Eluxa multitone horns & horn strobes

Description

Providing eight (8) alerting sounds in a single device, the Wheelock Eluxa multitone horns and horn strobes will meet most of your signaling needs. The nationally and internationally recognized alerting sounds include Horn, Bell, March Time Horn, Code-3 Tone, Code-3 Horn, Slow Whoop, Siren or Hi/Lo Tone. The Code-3 horn and tone patterns are engineered to comply with NFPA/ANSI Temporal Pattern specifications without requiring additional equipment.   The multitone horn strobe models include an advanced power saving LED technology with a full range of candela settings for indoor wall and ceiling-mount applications.

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 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. Amber, blue, green, and red lens strobes are also available. See seperate data sheet for colored lens specifications.

Low profile design and rich feature set

Eluxa is feature rich with 6 candela settings in 1 device, two sound output levels: Standard dBA and High dBA, and 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 ELMT is for both 24V and 12V system operation and the ELMTS is for 24V operation. All models may be used with filtered or unfiltered (full-wave-rectified) input voltages. Separate input terminals and shunt wires are provided to enable both audible and strobe to operate simultaneously from a single input or from two inputs using 4-wires.

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 based of existing notifications.

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Features

- 8 signals in 1 device to provide superior sound penetration for various ambient conditions
  - Horn, Bell, March Time Horn, Code-3 Tone, Code-3 Horn, Slow Whoop, Siren or Hi/Lo Tone
- 2 field selectable sound output levels: Standard and High
- Code-3 horn and tone meet ANSI/NFPA temporal pattern for standard emergency evacuation signaling
- Audible and strobe can operate from a single NAC circuit or from separate NAC circuits with any of the (8) eight audible sounds
- 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
  - Candela slide swith, Multitone DIP switch
  - Built-in level adjustment feature and snap-on grille cover
  - IN/OUT screw terminals provided for #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
  - UL 1638, UL 464, ULC-S525, ULC-S526
  - Factory Mutual (FM)
  - 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.
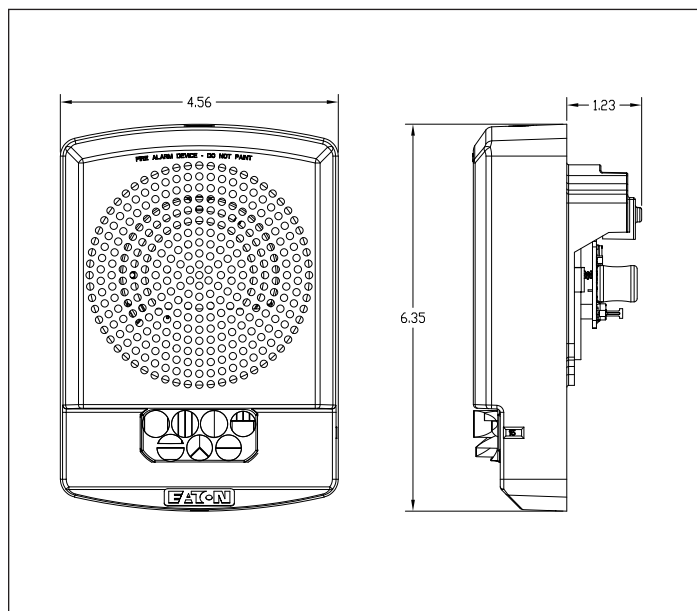- All candela ratings represent minimum effective strobe intensity based on UL 1638.
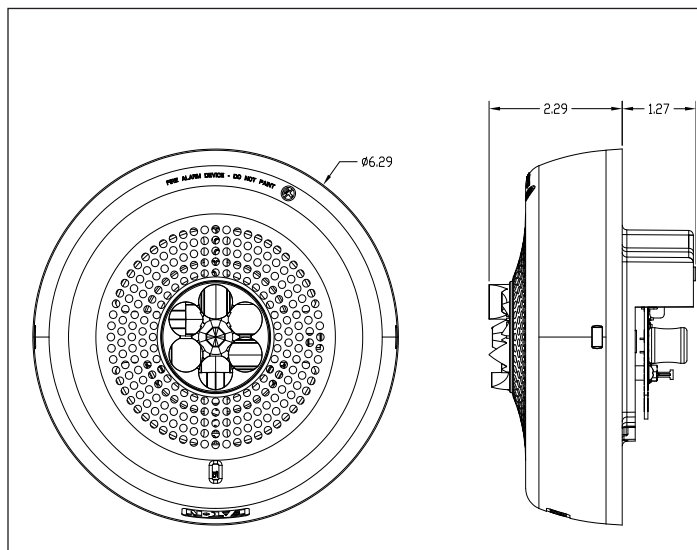
Drawings

