

Series ZRS Strobes, ZNS Horn Strobes and Series ZNH Horns

SNAP 
The EZ Mount



Series ZNS



Series ZNH



Series ZRS



Series ZRS

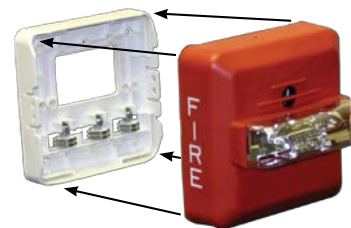
Description

The Wheelock Series Z notification appliances feature an easy snap on base that is designed to simplify the installation and testing of horns, strobes, and horn/strobes. The separate Series Z snap on base can be pre-wired so circuit wiring can be fully tested before the appliance is installed and before the walls are covered. Once all surrounding work is complete, the appliance can be simply installed by snapping it on the base. Shorting contacts in the base, which provide continuity for circuit testing, are permanently opened when the appliance is installed so any subsequent removal of the appliance will indicate a trouble condition on that circuit at the control panel when circuit supervision is enabled. The same base is used for all Series Z horns, strobes and horn/strobes to provide consistent installation and easy replacement of appliances if required. A locking screw is also included for the appliance to provide extra secure installation.

The Wheelock Series Z appliances incorporate the same dependable circuitry and high efficiency optics that are used in Wheelock RSS strobes, NS horn/strobes and NH horns and have the same high performance ratings. The Series Z appliances are compatible with all UL listed "Regulated" panels and all panels that are compatibility listed with Wheelock RSS, NS and NH appliances.

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 and OSHA 29, Part 1910, 165 compliant
- EZ Mount SNAP design, with separate base plate, provides ability to pre-wire the base and test the circuit wiring before the walls are covered
- The base plate is protected by a disposable cover and the appliances can quickly snap onto the base after the walls are painted.
- Patented EZ Mount Universal Mounting Plate – uses single plate for ceiling and wall mount installations
- Wall Mount models feature field selectable candela settings of 15/30/75/110cd and 135/185cd
- Ceiling Mount models feature field selectable candela settings of 15/30/75/95cd and 115/177cd
- Strobes can be synchronized using the Wheelock sync modules or power supplies with built-in sync protocol
- 12 and 24 VDC models with UL "Regulated Voltage" using filtered DC or unfiltered VRMS input voltage
- Strobes produce 1 flash per second over the "Regulated Voltage" range (ZNS, ZRS models)
- Selectable Continuous Horn or Temporal (Code-3) Tones with selectable 90 or 95 dBA setting (ZNH, ZNS models)
- Selectable 12 or 24VDC in 1 appliance (ZNH model)



ZNS, ZNH and ZRS appliances go onto the base plate in a SNAP.



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”.
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series ZNS 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%).
- Series ZNH 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”.

Table 1: Series ZNS Ratings Per UL Standard 1971

Model	Input Voltage VDC	Regulated Voltage Range VDC/FWR	Strobe Candela (CD)
ZNS-MCW	24	16.0 - 33.0	15/30/75/110
ZNS-MCWH	24	16.0 - 33.0	135/185
ZNS-MCC	24	16.0 - 33.0	15/30/75/95
ZNS-MCCH	24	16.0 - 33.0	115/177

Table 2: Series ZNS/ZNH Horn dBA Ratings

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

Table 3: Series ZNS Average RMS Current*

Series ZNS/ZNH 24 VDC	Audible ZNH-12/24 @24VDC	Wall Mount Strobe Models						Ceiling Mount Strobe Models						
		ZNS-MCW				ZNS-MCWH		ZNS-MCC				ZNS-MCCH		
		15cd	30cd	75cd	110cd	135cd	185cd	15cd	30cd	75cd	95cd	115cd	177cd	
High (95) dBA	24VDC	0.044	0.074	0.107	0.184	0.244	0.350	0.477	0.082	0.124	0.209	0.275	0.350	0.477
Low (90) dBA	24VDC	0.018	0.066	0.101	0.177	0.232	0.306	0.429	0.071	0.114	0.201	0.261	0.306	0.429
Series ZNS/ZNH 12VDC	Audible ZNH-12/24 @12V													
High (89) dBA	12 VDC	0.021												
Low (84) dBA	12VDC	0.012												

