



Features

Individually addressed and separately controlled multi-candela V/O (visible only) notification appliance with one amber ALERT strobe and one clear lens FIRE strobe:

- Combination unit allows mounting two visible notification appliances at the same installation site
- Amber lens with “ALERT” lettering is for use with Emergency Communications Systems
- Clear lens with “FIRE” lettering provides visible notification for fire alarm conditions
- Both strobes connect on same SLC, are separately addressed, and provide independent operation; (Operation is clear/Fire **OR** amber/Alert, **not both**)
- High intensity multi-candela xenon strobes with intensity *programmable from a Simplex® 4100U fire alarm control panel with TrueAlert Addressable Power Supply (TPS)* or jumper selected as 15, 30, 75, or 110 cd
- Synchronized 1 Hz strobe flash rate
- Wiring supervision to each appliance allowing “T-tapped” connections for Class B circuits to simplify wiring (Class A circuits require in/out wiring)
- Clear lens strobe is UL listed to Standard 1971
- Amber lens strobe is UL listed to Standard 1638 (due to non-white lens); and provides light dispersion patterns of UL Standard 1971
- Refer to important installation information on page 4

Compatible TrueAlert Addressable Host Controls:

- *4100U TrueAlert Addressable Power Supply (TPS)* mounted in the control panel or in a remote cabinet
- *TrueAlert Addressable Controller (4009T)* interface panel

With multi-candela appliances controlled from a 4100U TPS, TrueNAC™ voltage drop diagnostics (on clear lens strobes) provide:

- Individual (clear lens) appliance voltage drop analysis testing as-built SLC wiring (when amber lens strobes are wired with similar quantity, location, and same or lower intensity as clear lens strobes on the same SLC)**
- Device Reports and Status Reports (see details on page 2)
- Requires 4100U Software Revision 12.04 or higher and compatible TPS version (revision F or higher)

LED indicator and magnet test feature:

- Each appliance LED can be selected to display each polling cycle to indicate appliance supervision
- In diagnostic mode, the magnet test pulses the LED to indicate appliance address **AND pulses to indicate the intensity selection**; a brief output of the strobe is also selectable to confirm operation



Combination Clear/Amber Strobe Assembly (front and side view shown, available with red or white housing)

Mechanical design features:

- Rugged, high impact, flame retardant thermoplastic housing for flush or surface wall mount; available with red or white housing
- Individual strobe housings mount onto a common bracket that does not extend into box and easily mounts to standard electrical boxes
- Wall mount wiring terminal access is from front of housing to assist installation, inspection, and testing
- Optional adapter skirts for surface mounting

Description

TrueAlert Addressable Multi-Candela Combination Strobes are individually addressed and individually controlled with power, supervision, and control supplied from a TrueAlert Addressable SLC (signaling line circuit). A single assembly provides an amber lens strobe for non-fire alarm, alert notification for use with Emergency Communications Systems, and a clear lens strobe for fire alarm notification.

4100U Additional Features. When controlled from a Simplex 4100U control panel with TPS, additional features are available such as software selection of strobe intensity, detailed reports of actual appliance intensity selection, TrueNAC voltage drop diagnostics for clear strobes on the same SLC, and additional setup and test diagnostics. (See additional details on page 2).

* This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7125-0026:235 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. FM approval and MEA (NYC) acceptance is not applicable. Additional listings may be applicable; contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Safety Products Westminster.

** TrueAlert addressable notification is protected under U.S. Patent Nos. 6,313,744; 6,426,697; 6,693,532; 7,006,003; and 7,091,847. TrueNAC diagnostics are protected under U.S. patent No. 7,333,010.

Strobe Intensity Selection

Selectable at Appliance or Remotely Selected.

During installation, plugs at the back of the housings (visible after installation) select strobe output as 15, 30, 75, or 110 cd; **or FACP**. *FACP is the factory default setting and allows a 4100U control panel with TPS to program the output intensity.*

FACP Selection Advantages. When intensity is selected in software from a 4100U fire alarm panel, it can be easily changed if renovations or other usage conditions are revised, and intensity selection errors at installation are effectively eliminated. Proper strobe coverage criteria is further described in the *National Fire Alarm Code* (NFPA 72), ANSI A117.1; the appropriate model building code: BOCA, ICBO, or SBCCI; and the application guidelines of the Americans with Disabilities Act (ADA).

Strobe Application Reference

Amber strobes used as part of an Emergency Communication System (ECS) are located to provide the same area coverage as required of clear lens fire alarm strobes. Specific ECS requirements are discussed in detail in document UFC 4-021-01 (USA Department of Defense, United Facilities Criteria) and in NFPA 72, 2007 Annex E.

