

# Series AS Audible Strobe Appliances and Series AH Audibles



## Description

The Wheelock patented 2-wire Series AS Audible Strobe Appliances and Series AH Audibles offer more features with low current draw.

Strobe options for wall mount models include 1575cd or the Wheelock patented MCW multi-candela wall strobes with field selectable candela settings of 15/30/75/110cd, or the high intensity MCWH strobe with field selectable 135/185cd.

Ceiling mount models incorporate Wheelock's patented MCC multi-candela ceiling strobe with field selectable intensities of 15/30/75/95cd or the high intensity MCCH strobe with field selectable 115/177cd.

The audible provides a selectable choice of either a continuous horn or temporal pattern (Code 3) when constant voltage from a Fire Alarm Panel (FACP) is applied. Each tone has 3 dBA settings to choose from.

When used with the Wheelock Series SM,DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels incorporating the Wheelock Patented Sync Protocol, synchronization of the continuous horn tone provides the temporal (code 3) tone (mandated by NFPA72) simultaneously for all audible appliances. This ensures a distinct temporal (code 3) pattern when 2 or more audibles are within hearing distance. If not synchronized the temporal sound could overlap and not be distinctive. At the same time the strobes will be synchronized. This provides the ability to comply with ADA guidelines concerning photosensitive epilepsy and the NFPA standards when installing 2 or more visual appliances within the field of view all of this plus the ability to silence the audible is achieved by using only 2 wire.

#### **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 in Specifications and Ordering Information
- ADA/NFPA/UFC/ANSI Compliant
- Wall mount models are available with Field Selectable Candela Settings of 15/30/75/110cd or 135/185cd (Multi-Candela models) or 1575cd (single candela model)
- Ceiling mount models are available with field selectable candela settings of 15/30/75/95cd or 115/177cd (multi-candela ceiling models)
- Selectable Continuous Horn or Temporal (Code 3).
- 3 Selectable dBA settings (99, 95 and 90 dBA) in both tones
- Patented 2-Wire Audible Strobe Appliance.
- Patented Universal Mounting Plate
- Weatherproof models are available for outdoor use
- Strobes produce 1 flash per second over the regulated voltage range
- 12 and 24 VDC models with wide UL "Regulated Voltage Range" using filtered DC or unfiltered FWR input voltage
- Synchronize using the Wheelock Sync Modules or panels with built-in Wheelock Patented Sync Protocol
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wires

For Weatherproof Series AS, See Datasheet S9004









NOTE: All CAUTIONS and WARNINGS are identified by the symbol A. 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.COOPERWHEELOCK.COM OR CONTACT COOPER WHEELOCK 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".

Table 1: Ratings Per UL 1971									
Model Number	Input Voltage VDC	Regulated Voltage Range VDC/FWR	Strobe Candela (cd)						
AS-24MCW	24	16.0 - 33.0	15/30/75/110						
AS-24MCCH	24	16.0 - 33.0	115/177						
AS-241575W	24	16.0 - 33.0	15 (75 on Axis)						
AS-121575W	12	8.0 – 17.5	15 (75 on Axis)						
AS-24MCC	24	16.0 - 33.0	15/30/75/95						
AS-24MCWH	24	16.0 - 33.0	135/185						
ASWP-2475W	24	16.0 - 33.0	75 @ -31°F						

Table 2: dBA Ratings for 12 VDC and 24 VDC Series AS/AH 12 and 24 VDC Audible									
Description	Volume	Reverberant dBA Per UL 464 @ 10 ft.	Anechoic dBA @ 10 ft.						
Continuous Horn	High	91	99						
	Medium	88	95						
	Low	83	90						
Code 3 Horn	High	87	99						
	Medium	84	95						
	Low	79	90						

**Ceiling Mount Audible Strobe Models** 

95cd

0.205

0.285

0.186

0.269

0.173

0.263

AS-24MCCH

177cd

0.320

0.480

0.305

0.465

0.295

0.460

115cd

0.250

0.355

0.230

0.340

0.220

0.335

AS-24MCC

75cd

0.165

0.221

0.145

0.201

0.132

0.198

30cd

0.114

0.138

0.092

0 122

0.082

0.113

		T	T .							
		Audible	v	Vall Mo	ount Audil	ble Strol	oe Mode	ls		
24 VDC M	odels	AH-24	AS-241575W		AS-24	4MCW		Α		
			1575cd	15cc	30cd	75cd	110cd	13		
High (99) <b>24 vdc</b>		0.062	0.100	0.080	0.102	0.150	50 0.194			
dBA	UL max*	0.080	0.121	0.088	0.125	0.200	0.267	0		
Med (95)	24 vdc	0.033	0.080	0.060	0.084	0.132	0.173	0.		
dBA UL max*		0.043	0.107	107 0.07		0.190	0.253	0		
Low (90)	24 vdc	0.017	0.072	0.052	0.076	0.121	0.158	0.		
dBA	UL max*	0.021	0.100	0.068	0.105	0.182	0.245	0		
		A	Wall Mount				•			
12 VDC	Models	Audible	Audible Strobe		Table 4: Average Currer					
		AH-12	AS-121575W		Voltage S			igh dBA Setting		
High (99)	12 vdc	0.163	0.260		24.0 VDC		(99) dBA 0.128			
dBA	UL max*	0.192	0.320				0.168			
Med (95)	12 vdc	0.076	0.195			,				
ADY _	UL max*	0.108	0.275	1	* RMS current ratings		-	-		
Low (90)	12 vdc	0.039	0.175	1	rating is the maximum RM for 24v units). For strobe					
dBA	UL max*	0.058	0.265	listed voltage (16v for 24						

