

## Series HS Horn And Horn Strobe Appliances



HS-4 Series



HS Series

### Description

The Series HS4 Horn Strobe and HS Horn Appliances are an ideal choice for retrofit applications as well as new installations. They satisfy virtually all requirements for indoor, wall mount applications.

The Series HS Horn and the horn portion of the Series HS4 include a selectable continuous horn tone or temporal pattern (Code 3) with three selectable dBA settings for each tone.

Strobe options include 1575cd or the Wheelock patented MCW Multi-Candela strobe with field selectable candela settings of 15/30/75/110cd or the high intensity MCWH strobe with field selectable 135/185cd.

The Series 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 SM, DSM Sync Modules or the PS-24-8MC Power Supplies with 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.

### Features

- Approvals include: UL Standard 1971, UL Standard 464, New York City (MEA), California State Fire Marshal (CSFM) and Factory Mutual (FM) and Chicago (BFP) 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: 15/30/75/110cd or 135/185cd (Multi-Candela models) or 1575cd (single candela model)
- Selectable Continuous Horn or Temporal (Code 3)
- 3 Selectable dBA settings of 90/95/99 dBA in both tones
- 4-Wire Horn Strobe Appliance allows for separate operation of the horn and strobe circuits
- 24 VDC models with 16 to 33 VDC UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage
- Wall mount flush to standard 4-inch square or double-gang boxes or surface mount to IOB backbox
- Synchronize with Wheelock Sync Modules or Power Supplies with built-in sync protocol
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wires



**NOTE: All CAUTIONS and WARNINGS are identified by the symbol ▲. All warnings are printed in bold capital letters.**  
**▲ WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERWHEELLOCK.COM OR CONTACT COOPER WHEELLOCK 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”. 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 Standard 1971.
- Series NS Strobe products are listed under UL Standard 1971 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%).
- Series NH horns are listed under UL Standard 464 for audible signal appliances (Indoor use only).
- “Regulated Voltage Range” is the newest terminology used by UL to identify the voltage range. Prior to this change UL used the terminology “Listed Voltage Range”.

Model Number	Input Voltage VDC	Regulated Voltage Range VDC/FWR	Strobe Candela (CD)
HS4-24MCW	24	16.0 - 33.0	15/30/75/110
HS4-241575W	24	16.0 - 33.0	15 (75 on Axis)
HS4-24MCWH	24	16.0 - 33.0	135/185
HS-24	24	16.0 - 33.0	-

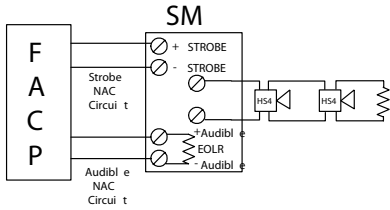
Description	Volume	Reverberant dBA @ 10ft per UL 464	Anechoic dBA @ 10 ft
		24VDC	24VDC
Continuous Horn	High	91	99
	Med	88	95
	Low	83	90
Code 3 Horn	High	87	99
	Med	84	95
	Low	79	90

\* RMS current ratings are per UL average 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.

HS/HS4 Series	Audible Current			Strobe Current						
	HS and HS4			HS4-241575W	HS4-24MCW				HS4-24MCWH	
	High (99) dBA	Med (95) dBA	Low (90) dBA	1575cd	15cd	30cd	75cd	110cd	135cd	185cd
24 vdc	<b>0.098</b>	<b>0.052</b>	<b>0.024</b>	<b>0.060</b>	<b>0.041</b>	<b>0.063</b>	<b>0.109</b>	<b>0.140</b>	<b>0.195</b>	<b>0.270</b>
UL max*	0.110	0.068	0.027	0.090	0.060	0.092	0.165	0.220	0.300	0.420