TrueAlert Addressable Advantage

TrueAlert Addressable Operation provides separate audible and visible appliance control functions using a single two-wire circuit that also *confirms connection to the individual notification appliance's electronic circuit*. This operation increases circuit supervision integrity by providing supervision beyond the appliance wiring connections.

Opportunities for Reducing Installation and Testing Time. Separate controls carried on the same two-wire SLC can significantly reduce installation time and expense for both retrofit and new construction. When Class B (Style 4) wiring is used, *wiring can be T-tapped*, allowing savings in distance, wire, junction boxes, and overall installation efficiency. In addition, TrueNAC diagnostics further improve installation efficiency by analyzing individual appliance wiring connections.

By providing an amber lens strobe with a clear strobe lens strobe, the 4906-9208 combination strobe assembly allows a single electrical installation to provide both types of visible notification.

TrueAlert Addressable Notification Product Reference

Product	Data Sheet	Product	Data Sheet
V/O (strobe)	S4906-0004	TrueAlert Addressable Horn	S4901-0012
V/O (amber strobe)	S4906-0007	TrueAlert Addressable Controller (4009T)	S4009-0003
A/V (horn/strobe)	S4906-0005	4100U Fire Alarm Panels	S4100-0031
S/V (speaker/strobe)	S4906-0006	4100U Cabinets, reference for 4009 TPS for remote mounting	S4100-0037
TrueAlert Isolator	S4905-0001		

TrueAlert Addressable Diagnostics

Appliance Type and Intensity Check. The TrueAlert Addressable Host Control is programmed with address, location, device type, and intensity selection. An incorrect appliance replacement or substitution will produce a location specific trouble allowing easy correction.

LED Communications Indicator. The host control can be selected to pulse each appliance's LED when it receives a supervision poll. This feature can be left on continuously, or activated for system testing.

Silent Mode Appliance Magnet Testing. In this test mode, the local magnet test activates the appliance LED to pulse sequentially to indicate the appliance's address *and* to indicate the appliance's strobe intensity selection. Each strobe has its own LED indicator.

Operational (non-silent mode) Appliance Magnet Test. When this test mode is selected at the host control, after the address and intensity selection is indicated, the strobe will flash once to indicate proper operation.

4100U TrueNAC Diagnostic Operation

Individual Appliance Performance Analysis. With clear lens appliances on the SLC activated, each measures its terminal voltage and reports it to the 4100U TPS where its address and appliance type is stored in memory. The 4100U TPS measures its output voltage and current and then iteratively analyzes all of this information against known appliance power requirements to determine equivalent impedance to each appliance. TrueNAC diagnostics then analyze each appliance's wiring connection for performance under worst case conditions and identifies problems by appliance address.

TrueAlert Device Reports detail type, candela rating, and location per appliance (see first sample on next page, amber lens type is AMB). Fixed candela appliances also report, but are not compatible with TrueNAC voltage drop diagnostics.

TrueNAC Status Reports detail the SLC wiring diagnostic results for clear strobes as shown in the second report example on the next page. With amber and clear strobes on the same SLC wiring, the test applies to both types (amber lens strobes list as passed).

TrueAlert Device and Device Status Reports

Service Port		Page 1	
REPORT 5 : TrueAlert Device Report		12:34:56am WED 5-May-10	
POINT ID	CUSTOM LABEL	DEVICE TYPE	CANDELA
T14-1-1	Location Label . . . up to 40 characters	V/O	15
T14-1-2	Break Room 5	A/V	110
T14-1-3	Boiler Room Fire	A/V	75
T14-1-4	Boiler Room Alert	AMB	75

Service Port		Page 1	
REPORT 6 : TrueNAC Status Report		12:34:56am	WED 5-May-10
TPS AT ADDRESS 3			
SLC 1			
POINT ID	CUSTOM LABEL	TEST RESULT	
T14-1-1	Location Label . . . up to 40 characters	PASSED	
T14-1-3	West Hall South End	PASSED	
T14-1-5	Classroom 2	PASSED	
T14-1-6	Classroom 3	FAILED	
NOMINAL CURRENT (A) :		1.34	
WORST CASE CURRENT (A) :		1.97	
WORST CASE VOLTAGE ABOVE/BELOW THRESHOLD (V) :		-0.6	
SLC HAS NOT PASSED UNLESS ALL DEVICES ARE MARKED AS PASSED			

