

# Wheelock HS Horns and Horn Strobes



## Description

The Wheelock HS horn and horn strobe appliances are ideal choices for retrofit applications as well as new installations. The HS/HS4 satisfy virtually all requirements for indoor, wall and ceiling mount applications.

The HS horns include a selectable continuous horn tone or temporal pattern (Code 3) with three selectable dBA settings for each tone.

Strobe options include the Wheelock patented MCW Multi-Candela strobe with field selectable candela settings of 15/30/75/110cd or 135/185cd for wall mount and 15/30/75/95cd or 115/177cd for ceiling mount.

The HS4 horn and strobe inputs are electrically isolated to allow for independent operation of the strobe circuit and the horn circuit. The horn and strobe may also be wired in parallel to operate on a single circuit.

These versatile horn and horn strobe appliances may be synchronized using Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock Patented Sync Protocol.

All models are designed for maximum performance, reliability and cost-effectiveness while meeting or exceeding the latest requirements of NFPA 72/ANSI 117.1/UFC and UL Standards 1971 and 464 as well as meeting ADA requirements concerning photosensitive epilepsy.



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## Features

- Approvals include: UL Standard 1971, UL Standard 464, ULC-S525, ULC-S526, California State Fire Marshal (CSFM) and Factory Mutual (FM). See approvals by model in Specifications and Ordering Information
- ADA/NFPA/UFC/ANSI compliant
- Complies with OSHA 29, Part 1910.165
- Field Selectable Candela Settings: Wall Mount 15/30/75/110cd or 35/185cd (Multi-Candela models) and Ceiling Mount 15/30/75/95cd or 115/177cd
- Selectable Continuous Horn or Temporal Code 3 (T3)
- 3 Selectable dBA settings of 90/95/99 dBA
- 4-Wire Horn Strobe Appliance allows for separate operation of the horn and strobe circuit
- 24 VDC models with 16 to 33 VDC UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage
- Mounts flush to standard 4-inch square or double-gang boxes or surface mount to IOB backbox
- Synchronize using the Wheelock Sync Modules or panels with built-in sync protocol (Wheelock Patented Sync Protocol)
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wires

**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.

## Drawings

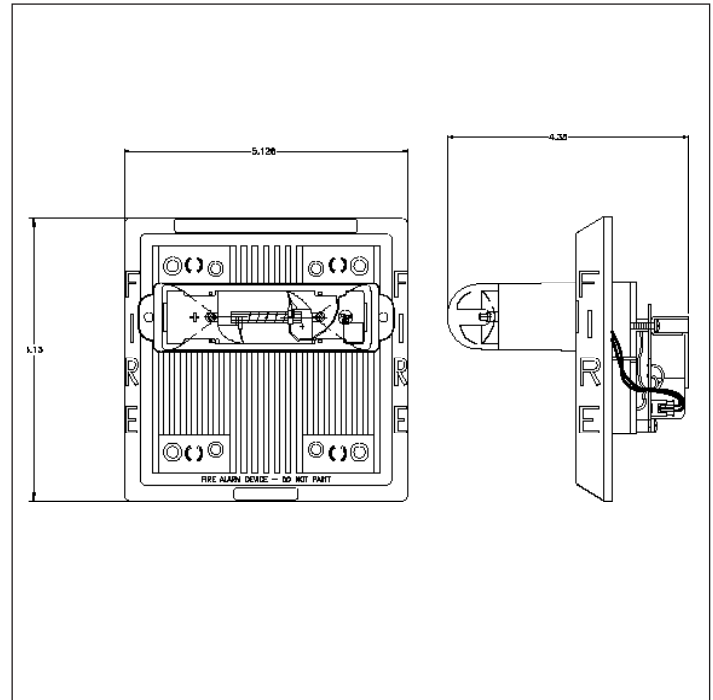


Figure 1. HS4 Horn Strobe - Front & Side Views

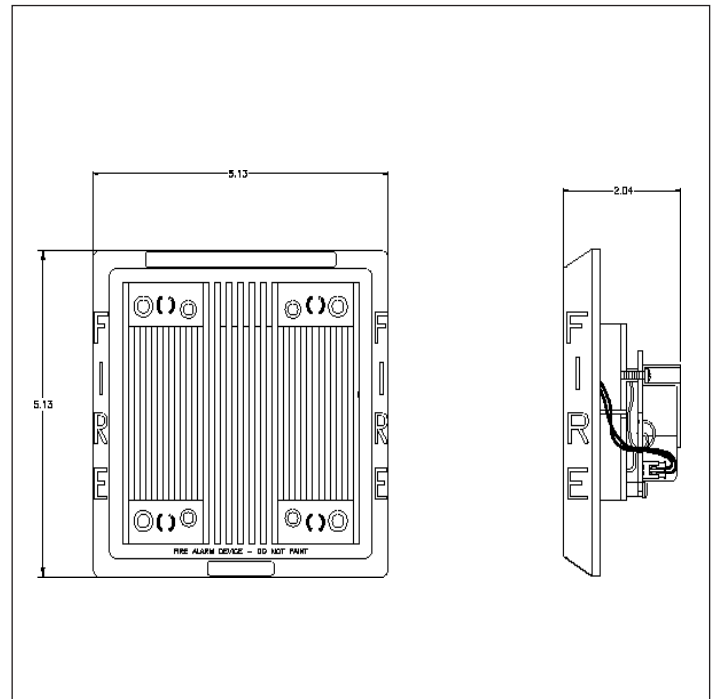


Figure 2. HS Horn - Front & Side Views

## 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.
- All candela ratings represent minimum effective Strobe intensity based on UL 1971.

