ELCH, ELCHS ELCHC, ELCHSC

# Eluxa chimes and chime strobes





## Description

The Wheelock Eluxa electronic chimes (ELCH) and chime strobes (ELCHS) by Eaton feature field selectable 1 Hz, 2 Hz, Coded, and Temporal 3 (T3) modes of operation. The chime strobe models include an advanced power saving LED technology with a full range of candela settings for indoor wall and ceiling-mount applications. Ideal for hospital and institutional applications, Eluxa is designed with a sleek, aesthetically pleasing low profile that blends with the building's interior décor.

## 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.

Eaton's unique 2-wire circuit has the ability to silence the audible while leaving the strobe active via Wheelock sync protocol. Alternatively, the device can use 4-wires providing independent control of the strobe and audible.

## Low profile design and rich feature set

Eluxa is feature rich with 6 candela settings in 1 device, field selectable modes of operation, adjustable volume, Anechoic sound levels up to 78 dB, pre-wire/pre-test via mounting plate with hinged feature for ease-of-installation. These products are suitable for indoor wall and ceiling mount applications. The ELCHS chime strobes and ELCH chimes are 24V operation.

#### Approvals and synchronization

The Eluxa notification appliances are listed under UL Standards 1638 and 464 and under CAN/ULC-S525 and CAN/ULC-S526. Listings also include California State Fire Marshall (CSFM), and Factory Mutual (FM). 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 models making them backward compatible with our installed base of existing notification devices.

## Technical Data **TD450180EN** Effective April 2023

# Features

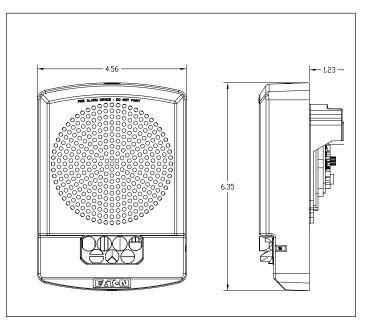
- Superior sound output
  - Adjustable volume
  - Anechoic sound level: up to 78 dB
  - 890 Hz preset tone
- Operation modes: 1 Hz, 2 Hz, Coded, or Temporal 3 (T3)
- Energy Efficient
- LED technology provides industry's lowest current draw
- Fewer power supplies required, smaller wire gage, reduced wire runs
- Low-Profile Design
  - · Small footprint with sleek, modern aesthetics
- 6 Field Selectable Settings in 1 Device
  - Wall: 15, 30, 75, 110, 135, 185 cd
  - Ceiling: 15, 30, 75, 110, 150,177 cd
- 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
  - Two or Four wire operation (separate horn and strobe circuits)
  - · 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 or INC 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 1638, UL 464, ULC-S525, ULC-S526
- California State Fire Marshal (CSFM)
- Factory Mutual (FM)
- 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.

# Drawings



## Figure 1. Wall chime strobe

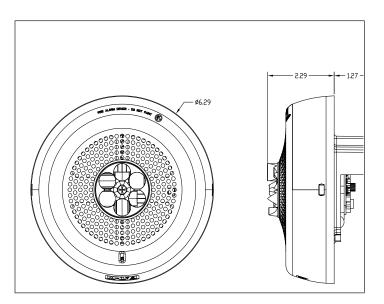


Figure 2. Ceiling chime strobe

# Mounting plate images



# Eluxa chimes & chime strobes

Table 1. Current Ratings			UL/ULC Max Current ①							
Model	Regulated Voltage Range VDC	Chime	24VDC							
			15cd	30cd	75cd	110cd	135cd	150cd	177cd	185cd
Chime										
ELCH wall	16.0-33.0	0.022								
ELCHC ceiling	16.0-33.0	0.022								
Chime strobe	S									
ELCHS	16.0-33.0	0.022	0.044	0.052	0.082	0.108	0.147			0.207
ELCHSC	16.0-33.0	0.022	0.044	0.052	0.082	0.108		0.147	0.207	

## Table 2. Chime dBA Ratings

Chime frequency

	Peak dBA @ 10ft. anechoic	dBA @ 10 ft. reverberant			
Model	Sound Level	MIN	МАХ		
Eluxa chime (all)	78	51	68		

