

### Features

#### Individually addressed and controlled multi-candela TrueAlert ES V/O (visible only) notification appliances

- Multi candela LED strobe available in low (15, 30, and 75 cd) and high (110, 135 and 185 cd) range candela models
- Small compact design and low current draw due to energy efficient strobe LEDs
- Advanced addressable notification controlled by IDNAC SLCs providing regulated 29 VDC allows strobes to operate with lower current even under battery backup
- Wiring supervision to each appliance allowing "T tapped" connections for Class B circuits to simplify wiring (Class A circuits require in/out wiring)
- Self-Test Mode allows on-board sensors to detect the LED strobe output and then report their status to the control panel
- TrueAlert Device Reports at the control panel detailing appliance point ID, custom label, type, and candela setting
- Magnet Test diagnostics to assist checkout and testing of appliances and wiring
- Compatibility with ADA requirements
- Strobe operation is listed to UL Standard 1971 and ULC Standard S526
- Synchronized LED strobe operation on the same IDNAC channel LED Indicator and Magnet Test.

#### LED Indicator and Magnet Test

- Indicator LED indicates magnet test acknowledgment, 3 digit IDNAC address, and candela rating
- Indicator LED can be configured to blink each polling cycle to indicate appliance supervision
- When the controller is in diagnostic mode, the magnet test pulses the LED to indicate appliance address and can also briefly flash the strobe

#### Mechanical design features

- Rugged, high impact, flame retardant thermoplastic housing in red and white colors
- Various cover and lettering options are available – red with white letters or white with red letters
- Covers can be easily removed without disturbing the connected housing and avoiding trouble conditions
- In/out wiring terminals for 18 AWG to 12 AWG wiring
- Mounts to single gang US electrical boxes
- Optional mounting adapter plate to adapt to European electrical boxes



Figure 1: TrueAlert ES 59VO Series LED Addressable Strobes are Available in Red with White Lettering and White with Red Lettering

### Description

#### TrueAlert ES LED Addressable Strobes

TrueAlert ES LED Addressable Strobes are individually addressed visible notification appliances that receive power, supervision, and control signals from a Simplex fire alarm control panel providing IDNAC Signaling Line Circuits.

#### Strobe Application Reference

Proper selection of visible notification is dependent on occupancy, location, local codes, and proper applications of: 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).

### TrueAlert ES Operation Advantage

#### Increased circuit integrity

TrueAlert ES Visual Only LED addressable appliances on IDNAC SLCs provide visible notification using a single two-wire circuit that also confirms connection to the individual notification appliance's electronic circuit. This provides supervision that extends beyond the appliance wiring connections.

#### Reduced current usage on IDNAC SLCs

A constant 29 VDC source voltage is maintained, even during battery standby. This allows 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.

#### Reduced installation and testing time

Installation time and expense for retrofit or new construction can be significantly reduced with separate controls on the same two wire SLC. 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 Self-Test and Magnet Test features improves installation efficiency. TrueAlert device reports conveniently identify information about each connected appliance.

\* These products have been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7125-0026:0383 for allowable values and/or conditions concerning material presented in this document. Additional listings may be applicable; contact your local Simplex product supplier for the latest status.

## TrueAlert ES Diagnostics

**Self-Test and Magnet Test** diagnostic features provide individual appliance testing for IDNAC SLCs. With the Self-Test feature, appliance operation can be confirmed without leaving the control panel. Additionally, each appliance's indicator LED can be selected to pulse when it receives a supervision poll during normal operation.

**Self-Test** allows on-board sensors to detect strobe output on the device and report the strobe status to the control panel. Operation is by selected VNAC appliance groups and is either automatic (all briefly simultaneously activated) or individually activated by applying a magnet. Refer to control panel data sheet for more Self-Test information, see list on [IDNAC SLC Controller Compatibility Reference](#) for more information.

**Silent Appliance Magnet Test** pulses the indicator LED sequentially in response to the application of a magnet to conveniently indicate the appliance's address.

**Operational Appliance Magnet Test** briefly flashes the strobe to indicate proper operation after the address is indicated by pulsing the indicator LED.

**TrueStart Instrument Two (TSIT)** helps with testing of IDNAC SLC wiring and TrueAlert ES appliances. Use it to test IDCs, NACs, and IDNet communications before connection to the control panel. Please contact your local Simplex representative for additional information.

