9 Simplex

TrueAlert Addressable Notification Appliances

UL, ULC, CSFM, FM Approved*



Wall Mount Addressable Horns, Model Series 59AO

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.

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.

Indoor Product Selection

Indoor TrueAlert ES Addressable Electronic Horns

Appliance and co	over							
Model*	Color	Wording	Description				Dimensions with Cover	
59AO-WRS(-BA)	Red		Indoor wal	Indoor wall mounted TrueAlert ES addressable A/O horn			5 ¼" H x 3 ½ " W x 1 %" D	
59AO-WWS(-BA)	White	Logos only	appliance, includes cover and matching mounting plate				(132 mm x 86 mm x 39 mm)	
Appliance only (S	Select cov	er and mounting plate	separately))				
Model Colo		Color	Model			Color		
59AO-APPLWR		Red	59AO-APPLWW			White		
Separate Covers (Required when ordering model 59AO-APPLWR or 59AO-APPLWW)								
Model	Color	Wording		Model	Colo	r	Wording	
59AOC-WRF	Red	FIRE		59AOC-WRS	Red			
59AOC-WWF	White	FIRE		59AOC-WWS	White	9	Logos only	
59AOC-WRFAB	Red			59AOC-WRFQB	Red		FEU/FIRE	
59AOC-WWFAB	White	حـريق / FIRE -		59AOC-WWFQB	White	9	FE0/FIRE	
Separate Europea	an adapt	er back plate						
Model	Color	Description						

 Solution
 Value
 Wall mounting plate for mounting to UK (Deta DB164), Swiss (Kaiser 9063-01), or German (HSB, NIS Kombi 372501686) back boxes.

* 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

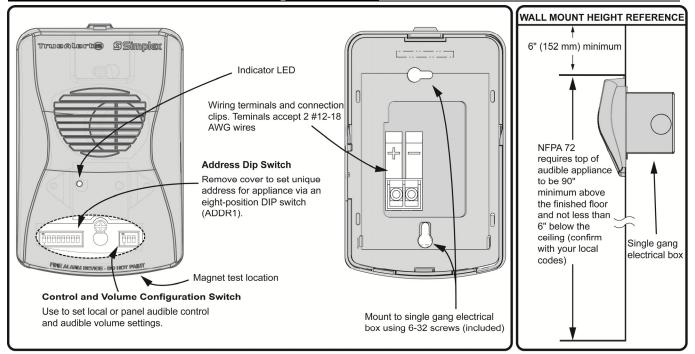
Appliance and c	over									
Model*	Color	Wording	Description			Dime	Dimensions with Cover			
59AO-WRSO(-BA)	Red	_		nounted TrueAlert ES addressable A/O horn			۱ 5 ¹ /″۱	5 ¼" H x 3 ½ " W x 1 %" D		
59AO-WWSO-BA	White	Logos only	appliance, includes cover. Order surface mount weatherproof				(132 mm x 86 mm x 39 mm)			
	Winto		box separately (see	pelow).			((102		
Appliance only (Select cov	er and mount	ing plate separately)							
Model			Color Model				Color			
59AO-APPLW	R-0		Red	59AO-APPLWW-O			White			
Separate Covers	(Required	l when orderi	ng model 59AO-APPL	WR-O or 59A0	D-APPLW	N-O)				
Model	Colo	r	Wording		odel	Color		Wording		
59AOC-WRFO	Red	FIRE		59AOC-WR		Red		- Logos only		
59AOC-WWFO	White	1 11.		59AOC-WW		White				
59AOC-WRFQBO	Red	FEU/F	IRE	59AOC-WR		Red		حـريق / FIRE		
59AOC-WWFQBO	White	1 20/1		59AOC-WW	FABO	White				
Surface Mount V	Veatherp	roof Boxes	(Required, ordered se	parately. Wea	therproof i	model only)				
Model	Colo	olor Description						Dimensions		
59WPBB-WR	Red		Surface mount weatherproof single-gang mounting box, includes							
59WPBB-WW	Whit	-	eatherproof gasket and painted versions of model 7219K23 (below).					4 ½" H x 2 ¾" W x 2" D		
	vviiit	Oldel	ler from your Simplex product representative							
70401/00	0		rface mount weatherproof single-gan		Manufactured by McMaster		. (114 m	m x 70 mm x 51 mm)		
7219K23	Gray		ing box; order blank co	0	Carr; order from electrica					
7219K5	Crow		ing weatherproof gask	(et product supplier			N/A C	over is not used		
121910	Gray	BIANK	cover with weatherpro	er with weatherproof gasket			IN/A, CO	N/A, Cover is not used		

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

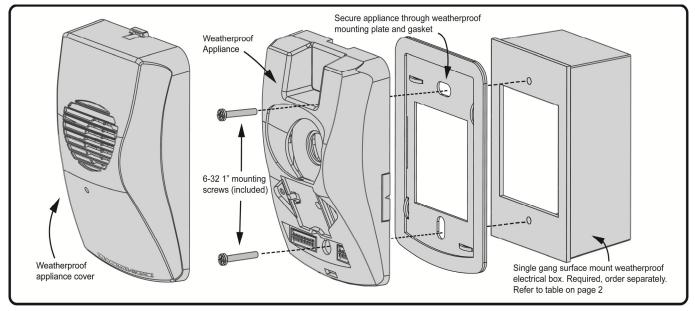
TrueAlert Device Reports Reference

Service Po	rt			Page 1	
REPORT 5 :	TrueAlert Device Report	12:34:56am	FRI	09 May-15	
		DEVICE			
POINT ID	CUSTOM LABEL	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



Weatherproof Mounting 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 SI C			
4009 IDNAC Repeater	S4009-0004		29 VDC (regulated)	23 VDC (with 6 VDC drop)	
4007ES with IDNAC Notification	S4007-0002				
4010ES with ESS Enhanced System Supply	S4010-0011				

TrueAlert ES Horn Specifications

Electrical Ratings

Typical Operating Voltage Range	Operating Voltage Range 23 VDC to 29.5 VDC, Special Application						
MS Current Rating 27 mA maximum @ 23 VDC (for connections to IDNAC SLCs)							
Supervisory Requirements	uirements 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) @ <u>23</u> <u>VDC</u> (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	UTP, unshielded twisted pair recommended						
(refer to control panel installation	Maximum wire length allowed with "T-Taps" for Class B wiring per SLC = 10,000 ft (3048 m)						
instructions for more information) 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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