Table 3: Average RMS Current

Table 4: Average Current* (AMPS) For Series ASWP#									
Voltage	High dBA Setting (99) dBA	Medium dBA Setting (95) dBA	Low dBA Setting (90) dBA						
24.0 VDC	0.128	0.105	0.098						
UL Max*	0.168	0.155	0.150						

AS-24MCWH

185cd

0.320

0.480

0.305

0.465

0.295

0.460

15cd

0.088

0.095

0.066

0.080

0.056

0.074

135cd

0.250

0.355

0.230

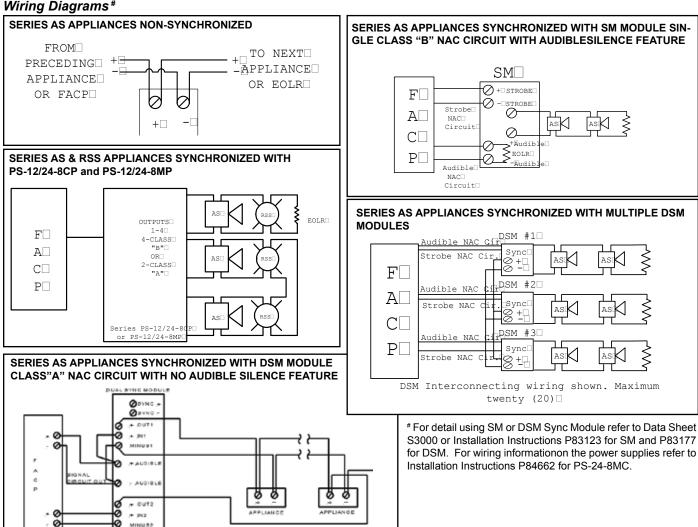
0.340

0.220

0.335

<sup>\*</sup> 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.

## Wiring Diagrams#



# Specifications and Ordering Information

Model Number	Order	Strobe	Non- Sync	Sync w/SM, DSM or PS-24-8MC	24 VDC	12 VDC		Ceiling Mount		Agency Approvals				
	Code	Candela							Mounting Options***		MEA	CSFM	FΜ	BFP
AS-24MCW-FR	9024	15/30/75/110	Х	Х	Х	-	Х	-	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	Х
AS-24MCW-FW	9025	15/30/75/110	Х	Х	Х	-	Х	-	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	Х
AS-24MCWH-FR	3468	135/185	Х	Х	Х	-	Х	-	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	*
AS-24MCWH-FW	3469	135/185	Х	Х	Х	-	Х	-	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	*
AS-241575W-FR	7405	15 (75 on Axis)	Х	Х	Х	-	Х	-	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	Х
AS-121575W-FR	7410	15 (75 on Axis)	Х	Х	-	Х	Х	-	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	Х
AS-24MCC-FR	3161	15/30/75/95	Х	Х	Х	-	-	Х	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	*
AS-24MCC-FW	3162	15/30/75/95	Х	Х	Х	-	-	Х	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	*
AS-24MCCH-FW	3467	115/177	Х	Х	Х	-	-	Х	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	*
ASWP-2475W-FR**	9012	75 @ -31°F	Х	Х	Х	-	Х	-	I (see Data Sheet S9004)	Х	Х	Х	Х	Х
AH-24-R	7892	-	Х	Х	Х	-	Х	Х	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	Х
AH-24-W	7893	-	Х	Х	Х	-	Х	Х	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	Х
AH-12-R	7891	-	Х	Х	-	Х	Х	Х	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	Х
AH-12-W	7894	-	Х	Х	-	Х	Х	Х	A,B,D,E,F,G,H,J,N,O,R,X	Х	Х	Х	Х	Х
AH-24WP-R**	7416	-	Х	Х	Х	-	Х	Х	K	Х	Х	Х		Х
AH-12WP-R**	7415	-	Х	Х	-	Х	Х	Х	K	Х	Х	Х		Х

<sup>\*\*</sup>For Weatherproof Series AS/AH specifications see data sheet S9004. \*\*\*Refer to Data Sheet S7000 for Mounting Options.

Note: Models are available in either Red or White. Contact Customer Service for Order Code and Delivery.

\*PENDING

### Architects and Engineers Specifications

The notification appliances shall be Wheelock Series AS Audible Strobe appliances and Series AH Audible appliances or approved equals. The Series AS Audible be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service. The Series AH Audible shall be UL Listed under Standard 464 (Fire Protective Signaling). Both shall meet the requirements of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP).

The audible portion of the 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 Series AS shall be of low current design. Where Multi-Candela appliances are specified, the strobe intensity shall have field selectable settings and shall be rated per UL Standard 1971 at 15/30/75/110 or 135/185 candela for wall mount and 15/30/75/95 or 115/177 candela for ceiling mount. The selector switch for selecting the candela 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 Wheelock's SM, DSM Sync Modules, Wheelock Power Supplies or other manufacturers panels with built-in 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 strobe 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 when used with Wheelock synchronization.

The Series AS Audible Strobe and Series AH Audible 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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S8100 AS/AH 10/07

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