Effective August 2021 Supersedes April 2021

Eluxa amber lens speaker strobes







Description

Ideal for mass notification and emergency communications, the Wheelock Eluxa amber lens speaker strobes by Eaton feature high fidelity sound output and an advanced power saving LED technology with a full range of candela settings for indoor wall and ceiling-mount applications. With the widest frequency response range (300 to 8000 Hz) in the industry, the ELSPST-A/ELSPSTC-A speaker strobes features leading intelligibility with crisp, clear voice messages and tone signaling. Special lettering for the colored lens speaker strobes includes "ALERT" and no lettering.

High efficiency, LED technology

Eaton's high energy efficient technology leads the industry in lowest current draw across the full candela range, which reduces overall power consumption and costs in fire alarm systems. As the first notification appliances in the industry to utilize LED as the light source, this breakthrough and patented optical design, resulting in best-in-class efficiency, enables material and system cost savings, allowing for a greater number of appliances on the notification appliance circuit and fewer power supplies. All strobe models feature six candela settings: 15, 30, 75, 110, 135, 185 cd on wall models and 15, 30, 75, 110, 150, 177 cd on ceiling models.

Low profile design and rich feature set

With the industry's smallest footprint, the Eluxa amber lens speaker strobes are aesthetically pleasing to building owners as the low profile design does not detract from the interior decor. Eluxa is feature rich with 6 candela settings in 1 device, dual voltage (25/70 VRMS) capability, field selectable taps from 1/8 to 2 watts (5W-70V), pre-wire/pre-test via mounting plate with hinged feature for ease-of-installation, and no tools needed for setting changes. These products are suitable for indoor wall and ceiling mount applications. The ELSPST speaker strobes are 24V operation.

Approvals and synchronization

Eaton's Eluxa strobes meet the 20 millisecond light pulse duration requirements of the 2016 edition of NFPA 72. By meeting this latest requirement, xenon and LED devices can now be in the same field of view.

The Eluxa notification appliances are listed under UL Standards 1638 and 1480 and under CAN/ULC-S526 and CAN/ULC-S541. The appliances are Restriction of Hazardous Substances (RoHS) compliant and contain no mercury or other hazardous substances.

In addition, the Eluxa product line has been UL/ULC listed as compatible with all Fire Alarm Control Panels (FACP) and accessories that have been determined to be compatible with Exceder LED3 and Wheelock RSS strobe-based products including the RSS, CH, E, EH, ET, ST, HS, MT, S8, SA, STH and Z Series. The listing also includes the ability to install the Eluxa strobes in the same notification zone and field of view with any Wheelock RSS strobe and Exceder LED3 models.

Technical Data TD450161EN

Features

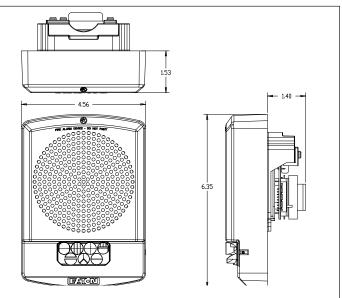
- High Fidelity Sound Output
 - High intelligibility at minimum wattage across a frequency range of 300 to 8000 Hz
- Energy Efficient
 - LED technology provides industry's lowest current draw
 - Fewer power supplies required, smaller wire gage, reduced wire runs
- Low-Profile Design
 - Smallest footprint with sleek, modern aesthetics
- Special Lettering Available
- 6 Field Selectable Settings in 1 Device
 - Wall: 15, 30, 75, 110, 135, 185 cd
 - Ceiling: 15, 30, 75, 110, 150, 177 cd
- Field Selectable Taps
 - 1/8 watt up to 2 watts (5W-70V)
 - 25 or 70 VRMS operation
- Easy-to-Install
 - Mounting plate included with all models: Convenient capture hinge allows installers to easily hold the device while fastening the single-mount screw in place.
 - Pre-wire/pre-test capability to check for wiring and ground faults prior to appliance installation
 - Finger slide switches--No tools needed for setting changes
 - · Built-in level adjustment feature and snap-on grille cover
 - IN/OUT screw terminals using #12 to #18 AWG wires
 - Mounting options include ELSPKBB backboxes and 4" square, 2 1/8" deep backboxes for wall models and LSPKBB-C backboxes and 4" square, 2 1/8" deep backboxes for ceiling models.
- Strobe Synchronization Components
 - Meet synchronizing standards with Wheelock's DSM Sync Modules, PS Power Supplies or SAFEPATH products
 - · Ability to mix xenon and LED strobes in the same field of view
- Compliance
 - NFPA 72 2016 20 ms flash duration requirements
 - UL 1480, UL 1971 Light Distribution (Amber lens), UL 1638 (Amber Lens), ULC-S541, ULC-S526
 - California State Fire Marshal (CSFM)
 - ADA/NFPA/ANSI/OSHA

