

TrueAlert Multi-Candela Notification Appliances

Wall Mount Visible Only and Audible/Visible, Non-Addressable Weatherproof Notification Appliances

Introduction

Weatherproof multi-candela TrueAlert appliances provide V/O and A/V SmartSync operation. They are suitable for indoor and outdoor extended temperature environments and humidity conditions. The enclosures are impact and vandal resistant. They provide convenient strobe intensity options. You can choose each model for intensity output, so you can minimize on-site inventory and accommodate changes encountered during construction.

Features

Weatherproof 24 VDC notification appliances designed for extended temperature and extended humidity operation include the following features:

- NEMA 3R rated enclosures suitable for indoor or outdoor applications.
- Rugged, high impact, flame retardant thermoplastic housings are available in red or white with a clear lens.
- Red housings are for indoor or outdoor applications and provide UV light-stable color.
- White housings are for indoor applications with limited UV light exposure.
- Mounting requires matching weatherproof boxes, ordered separately.
- Wiring terminals are accessible from the front of the housing for easy installation, inspection, and testing.

Agency listings:

- UL listed to Standard 1638 for outdoor applications with strobe rated at 75 candela (cd) (WP75).
- UL listed to Standard 1971 for indoor applications with strobe intensity selectable as 15 cd, 60 cd, or 75 cd. Indoor applications are compatible with ADA requirements. See [Weatherproof appliance installation reference](#).
- Separate models are ULC listed to Standard S526 for strobes, and S525 for horns, both intended for outdoor applications. Strobe intensities are selectable as 5 cd, 20 cd, or 30 cd. These are available in red exclusively.

Operation details:

- A jumper with visible intensity preferences is secured behind the strobe housing.
- Compatible reverse polarity is supported through polarized input on a supervised notification appliance circuit (NAC).
- Regulated circuit design ensures consistent flash output and controlled inrush current.
- Audio/Visible (A/V) appliances have an efficient electronic horn.

Synchronized strobe compatibility:

- Simplex® fire alarm control units (FACUs) and NAC extenders when selected to provide strobe synchronization or SmartSync two-wire control.
- Separate strobe synchronization modules or SmartSync Control Modules (SCMs) that convert conventional NAC inputs to a SmartSync output.
- SmartSync two-wire operation provides horns controlled separately from strobes on the same two-wire circuit, activated as temporal pattern, march time pattern, at 60 BPM, or on continuously.

Figure 1: Weatherproof A/V mounting box, top image. Strobe, middle image, and side view, bottom image



Strobe intensity options

During installation, use the preferences plug at the back of the housing to determine the strobe intensity. A flag with black letters on a yellow background indicates the chosen intensity at the side of the strobe lens.

Strobe application reference

The correct choice of weatherproof notification is dependent on the following factors:

- Occupancy
- Location
- Local codes
- The correct applications of the following standards and guidelines:
 - The National Fire Alarm and Signaling Code (NFPA 72)
 - ANSI A117.1
 - The appropriate model building code: BOCA, ICBO, or SBCCI
 - The application guidelines of the Americans with Disabilities Act (ADA).

Requirements may differ from those for indoor appliance applications. Contact your local authority having jurisdiction (AHJ) to determine requirements.

SmartSync two-wire control

You can activate a two-wire circuit with SmartSync operation mode.

You can use it for both the horn and the strobe on the same NAC. Then, you can silence the horn while the strobe continues to flash. The horn operates as on-until-silenced while the strobe operation is on-until-reset.

SmartSync control sources

SmartSync two-wire control is available from the following devices:

- 4006, 4007ES Hybrid, 4008, 4010, 4010ES, 4100ES, and 4100U FACUs. Refer to individual product datasheets for more information.
- 4009 IDNet NAC Extenders. Refer to, *4009 IDNet NAC Extender for Control with IDNet Communications or Conventional NACs (4009-0002)*.
- SmartSync Control Module (SCM) Model 4905-9938. Refer to *SmartSync Control Module and Strobe Synchronization Modules (S4905-0003)*.
- Additional SmartSync compatible notification appliances include separate horns and combination horn/strobe notification appliances.