Figure 1. Wall multitone strobe

Figure 2. Ceiling multitone strobe

Mounting plate images

Table 1. Strobe ratings
(Must add Alarm Tone current for combination.)

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

Table 2. Maximum RMS current for audibles (VDC)

Alarm Tones	24 VDC HI Output	24 VDC STD Output	12 VDC HI Output	12 VDC STD Output
Horn	0.108	0.044	0.177	0.034
Bell	0.053	0.024	0.095	0.020
March Time Horn	0.104	0.087	0.142	0.034
Code-3 Horn	0.122	0.035	0.200	0.034
Code-3 Tone	0.135	0.035	0.152	0.021
Slow Whoop	0.098	0.037	0.142	0.035
Siren	0.104	0.036	0.152	0.030
HI/LO	0.057	0.025	0.114	0.026

Maximum RMS current for audibles (FWR)

Alarm Tones	24 FWR HI Output	24 FWR STD Output	12 FWR HI Output	12 FWR STD Output
Horn	0.087	0.045	0.177	0.039
Bell	0.067	0.028	0.095	0.023
March Time Horn	0.087	0.045	0.142	0.039
Code-3 Horn	0.087	0.045	0.200	0.039
Code-3 Tone	0.110	0.029	0.152	0.023
Slow Whoop	0.092	0.042	0.142	0.038
Siren	0.092	0.040	0.152	0.034
HI/LO	0.063	0.032	0.114	0.029

Table 3. dBA for Multitone Audible Portion

Alarm Tones	Wall UL Reverberant dBA at 10 Feet 24 VDC HI Output	24 VDC STD Output	12 VDC (ELMT) HI Output	12 VDC (ELMT) STD Output	Ceiling 24 VDC HI Output	24 VDC STD Output
Horn	91	86	91	76	86	80
Bell	83	76	82	67	80	72
March Time Horn	88	83	88	73	82	77
Code-3 Horn	87	82	87	72	81	76
Code-3 Tone	85	80	85	70	79	74
Slow Whoop	90	84	89	73	85	79
Siren	89	84	89	74	85	79
HI/LO	88	84	88	72	85	81

Alarm Tones	Wall ULC Anechoic dBA at 10 Feet 24 VDC HI Output	24 VDC STD Output	12 VDC (ELMT) HI Output	12 VDC (ELMT) STD Output	Ceiling 24 VDC HI Output	24 VDC STD Output
Horn	99	93	99	86	97	91
Bell	89	81	87	73	90	82
March Time Horn	99	93	99	85	93	88
Code-3 Horn	99	93	99	86	97	91
Code-3 Tone	95	90	91	78	88	83
Slow Whoop	99	94	99	88	95	89
Siren	98	93	98	84	95	89
HI/LO	93	88	92	72	91	86

Table 4. Specification & Ordering Information

Model	Strobe Candela	Red	White	Lettering	Wall/Ceiling	Sync w/ DSM or Wheelock Power Supplies
Multitone strobes						
ELMTSR	15/30/75/110/135/185	X		FIRE	Wall	X
ELMTSW	15/30/75/110/135/185		X	FIRE	Wall	X
ELMTSR-N	15/30/75/110/135/185	X		No lettering	Wall	X
ELMTSW-N	15/30/75/110/135/185		X	No lettering	Wall	X
ELMTSRC	15/30/75/110/150/177	X		FIRE	Ceiling	X
ELMTSWC	15/30/75/110/150/177		X	FIRE	Ceiling	X
ELMTSR-A	15/30/75/110/135/185	X		AGENT	Wall	X
ELMTSW-A	15/30/75/110/135/185		X	AGENT	Wall	X
						X
Multitone horns						X
						X
ELMTR		X		FIRE or N (No lettering)	Wall	X
ELMTW			X	FIRE or N (No lettering)	Wall	
Backboxes						
ELSPKBB-R		X			Wall	
ELSPKBB-W			X		Wall	
LSPKBB-CR		X			Ceiling	
LSPKBB-CW			X		Ceiling	

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.