Table 4: Series ZRS Average RMS Current*

ZRS 24VDC Models	ZRS - Wall Mount						ZRS - Ceiling Mount					
	MCW				MCWH		MCC				MCCH	
	15cd	30cd	75cd	110cd	135cd	185cd	15cd	30cd	75cd	95cd	115cd	177cd
24 vdc	0.060	0.092	0.165	0.220	0.300	0.420	0.065	0.105	0.189	0.249	0.300	0.420

* 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.

Architects and Engineers Specifications

General

Audible/visual notification appliances shall be listed for indoor use and shall meet the requirements of FCC Part 15 Class B. These appliances shall be listed under UL Standard 1971, (Standard for Safety Signaling Devices for Hearing Impaired) and UL Standard 464 (Fire Protective Signaling). The appliances shall use a Patented Universal EZMount backplate that shall allow mounting to a single-gang, double-gang, 4-inch square, 4" octal, or a 3-1/2" octal backbox. Two wire appliance wiring shall be capable of directly connecting to the mounting back plate. Continuity checking of the entire NAC circuit prior to attaching any audible/visual notification appliances shall be allowed. A dust cover shall fit and protect the mounting plate. The dust cover shall be easily removed when the appliance is installed over the backplate. Removal of an appliance shall result in an alarm condition by the Fire Alarm Control Panel (FACP).

Strobes

Strobe appliances shall produce a minimum flash rate of 60 flashes per minute (1 flash per second) over the Regulated Voltage Range of 16 to 33 VDC and shall incorporate a Xenon flashtube enclosed in a rugged Lexan lens. The strobes shall be available with two or four field selectable settings in one unit and shall be rated, per UL 1971, for up to 185 cd for wall mounting and 177 cd for ceiling mounting. The strobes shall operate over an extended temperature range of 32°F to 120°F (0°C to 49°C) and be listed for maximum humidity of 95% RH. Strobe inputs shall be polarized for compatibility with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP).

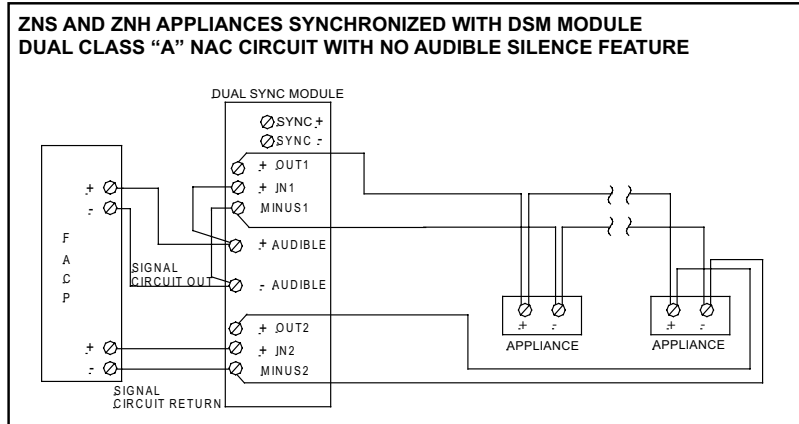
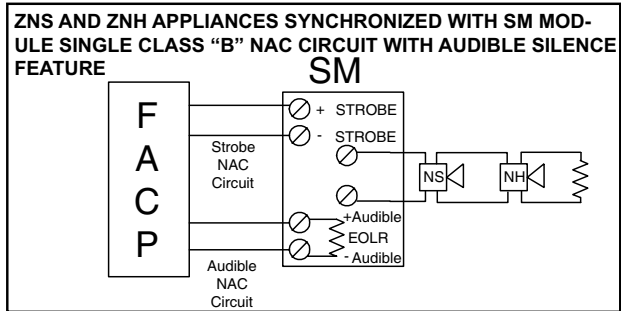
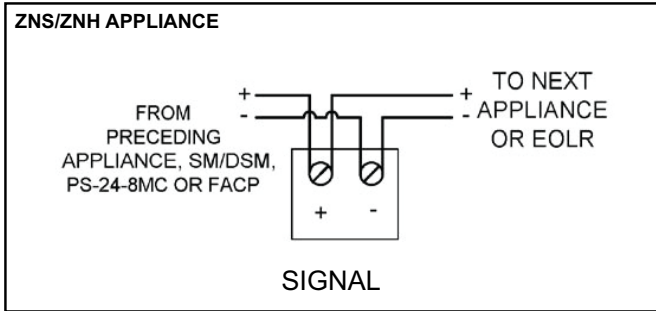
Audibles and Audible/Strobe Combinations