Products

Table 1: UL listed TrueAlert weatherproof multi-candela notification appliances

Model	Type	Housing	FIRE lettering	UL 1971 intensity rating	UL 1638 intensity rating	Description
4906-9105	Strobe (V/O)	Red	White	15 cd, 60 cd, or 75 cd	75 cd (setting WP75)	UL listed weatherproof appliance with a multi-candela strobe. It requires a weatherproof box, see Table 3 .
4906-9106		White	Red			
4906-9131	Horn/Strobe (A/V)	Red	White			
4906-9132		White	Red			

Table 2: ULC listed TrueAlert weatherproof multi-candela notification appliances

Model	Type	Housing	FIRE lettering	ULC intensity ratings	Description
4906-9113	Strobe (V/O)	Red	White	5 cd, 20 cd, or 30 cd	ULC listed weatherproof appliance with a multi-candela strobe. It requires weatherproof box, see Table 3 .
4906-9143	Horn/Strobe (A/V)				

Table 3: Required , wall mount weatherproof boxes

Model	Dimensions	Description
49WPBB-AVVOWR	5 1/2 in. x 6 1/8 in. x 1 5/8 in. (H x W x D) (140 mm x 156 mm x 41 mm)	Red
49WPBB-AVVOWW		White

Table 4: Aftermarket red bilingual, French and English, covers, for field installation

Model	Description
4905-9832	Red strobe (V/O) cover
4905-9833	Red horn/strobe (A/V) cover

Table 5: Synchronization module references

Model	Dimensions	Description
Note: Refer to datasheet <i>SmartSync Control Module and Strobe Synchronization Modules (S4905-0003)</i> for additional information.		
4905-9914	1 3/8 in. x 2 7/16 in. x 13/16 in. (H x W x D) (35 mm x 62 mm x 20 mm)	Class B
4905-9922		Class A
4905-9938	4 in. x 4 1/8 in. x 1 1/4 in. (H x W x D) (102 mm x 105 mm x 32 mm)	SmartSync Control Module with Class B or Class A output, mounts in 4 in. (102 mm) square box

Specifications

Regulated 24 VDC refers to the voltage range of 16 VDC to 33 VDC in accordance with UL 1971 and UL 1638. This voltage range is the absolute operating range. Operation outside of this range can cause permanent damage to the strobe.

Under worst case conditions, 16 VDC is the lowest operating voltage you can use at the last appliance on the NAC.

Table 6: Specifications

Specifications		
Rated voltage range		Regulated 24 VDC
Flash rate		1 Hz, up to 24 synchronized strobes maximum for each NAC
Temperature range	UL 1971 listed rating	32°F to 122°F (0°C to 50°C), selectable as, 15 cd, 30 cd, or 75 cd.
	UL 1638 listed rating	-31°F to 150°F (-35°C to 66°C), 75 cd.
	ULC S526 and S525 listed rating	-40°F to 150°F (-40°C to 66°C), selectable as, 5 cd, 20 cd, or 30 cd.
Humidity range	UL 1971 listed rating	10% to 93%, at 100°F (38°C)
	UL 1638, ULC S526, and ULC S525	Up to 98%, at 104°F (40°C)
Wiring connections		Terminal blocks for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²). Two wires for each terminal for in/out wiring

Coded values are representative of the output measured with a temporal coded or a march time coded pulse. Use a sound level meter reading on a fast setting. Under the same test conditions, coded horn output peak sound level readings are 4 dBA higher. Anechoic horn output ratings are more representative of actual installed sound output

Table 7: Horn output for models 4906-9131, 4906-9132, and 4906-9143.

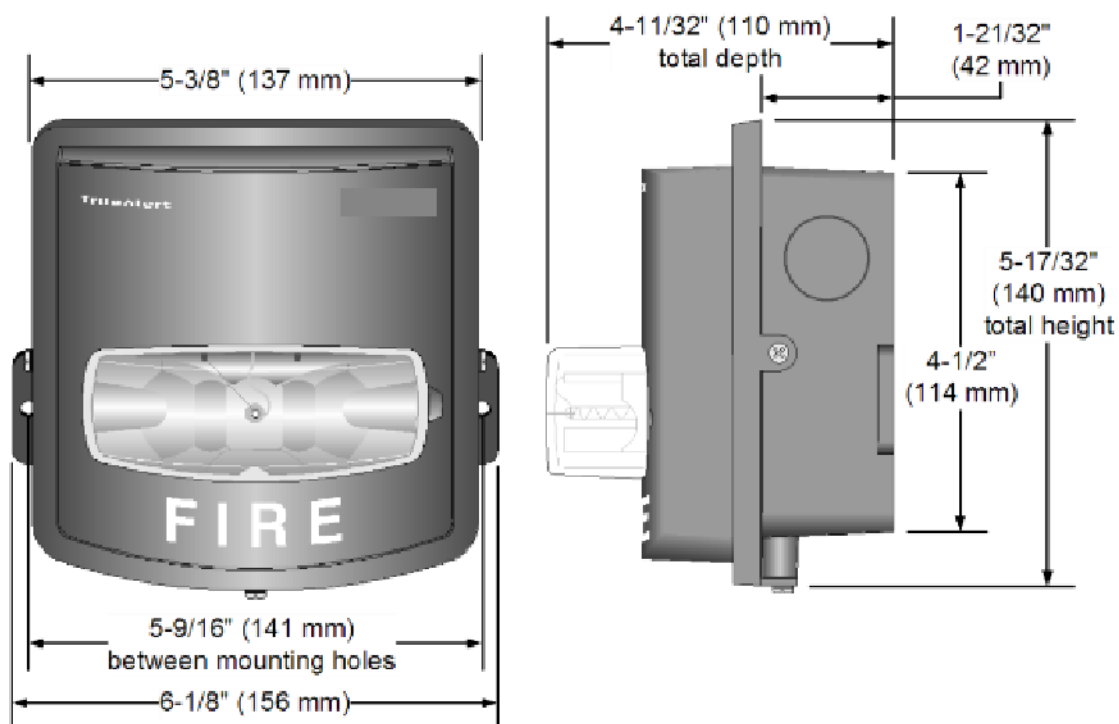
Output sound characteristics		2400 Hz to 3700 Hz sweep, modulated at 120 Hz rate					
Horn output ratings at 10 ft (3 m), see note	Voltage	16 VDC		24 VDC		33 VDC	
	Sound type	Steady		Coded		Steady	
	UL 464 reverberant chamber	80 dBA	76 dBA	83 dBA	79 dBA	86 dBA	81 dBA
	ULC S525 anechoic chamber	96 dBA	96 dBA	99 dBA	99 dBA	101 dBA	101 dBA