## 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. See data sheet [S4905-0001](#) for more information.

## Product Selection

### TrueAlert ES LED Wall Mount Addressable Strobe Appliances

**Table 1: Appliance and cover (dimensions with cover = 5 ¼" H x 3 ½" W x 1 ⅝" D / 132 mm x 86 mm x 39 mm)**

Model*	Color	Wording	Candela rating	Model*	Color	Wording	Candela rating
59VO-WRF	Red	FIRE	Low (15, 30 and 75 cd)	59VO-WRFH-BA	Red	FIRE	High (110, 135 and 185 cd)
59VO-WRF-BA				White	59VO-WRFH-BA		
59VO-WWF	59VO-WWFH-BA						
59VO-WWF-BA							

**Table 2: Appliance only**

Model	Color	Candela rating	Model	Color	Candela rating
59VO-APPLWR	Red	Low	59VO-APPLWRH	Red	High
59VO-APPLWW	White		59VO-APPLWWH	White	

**Table 3: Separate cover**

Model	Color	Wording	Model	Color	Wording
59VOC-WRF	Red	FIRE	59VOC-WWS	White	Logos only
59VOC-WWF	White		59VOC-WRS	Red	
59VOC-WRA	Red	ALERT	59VOC-WWA	White	ALERT

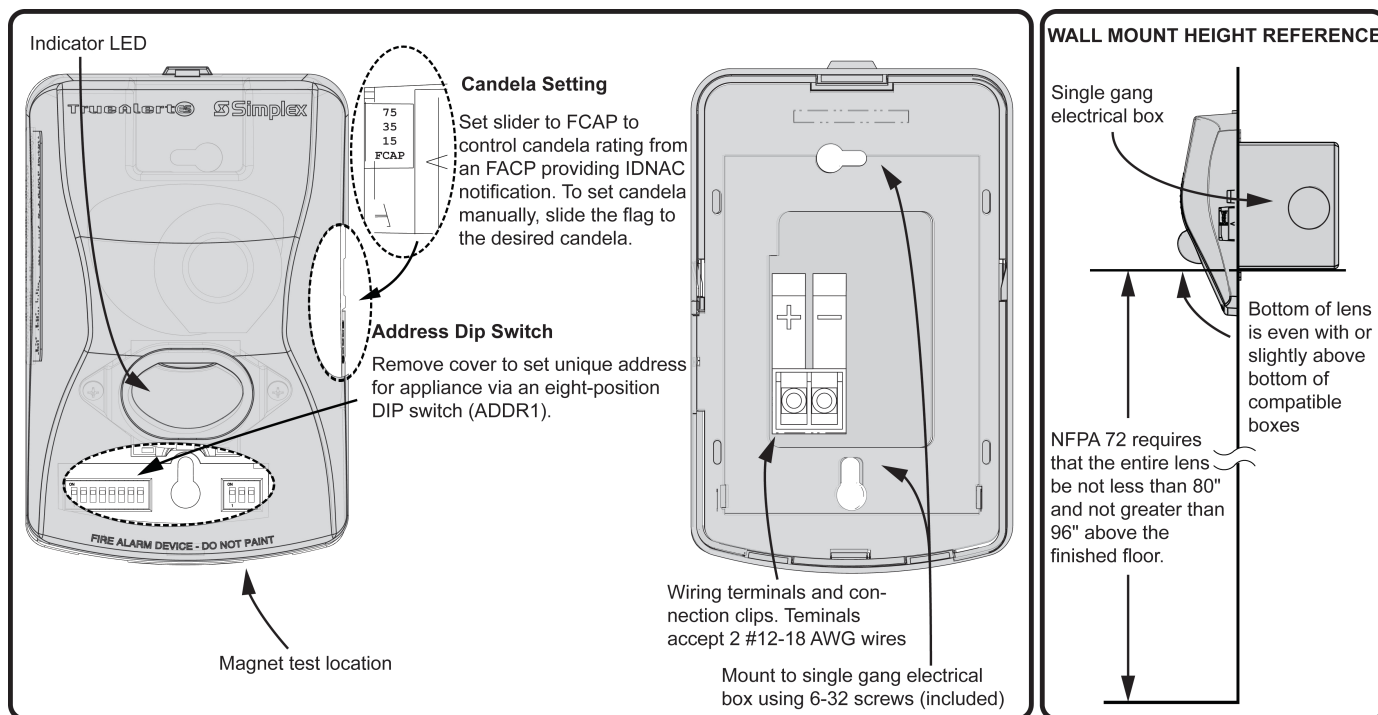
**Table 4: Separate European adapter back plate**

Model	Color	Description
59AP-EUROBB	Black	Wall mounting plate for mounting to UK (Deta DB164), Swiss (Kaiser 9063-01), or German (HSB, NIS Kombi 372501686) back boxes.

