



Features

Individually addressable TrueAlert ES indoor and weatherproof electronic horns

- Advanced addressable notification controlled by IDNAC SLCs providing regulated 29 VDC allow strobes on the same Signaling Line Circuits (SLC) to operate with lower current even under battery backup
- Wiring supervision to each appliance allows T-tapped™ connections for Class B circuits to simplify wiring (Class A circuits require in/out wiring)
- Self-test mode detects the horn output and then reports the status to the control panel
- Separate control of horns from visible appliances on the same SLC with control panel selection of operation as: Temporal Code 3, March Time (selectable as 20, 60, or 120 bpm), Continuous, or Temporal Code 4
- High and low outputs (~6 dBA difference), selectable at the appliance or from the controller with FACP mode selected at the appliance
- Magnet test diagnostics to test appliances and wiring
- Listed to UL Standard 464 and ULC Standard S525
- Synchronized piezo operation on the same IDNAC channel

LED Indicator and Magnet Test

- Indicator LED can be selected to display 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 is selectable to also briefly sound the horn to confirm operation

Mechanical design features

- Rugged, high impact, flame retardant thermoplastic housing in red and white colors
- Various covers options are available – Red with white letters or white with red letters
- Compatibility with ADA requirements
- Covers available in a selection of FIRE or ALERT lettering
- Covers can be easily removed without disturbing the connected housing and avoiding trouble conditions
- In/out wiring terminals for 18 AWG to 12 AWG
- Indoor model mounts to single gang US electrical boxes
- Weatherproof model mounts to single gang weatherproof electrical boxes



TrueAlert ES 59AO series Addressable Horns are Available in Red with White Lettering and White with Red Lettering

Description

TrueAlert ES 59 Series addressable horns are individually addressed audible notification appliances that receive power, supervision, and control signals from a Simplex fire alarm control panel providing IDNAC SLCs.

TrueAlert ES Operation Advantage

Increased circuit integrity

TrueAlert ES A/O addressable appliances on IDNAC SLCs provide audible 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. Efficiencies include wiring distances up to 2 to 3 times farther than with conventional notification, support for more appliances per IDNAC SLC, use of smaller gauge wiring, or combinations of these benefits.

* 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. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Fire Protection Products.

TrueAlert ES Operation Advantage (Cont'd)

Reduced Installation and Testing Time

Installation time and expense for retrofit or new construction is 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.

TrueAlert ES Diagnostics

Self-Test allows appliance operation to be confirmed without leaving the control panel. Operation is by selected VNAC appliance groups and is automatic or individually activated by applying a magnet. Refer to control panel data sheet for more self-test information, see list on page 4.

Indoor Product Selection

Indoor TrueAlert ES Addressable Electronic Horns

Appliance and cover

Model*	Color	Wording	Description	Dimensions with Cover
59AO-WRS(-BA)	Red	Logos only	Indoor wall mounted TrueAlert ES addressable A/O horn appliance, includes cover	5 1/4" H x 3 1/2" W x 1 5/8" D (132 mm x 86 mm x 39 mm)
59AO-WWS(-BA)	White			

Appliance only (Select cover separately)

Model	Color	Model	Color
59AO-APPLWR	Red	59AO-APPLWW	White

Separate Covers (Required when ordering model 59AO-APPLWR or 59AO-APPLWW)

Model	Color	Wording	Model	Color	Wording
59AOC-WRF	Red	FIRE	59AOC-WWS	White	Logos only
59AOC-WWF	White				
59AOC-WWFQB	White	FEU/FIRE	59AOC-WRFQB	Red	FEU/FIRE

* **Note:** (-BA) indicates model is available either with or without the -BA suffix. Model numbers ending in -BA are assembled in the USA.

Weatherproof Product Selection

Weatherproof TrueAlert ES Addressable Electronic Horns

Appliance and cover

Model*	Color	Wording	Description	Dimensions with Cover
59AO-WRSO(-BA)	Red	Logos only	Weatherproof wall mounted TrueAlert ES addressable A/O horn appliance, includes cover. Order surface mount weatherproof box separately (see below).	5 1/4" H x 3 1/2" W x 1 5/8" D (132 mm x 86 mm x 39 mm)
59AO-WWSO(-BA)	White			

Appliance only (Select cover separately)

Model	Color	Model	Color
59AO-APPLWR-O	Red	59AO-APPLWW-O	White

Separate Covers (Required when ordering model 59AO-APPLWR-O or 59AO-APPLWW-O)

Model	Color	Wording	Model	Color	Wording
59AOC-WRFO	Red	FIRE	59AOC-WRFQBO	Red	FEU/FIRE
59AOC-WWFQBO	White				

Surface Mount Weatherproof Boxes (Required, ordered separately. Weatherproof model only)

Model	Color	Description	Dimensions
59WPBB-WR	Red	Surface mount weatherproof single-gang mounting box, includes weatherproof gasket and painted versions of model 7219K23 (below). Order from your Simplex product representative	4 1/2" H x 2 3/4" W x 2" D (114 mm x 70 mm x 51 mm)
59WPBB-WW	White		
7219K23	Gray	Surface mount weatherproof single-gang mounting box; order blank cover to get matching weatherproof gasket	Manufactured by McMaster Carr; order from electrical product supplier
7219K5	Gray	Blank cover with weatherproof gasket	

* **Note:** (-BA) indicates model is available either with or without the -BA suffix. Model numbers ending in -BA are assembled in the USA.