Product Selection

Model	Housing Color	Description	Dimensions
4906-9208	Red	Multi-Candela Addressable Combination Strobe assembly with amber lens, Alert strobe on top and clear lens, Fire strobe on bottom; intensity selectable as: 15, 30, 75, or 110 candela	10-3/4" H x 5-1/8" W x 3-15/16"D (273 mm x 130 mm x 100 mm)
4906-9211	White		
4905-9837	Red	Surface Mount Adapter Skirt, use to cover surface mounted electrical boxes	10-1/2" H x 5-1/4" W x 1-3/4" D (267 mm x 133 mm x 44 mm) Total depth with strobe assembly = 5-5/8" (143 mm)
4905-9847	White		
4905-9840	Red	Adapter Plate for mounting to installed Simplex Model 2975-9145 box; <i>for flush mounted boxes only</i>	12-5/16" H x 5-3/4" W x 0.06 thick (313 mm x 146 mm x 1.5 mm)

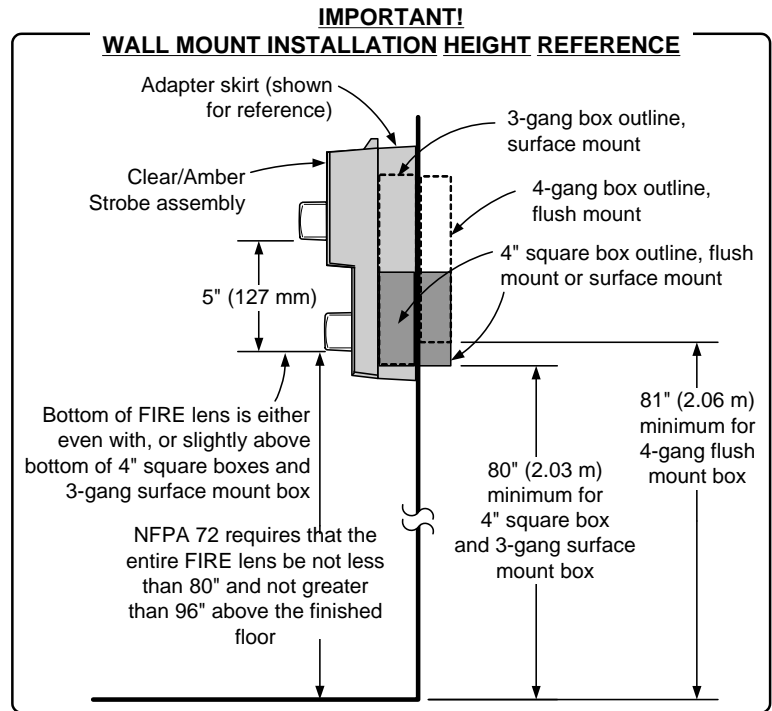
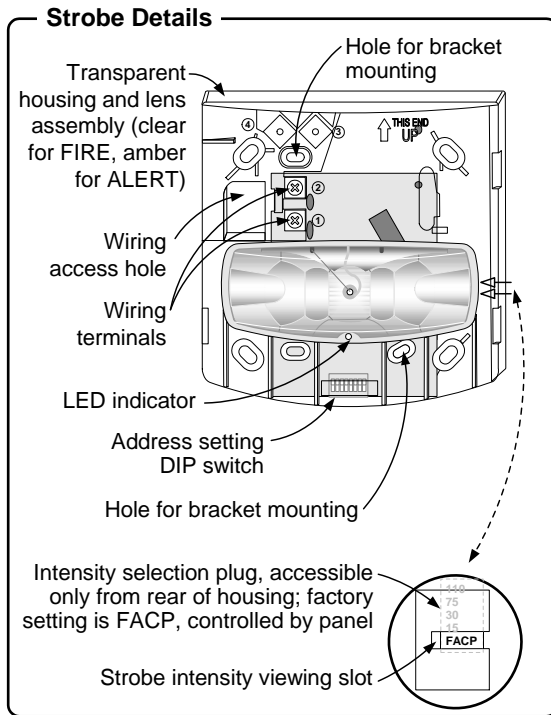
Addressable V/O Specifications

UL Listed Rated Voltage Range			Special Application, 17 to 31 VRMS, see Note 2 below			
Supervisory Requirements			1 unit load each, 2 unit loads total per 4906-9208			
Strobe Flash Rate and SLC Loading			1 Hz; with up to 46 synchronized addressable strobes maximum per SLC			
Environmental; Temperature and Humidity			32° to 122° F (0° to 50° C); 10% to 93%, non-condensing at 100° F (38° C)			
Terminal Block Connections on strobe housings			18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²); 2 wires per terminal for in/out wiring			
Technical Publication Reference			Clear/Amber Strobes, Instructions 579-847; Adapter Skirts, Instructions 574-790; Adapter Plate, 574-791			
Current per strobe	Maximum RMS Current Rating per Strobe Intensity (see Notes below)		15 cd	30 cd	75 cd	110 cd
			64 mA	98 mA	187 mA	253 mA
	RMS Currents at other voltages (Reference)	18 VRMS	60 mA	93 mA	177 mA	239 mA
		24 VRMS	45 mA	69 mA	132 mA	179 mA

