Simplex

True*Alert* Addressable Notification Appliances

UL, ULC, CSFM Listed; FM Approved;
*MEA (NYC) Acceptance**

Multi-Candela Audible/Visible
(A/V) Appliances; Ceiling Mount

Features

Individually addressed and controlled multi-candela A/V (audible/visible) notification appliances provide:

- Multi-candela xenon strobe with synchronized 1 Hz flash rate and with intensity ***programmable from the control panel*** or jumper selected as 15, 30, 75, or 110 cd
- Advanced addressable notification controlled by ***IDNAC SLCs*** providing ***regulated 29 VDC*** allowing strobes to operate with lower current even under battery backup
- Wiring supervision to each strobe allowing "T-tapped" connections for Class B circuits to simplify wiring (Class A circuits require in/out wiring)
- ***TrueAlert Device Reports*** at the control panel detailing appliance point ID, custom label, type, and candela setting (see sample on page 2)
- ***Magnet test diagnostics*** to assist checkout and testing of appliances and wiring
- Compatibility with ADA requirements
- Compatibility with legacy TrueAlert addressable systems for upgrade and replacement (see page 4)
- Strobe operation listed to UL Standard 1971 and ULC Standard S526
- Horn operation listed to UL Standard 464 and ULC Standard S525

LED indicator and magnet test feature:

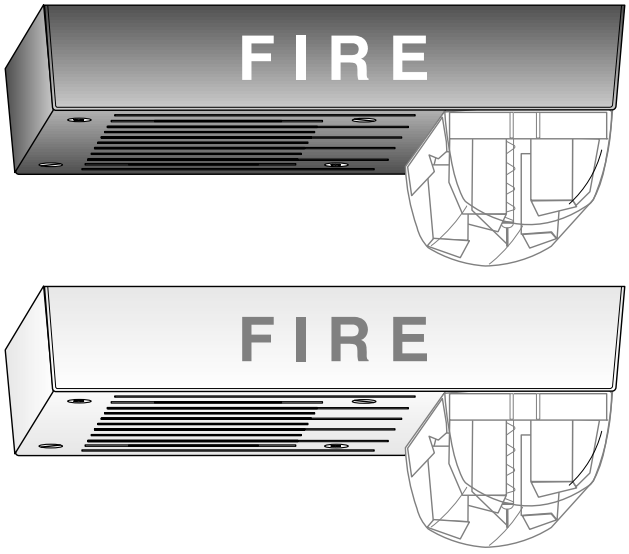
- Appliance LED can be selected to display each polling cycle to indicate appliance supervision
- In diagnostic mode, the magnet test pulses the LED to indicate appliance address ***AND pulses to indicate the intensity selection***; a brief output of the strobe and the horn is also selectable to confirm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

Mechanical design features:

- Rugged, high impact, flame retardant thermoplastic housings are available in red or white
- Rear of housing does not extend into box and easily mounts to standard electrical boxes
- Mounting options include red wire guards and adapters for surface mount electrical boxes

Audible notification appliance (horn):

- Low current electronic horn with harmonically rich output sound for either coded or steady operation
- Horns sound as Temporal or March Time pattern (60 or 120 BPM), or on continuously, controlled separately from visible appliances on the same two-wire circuit
- Output is "high" or "low" (~5 dBA difference); IDNAC SLC control selects output per device



Ceiling Mount Addressable A/Vs

Description

Multi-Candela TrueAlert addressable A/Vs provide convenient installation to standard electrical boxes. Operation is individually addressed and individually controlled with power, supervision, and control supplied from a Simplex fire alarm control panel providing **IDNAC** Signaling Line Circuits (SLCs). (See compatibility list on page 3.)

Strobe Application Reference

Proper selection of visible notification is dependent on occupancy, location, local codes, and proper applications of: the *National Fire Alarm and Signaling 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).

IDNAC SLC Operation Advantage

TrueAlert A/V Addressable Appliances on IDNAC SLCs provide audible and visible notification 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 that extends beyond the appliance wiring connections.

* See page 2 for wire guard listings. 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 7125-0026:239 for allowable values and/or conditions concerning material presented in this document. Accepted for use – City of New York Department of Buildings – MEA35-93E. 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.

