

TrueAlert Addressable Notification Appliances

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

Description

TrueAlert ES 59 Series addressable horns

are individually addressed audible notification appliances that receive power, supervision, and control signals from a Autocall fire alarm control panel providing IDNAC SLCs.



Figure 1: TrueAlert ES A59AO series Addressable Horns are Available in Red with White Lettering and White with Red Lettering

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.

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.

* Additional listings may be applicable; contact your local product supplier for the latest status.

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.

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 Autocall representative for additional information.

TrueAlert Addressable Wiring Isolator

Isolator Model A4905-9929 is available for remote mounting on TrueAlert addressable circuits to isolate short circuited wiring from functioning wiring. See data sheet *AC4905-0001*.

Indoor Product Selection

Indoor TrueAlert ES Addressable Electronic Horns

Table 1: Appliance only (Select cover and mounting plate separately)

SKU	Color
A59AO-APPLWR	Red
A59AO-APPLWW	White

Table 2: Separate Covers (Required when ordering model A59AO-APPLWR or A59AO-APPLWW)

SKU	Color	Wording
A59AOC-WRF	Red	FIRE
A59AOC-WWF	White	
A59AOC-WRFAB	Red	FIRE / حريق
A59AOC-WWFAB	White	
A59AOC-WRS	Red	Logos only
A59AOC-WWS	White	

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

Weatherproof Product Selection

Weatherproof TrueAlert ES Addressable Electronic Horns

Table 3: Appliance only (Select cover and mounting plate separately)

SKU	Color
A59AO-APPLWR-O	Red
A59AO-APPLWW-O	White

Table 4: Separate Covers (Required when ordering model A59AO-APPLWR-O or A59AO-APPLWW-O)

SKU	Color	Wording
A59AOC-WRFO	Red	FIRE
A59AOC-WWFO	White	
A59AOC-WRSO	Red	Logos only
A59AOC-WWSO	White	
A59AOC-WRFABO	Red	FIRE / حريق

Table 5: Surface Mount Weatherproof Boxes (Required, ordered separately. Weatherproof model only)

SKU	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 Autocall product representative	4 ½" H x 2 ¾" 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	
			N/A, Cover is not used

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

IDNAC SLC Controller Compatibility Reference

Table 6: Compatibility Reference

Compatible Controllers	Data Sheet Reference	Controller Output	IDNAC SLC Output Voltage	Appliance Voltage Design Reference
4100ES with EPS+ or EPS Power Supply	AC4100-0100	IDNAC SLC	29 VDC (regulated)	23 VDC (with 6 VDC drop)
4009 IDNAC Repeater	AC4009-0004			
4007ES with IDNAC Notification	AC4007-0002			
4010ES with ESS Enhanced System Supply	AC4010-0011			

TrueAlert ES Horn Specifications

Table 7: Electrical Ratings

Rating	Details
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

Table 8: 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

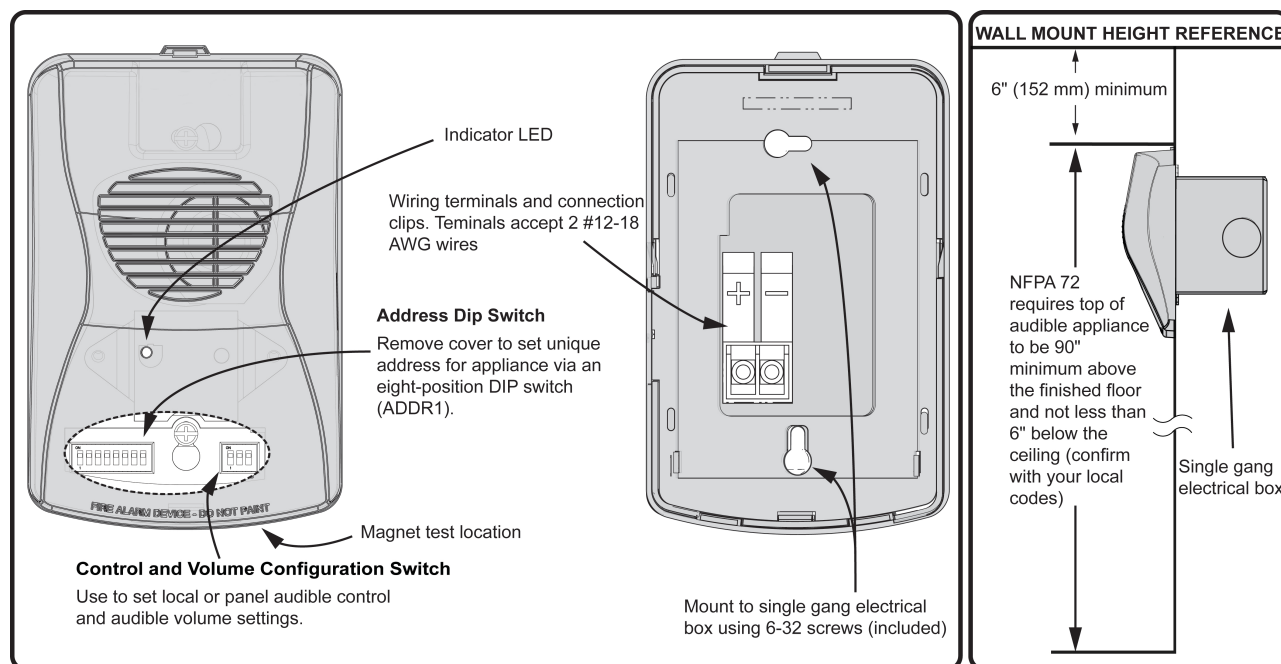
Table 9: Sound Output Dispersion per ULC 5541 Anechoic Testing

Direction	Details
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

Table 10: General Specifications

Specifications	Details
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	579-1200AC (A/O Indoor) 579-1199AC (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)
Note: 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.	

Installation and Indoor Wall Mount Height Reference



Weatherproof Mounting Reference

