

## Series NS Horn Strobes and Series NH Horns



**Series NS**



**Series NH**

### **Description:**

The Series NS Horn Strobe Appliances are designed for indoor, wall and ceiling mount applications.

The Series NH Horn and the horn portion of the Series NS include a selectable continuous horn tone or temporal pattern (Code 3) with selectable dBA settings of 90 or 95 dBA.

Strobe options include 1575cd or the Wheelock patented Multi-Candela strobe with field selectable candela settings of 15/30/75/110cd for wall mount and 15/30/75/95cd and 115/177cd for ceiling mount.

These versatile Horn Strobe Appliances can be synchronized using the Wheelock SM, DSM Sync Modules or the PS-24-8MC Power Supply with the Wheelock patented Sync Protocol. Additionally, the audible may be silenced while maintaining strobe activation.

All models of the Series NS and NH 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.

The Wheelock patented 2-Wire Series NS Horn Strobes and Series NH Horns offer more features with lower current draw than competitors.

### **Features:**

- Approvals include: UL Standard 1971, UL Standard 464, New York City (MEA), California State Fire Marshal (CSFM), Factory Mutual (FM) and Chicago (BFP). See approvals by model number in Specifications and Ordering Information
- ADA/NFPA/UFC/ANSI compliant
- Complies with OSHA 29, Part 1910.165
- Wall mount model Field Selectable Candela Setting 15/30/75/110cd (24 VDC Multi-Candela models) or 1575cd in 12 or 24 VDC
- Ceiling mount model Field Selectable Candela Setting 15/30/75/95cd and 115/177cd (24 VDC Multi-Candela models)
- Selectable Continuous Horn or Temporal (Code 3)
- 2 Selectable dBA settings of 90 and 95 dBA in both tones
- Patented Universal Mounting Plate
- 12 and 24 VDC models with UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage
- Wall and Ceiling Mount
- Ceiling models with same look as Wheelock round ceiling strobes and speakers
- NH horn is selectable 12 or 24 VDC in 1 appliance
- The strobes can be synchronized using the Wheelock sync modules or power supplies with built in Sync Protocol
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wires



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**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:

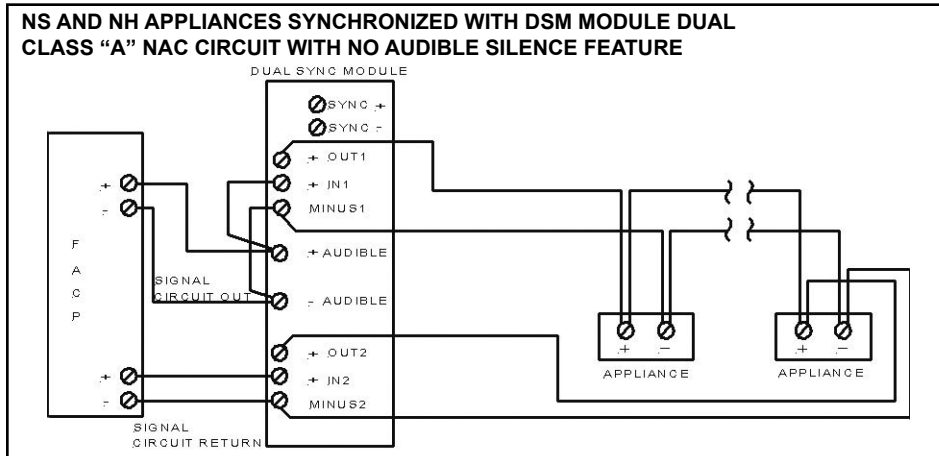
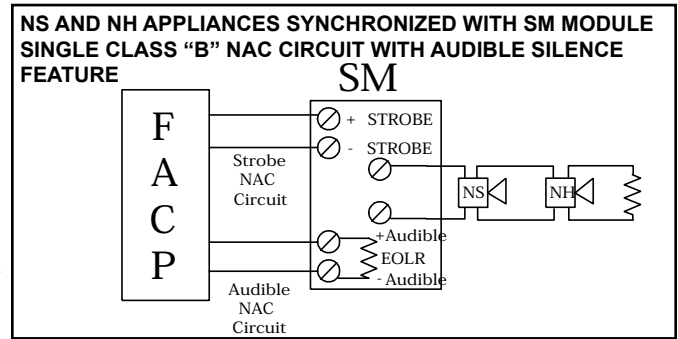
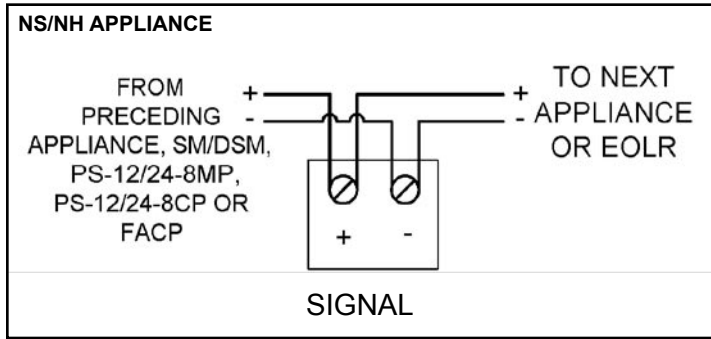
- Strobes are designed to flash at 1 flash per second minimum over their “Regulated Voltage Range”. Note that NFPA-72 specifies a flash rate of 1 to 2 flashes per second and ADA Guidelines specify a flash rate of 1 to 3 flashes per second.
- All candela ratings represent minimum effective Strobe intensity 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	Input Voltage VDC	Regulated Voltage Range VDC/FWR	Strobe Candela (CD)
NS-24MCW	24	16.0 - 33.0	15/30/75/110
NS-241575W	24	16.0 - 33.0	15 (75 on Axis)
NS-121575W	12	8.0 - 17.5	15 (75 on Axis)
NS-24MCC	24	16.0 - 33.0	15/30/75/95
NS-24MCCH	24	16.0 - 33.0	115/177

