

Cautions and Warnings



READ AND SAVE THESE INSTRUCTIONS- Follow the instructions in this installation manual. These instructions must be followed to avoid damage to this product and associated equipment. Product operation and reliability depend upon proper installation.

DO NOT INSTALL ANY SIMPLEX® PRODUCT THAT APPEARS DAMAGED- Upon unpacking your Simplex product, inspect the contents of the carton for shipping damage. If damage is apparent, immediately file a claim with the carrier and notify an authorized Simplex product supplier.



ELECTRICAL HAZARD - Disconnect electrical field power when making any internal adjustments or repairs. All repairs should be performed by a representative or authorized agent of your local Simplex product supplier.



STATIC HAZARD - Static electricity can damage components. Handle as follows:

- Ground yourself before opening or installing components.
- Prior to installation, keep components wrapped in anti-static material at all times.

FCC RULES AND REGULATIONS – PART 15 - This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

SYSTEM REACCEPTANCE TEST AFTER SOFTWARE CHANGES - To ensure proper system operation, this product must be tested in accordance with NFPA 72, after any programming operation or change in site-specific software. Reacceptance testing is required after any change, addition or deletion of system components, or after any modification, repair or adjustment to system hardware or wiring. All components, circuits, system operations, or software functions known to be affected by a change must be 100% tested. In addition, to ensure that other operations are not inadvertently affected, at least 10% of initiating devices that are not directly affected by the change, up to a maximum of 50 devices, must also be tested and proper system operation verified.

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Overview

The 4906 TrueAlert Addressable Multi-Candela notification appliances are available for wall or ceiling mount, **for indoor use only**. They provide visible, horn/visible (A/V), or speaker/visible (S/V) warning of an alarm condition when activated from the control panel of a UL/ULC Listed, Simplex Fire Alarm System.

Note: When the notification appliance emits light or sound, it indicates the possibility of an emergency situation that requires immediate attention of all occupants.

Strobe output is selectable as 15, 30, 75, 110cd, or FACP. Selection can be made manually by jumper placement. **The appliance comes with the jumper installed in the factory default “FACP” setting. When the jumper is in the factory default “FACP” setting, strobe output can be programmed from a 4100U/4100ES fire alarm control panel when connected to a TrueAlert Addressable Power Supply (TPS).** Default FACP programmed output is 15cd, however, one of the four candela outputs must be programmed for each appliance, by authorizing service personnel or a programming mismatch trouble will result. Additional information is contained in *ES Panel Programmer’s Manual (574-849)*.

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Each addressable multi-candela notification appliance has a unique address, set via an eight-position DIP switch. Up to 63 unique addresses can be assigned to a TrueAlert Addressable Signaling Line Circuit (SLC), however, total appliance loading available may be less due to appliance current requirements. The appliances are available in the colors described in Table 1. The appliances must not be painted or have their finish altered in any way.

Table 1. TrueAlert Multi-Candela Notification Appliances and Specifications







Multi-Candela	Model	Operation	Replaces
Wall-Mount  Visible Only (V/O)	4906-9201 (Red)	Multi-Candela strobe only provides intensity selectable for candela ratings of 15, 30, 75, or 110 cd; Synchronized 1 HZ flash.	4904-9350 4904-9351 4904-9352
	4906-9203 (White)		4904-9353 4904-9354 4904-9355
Wall-Mount  Audible/Visible (A/V)	4906-9227 (Red)	Multi-Candela strobe with electronic horn provides intensity selectable for 15, 30, 75, or 110 cd; Synchronized 1 HZ flash.	4903-9450 4903-9451 4903-9452
	4906-9229 (White)		4903-9453 4903-9454 4903-9455
Wall-Mount  Speaker/Visible (S/V)	4906-9251 (Red)	Multi-Candela strobe with speaker provides intensity selectable for 15, 30, 75, or 110 cd; Synchronized 1 HZ flash. TrueAlert Addressable strobe and speaker are wired separately. Speakers are for 25 or 70.7 VRMS, tapped at ¼ W, ½ W, 1 W, and 2 W.	4903-9350 4903-9351 4903-9352
	4906-9253 (White)		4903-9353 4903-9354 4903-9355
Ceiling-Mount  Visual Only (V/O)	4906-9202 (Red)	Multi-Candela strobe only provides intensity selectable for candela ratings of 15, 30, 75, or 110 cd; Synchronized 1 HZ flash.	4904-9356 4904-9357 4904-9358
	4906-9204 (White)		4904-9359
	4906-9212 (White, Fire Alarm CN)		4904-9360 4904-9361
Ceiling-Mount  Audible/Visible (A/V)	4906-9228 (Red)	Multi-Candela strobe with electronic horn provides intensity selectable for candela ratings of 15, 30, 75, or 110 cd; Synchronized 1 HZ flash.	New Model
	4906-9230 (White)		4903-9459 4903-9460 4903-9461
Ceiling-Mount  Speaker/Visible (S/V)	4906-9254 (White, Fire Marking) 4906-9255 (White, No Marking) 4906-9256 (White, Alert Marking) 4906-9257 (White, Fire Marking) 4906-9258 (White, Fire Alarm CN Markings)	Multi-Candela strobe with speaker provides intensity selectable for candela ratings of 15, 30, 75, or 110 cd; Synchronized 1 HZ flash, TrueAlert Addressable Strobe is wired separately. Speakers are for 25 or 70.7 VRMS, tapped at ¼ W, ½ W, 1 W, and 2 W. Appliances 4906-9254 through -9256 are not ULC listed. 4906-9257 is ULC listed only. 4906-9258 is not ULC listed.	4903-9362 4903-9363 4903-9364

Table 2. General Specifications for Wall/Ceiling Strobes & A/Vs

Rated Voltage Range	SPECIAL APPLICATION 17 - 31 VRMS
Temperature Range	32° to 120° F (0° to 49° C)
Humidity Range	10% to 93%, non-condensing at 100° F (38° C)
Connections	Terminal for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²)

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Table 3. Wall-Mount A/V and S/V Strobes - TPS/4009T Application