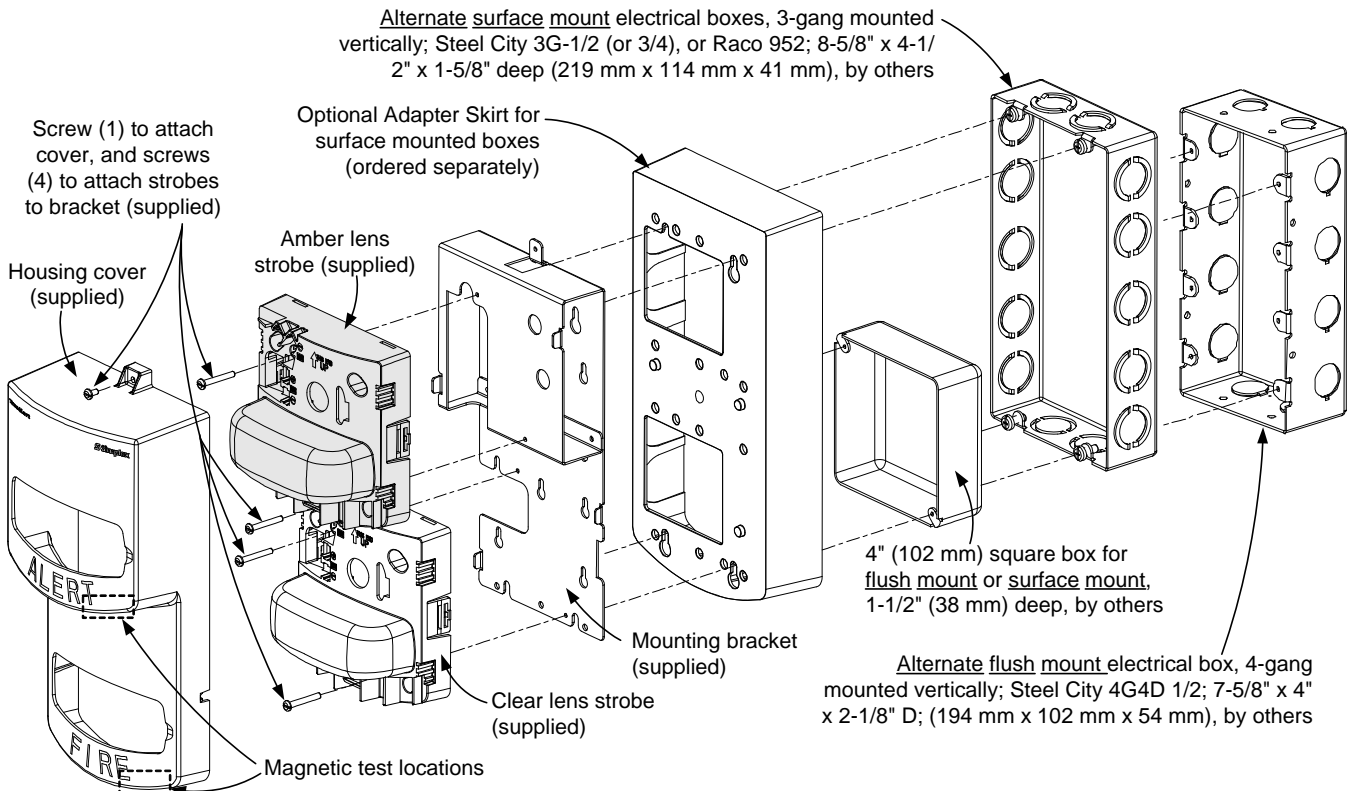
NOTES:

- Amber strobes and clear strobes provide notification for two different functions and are not activated at the same time.
- "Special Application" refers to the operating category under UL Standard 1638, *Visual Signaling Appliances – Private-Mode Emergency and General Utility Signaling*. The rated voltage range listed is the absolute operating range. Operation outside of this range may cause permanent damage to the appliance. Please note that 17 VRMS is the lowest operating voltage allowed at the last appliance on the TrueAlert signaling line circuit under worst case conditions.
- The maximum RMS current listed is the appliance nameplate rating. Strobe designs are constant wattage and the maximum RMS current rating occurs at the lowest allowable operating voltage.

Strobe Details and Mounting Height Reference



Installation Reference



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