A/V currents are measured with horn on steady mode. The maximum RMS current listed is the device nameplate rating. Strobe designs are constant wattage and the maximum RMS current rating occurs at the lowest allowable operating voltage. Root mean square (RMS) refers to the effective value of a varying current waveform.

Table 8: Maximum RMS current ratings

		UL 1971 ratings (32°F to 122°F)			UL 1638 ratings 75 cd (WP75)	
SKU	Intensity selection or temperature	15 cd	60 cd	75 cd	32°F to 150°F (0°C to 66°C)	-31°F to below 32°F (-35°C to 0°C)
V/O Models 4906-9105 and 4906-9106		77 mA	192 mA	231 mA	189 mA	273 mA
A/V Models 4906-9131 and 4906-9132		91 mA	204 mA	249 mA	205 mA	277 mA
ULC S526/S525 ratings according to intensity selection						
Model		5 cd		20 cd		30 cd
VO Model 4906-9113		115 mA		270 mA		295 mA
A/V Model 4906-9143		125 mA		275 mA		322 mA

Dimension and optional cover reference

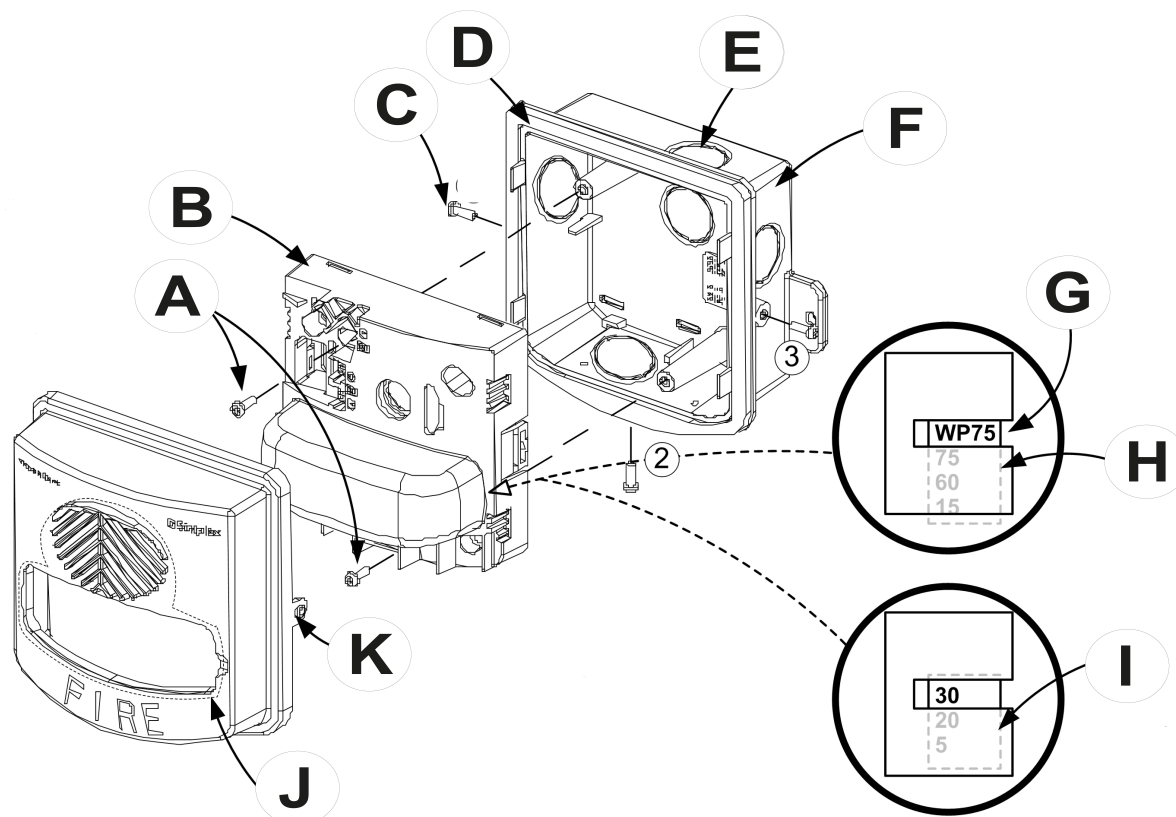


Weatherproof appliance installation reference

For more detailed installation information on UL listed products, refer to TrueAlert Non-Addressable A/V and V/O Weatherproof Appliances Installation Instructions 579-857.

For ULC listed products, refer to TrueAlert Non-Addressable AV and VO Weatherproof Appliances, ULC Approved Installation Instructions 579-885.

Figure 2: Weatherproof appliance installation



Callout	Component
A	Housing to mounting box screws, x 2
B	Housing, A/V shown
C	Cover to mounting box mounting screws x 3
D	Pre-installed premier gasket
E	Top, bottom, sides, and back knockouts x 5
F	Weatherproof mounting box, required. Red: 49WPBB-AVVOWR White: 49WPBB-AVVOWW