IDNAC SLC Operation Advantage *(Cont'd)*

Reduced current allows efficient IDNAC SLC operation. With ***IDNAC SLCs***, a ***constant*** 29 VDC source voltage is maintained, even during battery standby, allowing strobes to operate at higher voltage with lower current and ensuring a consistent current draw and voltage drop margin under both primary power and secondary battery standby. Efficiencies include wiring distances up to 2 to 3 times farther than with conventional notification, or support for more appliances per IDNAC SLC, or use of smaller gauge wiring, or combinations of these benefits, all providing installation and maintenance savings with high assurance that appliances that operate during normal system testing will operate during worst case alarm conditions.

Reducing Installation and Testing Time. With separate controls on the same two-wire SLC, installation time and expense for both retrofit and new construction can be significantly reduced. When Class B wiring is used, *wiring can be "T" tapped*, allowing more savings in distance, wire, conduit (size and utilization), and overall installation efficiency. Use of the magnet test feature improves installation efficiency. TrueAlert device reports conveniently identify information about each connected appliance.

TrueAlert Addressable Wiring Isolator

Isolator Model 4905-9929 is available for remote mounting on TrueAlert addressable circuits to isolate short circuited wiring from functioning wiring. (Refer to data sheet S4905-0001 for additional information.)

TrueAlert Addressable Diagnostics

Test Features. Controllers can be selected to pulse each appliance's LED when it receives a supervision poll. When the controller is selected for diagnostic mode, the appliance magnet test feature provides a response at the individual appliance being tested.

Silent Appliance Magnet Test. In this test mode, in response to the magnet test, the appliance LED pulses sequentially to conveniently indicate the appliance's address.

Operational Appliance Testing. In this test mode, after the address is indicated by pulsing the appliance LED, the strobe will briefly flash and the horn will briefly sound to indicate proper operation.

TrueStart Instrument Two (TSIT). The 2nd generation of the Simplex TrueStart Test Instrument adds testing of IDNAC SLC wiring and TrueAlert (and TrueAlert ES) appliances to its ability to test IDCs, NACs, and IDNet communications *before connection to the control panel*. Please contact your local Simplex representative for additional information.

Product Selection

Multi-Candela Ceiling Mount Addressable A/Vs

Model	Housing Color	"FIRE" Lettering	Description	Dimensions
4906-9228	Red	White	Addressable Horn with Multi-Candela Strobe; intensity selectable as: 15, 30, 75, or 110 candela	4 ¾ L" x 6 ⅞" W x 2 ⅝" D (121 mm x 175 mm x 67 mm)
4906-9230	White	Red		

Wire Guards and Ceiling Mount A/V Adapter

Model	Description		Dimensions
4905-9927*	Red Wire Guard for mounting to flush mounted electrical box		8 ½" x 6 ⅛" x 3" (216 mm x 156 mm x 76 mm)
4905-9928*	Red Adapter Plate, required for surface mount guard		9" x 7" (229 mm x 178 mm)
4905-9915	White	Surface Mount Adapter Box Extension, use to cover 1-1/2" deep surface mounted boxes	4 ¾" x 6 ⅞" x 1 ½" deep, (121 mm x 175 mm x 38 mm)
4905-9916	Red		

* UL listed by Space Age Electronics Inc.

TrueAlert Device Reports Reference

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Service Port                                                          Page 1
REPORT 5 : TrueAlert Device Report                  12:34:56am  TUE  27-Jan-15