Candela Rating	Input Voltage SPECIAL APPLICATION	Wall-Mount Strobe & S/V Maximum Operating Current RMS	Wall-Mount A/V* Maximum Operating Current RMS	
			High Volume	Low Volume
15	17-31 VRMS	64 mA	73 mA	68 mA
30	17-31 VRMS	98 mA	108 mA	103 mA
75	17-31 VRMS	187 mA	195 mA	190 mA
110	17-31 VRMS	253 mA	259 mA	254 mA

**A/V Strobe current is measured with circuit steady ON*

Table 4. Wall-Mount A/V and S/V Strobes - IDNAC Application

Candela Rating	Input Voltage SPECIAL APPLICATION	Wall-Mount Strobe & S/V Maximum Operating Current RMS	Wall-Mount A/V* Maximum Operating Current RMS	
			High Volume	Low Volume
15	23-31 VRMS	50 mA	68 mA	63 mA
30	23-31 VRMS	75 mA	92 mA	87 mA
75	23-31 VRMS	137 mA	158 mA	153 mA
110	23-31 VRMS	190 mA	210 mA	205 mA

**A/V Strobe current is measured with circuit steady ON*

Table 5. Ceiling-Mount A/V and S/V Strobes - TPS/4009T Application

Candela Rating	Input Voltage SPECIAL APPLICATION	Ceiling Mount Strobe Maximum Operating Current RMS	Ceiling-Mount A/V* Maximum Operating Current RMS	
			High Volume	Low Volume
15	17-31 VRMS	76 mA	82 mA	77 mA
30	17-31 VRMS	128 mA	135 mA	130 mA
75	17-31 VRMS	242 mA	249 mA	244 mA
110	17-31 VRMS	328 mA	335 mA	330 mA

**A/V Strobe current is measured with circuit steady ON*

Table 6. Ceiling-Mount A/V and S/V Strobes - IDNAC Application

Candela Rating	Input Voltage SPECIAL APPLICATION	Ceiling Mount Strobe & S/V Maximum Operating Current RMS	Ceiling-Mount A/V* Maximum Operating Current RMS	
			High Volume	Low Volume
15	23-31 VRMS	60 mA	75 mA	70 mA
30	23-31 VRMS	92 mA	110 mA	105 mA
75	23-31 VRMS	180 mA	198 mA	193 mA
110	23-31 VRMS	240 mA	250 mA	245 mA

**A/V Strobe current is measured with circuit steady ON*

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Table 7. TrueAlert Multi-Candela Wall and Ceiling Mount A/V Units- Horn Sound Pressure Level Measurements

	Voltage (Vrms)	Sound Pressure Level Measurement (dBA) Reverberant Room at Ten Feet Per UL464 (See Note 2)		Sound Pressure Level Measurement (dBA) Anechoic Room at 3 Meter per ULC-S525 (see note 4, 5, and 6)	
		Horn Mode Steady	Horn Mode Coded (See Note 1)	Steady	Coded (see note 1)
High Volume Setting through Addressable Controller (See Note 3)	17 (Min)	84.6	80.6	91	99
	31 (Max)	88.4	84.5	95	102
Low Volume Setting via Addressable Controller (See Note 3)	17 (Min)	79.1	75.5	84	90
	31 (Max)	84.3	79.2	89	95

Notes:

1. The coded category covers both Temporal and March time cadences.
2. Reverberant dBA measurements are a minimum UL rating based on sound power level measurements made in UL's reverberant test chamber.
3. High and Low volume settings are configured with DIP Switch (SW4) on the TrueAlert Addressable Controller.
4. Anechoic dBA measurements are a minimum ULC rating based on sound pressure level measurements made in ULC's anechoic test chamber.
5. The sound pressure level decreases by 3 dB at an angular displacement of 40 degrees and by 6 dB at an angular displacement of 50 degrees both horizontally and vertically.
6. With the 4905-9838 sound damper installed, the anechoic measurements decrease 5 to 6 dBA

Table 8. Wall/Ceiling Speaker Specifications

Input Voltage	25 or 70.7 VRMS – Speakers are for connection to conventional fire alarm audio circuits.	
Power Taps via Jumper J1	¼, ½, 1, and 2 W	
Frequency Response	Fire Alarm	400 to 4000 Hz
	General Signalling	125 to 12 kHz

Table 9. TrueAlert Addressable Wall and Ceiling Mount S/V Units - Speaker Jumper setting

Voltage	Jumper J1 to Tap	Tap Setting in Watts	UL1480 at 10 ft		ULC-S541 at 3 m	
			Wall S/V (all models)	4906-9254, 4906-9255, 4906-9256, 4906-9258 Ceiling S/V	Wall S/V (all models)	4906-9257 (Ceiling S/V for ULC)
70.7 Vrms	A	¼	76	76	77	80.9
	B	½	79	79	80	84.1
	C	1	82	82	83	87.3*
	D	2	85	85	86*	90.2*
25 Vrms	D	¼	76	76	77	81.6
	E	½	79	79	80	84.3
	F	1	82	82	83	87.1*
	G	2	85	85	86*	89.7*

Notes:

- Reverberant dBA measurements are a minimum UL rating based on sound level measurements made in UL's reverberant test chamber.
 - Anechoic dBA measurements are a minimum ULC rating based on sound pressure level measurements made in ULC's anechoic test chamber.
 - The sound pressure level decreases by 3 dB at an angular displacement of 30 degrees and by 6 dB at an angular displacement of 55 degrees.
- * Only marked settings may be used for ULC fire alarm applications.

