

# Eluxa horns, horn strobes, & strobes



## Description

The Wheelock Eluxa horns, horn strobes, and strobes by Eaton feature an advanced power saving LED technology with a full range of low and high candela settings for indoor wall and ceiling-mount applications. Designed in sleek, modern enclosures, Eluxa's aesthetically pleasing low profile will blend with the building's interior décor.

## High efficiency, LED technology

Eaton's high energy efficient technology leads the industry in lowest current draw for a combined high and low candela device, which reduces overall power consumption. As the first notification appliances in the industry to utilize LED as the light source, this breakthrough 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. This reduces installation and operating costs. 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 horns, horn strobes, and 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 and 3 horn patterns (Continuous, T3, T3/T4) in 1 device, pre-wire/pre-test via mounting plate with hinged feature for ease-of-installation, single-gang design (wall models), and no tools needed for setting changes. The ELST strobe, ELHS horn strobe, and the ELHN horn are for 24V operation. ELHN is suitable for 12V applications.

## 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 1971, 1638, and 464 and under CAN/ULC-S525 and CAN/ULC-S526. 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 and Exceder LED3 strobe models.

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**Features**

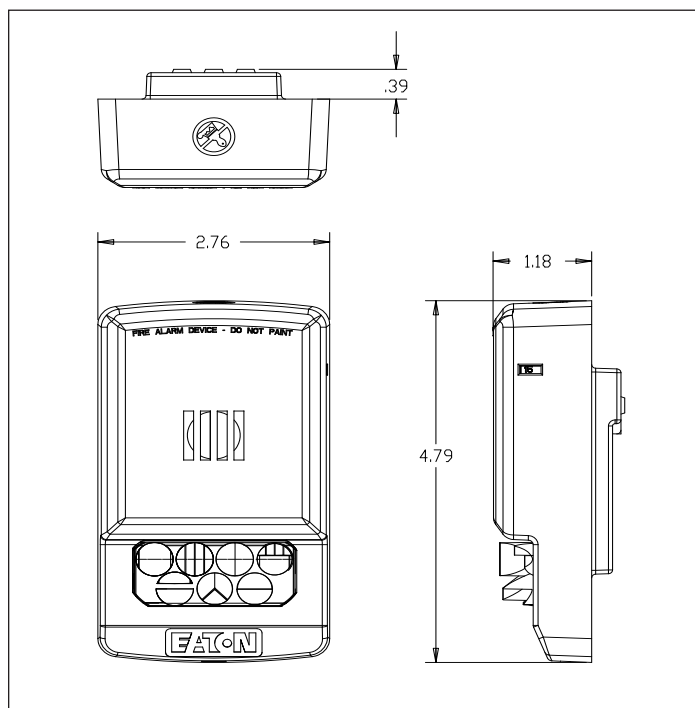
- Energy efficient
  - LED technology provides industry’s lowest current draw
  - Fewer power supplies required, smaller wire gage, reduced wire runs
- Low-profile design
  - One of the smallest, most compact single-gang designs
  - Sleek, modern aesthetics with no visible mounting screws
- Special lettering available
- 6 Field selectable settings in 1 device
  - Wall: 15, 30, 75, 110, 135, 185 cd
  - Ceiling: 15, 30, 75, 110, 150, 177 cd
- 3 horn patterns
  - Continuous, T3, and T3/T4; Fire and CO signaling in 1 device
- Sound pressure (Anechoic) dBA
  - Low 86, High 91 (for Continuous, T3, and T4)
- 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
  - IN/OUT screw terminals using #12 to #18 AWG wires
  - Mounting options include ELSBB, any single-gang backbox and to 4” square with adapter kit for wall models and LSPKBB-C backboxes and 4” square, 1 1/2” or 2 1/8” deep for ceiling
- Strobe synchronization
  - 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 1971, UL 1638, UL 464, ULC-S525, ULC-S526
  - California State Fire Marshal (CSFM)
  - RoHS
  - FCC Part 15, ICES

