# Wheelock Exceder Series Horns, Strobes, and Horn Strobes



K-75-020 Effective: April 2016

#### **FEATURES**

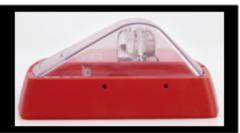
- Sleek Modern Aesthetics
- Finger Slide Switches
- Voltage Test Points
- Multiple Voltages
- 3 Audible Settings: 90, 95, 99 dB
- 8 Candela Settings (per Device)
  - Wall: 15/15\_75/30/75/95/110/135/185
  - Ceiling: 15/30/60/75/95/115/150/177

- Universal Mounting Base
- Ceiling and Wall, Mounts to 5 Backbox Types
- Environmentally Friendly
- Low Current Draw
- FM Approved
- UL Listed
- ULC Listed
- California State Fire Marshal (CSFM) Approved
- RoHS Compliant









# **DESCRIPTION**

Eaton's Wheelock Exceder™ Series Notification Appliances are compatible with Kidde Fire Systems' families of AEGIS™ and ARIES™ Suppression Control Units and offer modern designs with pleasing aesthetics and low cost of ownership.

The Exceder Series devices incorporate 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. Audible models 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.

An additional included benefit is the Universal Mounting Base (UMB). The UMB allows retrofitting for previous generation of Wheelock notification appliances. The UMB can be pre-wired to allow full testing of circuit wiring before the appliance is installed. 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.

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.

# **COMPATIBILITY AND REQUIREMENTS**

- Synchronize using the Series DSM Sync Modules or panels with built-in Patented Sync Protocol, such as Kidde Fire Systems' families of AEGIS and ARIES panels.
- Compatible with UL "Regulated Voltage" using filtered VDC or unfiltered VRMS input voltage
- Strobes produce 1 flash per second over the "Regulated Voltage" range



PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. CONTACT KIDDE FIRE SYSTEMS FOR THE CURRENT INSTALLATION INSTRUCTIONS. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

### **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).

# Strobe Rating per UL Standard 1971

	UL Max Current*														
	24 VDC / 24 FWR							12 VDC							
Model	Regulated Voltage Range 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	

### Horn Strobe Rating per UL 1971 & UL 464 at 24 VDC

		UL Max Current* at 99 dBA (Anechoic)													
							24 V	DC						12 \	VDC
Model	Regulated Voltage Range 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	
		UL Max Current* at 95 dBA (Anechoic)													
							24 V	DC						12 \	VDC
Model	Regulated Voltage Range 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			0.272	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	
		UL Max Current* at 90 dBA (Anechoic)													
							24 V	DC						12 \	VDC
Model	Regulated Voltage Range 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	

# Horn Ratings per UL 464

Model	Regulated Voltage Range YDC	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	

\* 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.

# **SPECIFICATIONS & ORDERING INFORMATION**

All Exceder Series of notification appliances listed in this document meet the following requirements:

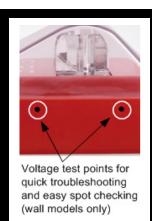
- Can be powered by 12 or 24 VDC
- Can synchronize with Kidde Fire Systems' families of AEGIS and ARIES panels, Series DSM Sync Module or Power Supplies that support appropriate Sync Protocol, or PS-6 and PS-8 power supplies
- · Uses the Universal Mounting Base

The model numbers and descriptions are as follows:

Model	Description	Model	Description					
HSR	Horn, Strobe, Red	ESBCW	Universal Back Box, Ceiling Mount, White					
HSW	Horn, Strobe, White	ESBR	Universal Back Box, Wall Mount, Red					
HSR-A	Horn, Strobe, Red, Agent Label	ESBW	Universal Back Box, Wall Mount, White					
HSW-A	Horn, Strobe, White, Agent Label							
HSRC	Horn, Strobe, Red, Ceiling Mount							
HSWC	Horn, Strobe, White, Ceiling Mount	MODEL LEGEND						
STR	Strobe, Red							
STW	Strobe, White	Example:						
STR-A	Strobe, Red, Agent Label	HN = Horn						
STW-A	Strobe, White, Agent Label	STWC= Strobe, White, ST = Strobe	Ceiling Mount					
STRC	Strobe, Red, Ceiling Mount	HSR= Horn Strobe, Re	d. Wall Mount					
STWC	Strobe, White, Ceiling Mount	HS = Horn Strobe	-,					
HNR	Horn, Red	R = Red						
HNW	Horn, White	W = White						
HNRC	Horn, Red, Ceiling Mount	C = Ceiling Mount						
HNWC	Horn, White, Ceiling Mount							
ESBCR	Universal Back Box, Ceiling Mount, Red							









#### **ARCHITECTS & ENGINEERS SPECIFICATIONS**

The notification appliances shall be 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, doublegang, 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.

Synchronization is achieved through Kidde Fire Systems' families of AEGIS and ARIES control panels. 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 synchronization protocol.

Wall Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC

Ceiling Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC

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