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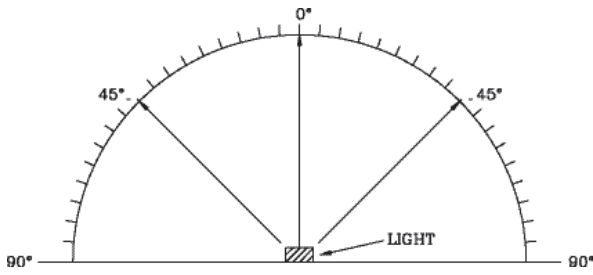


Figure 1. Strobe Light Output (Horizontal Dispersion)

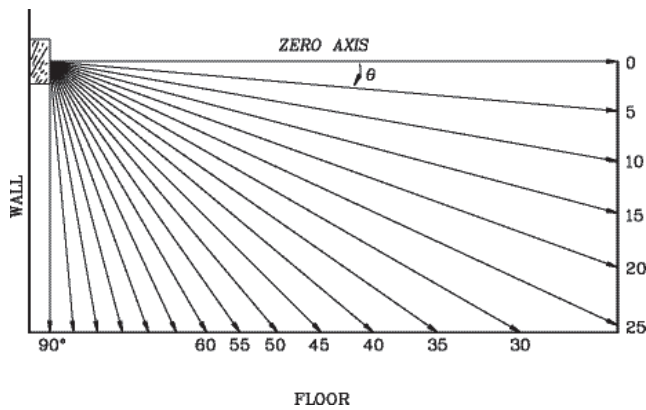


Figure 2. Strobe Light Output, Wall to Floor

Table 10. Vertical and Horizontal Light Dispersion Ratings (Wall to Floor)

Percent of Rated Light Output At Any Candela Setting (Room Temperature)					
Vertical Dispersion			Horizontal Dispersion		
X-Plane Angle	UL Req Output	Typical Output	Y-Plane Angle	UL Req Output	Typical Output
0	100%	322%	0	100%	320%
5	90%	217%	±5	90%	214%
10	90%	168%	±10	90%	177%
15	90%	179%	±15	90%	175%
20	90%	210%	±20	90%	174%
25	90%	184%	±25	90%	170%
30	90%	149%	±30	75%	169%
35	65%	172%	±35	75%	157%
40	46%	189%	±40	75%	151%
45	34%	203%	±45	75%	138%
50	27%	152%	±50	55%	130%
55	22%	166%	±55	45%	121%
60	18%	166%	±60	40%	117%
65	16%	164%	±65	35%	109%
70	15%	163%	±70	35%	105%
75	13%	159%	±75	30%	98%
80	12%	138%	±80	30%	90%
85	12%	113%	±85	25%	78%
90	12%	88%	±90	25%	67%

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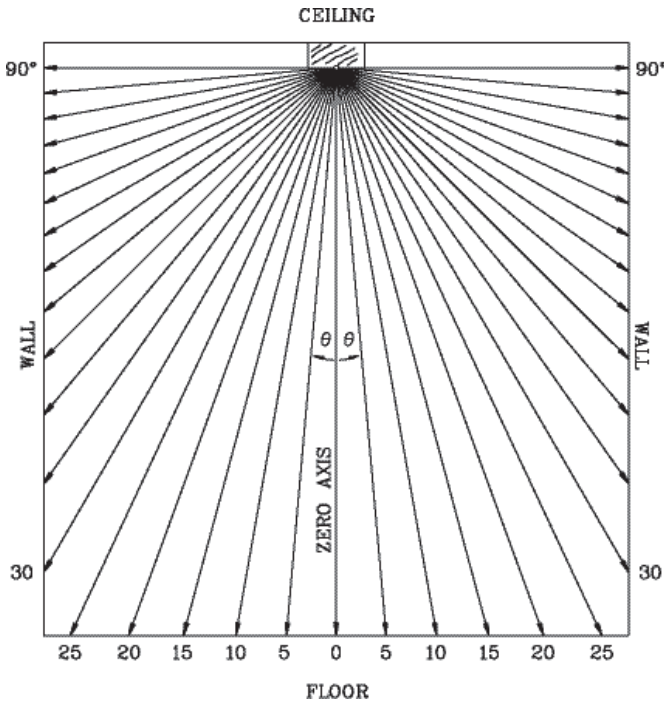


Figure 3. Strobe Light Output, Ceiling to Walls and Floor

Table 11. Vertical and Horizontal Light Dispersion Ratings (Ceiling to Walls and Floor)

Percent of Rated Light Output At Any Candela Setting (Room Temperature)					
Vertical Dispersion			Horizontal Dispersion		
X-Plane Angle	UL Req Output	Typical Output	Y-Plane Angle	UL Req Output	Typical Output
0	100%	327%	0	100%	343%
±5	90%	293%	±5	90%	160%
±10	90%	281%	±10	90%	175%
±15	90%	197%	±15	90%	129%
±20	90%	168%	±20	90%	145%
±25	90%	142%	±25	90%	165%
±30	45%	143%	±30	45%	152%
±35	45%	155%	±35	45%	144%
±40	45%	156%	±40	45%	139%
±45	45%	134%	±45	45%	129%
±50	55%	115%	±50	55%	129%
±55	45%	104%	±55	45%	123%
±60	40%	103%	±60	40%	111%
±65	35%	98%	±65	35%	120%
±70	35%	87%	±70	35%	103%
±75	30%	90%	±75	30%	75%
±80	30%	96%	±80	30%	83%
±85	25%	96%	±85	25%	70%
±90	25%	83%	±90	25%	47%

Manually Selecting the Strobe Candela Output

Notes:

1. Jumpers are factory set as FACP. If manual selection is required, strobe intensity is selected by jumper position (15, 30, 75, 110 candela or FACP). See Figure 4.
2. Leave in FACP (factory default) setting if candela setting is to be programmed from a 4100U/4100ES FACP.
3. The candela setting is visible through the strobe lens.
4. When controlled from a TrueAlert Addressable Controller, the FACP setting is not supported.