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

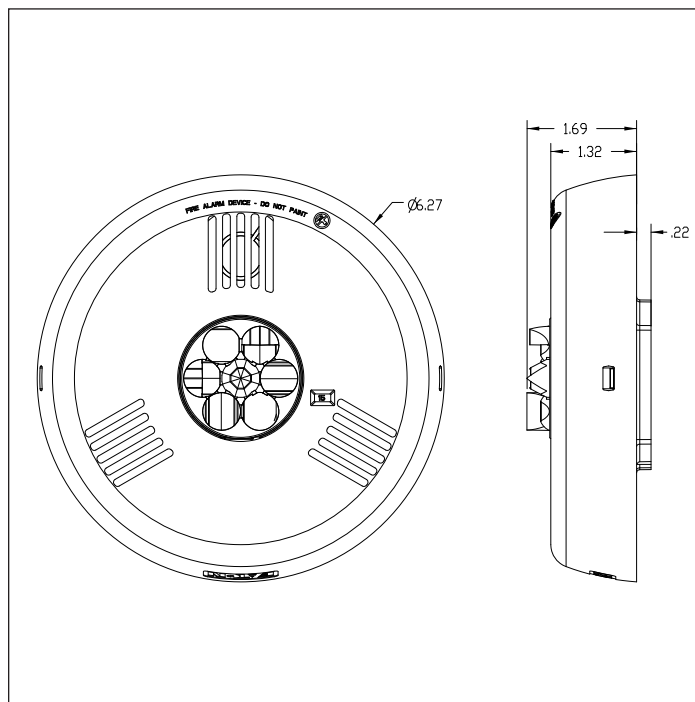
**General Notes**

- 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 1. Wall, horn strobe**



**Figure 2. Ceiling, horn strobe**

**Table 1. Horn ratings per UL/ULC Anechoic**

Eluxa Horns			
Model	Regulated Voltage Range VDC	High dB	Low dB
ELHN/ELHNC	8.0 - 17.5	0.025	0.020
ELHN/ELHNC	16.0 - 33.0	0.028	0.021

**Table 2. Strobe ratings**

Model	Regulated Voltage Range VDC	UL/ULC Max Current ①							
		24VDC							
		15	30	75	110	135	150	177	185
ELST	16.0-33.0	0.022	0.030	0.060	0.086	0.125			0.185
ELSTC	16.0-33.0	0.022	0.030	0.060	0.086		0.125	0.185	

**Table 3. Code 3 horn strobe ratings**

Eluxa Horn Strobes	Model	Regulated Voltage Range VDC	UL/ULC Max Current ① at Anechoic High continuous							
			24VDC							
			15	30	75	110	135	150	177	185
	ELHS	16.0-33.0	0.037	0.046	0.077	0.109	0.146			0.208
	ELHSC	16.0-33.0	0.037	0.046	0.077	0.109		0.146	0.208	

Eluxa Horn Strobes	Model	Regulated Voltage Range VDC	UL/ULC Max Current ① at Anechoic Low continuous							
			24VDC							
			15	30	75	110	135	150	177	185
	ELHS	16.0-33.0	0.030	0.039	0.070	0.102	0.139			0.201
	ELHSC	16.0-33.0	0.030	0.039	0.070	0.102		0.139	0.201	

**Table 4. Specification & Ordering Information**

Model	Mounting	Strobe Candela	Red	White	Lettering	Sync w/ DSM or Wheelock Power Supplies
<b>Horn strobes</b>						
ELHSR	Wall	15/30/75/110/135/185	X		FIRE	X
ELHSW	Wall	15/30/75/110/135/185		X	FIRE	X
ELHSR-A	Wall	15/30/75/110/135/185	X		AGENT	X
ELHSR-N	Wall	15/30/75/110/135/185	X		No Lettering	X
ELHSW-A	Wall	15/30/75/110/135/185		X	AGENT	X
ELHSW-AL	Wall	15/30/75/110/135/185		X	ALERT	X
ELHSW-N	Wall	15/30/75/110/135/185		X	No Lettering	X
ELHSW-EV	Wall	15/30/75/110/135/185		X	EVACUATE	X
ELHSRC	Ceiling	15/30/75/110/150/177	X		FIRE	X
ELHSWC	Ceiling	15/30/75/110/150/177		X	FIRE	X
<b>Strobes</b>						
ELSTR	Wall	15/30/75/110/135/185	X		FIRE	X
ELSTW	Wall	15/30/75/110/135/185		X	FIRE	X
ELSTR-A	Wall	15/30/75/110/135/185	X		AGENT	X
ELSTR-AL	Wall	15/30/75/110/135/185	X		ALERT	X
ELSTW-A	Wall	15/30/75/110/135/185		X	AGENT	X
ELSTW-AL	Wall	15/30/75/110/135/185		X	ALERT	X
ELSTW-N	Wall	15/30/75/110/135/185		X	No Lettering	X
ELSTR-N	Wall	15/30/75/110/135/185	X		No Lettering	X
ELSTW-EV	Wall	15/30/75/110/135/185		X	EVACUATE	X
ELSTRC	Ceiling	15/30/75/110/150/177	X		FIRE	X
ELSTWC	Ceiling	15/30/75/110/150/177		X	FIRE	X
ELSTRC-AL	Ceiling	15/30/75/110/150/177	X		ALERT	X
ELSTWC-AL	Ceiling	15/30/75/110/150/177		X	ALERT	X
ELSTWC-EV	Ceiling	15/30/75/110/150/177		X	EVACUATE	X
<b>Horns</b>						
ELHNR	Wall		X		No Lettering	X
ELHNW	Wall			X	No Lettering	X
ELHNRC	Ceiling		X		No Lettering	X
ELHNWC	Ceiling			X	No Lettering	X
<b>Accessories</b>						
ELSB-B-R	LED Backbox, wall		X			
ELSB-B-W	LED Backbox, wall			X		
ESB-KIT-R	Trim Plate, wall		X			
ESB-KIT-W	Trim Plate, wall			X		
LSPKBB-CR	Backbox, ceiling		X			
LSPKBB-CW	Backbox, ceiling			X		

