

'SNAP' Series Z

Series ZRS Strobes, ZNS Horn Strobes



Audio/Visual Devices

General

The Cooper 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 Cooper 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 that 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

- 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 (ZBASE) 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 SM or DSM Sync Modules or a power supply with built-in Sync Protocol.
- 12 and 24 VDC models with UL "Regulated Voltage": using filtered DC or unfiltered VRMS input voltage.
- Strobes produce one (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 24 VDC in one appliance (ZNH model).
- ADA/NFPA/UFC/ANSI and OSHA 29 Part 1910, 165 compliant.



Series ZNS



Series ZRS



Series ZNS



Series ZNH



WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THE FOLLOWING INSTRUCTIONS, CAUTIONS AND 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 one (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 temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% ($\pm 2\%$).
- 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."

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

Description	Volume	Reverberant dBA @ 10ft per UL 464		Anechoic dBA @ 10ft	
		12VDC	24VDC	12VDC	24VDC
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

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
16-33 VDC	.060	.092	.165	.220	.300	.420	.065	.105	.189	.249	.300	.420

* UL maximum current rating is the maximum RMS current within the listed voltage range (16-33V for 24V units). For strobes the UL maximum current is usually at the minimum listed voltage (16V for 24V units). For audibles the maximum current is usually at the maximum listed voltage (33V for 24V units). For unfiltered FWR ratings, see installation instructions.

Series ZNS/ZNH 24VDC		Audible	Wall Mount Strobe Models						Ceiling Mount Strobe Models					
		ZNH-12/24	ZNS-NCW				ZNS-MCWH		ZNS-MCC				ZNS-MCCH	
			15cd	30cd	75cd	110cd	135cd	185cd	15cd	30cd	75cd	95cd	115cd	177cd
High (95) dBA	16-33 VDC	.044	.074	.107	.184	.244	.350	.477	.082	.124	.209	.275	.350	.477
Low (90) dBA		.018	.066	.101	.177	.232	.306	.429	.071	.114	.201	.261	.306	.429
Series ZNS/ZNH 12VDC		Audible	* UL maximum current rating is the maximum RMS current within the listed voltage range (16-33V for 24V units). For strobes the UL maximum current is usually at the minimum listed voltage (16V for 24V units). For audibles the maximum current is usually at the maximum listed voltage (16V for 24V units). For unfiltered FWR ratings, see installation instructions.											
		ZNH-12/24												
High (89) dBA	8-17.5 VDC	.021												
Low (84) dBA		.012												

Architectural/Engineering Specifications

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 EZ Mount backplate that shall allow mounting to a single-gang, double-gang, 4-inch square, 4-inch octal, or a 3½-inch octal backbox. Two wire appliance wiring shall be capable of directly connecting to the mounting backplate. 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 duct 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).

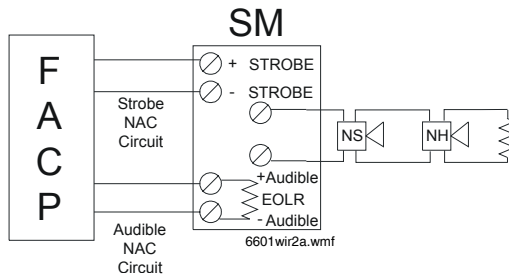
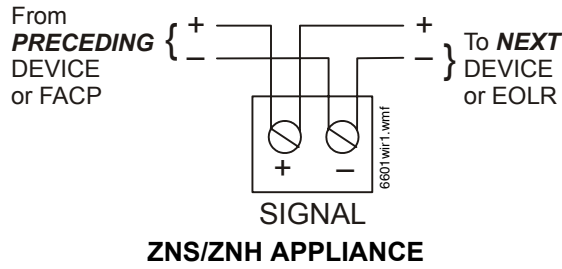
Strobe appliances shall produce a minimum flash rate of 60 flashes per minute (1 flash per second) over the Regulated Voltage Range of 16 to 33 VDC and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. The strobes shall

be available with 2 or 4 field selectable settings in one unit and shall be rated, per UL 1971 for up to 185cd for wall mounting and 177cd for ceiling mounting. The strobe 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).