G	Strobe intensity viewing slot.
H	Intensity selection plug, accessible from rear of housing
I	UL listed models: Models 4906-9105, 4906-9106, 4906-9131, and 4906-9132 Factory setting is WP75, the UL 1638, 75 cd rating
J	ULC Listed Models: Models 4906-9113, 4906-9143 Factory setting is 30 cd
K	Internal cover gasket is pre-installed
	Cover attachment tabs, x 3, located at the bottom, left and right sides.

Figure 3: Indoor wall mount installation height reference

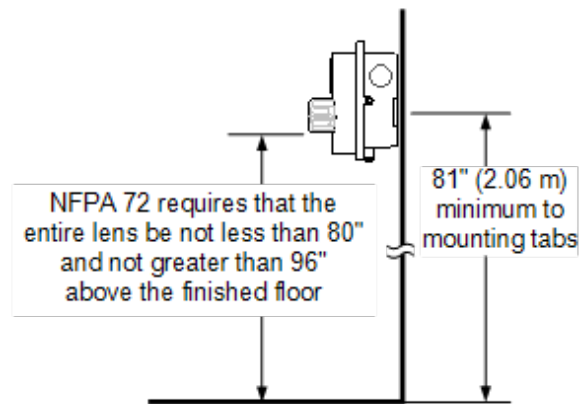


Figure 4: Horizontal and vertical dispersion

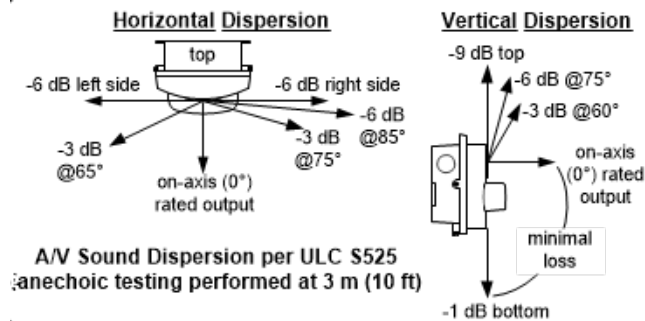


Table 9: Polar Light Dispersion References

Each intensity option percent of rated light output at 77° F (25° C)					
Vertical dispersion			Horizontal dispersion		
Angle below axis	UL 1971 minimum	Typical output	Angle from axis	UL1971 minimum	Typical output
0	100%	322%	0	100%	320%
5	90%	217%	±5	90%	214%
10	90%	168%	±10	90%	177%
15	90%	179%	±15	90%	175%
20	90%	210%	±20	90%	174%
25	90%	184%	±25	90%	170%
30	90%	149%	±30	75%	169%
35	65%	172%	±35	75%	157%
40	46%	189%	±40	75%	151%
45	34%	203%	±45	75%	138%
50	27%	152%	±50	55%	130%
55	22%	166%	±55	45%	121%
60	18%	166%	±60	40%	117%
65	16%	164%	±65	35%	109%
70	15%	163%	±70	35%	105%
75	13%	159%	±75	30%	98%
80	12%	138%	±80	30%	90%
85	12%	113%	±85	25%	78%
90	12%	88%	±90	25%	67%

Table 10: WP75 Intensity choice light output reference

Angle	On axis	Vertical below axis		Horizontal left or right of axis	
	0°	45°	90°	45°	90°
UL 1638 minimum candela rating over temperature range	75	35	10	32	15
Typical candela at 77° F (25° C)	215	103	24	94	39