                                                      DEVICE
POINT ID     CUSTOM LABEL                               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                                 A/V            75
T14-1-4      Elec. Room 7                                A/V            30
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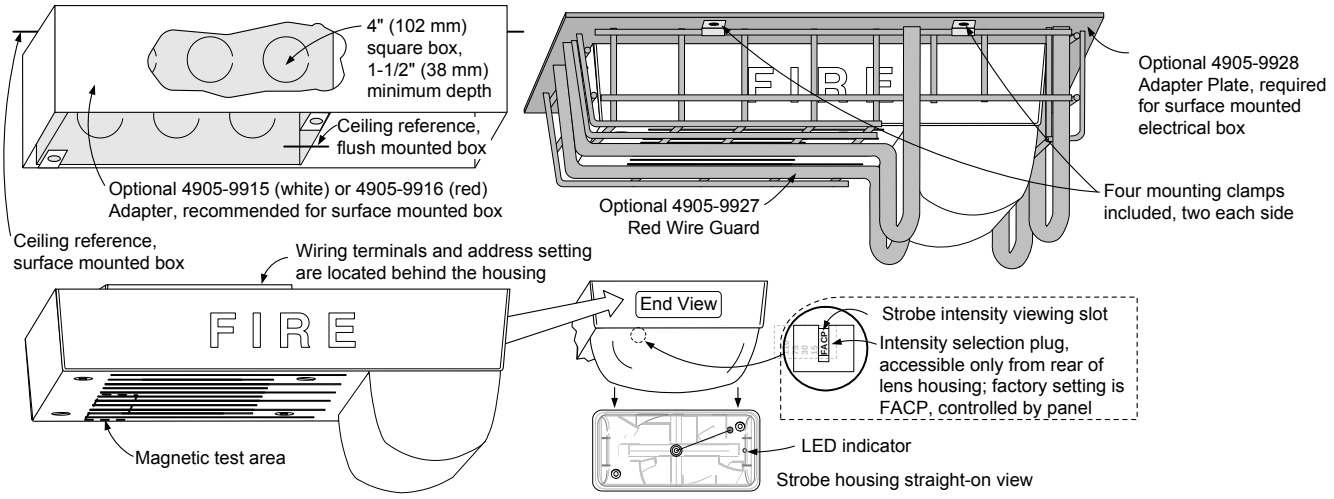
Ceiling Mount A/V and Guard Installation Reference



IDNAC SLC Controller Compatibility Reference

Compatible Controllers	Data Sheet Reference	Controller Output	IDNAC SLC Output Voltage	Appliance Voltage Design Reference
4100ES with EPS+ or EPS Power Supply	S4100-0100	IDNAC SLC	29 VDC (regulated)	23 VDC (with 6 VDC drop)
4009 IDNAC Repeater	S4009-0004			
4007ES with IDNAC Notification	S4007-0002			
4010ES with ESS Enhanced System Supply	S4010-0011			

Specifications

General Specifications (see page 2 for dimensions)

Environmental	32° to 122° F (0° to 50° C); 10% to 93%, non-condensing at 100° F (38° 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
Reference	Installation Instructions 579-808

Electrical Specifications

Typical Operating Voltage Range	23 VDC to 31 VDC, Special Application (see page 4 for 17 VDC rating)							
Supervisory Requirements	1 unit load (= 0.8 mA control panel current)							
Flash Rate and Synchronized SLC Loading	1 Hz; with up to 46 synchronized strobes maximum per NAC							
Candela Setting	**15 cd**		**30 cd**		**75 cd**		**110 cd**	
Horn Output Selection	**High**	**Low**	**High**	**Low**	**High**	**Low**	**High**	**Low**
23 VDC RMS Current Ratings, for connection to IDNAC Addressable SLCs, horn steady on	75 mA	70 m A	110 mA	105 mA	198 mA	193 mA	250 mA	245 mA

Horn Output Characteristics	2400 to 3700 Hz sweep, modulated at 120 Hz rate			
Horn Output Ratings @ 10 ft (3 m) — Sound Type (see Note)	**Steady**		**Coded**	
Setting	**High**	**Low**	**High**	**Low**
Reverberant Chamber, UL 464 Test	84.6 dBA	79.1 dBA	80.6 dBA	75.5 dBA
Anechoic Chamber	90 dBA	84 dBA	86 dBA	80 dBA

Note: Coded horn values are typical of the output measured with a Temporal or March Time pattern and with a sound level meter reading on a "fast" setting. Under the same test conditions, coded horn output "peak" sound level readings are typically 4 dBA higher.

TrueAlert Strobe LEGACY Compatibility Reference

Compatible Controller	Data Sheet Reference	Controller Output	Available Strobe Intensity	Appliance Voltage Minimum
4100ES or 4100U with TrueAlert Power Supply	S4100-0031	TrueAlert Addressable SLC	15, 30, 75, and 110 cd	17 VDC
4009 TPS, Remote TrueAlert Power Supply	S4100-0037			
TrueAlert Addressable Controller (4009T)	S4009-0003			

Electrical Ratings Difference for Retrofit Applications

Voltage Range	17 VDC to 31 VDC, Special Application							
Candela Setting	**15 cd**		**30 cd**		**75 cd**		**110 cd**	
Horn Output Selection	**High**	**Low**	**High**	**Low**	**High**	**Low**	**High**	**Low**
17 VDC RMS Current Ratings, use when connected to TrueAlert Addressable SLCs per above	82 mA	77 mA	135 A	130 mA	249 mA	244 mA	335 mA	330 mA

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