TrueAlert ES Diagnostics (Continued)

Magnet Test features indicate device location by pulsing the indicator LED briefly, and briefly sounding the horn. The indicator LED can be pulsed sequentially to indicate appliance address. The horn can also be briefly sounded to indicate proper operation.

TrueStart Instrument Two (TSIT) can be used to test IDNAC SLC wiring and TrueAlert ES appliances for before connecting the appliance 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.

TrueAlert Device Reports Reference

Service Port		Page 1	
REPORT 5 : TrueAlert Device Report		12:34:56am FRI 09 May-15	
POINT ID	CUSTOM LABEL	DEVICE TYPE	CANDELA
T14-1-1	Location Label . . . up to 40 characters	AO	---
T14-1-2	Break Room 5	AV-H	110
T14-1-3	Boiler Room	AV-L	75
T14-1-4	Elec. Room 7	AV-H	135

Installation and Indoor Wall Mount Height Reference

The diagram illustrates the internal components of the TrueAlert device and the required wall mount height. On the left, a cutaway view of the device shows the **Indicator LED**, **Wiring terminals and connection clips** (accepting 2 #12-18 AWG wires), an **Address Dip Switch** (used to set a unique address via an eight-position DIP switch labeled ADDR1), a **Magnet test location**, and a **Control and Volume Configuration Switch** (used for local or panel audible control and volume settings). On the right, a **WALL MOUNT HEIGHT REFERENCE** diagram shows the device mounted on a **Single gang electrical box**. A vertical dimension line indicates a **6" (152 mm) minimum** clearance from the top of the device to the top of the box. A note specifies that **NFPA 72 requires top of audible appliance to be 90" minimum above the finished floor and not less than 6" below the ceiling** (confirm with local codes).

Mount to single gang electrical box using 6-32 screws (included)

Weatherproof Mounting Reference

The diagram shows the process of weatherproofing the device. It includes a **Weatherproof appliance cover** on the left. The main assembly shows the **Weatherproof Appliance** being secured through a **weatherproof mounting plate and gasket** into a **Single gang surface mount weatherproof electrical box**. **6-32 1" mounting screws (included)** are used to secure the appliance through the mounting plate and gasket. A note states: **Secure appliance through weatherproof mounting plate and gasket**. A final note indicates: **Single gang surface mount weatherproof electrical box. Required, order separately. Refer to table on page 2**.

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			

TrueAlert ES Horn Specifications

Electrical Ratings

Typical Operating Voltage Range	23 VDC to 29.5 VDC, Special Application
RMS Current Rating	27 mA maximum @ 23 VDC (for connections to IDNAC SLCs)
Supervisory Requirements	1 unit load (= 0.8 mA control panel current)
IDNAC SLC Loading	Maximum of 127 addresses per SLC, 139 unit loads

Sound Output Ratings @ 10 ft (3 m) @ 23 VDC (with IDNAC SLCs)

Sound Type/Setting	Steady/High	Steady/Low	Coded/High	Coded/Low
Reverberant Chamber, UL 464 Test	86.9 dBA	85.7 dBA	83.3 dBA	81.2 dBA
Anechoic Chamber, ULC 525 Test	93.8 dBA	87.5 dBA	93.7 dBA	87.4 dBA

Sound Output Dispersion per ULC S541 Anechoic Testing

Horizontal	-3 dBA @ 50°; -6 dBA @ 63°; left and right from center
Vertical	-3 dBA @ 20° above, 48° below; -6 dBA @ 65° above, 60° below; ref. to center

General Specifications

Sound Characteristics	2400 to 3700 Hz sweep, modulated at 120 Hz rate
Temperature Range	Indoor: 32° to 120° F (0° to 49° C) Outdoor: -40° to 150° F (-40° to 66° C)
Humidity Range	10% to 93%, non-condensing @ 104° F (40° C)
Connections	Terminal blocks on mounting plate for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²); two wires per terminal for in/out wiring
Installation Instructions	579-1200 (A/O Indoor) 579-1199 (A/O Weatherproof)
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)

Notes: UL 464 test coded values are typical of the output measured with a Temporal or a 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. Anechoic horn output ratings are typically more representative of actual installed sound output.

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