Note: Please read these specifications and associated installation instructions, before using, specifying, or installing this product. Visit Eaton. com/Lifesafetynotification for current installation instructions.

General Notes

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range." Note that NFPA-72 specifies a flash rate of 1 to 2 flashes per second and ADA Guidelines specify a flash rate of 1 to 3 flashes per second.
- All candela ratings represent minimum effective Strobe intensity based on UL 1971.

Drawings





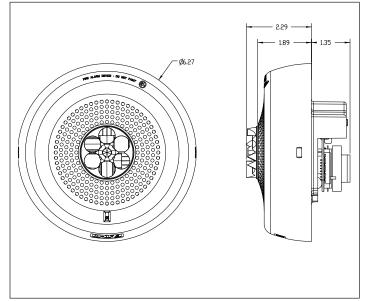


Figure 2. Ceiling speaker strobe

Mounting plate images



Table 1. Speaker Strobe ratings

ble 1. Speaker Strobe ratings		UL/ULC Max Current ①								
		24VDC	;							
Model	Regulated Voltage Range VDC	15	30	75	110	135	150	177	185	
ELSPST ELSPSTC	16.0-33.0 16.0-33.0	0.022 0.022	0.030 0.030	0.060 0.060	0.086 0.086	0.125	0.125	0.185	0.185	

Table 1. UL/ULC Listed Models and Ratings

UL Reverberant dBA at 10 Feet					Anechoic dBA per CAN/ULC-S541-07					
Model	1/8 watts	1/4 watts	1/2 watts	1 watts	2 watts (5W - 70V)	1/8 watts	1/4 watts	1/2 watts	1 watts	2 watts (5W - 70V)
ELSPST Speaker Strobe	75	79	82	85	87	75	79	82	85	87

Table 2. Specification & Ordering Information

Model	Strobe Candela	Red	White	Lettering	Mounting	Sync w/ DSM or Wheelock Power Supplies
Speaker Strobes						
ELSPSTR-ALA ELSPSTW-ALA ELSPSTW-NA ELSPSTR-NA ELSPSTWC-ALA ELSPSTRC-ALA ELSPSTWC-NA	15/30/75/110/135/185 15/30/75/110/135/185 15/30/75/110/135/185 15/30/75/110/135/185 15/30/75/110/150/177 15/30/75/110/150/177 15/30/75/110/150/177	x x x x	x x x x	ALERT ALERT No Lettering No Lettering ALERT ALERT No Lettering No Lettering	Wall Wall Wall Ceiling Ceiling Ceiling Ceiling	X X X X X X X
Backboxes						
ELSPKBB-R ELSPKBB-W LSPKBB-CR		X X	х		Wall Wall Ceiling	
LSPKBB-CW		A	Х		Ceiling	