Description	Volume	Reverberant dBA @ 10ft per UL 464		Anechoic dBA @ 10 ft	
		12 VDC	24 VDC	12 VDC	24 VDC
Continuous Horn	High	83	87	89	95
	Low	76	81	84	90
Code 3 Horn	High	79	82	89	95
	Low	72	76	84	90

Series NS/NH 24 VDC		Audible	Wall Mount Strobe Models					Ceiling Mount Strobe Models					
		NH-12/24	NS-241575W	NS-24MCW				NS-24MCC				NS-24MCCH	
		@24VDC	15/75cd	15cd	30cd	75cd	110cd	15cd	30cd	75cd	95cd	115cd	177cd
High (95) dBA	<b>24VDC</b>	0.044	0.104	0.074	0.107	0.184	0.244	0.082	0.124	0.209	0.275	0.350	0.477
Low (90) dBA	<b>24VDC</b>	0.018	0.096	0.066	0.101	0.177	0.232	0.071	0.114	0.201	0.261	0.306	0.429
Series NS/NH 12VDC		Audible	Wall Mount	* 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.									
		NH-12/24	Aud/Strobe										
		@12V	NS-121575W										
High (89) dBA	<b>12 VDC</b>	0.021	0.220										
Low (84) dBA	<b>12VDC</b>	0.012	0.210										

## Wiring Diagrams#



**NOTE: NS/NH must be set on Code 3 horn tone to achieve synchronized temporal (Code 3) tone. Refer to installation instruction (P83983, P83600 respectively).**

# For detail using SM or DSM Sync Module refer to Data Sheet S3000 or Installation Instructions P83123 for SM and P83177 for DSM. For wiring information on the power supplies refer to Installation Instructions P84662 for PS-24-8MC.

## SPECIFICATION & ORDERING INFORMATION

Model Number	Order Code	Strobe Candela	Sync w/ SM, DSM or PS-24-8MC	24 VDC	12 VDC	Mounting Options#	Agency Approvals				
							UL	MEA	CSFM	FM	BFP
NS-24MCW-FR	9404	15/30/75/110	X	X	-	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-24MCW-FW	9405	15/30/75/110	X	X	-	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-241575W-FR	7806	15 (75 on Axis)	X	X	-	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-241575W-FW	7811	15 (75 on Axis)	X	X	-	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-121575W-FR	7816	15 (75 on Axis)	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-121575W-FW	7818	15 (75 on Axis)	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NH-12/24-R	7449	-	X	X	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NH-12/24-W	7500	-	X	X	X	B,D,E,F,G,H,J,N,O,R,X	X	X	X	X	X
NS-24MCC-FR	3754	15/30/75/95	X	X	-	E	X	*	X	X	*
NS-24MCC-FW	3753	15/30/75/95	X	X	-	E	X	*	X	X	*
NS-24MCCH-FR	3756	115/177	X	X	-	E	X	*	X	X	*
NS-24MCCH-FW	3755	115/177	X	X	-	E	X	*	X	X	*
NH-12/24R-R	3752	-	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	*	X	X	*
NH-12/24R-W	3751	-	X	-	X	B,D,E,F,G,H,J,N,O,R,X	X	*	X	X	*

NS and NH Ceiling Mount Appliances will be available July 2006.

\*Pending

Note: Models are available in Red or White. Contact Customer Service for Order Code and 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 appliances shall be Wheelock Series NS Horn Strobe appliances and Series NH Horn appliances or approved equals. The Series NS appliances shall meet and be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired for Indoor Fire Protection Service). The Series NH Horn shall be UL Listed under Standard 464 (Fire Protective Signaling). The horn strobe shall be listed for indoor use and shall meet the requirements 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 audible portion of the appliance shall have a minimum of two (2) field selectable settings for dBA levels (90 and 95 dBA) 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 NS 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 15/30/75/110 candela. 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 15/30/75/95 candela or 115/177 candela. 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 (e.g. ADA compliance).

When synchronization is required, the appliance shall be compatible with the Wheelock SM, DSM Sync Modules or the 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. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation.

The Series NS Horn Strobes and NH horn shall incorporate a Patented Universal Mounting Plate that shall allow mounting to a single-gang, double-gang, 4-inch square, 100mm European type backboxes, or the SHBB Surface Backbox. If required, an NATP (Notification Appliance Trimplate) shall be provided.

All notification appliances shall be backward compatible.



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