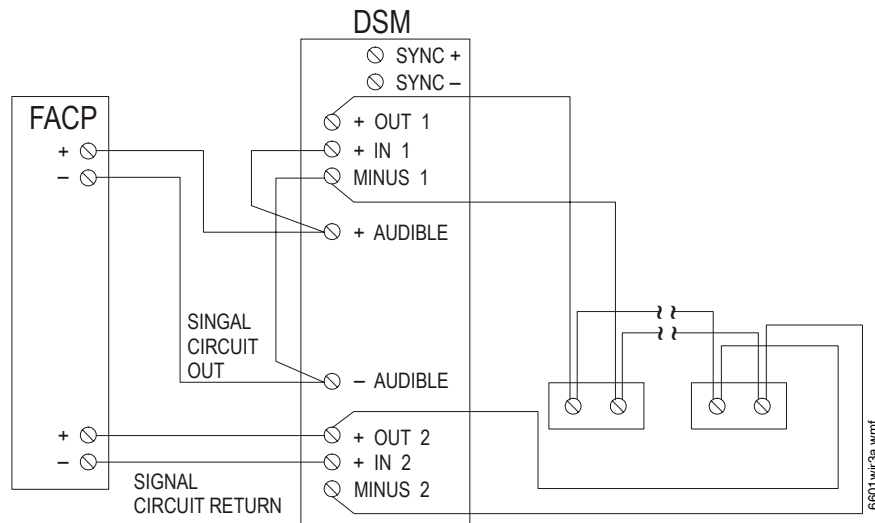
Horns and horn/strobes shall be listed for indoor use under UL Standard 464. The horns shall be able to produce a continuous output or a temporal Code-3 output that can be synchronized. The horns shall have at least 2 sound level settings of 90 and 95 dBA.

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 a power supply with built-in 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



**ZNS AND ZNH APPLIANCES
SYNCHRONIZED WITH SM MODULE
SINGLE CLASS "B" NAC CIRCUIT WITH
AUDIBLE SILENCE FEATURE**



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

NOTE: ZNS/ZNH must be set on Code 3 horn tone to achieve synchronized temporal (Code 3) tone. Refer to installation instructions (P83983, P83600 respectively).

NOTE: For detail using SM or DSM Sync Module refer to data sheet S3000 or installation instructions P83123 for SM and P83177 for DSM.

Agency Listings and Approvals

These listings and approvals apply to the modules specified in this. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. *Consult factory for latest listing status.*

- **UL Listed:** E5946, S5391
- **CSFM:** 7125-0785:141, 7125-0785:142
- **MEA:** 151-92E, Vol. 48
- **FM Approved**
- **ULC Listed:** E5946 (ZNH)

Ordering Information

Model Number	Strobe Candela	Sync w/ SM, DSM	24 VDC	12 VDC	Agency Approvals				
					UL	MEA	CSFM	FM	BFP
ZNS-MCW-FR	15/30/75/110	X	X	-	X	X	X	X	-
ZNS-MCW-FW	15/30/75/110	X	X	-	X	X	X	X	-
ZNS-MCWH-FR	135/185	X	X	-	X	X	X	X	-
ZNS-MCWH-FW	135/185	X	X	-	X	X	X	X	-
ZNH-R	-	X	X	X	X	X	X	X	-
ZNH-W	-	X	X	X	X	X	X	X	-
ZNS-MCC-FR	15/30/75/95	X	X	-	X	X	X	X	-
ZNS-MCC-FW	15/30/75/95	X	X	-	X	X	X	X	-
ZNS-MCCH-FR	115/177	X	X	-	X	X	X	X	-
ZNS-MCCH-FW	115/177	X	X	-	X	X	X	X	-
ZRS-MCW-FR	15/30/75/110	X	X	-	X	X	X	X	-
ZRS-MCW-FW	15/30/75/110	X	X	-	X	X	X	X	-
ZRS-MCWH-FR	135/185	X	X	-	X	X	X	X	-
ZRS-MCWH-FW	135/185	X	X	-	X	X	X	X	-
ZRS-MCC-FR	15/30/75/95	X	X	-	X	X	X	X	-
ZRS-MCC-FW	15/30/75/95	X	X	-	X	X	X	X	-
ZRS-MCCH-FR	115/177	X	X	-	X	X	X	X	-
ZRS-MCCH-FW	115/177	X	X	-	X	X	X	X	-

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