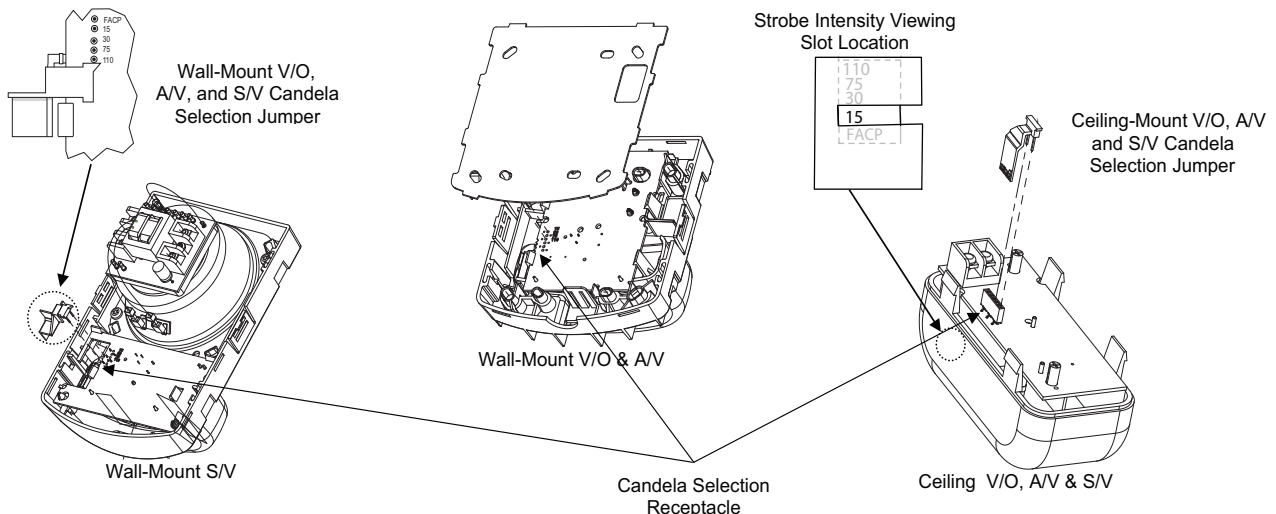


Figure 4. Multi-Candela Intensity Setting

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Setting the Multi-Candela Address

Addresses are set via an eight-position DIP switch, as shown in Table 12. See Figure 5 for the DIP switch location. DIP switch position 1 is the least significant bit (LSB) and position 8 is the most significant bit (MSB).

Note: DIP Switches 1 through 6 are used to set the possible 63 address codes, DIP Switches 7 and 8 are not used and are set to "OFF".

Use a small screwdriver or pen to set the switches, and then record the address.

Table 12. Addressable Multi-Candela- DIP Switch Address Chart

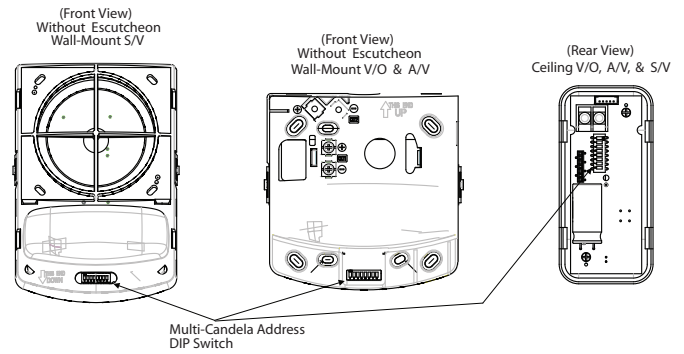
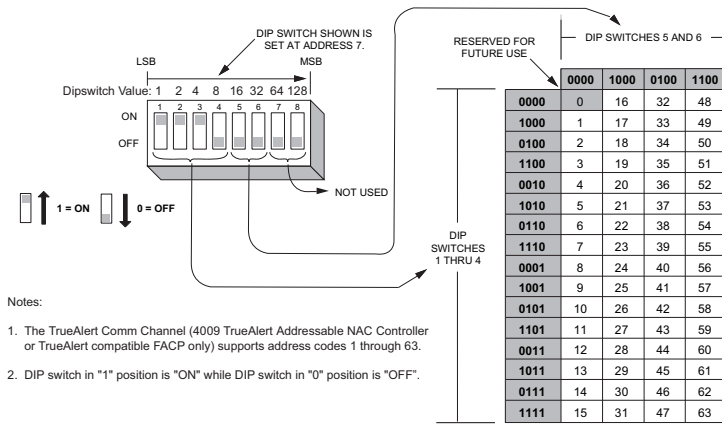


Figure 5. Multi-Candela Address DIP Switch

TrueAlert Multi-Candela Magnet Test

Note: The host control panel must be in diagnostic mode and configured to support magnet testing.

Position magnet tester 553-810 to the bottom right side of the appliance cover near the LED indicator (see Figure 6). Hold the magnet tester in place for a minimum of two seconds or until the LED begins flashing.

In response to the magnetic test, the indicator LED emits one long flash denoting the test acknowledge signal. This is followed by a pause, and then another long flash followed by a pause. The LED then flashes one to six times to denote the first digit of the address, pauses, and then flashes one to nine times to indicate the second digit of the address. One long flash always indicates a zero.

For example address 17 would be: long flash - pause - 1 fast flash - pause - 7 fast flashes.
Address 32 would be: long flash - pause - 3 fast flashes - pause - 2 fast flashes.

After the Multi-Candela's LED flashes its address, it pauses for two seconds and flashes the candela rating as follows:

- 15 cd: 1 fast flash - pause - 5 fast flashes
- 30 cd: 3 fast flashes - pause - 1 long flash
- 75 cd: 7 fast flashes - pause - 5 fast flashes
- 110 cd: 1 fast flash - pause - 1 fast flash - pause - 1 long flash

After the Multi-Candela's LED flashes its candela rating, it goes into alarm (when selected for real appliance test at the host control panel) or the LED illuminates (silent appliance test) for 2 to 3 seconds.

Important: Refer to the *TrueAlert Addressable Controller Installation Guide (574-762)* for detailed information on appliance diagnostic testing.

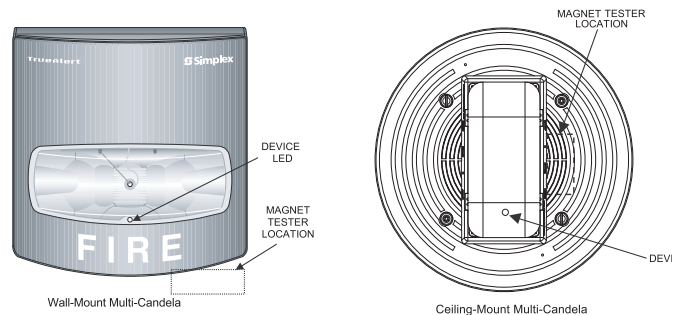


Figure 6. Multi-Candela Appliances Magnet

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TrueAlert Multi-Candela Notification Appliance Wiring

Warning: Make sure that all power is disconnected before starting the installation.

