

# Exceder Strobe, Horn Strobe, and Horn Notification Appliances



## Description

The Wheelock Exceder Series of notification appliances feature a sleek modern design that will please building owners with reduced total cost of ownership. Installers will benefit from its comprehensive feature list, including the most candela options in one appliance, low current draw, no tools needed for setting changes, voltage test points, 12/24 VDC operation, universal mounting base and multiple mounting options for both new and retrofit construction.

The Wheelock Exceder Series incorporates high reliability and high efficiency optics to minimize current draw allowing for a greater number of appliances on the notification appliance circuit. All strobe models feature an industry first of 8 candela settings on a single appliance. Models with an audible feature 3 sound settings (90, 95, 99 dB). All switches to change settings, can be set without the use of a tool and are located behind the appliance to prevent tampering. Wall models feature voltage test points to take readings with a voltage meter for troubleshooting and AHJ inspection.

The Wheelock Exceder Series of wall and ceiling notification appliances feature a Universal Mounting Base (UMB) designed to simplify the installation and testing of horns, strobes, and combination horn strobes. The separate universal mounting base can be pre-wired to allow full testing of circuit wiring before the appliance is installed and the surface is finished. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also acts as a shunting device to allow pre-wire testing for common wiring issues. The Contact Cover is polarized to prevent it from being installed incorrectly and prevents the appliance from being installed while it is on the UMB. When the Contact Cover is removed the circuit will show an open until the appliance is installed. The UMB allows for consistent installation and easy replacement of appliances if required. Wall models provide an optional locking screw for extra secure installation, while the ceiling models provide a captivated screw to prevent the screw from falling during installation.



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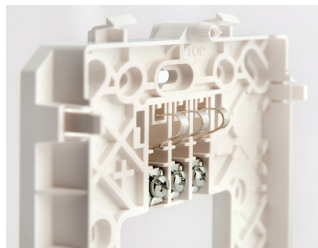
## Features

- Sleek modern aesthetics
- Finger slide switches
- Voltage test points
- Multiple voltages
- 3 Audible settings
  - 90, 95, 99 dB
- Industry leading—8 candela settings on 1 device
  - Wall: 15/1575/30/75/95/110/135/185
  - Ceiling: 15/30/60/75/95/115/150/177

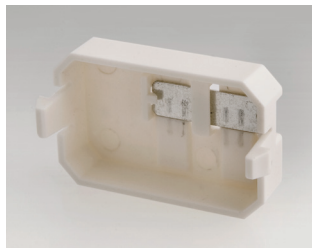


- Universal mounting base
  - Ceiling and wall
  - Mounts to 5 backbox types: 1 gang, 2 gang, 4" square, 3.5" octal. & 4" octal. (100mm for international customers)

### Universal mounting base

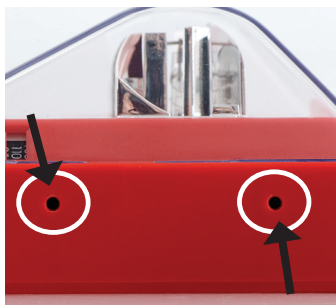


### Contact cover



Common base for wall and ceiling with 5 mounting options

- Voltage test points for quick troubleshooting and easy spot checking (wall models only)



- Environmentally friendly
  - Low current draw
- Up to 9 models now in 1 appliance draw<sup>①</sup>
- 12/24VDC on a single appliance
- Easy to remember model numbers

<sup>①</sup> Patented

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

## General Notes

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range".
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series Exceder Strobe products are Listed under UL Standards 1971 and 464 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%) UL 464 (85% UL 1971).
- Series Exceder horns are under UL Standard 464 for audible signal appliances (Indoor use only).

## Compatibility and requirements

- Synchronize using the Wheelock® Sync Modules or panels with built-in Wheelock® Patented Sync Protocol
- Compatible with UL "Regulated Voltage" using filtered VDC or unfiltered VRMS input voltage
- Strobes produce 1 flash per second over the "Regulated Voltage" range

## Compliance

- UL 1971, UL 464, ULC, CSFM, FM
- ADA/NFPA/ANSI/OSHA
- RoHS

**Table 1. Strobe Ratings per UL Standard 1971**

Model	Regulated Voltage Range VDC	UL Max Current <sup>①</sup>													
		24 VDC / 24 FWR												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
ST	8.0-33.0	0.057	0.070	0.085	—	0.135	0.163	0.182	—	0.205	—	—	0.253	0.110	0.140
STC	8.0-33.0	0.061	—	0.085	0.103	0.135	0.163	—	0.182	—	0.205	0.253	—	0.110	—

**Table 2. Horn Strobe Ratings per UL 1971 & Anechoic at 24 VDC**

Model	Regulated Voltage Range VDC	UL Max Current <sup>①</sup> at Anechoic 99 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.082	0.095	0.102	—	0.148	0.176	0.197	—	0.242	—	—	0.282	0.125	0.159
HSC	8.0-33.0	0.082	—	0.102	0.141	0.148	0.176	—	0.197	—	0.242	0.282	—	0.125	—

Model	Regulated Voltage Range VDC	UL Max Current <sup>①</sup> at Anechoic 95 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.073	0.083	0.087	—	0.139	0.163	0.186	—	0.230	—	—	0.282	0.122	0.153
HSC	8.0-33.0	0.073	—	0.087	0.128	0.139	0.163	—	0.186	—	0.230	0.272	—	0.122	—