890 Hz fixed

## Table 3. Specification & Ordering Information

Model	Strobe Candela		Red	White	Lettering	Wall/Ceiling	Sync w/ DSM or Wheelock Power Supplies	
Chime strobes								
ELCHSR	15/30/75/110/135/185	5	Х		FIRE	Wall	Х	
ELCHSW	15/30/75/110/135/185			Х	FIRE	Wall	Х	
ELCHSRC	15/30/75/110/150/177		Х	V	FIRE	Ceiling	X	
ELCHSWC	15/30/75/110/150/177	/		Х	FIRE	Ceiling	Х	
Chimes					"N" (no lottoring)			
ELCHR			Х		"N" (no lettering)	Wall	v	
ELCHW				Х	"N" (no lettering)	Wall	X X	
ELCHRC			Х	^	"N" (no lettering)	Ceiling	Ŷ	
ELCHWC			Λ	Х	"N" (no lettering)	Ceiling	X X	
Backboxes								
ELSPKBB-R			х			Wall		
ELSPKBB-W			Λ	Х		Wall		
LSPKBB-CR			Х	X		Ceiling		
LSPKBB-CW				Х		Ceiling		
Physical								
•								
Material						• ·	ceeds 94V-0 UL flammability rating	
Weight				. 0	); Ceiling chime strobe: 1	.54 lbs (700g); Speaker	Backbox: .44 lb (200g)	
Lens		0	0		igged Lexan lens			
Dimensions		ELCH: 6.3 Diameter			; ELCHS: 6.35"H x 4.56" V	V x 1.54" D; ELCHC: 6.27	" Diameter x 1.9" D; ELCHSC: 6.27"	
Operating Temperature		Indoor: 3	2°F to 12	2°F (0°C to 50°(	C) and maximum humidit	y of 93%		
Mounting & Wire Conne	ctions							
Mounting (indoor only)		Mounting plate included with all models. ELCHS chime strobes are for wall-mount applications, and ELCHSC chime strobes are for ceiling-mount applications. ELCH chimes can be used for wall or ceiling-mount applications. 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 throu	ıgh #18 A	WG				
Power & General								
Operating voltage		24VDC/24	4VFWR					
Strobe Output Rating		UL 1971, 150, 177			ll: Selectable 15, 30, 75, 1	10, 135, 185 candela out	put; Ceiling: Selectable 15, 30, 75, 110,	
Synchronization Models	3						upplies or SAFEPATH products, using and Wheelock sync (DSM or PS).	
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# **Architects and Engineers Specifications**

The LED chime appliances shall be Wheelock<sup>®</sup> ELCH chimes and ELCHS chime strobes for wall-mount applications and ELCHC chimes and ELCHSC chime strobes for ceiling-mount applications with a low-profile design or approved equals. The chime shall be UL Listed under Standard 464 for Audible Signal Appliances and chimes equipped with strobes shall be listed under UL Standard 1638. In addition, the chime strobes 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.

All chimes shall use solid state components and shall provide field selectable 1 Hz, 2 Hz, Coded, or Temporal 3 (T3) with volume control. ELCH chimes models shall have a peak Anechoic sound output of 78 dB at 10 feet and a frequency of 890 Hz. All inputs shall employ terminals that accept #12 to #18 AWG wire sizes.

The series ELCHS/ELCHSC chime 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. 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 series ELCH/ELCHC and ELCHS/ELCHSC 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 chime and chime strobe shall incorporate a 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).

The ELCH wall model shall have a low profile measuring  $6.35^{\circ}$  H x 4.56" W x 1.54" D. The ELCHS wall model shall have a low profile measuring  $6.35^{\circ}$  H x 4.56" W x 1.54" D. The ELCHC and ELCHSC ceiling models shall have a low profile measuring  $6.27^{\circ}$  diameter with 1.9" depth (profile) for ELCHSC and 2.29" depth (profile) for ELCHSC models. Finish shall be red or white. Special lettering shall be available.

When synchronization is required, the appliance shall be compatible with Wheelock®'s DSM Sync Modules, PS or INC 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 1638, UL 464, ULC-S525, ULC-S526, CSFM, FM, FCC, ICES

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 audibles the max current is usually at the maximum listed voltage (33v for 24v units). For unfiltered FWR ratings, see installation instructions.

**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.



WE ENCOURAGE AND SUPPORT NICET CERTIFICATION 3 YEAR WARRANTY

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