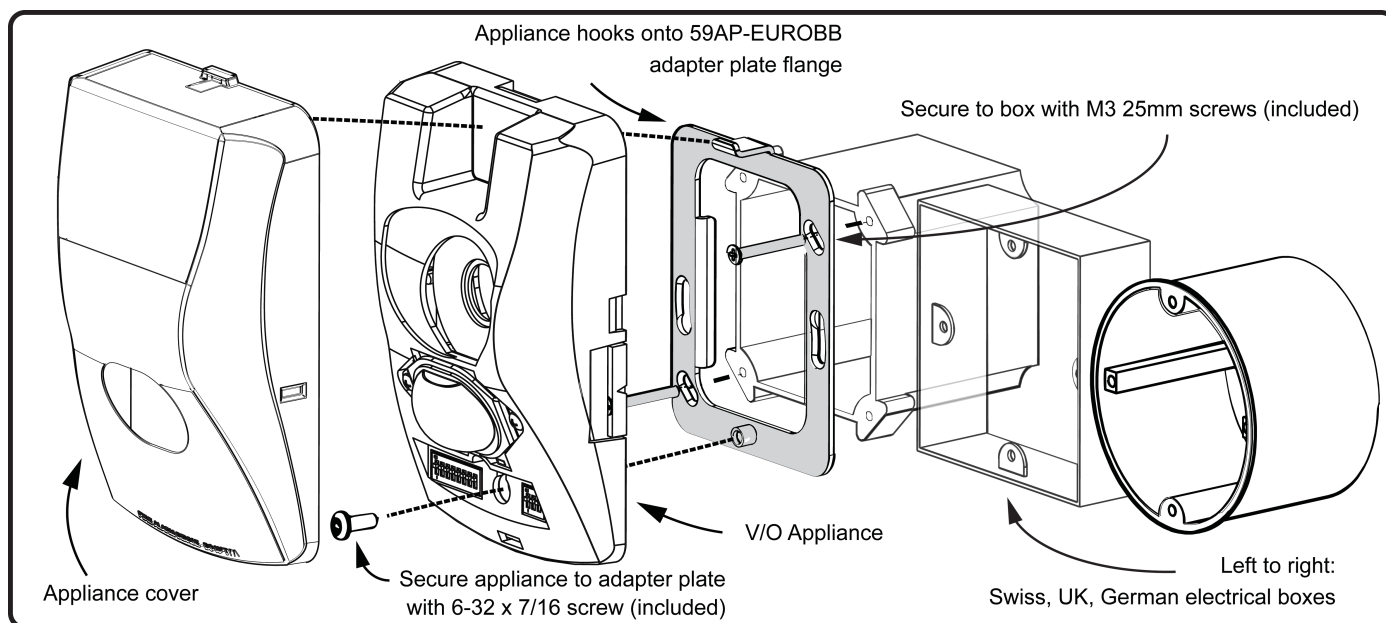
**Note:** Model numbers ending in -BA are assembled in the USA.

**Note:** Dimensions of appliance and cover: 5 ¼" H x 3 ½" W x 1 ⅝" D / 132 mm x 86 mm x 39 mm.

**Installation Reference**



**Adapter Plate Installation Reference**



**IDNAC SLC Controller Compatibility Reference**

**Table 5: IDNAC SLC Controller Compatibility**

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			

## TrueAlert ES Strobe Specifications

**Table 6: Electrical ratings**

Rating	Details
Typical Operating Voltage Range	23 - 29.5 VDC, Special Application
Supervisory Requirements	1 unit load (= 0.8 mA control panel current)
IDNAC SLC Loading	Maximum of 127 addresses per SLC, 139 unit loads

**Table 7: Candela setting**

Candela Setting	15 cd	30 cd	75 cd	110 cd	135 cd	185 cd
23 VDC RMS Current Ratings, for typical design of IDNAC Addressable SLCs (6 VDC drop)	31 mA	44 mA	60 mA	125 mA		

**Table 8: Percentage of rated light output at room temperature**

Angle	On-Axis		Vertical, Below Axis		Horizontal, Left/Right of Axis	
	0°	45°	90°	45°	90°	90°
UL required output	100%	34%	12%	75%	25%	
Typical output	145%	84%	21%	102%	47%	

**Table 9: General Specifications**

Specification	Details
Temperature Range	32° to 120° F (0° to 49° C)
Humidity Range	10% to 93%, non-condensing @ 104° F (40° C)
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)
Connections	Terminal blocks on mounting plate for 18 AWG to 12 AWG (0.82 mm <sup>2</sup> to 3.31 mm <sup>2</sup> ); two wires per terminal for in/out wiring
Installation Instructions	579-1162
<b>Note:</b> Refer to compatibility table above for fire alarm control panel and power supply operation type.	