Model	Regulated Voltage Range VDC	UL Max Current <sup>①</sup> at Anechoic 90 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.065	0.075	0.084	—	0.136	0.157	0.184	—	0.226	—	—	0.267	0.120	0.148
HSC	8.0-33.0	0.065	—	0.084	0.120	0.136	0.157	—	0.184	—	0.226	0.267	—	0.120	—

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

**Table 3. Horn Ratings per UL Anechoic**

Model	Regulated Voltage Range VDC	99 dB	95 dB	90 dB
HN	16-33.0	0.064	0.044	0.022
HNC	16-33.0	0.084	0.044	0.022
HN	8.0-17.5	0.047	0.026	0.017
HNC	8.0-17.5	0.047	0.026	0.017

**Table 4. Specification & Ordering Information**

Model	Strobe Candela	Sync w/ Wheelock Power Supplies	12/24 VDC <sup>①</sup>	Mounting Options
<b>Horn Strobes</b>				
HSR	15/1575/30/75/95/110/135/185	X	X	UMB <sup>②</sup>
HSW	15/1575/30/75/95/110/135/185	X	X	UMB <sup>②</sup>
HSRC	15/30/60/75/95/115/150/177	X	X	UMB <sup>②</sup>
HSWC	15/30/60/75/95/115/150/177	X	X	UMB <sup>②</sup>
<b>Strobes</b>				
STR	15/1575/30/75/95/110/135/185	X	X	UMB <sup>②</sup>
STW	15/1575/30/75/95/110/135/185	X	X	UMB <sup>②</sup>
STRC	15/30/60/75/95/115/150/177	X	X	UMB <sup>②</sup>
STWC	15/30/60/75/95/115/150/177	X	X	UMB <sup>②</sup>
<b>Horn</b>				
HNR		X	X	UMB <sup>②</sup>
HNW		X	X	UMB <sup>②</sup>
HNRC		X	X	UMB <sup>②</sup>
HNWC		X	X	UMB <sup>②</sup>

① 12 VDC models feature 15 & 15/75 settings

② UMB = Universal Mounting Base

**Model Legend**

HN	= Horn	R	= Red
ST	= Strobe	A	= Agent Lettering (strobes only)
HS	= Horn Strobe	AL	= Alert Lettering (strobes only)
C	= Ceiling Mount	N	= No Lettering (strobes only)
W	= White		

Example 1: STRC = Strobe, Red, Ceiling Mount  
 Example 2: HSR = Horn Strobe, Red, Wall Mount  
 Example 3: HSW = Horn Strobe, White, Wall Mount  
 Example 4: STW-AL = Strobe, White, Wall Mount, Alert Lettering



Example: HSR



Example: HSWC

## Architects and Engineers Specifications

The notification appliances shall be Wheelock Exceder Series HS Audible Strobe appliances, Series ST Visual Strobe appliances and Series HN Audible appliances or approved equals. The Series HS and ST Strobes shall be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service. The Series HS and HN Audibles shall be UL Listed under Standard 464 (Fire Protective Signaling). All Series shall meet the requirements of FCC Part 15 Class B. 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 8 to 33 VDC. Indoor wall models shall incorporate voltage test points for easy voltage inspection.

The Series HS Audible Strobe and ST Strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. The Series shall be of low current design. Where multi-candela appliances are specified, the strobe intensity shall have 8 field selectable settings at 15, 15/75, 30, 75, 95, 110, 135, 185 candela for wall mount and 15, 30, 60, 75, 95, 115, 150, 177 candela for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 15/75 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on-axis is required (e.g., ADA compliance). Appliances with candela settings shall show the candela selection in a visible location at all times when installed.

The audible shall have a minimum of three (3) field selectable settings for dBA levels and shall have a choice of continuous or temporal (Code 3) audible outputs.

The Series HS Audible Strobe, ST Strobe and Series HN Audible shall incorporate a patented Universal Mounting Base that shall allow mounting to a single-gang, double-gang, 4-inch square, 3.5-inch octal, 4-inch octal or 100mm European type back boxes. Two wire appliance wiring shall be capable of directly connecting to the mounting base. Continuity checking of the entire NAC circuit prior to attaching any notification appliances shall be allowed. Product shall come with Contact Cover to protect contact springs. Removal of an appliance shall result in a supervision fault condition by the Fire Alarm Control Panel (FACP). The mounting base shall be the same base among all horn, strobe, horn strobe, wall and ceiling models. All notification appliances shall be backwards compatible.

The Series HS and ST wall models shall have a low profile measuring 5.24" H x 4.58" W x 2.19" D. Series HN wall shall measure 5.24" H x 4.58" W x 1.6" D. The Series HSC and STC shall be round and have a low profile with a diameter of 6.68" x 2.63" D. Series HNC ceiling shall have a diameter of 6.68" x 1.50" D.

When synchronization is required, the appliance shall be compatible with Wheelock's DSM Sync Modules, Wheelock Power Supplies 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 synchronization protocol.

**Wall Appliances:** UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM, RoHS

**Ceiling Appliances:** UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM, RoHS

**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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