**Table 1. Maximum RMS Current**

		UL/ULC Max Current ①								
		24 VDC								
Model	Regulated Voltage Range VDC	15	30	75	95	110	115	135	177	185
HS4-24MCC	16.0-33.0	0.065	0.105	0.189	0.249					
HS4-24MCCH	16.0-33.0						0.300		0.420	
HS4-24MCWV	16.0-33.0	0.060	0.092	0.165		0.220				
HS4-24MCWH	16.0-33.0							0.300		0.420

**Table 2. dBA Ratings & Current for Horn**

Description	Volume	Reverberant dBA at 10ft per UL 464 (24 VDC)	Anechoic dBA at 10ft (24 VDC)
Continuous Horn	High	91	100
	Med	88	95
	Low	83	90
Code 3 Horn	High	87	99
	Med	84	95
	Low	79	90

**Audible Current**

HS/HS4	High dBA	Med dBA	Low dBA
24 VDC	0.098	0.052	0.024
UL Max	0.110	0.068	0.027

**Table 4. Specifications**

Physical	
Material	Red or white textured UV stabilized, colored impregnated engineered plastic. Exceeds 94V-0 UL flammability rating.
Weight	HS Strobe: 0.66 lbs. (.03 kg)
Lens	Sabic Lexan 943A
Dimensions	HS Horn: 5.13" W x 5.13" H x 3.15"D; HS strobe: 5.13" W x 5.13" H x 5.24"D
Operating Temperature	Indoor: 33.8°F to 120.2°F (0°C to 49°C) and maximum humidity of 93%
Wire Connections	#12 through #18 AWG
Power & General	
Operating voltage	16 - 33V (DC or FWR)
Strobe Output Rating	UL 1971
Strobe Flash Rate	Strobes are designed to flash at 1 flash per second
Synchronization Models	Strobes can be synchronized with Wheelock's DSM Sync Modules, Power Supplies or SAFEPATH products, using Wheelock patented sync protocol

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 3. Specification & Ordering Information**

Model	Order #	Color	Strobe Candela	Mounting Options ②	Agency UL	Approvals ULC	CSFM	FM
HS4-24MCW-FR	3150	Red	15/30/75/110	D,E,F,L,M,O,PR	X	X	X	X
HS4-24MCW-FW	3151	White	15/30/75/110	D,E,F,L,M,O,PR	X	X	X	X
HS4-121575W-FR	3177	Red	15 (75 on Axis)	D,E,F,L,M,O,PR	X	X	X	X
HS4-24MCWH-FR	3132	Red	135/185	D,E,F,L,M,O,PR	X	X	X	X
HS4-24MCWH-FW	3148	White	135/185	D,E,F,L,M,O,PR	X	X	X	X
HS-24-R	3152	Red		D,E,F,L,M,O,PR	X	X	X	X
HS-24-W	3153	White		D,E,F,L,M,O,PR	X	X	X	X
HS4-24MCC-FR	6264	Red	15/30/75/95	D,E,F,L,M,O,PR	X	X	X	X
HS4-24MCC-FW	6250	White	15/30/75/95	D,E,F,L,M,O,PR	X	X	X	X
HS4-24MCCH-FR	6228	Red	115/177	D,E,F,L,M,O,PR	X	X	X	X
HS4-24MCCH-FW	6225	White	115/177	D,E,F,L,M,O,PR	X	X	X	X

**Architects and Engineers Specification**

The audible/visual notification appliance shall be Wheelock Series HS4 Horn Strobe and HS Horn Appliances or approved equals. The Series HS4 and HS appliance shall meet and be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired for Indoor Fire Protection Service) and Standard 464 (Fire Protective Signaling). The horn strobe shall be listed for indoor use and shall meet the requirement of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by the Fire Alarm Control Panel (FACP).

The HS Horn and the audible of the HS4 appliance 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 strobe portion of the appliance 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 horn strobe shall be of low current design. Where wall mount, Multi-Candela appliances are specified, the strobe intensity shall have field selectable settings and shall be rated per UL Standard 1971 for: 15/30/75/110cd or 135/185cd. The selector switch for selecting the candela setting shall be tamper resistant.

The 1575 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on-axis is required. Where ceiling mount, multi-candela appliances are specified, the strobe intensity shall have field selectable settings and shall be rated per UL standard 1971 for 15/30/75/95cd or 115/177cd.

When synchronization is required, the appliance shall be compatible with Wheelock DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock Patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync module or Power Supply fails to operate, (i.e., contacts remain closed), the strobes shall revert to a non-synchronized flash-rate.

All notification appliances shall be backward compatible.

UL, ULC, CSFM, FM

② For information on mounting options, refer to specification sheet TD450028EN.

**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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