Table 5. Specifications

Physical

Material	Red or white textured UV stabilized, colored impregnated engineered plastic. Exceeds 94V-0 UL flammability rating
Weight	Wall multitone strobe: 0.82 lbs (370g); Ceiling multitone strobe: 0.94 lbs (426g); Speaker Backbox: 0.44 lb (267g)
Lens	Light Emitting Diode (LED) in a rugged Lexan lens
Dimensions	ELMT: 6.35"H x 4.56" W x 1.54" D; ELMTS: 6.35"H x 4.56" W x 1.54" D; ELMTSC: 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. ELMTS multitone strobes are for wall-mount applications only. ELMT multione horns can be used for wall or ceiling-mount applications. ELMTSC are for 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 through #18 AWG

Power & General

Operating voltage	24VDC/24VFWR; 12VDC/12VFWR (ELMT only)
Strobe Output Rating	UL 1638, ULC S526: Wall: Selectable 15, 30, 75, 110, 135, 185 candela output; Ceiling: Selectable 15, 30, 75, 110, 150, 177 candela output
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 multitone appliances shall be Wheelock® ELMT multitone horns and ELMTS multitone strobes for wall-mount applications and ELMT multitone horns and ELMTSC multitone strobes for ceiling-mount applications with a low-profile design or approved equals. Notification appliance shall be electronic and use solid state components. Electromechanical alternatives are not approved. Each electronic appliance shall provide eight (8) field selectable alarm tones. The tones shall consist of: HORN, BELL, MARCH TIME HORN, CODE-3 HORN, CODE-3 TONE, SLOW WHOOP, SIREN and HI/LO. Tone selection shall be by dip switch. The multitones shall be UL Listed under Standard 464 for Audible Signal Appliances and multitones equipped with strobes shall be listed under UL Standard 1638.

The audible and the strobe shall be able to operate from a single NAC circuit or two independent circuits. The appliance shall provide two output sound levels: STANDARD and HIGH dBA. The HIGH dBA setting shall provide a typical 5 dBA increase in sound output at nominal voltage. The HIGH anechoic dBA at 10 feet on the alarm HORN SETTING shall be 99 dBA. Operating voltages shall be either 12 VDC or 24 VDC for ELMT models and 24VDC for ELMTS models, using filtered power or unfiltered power supply (full-wave-rectified). All models shall have provisions for standard reverse polarity type supervision and IN/OUT field wiring using terminals that accept #12 to #18 AWG wiring.

The series ELMTS/ELMTSC multitone 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 multi-tones shall be designed for indoor surface or flush mounting and include a mounting plate. Mounting options shall include ELSPKBB back-boxes and 4" square, 2 1/8" deep back-boxes for wall models and LSPKBB-C back-boxes and 4" square, 2 1/8" deep back-boxes for ceiling models. The multi-tone and multi-tone strobe shall incorporate a mounting plate with a snap-on grille cover and shall mount to standard electrical hardware requiring no additional trim-plate 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 ELMT wall model shall have a low profile measuring 6.35" H x 4.56" W x 1.54" D. The ELMTS wall model shall have a low profile measuring 6.35" H x 4.56" W x 1.54" D. The ELMTSC ceiling models shall have a low profile measuring 6.27" diameter and 2.29" D. Finish shall be red or white. Special lettering and amber, red, blue and green lens models 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 flash-rate and still maintain (1) flash per second over its Regulated Voltage Range. Multi-tone may be synchronized using Code 3 Horn setting and Wheelock Sync (DSM or PS).

UL 1638, UL 464, ULC-S525, ULC-S526, CSFM, FM, 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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