Horns and horn/strobes shall be listed for Indoor use under UL Standard 464. The horns shall be able to produce a continuous output or a temporal code-3 output that can be synchronized. The horns shall have at least 2 sound level settings of 90 and 95 dBA.

Synchronization Modules

When synchronization of strobes or temporal Code-3 audibles is required, the appliances shall be compatible with the Wheelock Series SM and DSM Sync Modules or the Wheelock PS-24-8MC Power Supply with built-in, patented sync protocol. The strobes shall not drift out of synchronization at any time during operation. Audibles and strobes shall be able to be synchronized on a 2-wire circuit with the capability to silence the audible if required. If the sync module or power supply fails to operate (i.e., contacts remain closed), the strobes shall revert to a non-synchronized flashrate.

Wiring Diagrams



NOTE: ZNS/ZNH 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.

Specifications and 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
ZNS-MCW-FR	0304	15/30/75/110	X	X	-	B, D, E, F	X	*	X	*	*
ZNS-MCW-FW	0305	15/30/75/110	X	X	-	B, D, E, F	X	*	X	*	*
ZNS-MCWH-FR	0306	135/185	X	X	-	B, D, E, F	X	*	X	*	*
ZNS-MCWH-FW	0307	135/185	X	X	-	B, D, E, F	X	*	X	*	*
ZNH-R	0300	-	X	X	X	B, D, E, F	X	*	X	*	*
ZNH-W	0301	-	X	X	X	B, D, E, F	X	*	X	*	*
ZNS-MCC-FR	0310	15/30/75/95	X	X	-	B, D, E, F	X	*	X	*	*
ZNS-MCC-FW	0311	15/30/75/95	X	X	-	B, D, E, F	X	*	X	*	*
ZNS-MCCH-FR	0312	115/177	X	X	-	B, D, E, F	X	*	X	*	*
ZNS-MCCH-FW	0313	115/177	X	X	-	B, D, E, F	X	*	X	*	*
ZRS-MCW-FR	4085	15/30/75/110	X	X	-	B, D, E, F	X	*	X	*	*
ZRS-MCW-FW	0302	15/30/75/110	X	X	-	B, D, E, F	X	*	X	*	*
ZRS-MCWH-FR	5242	135/185	X	X	-	B, D, E, F	X	*	X	*	*
ZRS-MCWH-FW	0303	135/185	X	X	-	B, D, E, F	X	*	X	*	*
ZRS-MCC-FW	0309	15/30/75/95	X	X	-	B, D, E, F	X	*	X	*	*
ZRS-MCC-FR	0308	15/30/75/95	X	X	-	B, D, E, F	X	*	X	*	*
ZRS-MCCH-FR	5240	115/177	X	X	-	B, D, E, F	X	*	X	*	*
ZRS-MCCH-FW	0314	115/177	X	X	-	B, D, E, F	X	*	X	*	*

*Pending

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.