Caution: Connect wiring to terminals as shown. Do not loop wires under terminals. Break wire runs to provide supervision of connection. Do not bring conduit through the rear of the electrical box if installing any peripherals with speakers. Strip lead insulation to 3/8" maximum.

General Wiring Notes (V/O, A/V):

1. At the electrical box, connect the contractor wiring to the CKT + and CKT - terminals at the rear of the strobe unit. **Torque terminal block screws 12-15 in/lbs. to ensure proper continuity.** See Figure 7.
2. Ensure that correct polarity is maintained for each strobe unit.
3. SLC wiring must be twisted pair (TWP)
4. CKT Terminals accept 2 Wires: #12 - 18 AWG TWP .

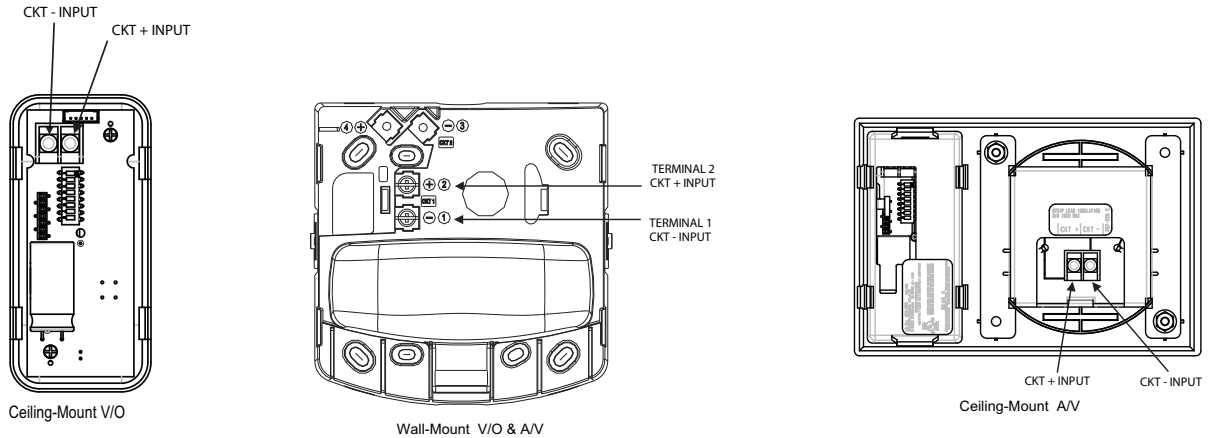
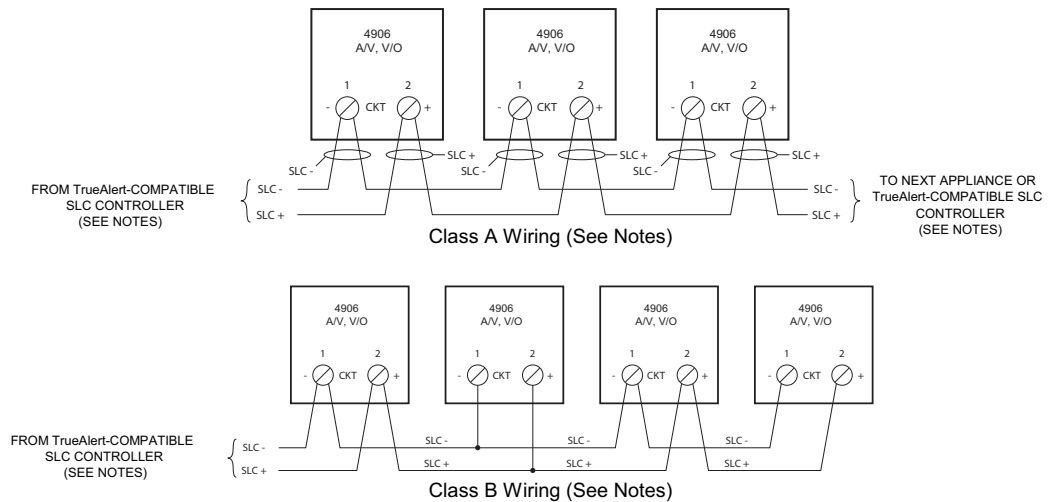


Figure 7. Multi-Candela (V/O and A/V) Terminal Wiring



Notes:

1. Maximum 46 appliances per circuit. Maximum 30 ohms wire resistance between appliances. Refer to Field Wiring Diagrams of the driving TrueAlert compatible fire alarm control panel for further instructions.
2. Notification appliances are rated per individual module label.
3. Maintain the correct polarity on the terminal connections. Do not loop wires under terminals.
4. All TrueAlert SLC wiring connections are supervised and power-limited.
5. These appliances were only tested to the operating voltage limits of 17 - 31 VDC. The appliance may fail to operate as intended, and/or cause permanent damage to this equipment if it operates outside of these limits.
6. The TrueAlert A/V and V/O can only be operated through a compatible TrueAlert Addressable Controller or 4100U/4100ES TPS.
7. T-tapping is not allowed for Class A wiring.

Figure 8. Multi-Candela (A/V and V/O) Wiring

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TrueAlert Multi-Candela Notification Appliance Wiring

General Wiring Notes (S/V):

1. At the rear of the strobe assembly, make sure that the rectangular slot in the housing is aligned with the DIP switch. Route the black and red leads through the strobe housing conduit cut-out (see Figure 12). Attach the strobe assembly onto the housing. Connect the plug ends of the black (NEG) and red (POS) leads to the appropriate connectors posts located and silk-screened on the speaker circuit board assembly.
2. At the metal electrical box, connect the contractor wiring to the STROBE + and STROBE - terminals and speaker wires to the SPKR + and SPKR - terminals at the rear of the S/V. **Torque terminal block screws 12-15 in/lbs. to ensure proper continuity.** See Figures 9 and 10.
3. Ensure that correct polarity is maintained on each unit.
4. Configure the speaker wattage setting using Table 9 on page 4. Ensure that the RMS value of the connected audio circuit matches the RMS value of the connected speaker. An incorrect tap setting may damage the speaker. The factory default setting for the speaker is J1 to Tap E (25 Vrms, 1/2 W).
5. TrueAlert SLC and audio NAC wiring must be a twisted pair (TWP). If the audio NAC wiring is run in the same conduit with the high-intensity strobes (110 CD), then a twisted shield pair is required.