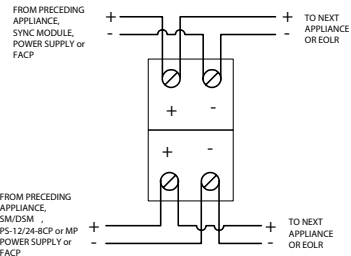
## Wiring Diagrams

**HS4 or HS APPLIANCES SYNCHRONIZED WITH SM MODULE SINGLE CLASS "B" NAC CIRCUIT WITH AUDIBLE SILENCE FEATURE**



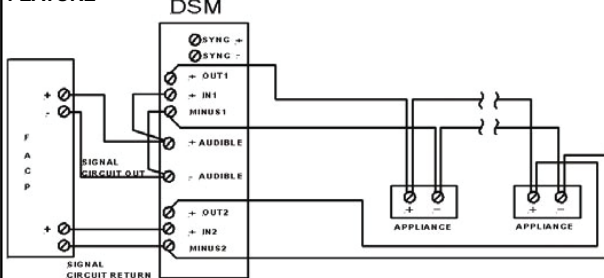
Horn and Strobe wired in parallel

**HS4 (4WIRE) APPLIANCE INDEPENDENT OPERATION OF AUDIBLE SIGNAL AND STROBE**



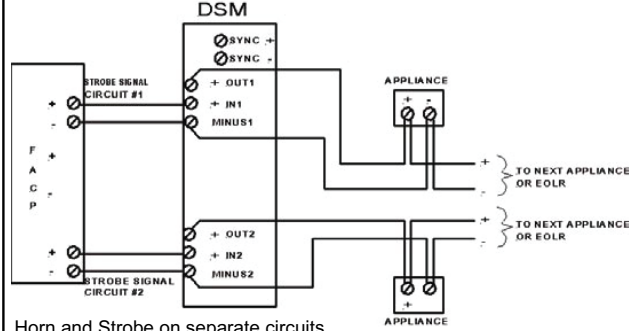
Horn and Strobe on separate circuits

**HS4 AND HS APPLIANCES SYNCHRONIZED WITH DSM MODULE DUAL CLASS "A" NAC CIRCUIT WITH NO AUDIBLE SILENCE FEATURE**



Horn and Strobe wired in parallel

**HS4 OR HS APPLIANCES SYNCHRONIZED WITH DSM MODULE 2 CLASS "B" CIRCUITS**



Horn and Strobe on separate circuits

## Specifications and Ordering Information

Model Number	Order Code	Strobe Candela	Non-Sync	Sync w/ SM, DSM or PS-12/24-8CP/MP	24 VDC	2 WIRE	4 WIRE	Mounting Options**	Agency Approvals				
									UL	MEA	CSFM	FM	BFP
HS4-24MCW-FR	3150	15/30/75/110	X	X	X	X	X	D,E,F,L,M,O,P,R	X	X	X	X	*
HS4-24MCW-FW	3151	15/30/75/110	X	X	X	X	X	D,E,F,L,M,O,P,R	X	X	X	X	*
HS4-241575W-FR	3176	15 (75 on Axis)	X	X	X	X	X	D,E,F,L,M,O,P,R	X	X	X	X	*
HS4-121575W-FR	3177	15 (75 on Axis)	X	X	X	X	X	D,E,F,L,M,O,P,R	X	X	X	X	*
HS4-24MCWH-FR	3132	135/185	X	X	X	X	X	D,E,F,L,M,O,P,R	X	X	X	*	*
HS4-24MCWH-FW	3148	135/185	X	X	X	X	X	D,E,F,L,M,O,P,R	X	X	X	*	*
HS-24-R	3152	-	X	X	X	X		D,E,F,L,M,O,P,R	X	X	X	X	*
HS-24-W	3153	-	X	X	X	X		D,E,F,L,M,O,P,R	X	X	X	X	*

\*PENDING

Models are available in either Red or White. Call Customer Service for Order Code & Delivery.  
 \*\*Refer to Data Sheet S7000 for Mounting Options.

**NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Wheelock Inc. standard terms and conditions.**

## Architects and Engineers Specifications

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 portion of the HS4 appliance shall have a minimum of three (3) field selectable setting 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 Series HS4 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.

When synchronization is required, the appliance shall be compatible with Wheelock's SM, DSM Sync Modules or Wheelock PS-24-8MC Power Supplies with built-in 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.