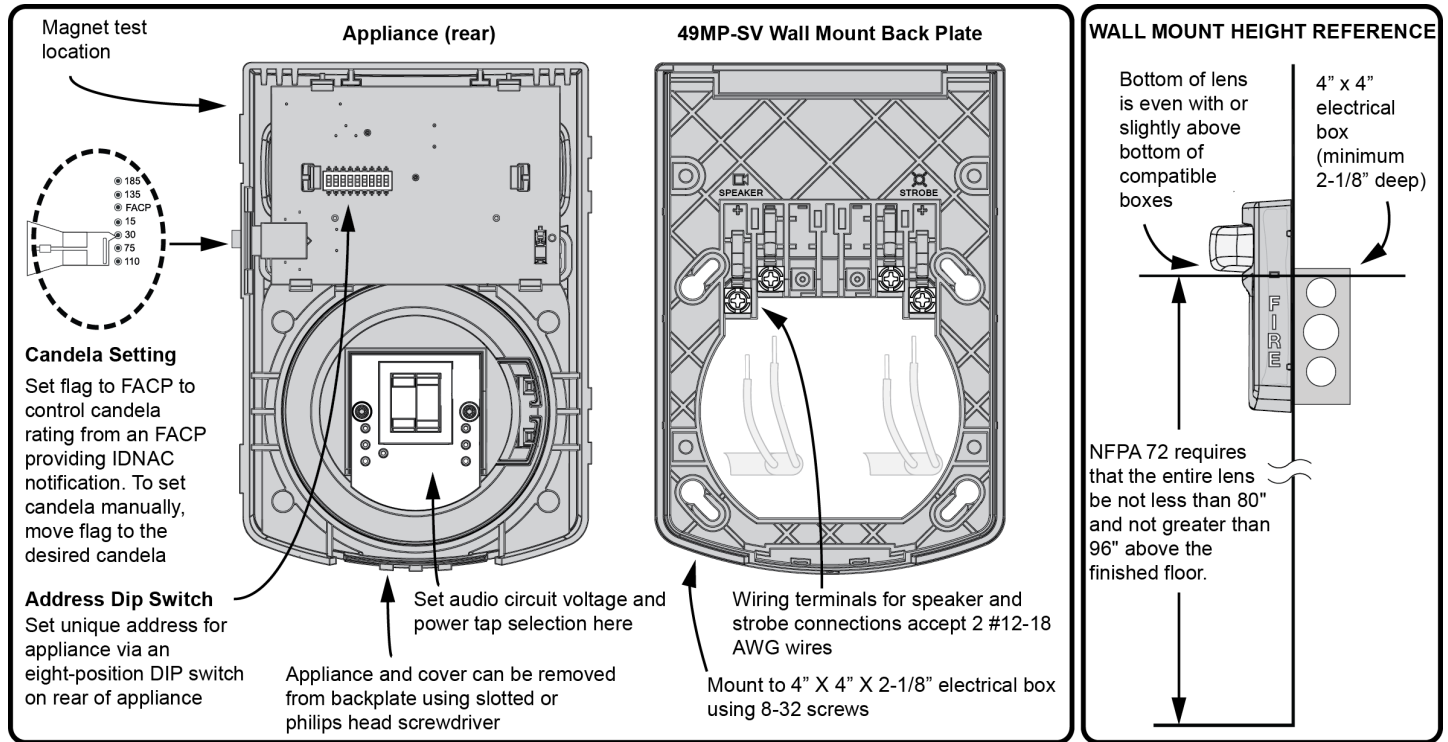
| Candela Setting | 15 cd | 30 cd | 75 cd | 110 cd | 135 cd | 185 cd |
|---|-------|-------|--------|--------|--------|--------|
| Clear/White Lens | 47 mA | 57 mA | 100 mA | 132 mA | 160 mA | 208 mA |
| Tinted Lens | 54 mA | 78 mA | 128 mA | 184 mA | 211 mA | N/A |
| ***Measured at 23 VDC on IDNAC Addressable 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 | <i>S4100-0100</i> |
| 4009 IDNAC Repeater | <i>S4009-0004</i> |
| 4100ES Flex 35 and 50 Watt Amplifiers | <i>S4100-0034</i> |
| 4100ES 100 Watt Amplifiers | |
| 4100ES Constant Supervision and Audio NACs | |

Wall Mount S/V Installation Reference



Weatherproof Wall Mount S/V Installation Reference