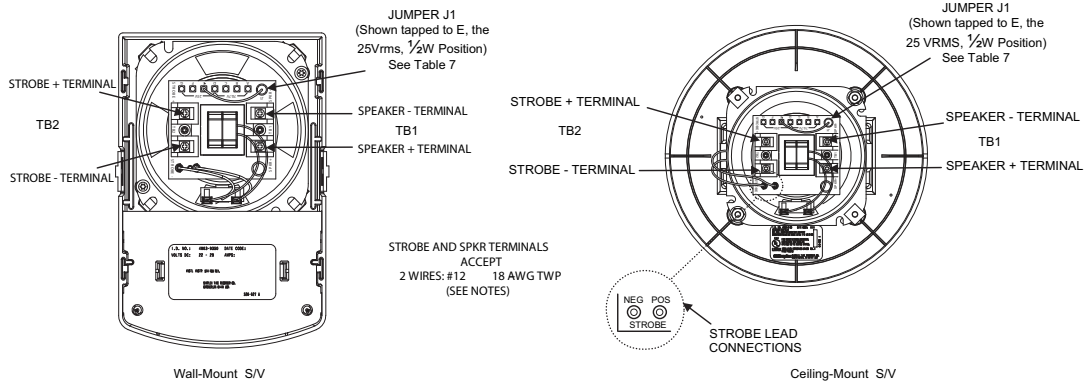
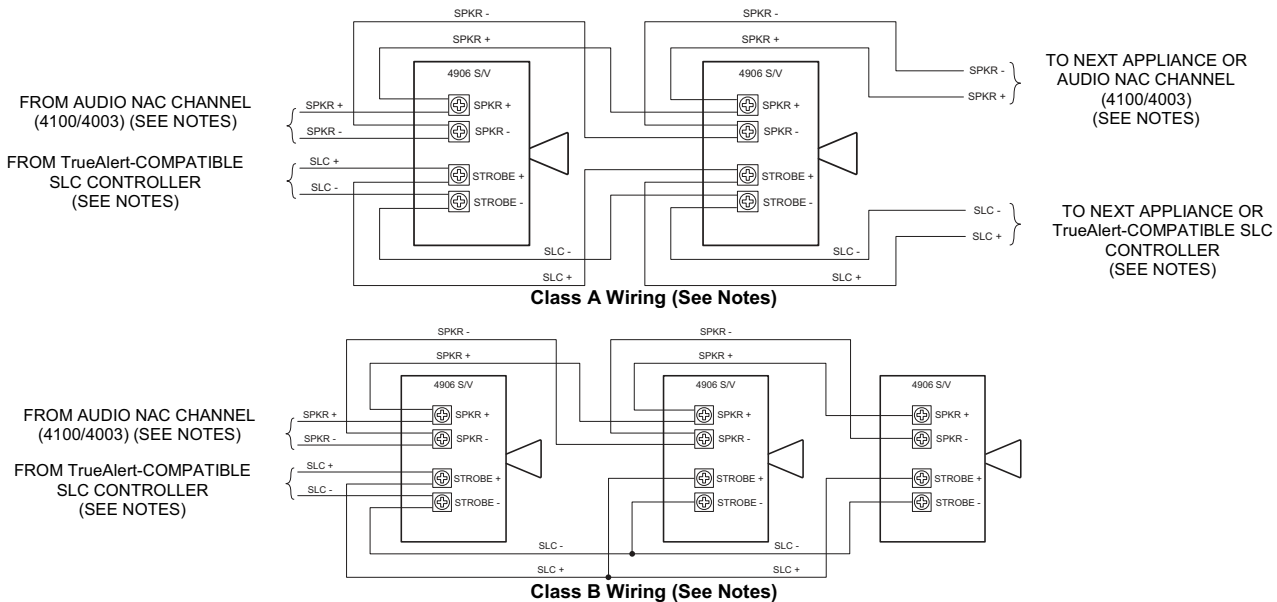


Figure 9. Multi-Candela (S/V) Terminal Wiring



Wiring Notes (S/V):

1. Maximum 43 appliances per circuit. Maximum 30 ohms wire resistance between appliances. Refer to Field Wiring Diagrams of the driving TrueAlert compatible fire alarm control panel for further instructions.
2. Notification appliances are rated per individual module label.
3. Maintain the correct polarity on the terminal connections. Do not loop the wires under the terminals.
4. All TrueAlert SLC and NAC wiring connections are supervised and power-limited.
5. These appliances were only tested to the operating voltage limits of 17 - 31 VDC. The appliance may fail to operate as intended, and/or cause permanent damage to this equipment if it operates outside of these limits.
6. The TrueAlert S/V can only be operated through a compatible TrueAlert addressable controller or 4100U/4100ES TPS.
7. T-tapping is not allowed for Class A wiring.

Figure 10. Multi-Candela (S/V) Class A & B Wiring

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Wall-Mount Strobe, A/V and S/V Mounting

See Figure 11 for mounting the notification appliance to the enclosure box. When surface mounting the Strobe or A/V, the 4905-9937 or -9940 TrueAlert Surface Mount Skirt is recommended, when surface mounting the S/V, either the 4905-9946 or 4905-9947 Surface Mount Skirt is required. Refer to the *4905 TrueAlert NAC Surface Mount Skirt Installation Instructions 574-790* for this mounting application. Surface mount accessories are not compliant with Canadian requirements and can not be used in Canada.

When mounting the wall-mount S/V to a Simplex 2975-9145 electrical box, the 4905-9903 Adapter Plate is required. Refer to the *4905 TrueAlert Adapter Plate Installation Instructions (574-791)* for this mounting application.

Caution: Do not bring conduit through the rear of the electrical box if installing any peripherals with speakers.