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.

② Regulated Voltage Range- VDC

**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.

**Table 5. Specifications**

<b>Physical</b>	
Material	Red or white textured UV stabilized, colored impregnated engineered plastic. Exceeds 94V-0 UL flammability rating
Weight	Wall: 0.35 lbs; Ceiling: 0.55 lbs
Lens	Light Emitting Diode (LED) in a rugged Lexan lens
Dimensions	Wall: 4.79" H x 2.76" W x 1.18" D, Trimplate: 5.25" H x 4.58" W x 0.32" D; Ceiling: 6.27" Diameter x 1.69" D
Operating Temperature	Indoor: 32°F to 122°F (0°C to 50°C) and maximum humidity of 93%
<b>Mounting &amp; Wire Connections</b>	
Mounting (indoor only)	Mounting plate included with all models. ELHS and ELST are for wall-mount applications only. ELHN can be used for wall and ceiling-mount applications. Wall mounting: Single-gang, ELSBB backboxes or to 4" square with adapter kit. ELHN can be used for wall and ceiling-mount applications. ELHSC and ELSTC are for ceiling mount applications only. The ELHNC can also be used for wall-mount applications. Ceiling mounting: LSPKBB-C backboxes or to 4" square, 1 1/2" or 2 1/8"
Wire Connections	#12 through #18 AWG
<b>Power &amp; General</b>	
Operating voltage	12 VDC/VFWR: 8 - 17.5 VDC/VFWR; 24 VDC/VFWR: 16 - 33 VDC/VFWR (12 VDC ELHN/ELHNC models only)
Strobe Output Rating	UL 1971, UL 1638, ULC S526: Selectable 15, 30, 75, 110, 135, 185 candela output for wall models; Selectable 15, 30, 75, 110, 150, 177 candela output for ceiling models
Synchronization Models	Strobes can be synchronized with Wheelock's DSM Sync Modules, PS Power Supplies or SAFEPATH products, using Wheelock patented sync protocol

**Architects and Engineers Specifications**

The LED notification appliances shall be Wheelock® ELHS audible visual strobe appliances, ELST visual strobe appliances and ELHN audible appliances for wall and ceiling-mount applications with a low-profile design or approved equals. Special lettering, including AGENT, ALERT, EVACUATE, and no lettering, shall be available. The ELHS and ELST strobes shall be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service and UL 1638 (Visible Signaling Devices. The ELHS and ELHN Audibles shall be UL Listed under Standard 464 (Fire Protective Signaling). All models shall meet the requirements of FCC Part 15 and ICES-003. All inputs 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/VFWR.

The ELHS audible strobe and ELST 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 appliances shall be of low current design. The LED strobe flash duration shall be 20 ms. Where Multi-Candela appliances are specified, the strobe intensity shall have 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 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 audible shall have a choice of three (3) horn patterns (high & low

output): Continuous, T3, and T3/T4 for fire (T3) and CO (T4) signaling.

The ELHS audible strobe, ELST strobe, and ELHN audible shall include a hinged mounting plate. Mounting options shall include LED backboxes, single-gang backbox and to 4" square with adapter kit for wall-mount models and LED Ceiling backboxes and 4" square, 1 1/2" or 2 1/8" deep for ceiling models. Two wire appliance wiring shall be capable of directly connecting to the mounting base. 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 ELHS, ELHN and ELST wall models shall have a low profile measuring 4.79" H x 2.76" W x 1.18" D. The ELHSC, ELHNC and ELSTC ceiling models shall have a low profile measuring 6.27" Diameter with 1.69" D.

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 flash-rate and still maintain (1) flash per second over its Regulated Voltage Range. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation when used with Wheelock® patented sync protocol.

NFPA 72 2016, UL 1971, UL, 1638, UL 464 ULC-S525-16, ULC-S526-16, CSFM, FCC, RoHS, ICES



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