Table 3. Specifications

Physical	
Material	Red or white textured UV stabilized, colored impregnated engineered plastic. Exceeds 94V-0 UL flammability rating
Weight	Wall Speaker Strobe: 1.54 lbs (700g); Ceiling Speaker Strobe: 1.54 lbs (700g); Speaker Backbox: .44 lb (200g)
Lens	Light Emitting Diode (LED) in a rugged Lexan lens
Dimensions	ELSPST: 6.35"H x 4.56" W x 1.54"; ELSPSTC: 6.27" Diameter x 2.29" Depth
Operating Temperature	Indoor: 32°F to 122°F (0°C to 50°C) and maximum humidity of 93%
Mounting & Wire Connections	
Mounting (indoor only)	Mounting plate included with all models. ELSPST speaker strobes are for wall-mount applications only. ELSPSTC speaker strobes are for ceiling-mount applications only. Mounting options include ELSPKBB backboxes and 4" square 2 1/8" deep backboxes for wall models and LSPKBB-C backboxes and 4" square, 2 1/8" deep backboxes for ceiling models.
Wire Connections	#12 through #18 AWG
Power & General	
Operating voltage	25/70 VRMS; Strobe: 24VDC/24VFWR
Strobe Output Rating	UL 1638 (Amber Lens), Light output meets UL 1971 (Amber Lens); Wall: Selectable 15, 30, 75, 110, 135, 185 candela out- put; Ceiling: Selectable 15, 30, 75, 110, 150, 177 candela output
Strobe Flash Rate	Strobes are designed to flash at 1 flash per second
Synchronization Models	Strobes can be synchronized with Wheelock's DSM Sync Modules, PS Power Supplies or SAFEPATH products, using Wheelock patented sync protocol
Frequency Range	300 Hz to 8000 Hz

① RMS current ratings are per UL maximum RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33v for 24v units). For strobes the UL max current is usually at the minimum listed voltage (16v for 24v units). For audibles the max current is usually at the maximum listed voltage (33v for 24v units). For unfiltered FWR ratings, see installation instructions.

Architects and Engineers Specifications

The speaker strobe appliances shall be Eluxa ELSPST-A amber lens speaker strobes for wall-mount applications and Eluxa ELSPSTC-A for ceiling mount applications or approved equals. Special lettering for the amber lens speaker strobes shall include "ALERT" and no lettering. The speakers shall be UL Listed under UL 1480 for Fire Protective Service and speakers equipped with strobes shall be listed under UL 1638 for visual signaling appliances - Private Mode with the light distribution meeting UL 1971 light output. In addition, the speaker strobes shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP) with the ability to operate from 16 to 33 VDC.

All speaker strobes shall be designed for a field selectable input of either 25 or 70 VRMS, with selectable power taps from 1/8 watt to 2 watts and 5 watts for 70V. All models shall have listed sound output of up to 87 dB at 10 feet and a listed frequency response of 300 to 8000 Hz. All inputs shall employ terminals that accept #12 to #18 AWG wire sizes. The ELSPST speaker strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Light Emitting Diode (LED) as the light source with a rugged Lexan® lens. The series shall be of low current design. The LED strobe flash duration shall be 20 ms. The strobe shall include 6 field selectable settings at 15, 30, 75, 110, 135 and 185 candela for wall mount applications and 15, 30, 75, 110, 150 and 177 for ceiling mount applications. The selector switch for selecting the candela shall be tamper resistant. Appliances with candela settings shall show the candela selection in a visible location at all times when installed. The speaker strobe shall be available with clear or amber lens.

The series ELSPK and ELSPST shall be designed for indoor surface or flush mounting and include a mounting plate. Mounting options shall include ELSPKBB backboxes and 4" square, 2 1/8" deep backboxes for wall models and LSPKBB-C backboxes and 4" square, 2 1/8" deep backboxes for ceiling models. The speaker and speaker strobe shall incorporate a speaker mounting plate with a snap-on grille cover and shall mount to standard electrical hardware requiring no additional trimplate or adapter. Removal of an appliance shall result in a supervision fault condition by the Fire Alarm Control Panel (FACP). All notification appliances shall be backwards compatible.

The ELSPST wall model shall have a low profile measuring 6.35" H x 4.56" W x 1.54" D. The ELSPSTC ceiling models shall have a low profile measuring 6.27" diameter with 2.29"D. Finish shall be red or white.

When synchronization is required, the appliance shall be compatible with Wheelock's DSM Sync Modules, PS Power Supplies, SAFEPATH products or other manufacturer's panels with built-in Wheelock Patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync protocol fails to operate, the strobe shall revert to a non-synchronized flashrate and still maintain (1) flash per second over its Regulated Voltage Range.

UL 1480, UL 1971 Light Distribution (Amber lens), UL 1638 (Amber Lens), ULC-S541, ULC S526, CSFM, FCC, ICES

Note: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc., dba Eaton standard terms and conditions.



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