- A. Tighten mounting screws snugly (do not over tighten). Torque terminal block screws 12-15 in/lbs. to ensure proper continuity.
- B. For semi-flush mounting, install the box either flush with the wall or with a maximum 1/4-inch recess.

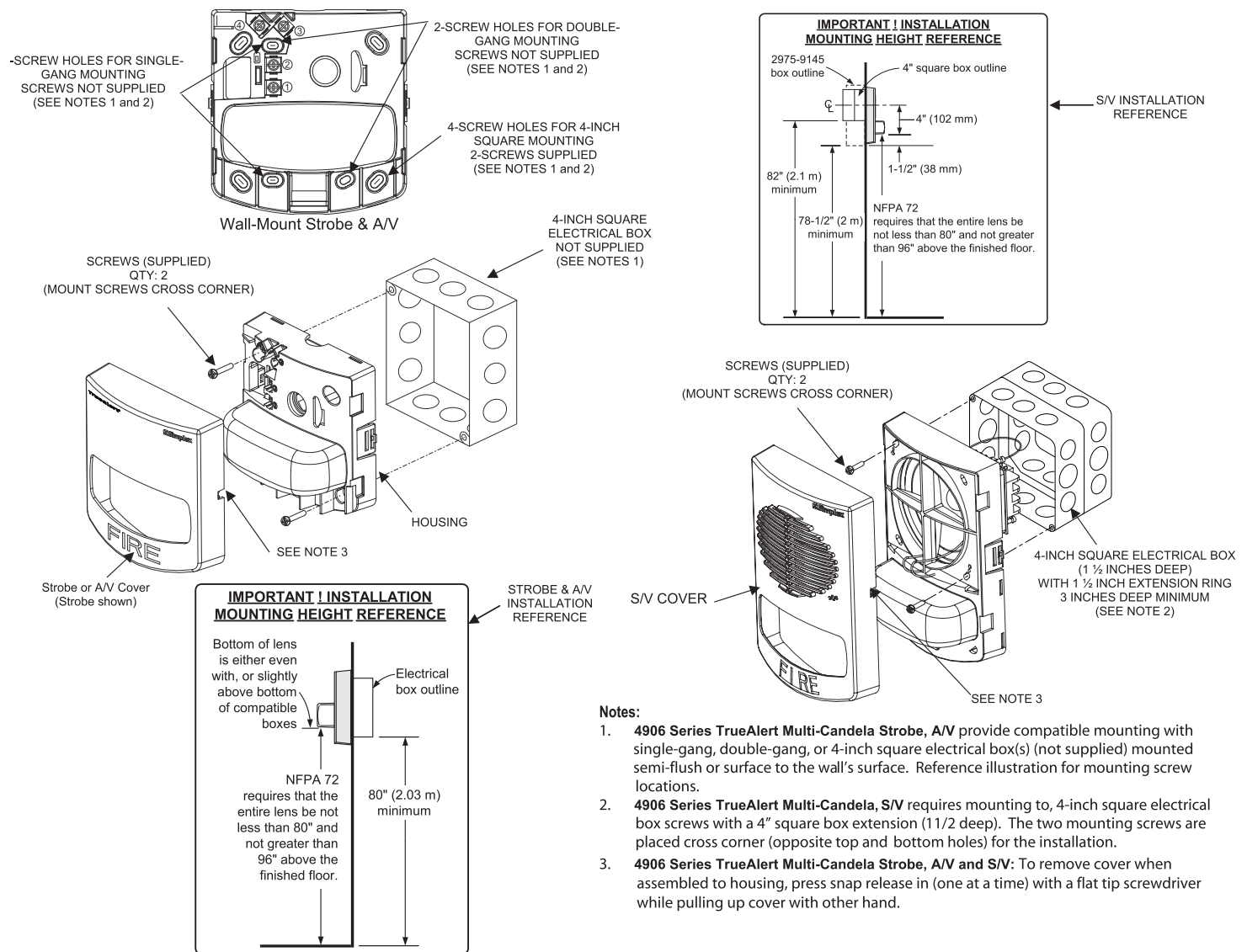


Figure 11. Multi-Candela Wall-Mounting

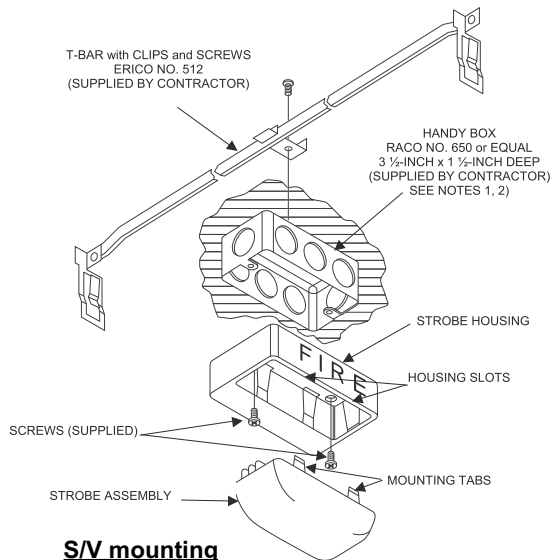
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Ceiling-Mount Strobe, A/V and S/V Mounting

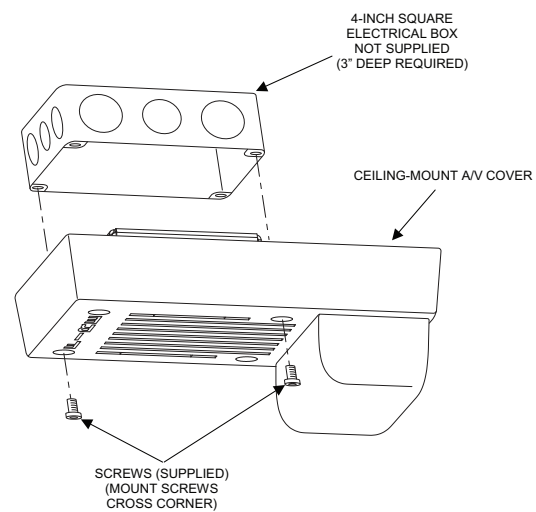
Caution: Do not bring conduit through the rear of the electrical box if installing any peripherals with speakers.

- A. Tighten mounting screws snugly (do not over tighten). Torque terminal block screws 12-15 in/lbs. to ensure proper continuity.
 B. For semi-flush mounting, install the box either flush with the wall or with a maximum 1/4-inch recess.

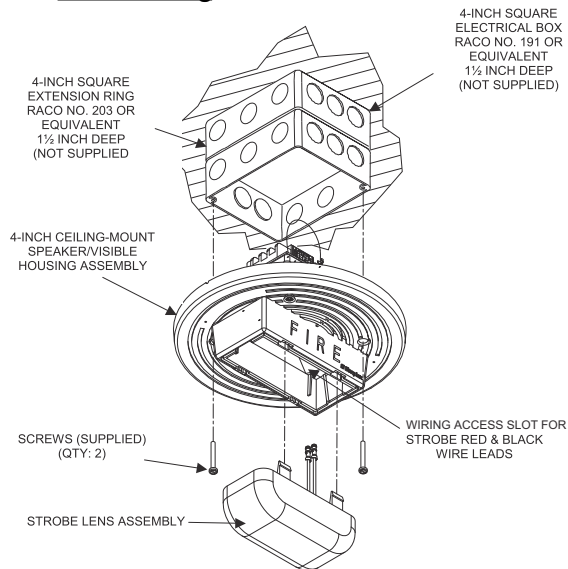
Strobe mounting



A/V mounting



S/V mounting



Ceiling Strobe Mounting Notes:

1. The TrueAlert Ceiling Strobe unit attaches directly to a standard single-gang electrical box (not supplied), semi-flush or surface mounted.
2. There are two holes for electrical box mounting. Secure the housing to the single-gang box using two mounting screws (#6/32-inch x 1 1/8-inch long supplied). Line the mounting tabs of the strobe unit to the housing slots and snap into place.
3. Ensure that the strobe candela selection jumper is in the correct position before the strobe assembly is snapped to the housing.

Ceiling A/V Mounting Notes:

1. The TrueAlert Ceiling-Mount A/V attaches directly to a 4-inch square electrical box (not supplied), semi-flush or surface mounted. Ensure correct orientation of the box in relation to the location of the mounting screws and the A/V's position.
2. For installation in a concrete or plaster ceiling, flush-mount the box (with a 1/4-inch recess, maximum).
3. For installation in a suspended ceiling, use a suitable tile bridge that rests on tile to support the box.
4. Ensure that the strobe candela selection jumper is in the correct position before the strobe assembly is snapped to the housing.

Ceiling S/V Mounting Notes:

1. The TrueAlert Ceiling-Mount S/V attaches directly to a 4-inch square electrical box (not supplied), semi-flush or surface mounted.
2. Ensure correct orientation of box with extension in relation to location of mounting screws.
3. Ensure that the strobe candela selection jumper is in the correct position before the strobe assembly is snapped to the housing.
4. For installation in a plaster or concrete ceiling, mount box with extension flush or with maximum 1/4-inch recess; for suspended ceiling, use a suitable bridge that rests on tile to support box with extension.
5. Pass wires from strobe assembly through the wiring access slot. On model 4906-9257, the gasket for acoustic performance must be temporarily pushed to the side to feed the wires through.
6. Connect RED wire from strobe assembly to POS terminal on PCB. Connect BLK wire from strobe assembly to NEG terminal on PCB.

Figure 12. Multi-Candela Ceiling-Mounting

4906 TrueAlert Addressable Multi-Candela Installation Instructions

Limitations, Safety and Placement of Notification Appliances

Notification Appliances, and the Fire Alarm System itself, have certain limitations and requirements for safety, placement, installation, and test. Since you must know the limitations and adhere to the requirements, **keep** these instructions at a central location for future reference so that all people who use, maintain, and test the Fire Alarm System have access to this information.

Limitations

Notification Appliances do not provide their own power. They receive their power from the Fire Alarm System. If power is not supplied to the Notification Appliances (for whatever reason), the Notification Appliances will not provide a visible and/or audible warning. **THEREFORE, BACK-UP POWER SUPPLIES, OR OTHER BACK-UP POWER SOURCES, ARE REQUIRED FOR THE FIRE ALARM SYSTEM.**

Notification Appliances provide a specific rated output level of light. The output level must meet the requirements of the intended protected area(s). Although the 4906 TrueAlert Strobe Notification Appliances meet the current UL and ULC standards for light intensity, the protected area(s) may have walls, doors, carpeting, furniture, insulation, or other obstacles that reduce or even block the light. For all applications, the light output must provide enough intensity to alert all occupants of the protected area(s) including those occupants that are sleeping. If these occupants cannot see the effect of the Notification Appliances within the protected area(s), you must increase the intensity of the light output or add additional Notification Appliances so that the occupants can see the effect of the Notification Appliances when activated. Refer to National Fire Protection Association (NFPA) National Fire Alarm and Signaling Code 72.

Notification Appliances are not a substitute for insurance coverage. All users should have adequate levels of life and property insurance.

Safety

Always install, maintain, and test Notification Appliances within their specifications. **Failure to follow all safety precautions and instructions may result in loss of life and property due to non-functioning Notification Appliances.**

Some Notification Appliances use high voltage. To avoid electrical hazards and avoid damage to appliances, make sure that the electrical power for the Notification Appliance Circuit is disconnected at the control panel before installing, repairing, or internally adjusting any Notification Appliances.

Even with electrical power removed, some Notification Appliances (such as visible strobes) store a high voltage charge. The high voltage can cause injury resulting in death from electrical shock. **DO NOT TOUCH EXPOSED CIRCUITRY.**

Location

The Location of Notification Appliances must conform to:

- Latest NFPA standards and guidelines (Refer to National Fire Alarm and Signaling Code 72), if applicable
- The Canadian Building Code, if applicable
- Light Intensity Analysis of Intended Protected Areas
- Local Authority Having Jurisdiction (AHJ) Requirements

Notification Appliances are not intended for installation within hazardous locations as defined by the National Electrical Code (NEC) or the NFPA. Contact Simplex for information on Explosion-Proof Notification Appliances designed for hazardous environments.