



## FIRE ALARM SYSTEMS



Helping People Take Action<sup>SM</sup>

### SERIES AS SINGLE & MULTI-CANDELA AUDIBLE STROBE APPLIANCES SERIES AH AUDIBLES

#### Description

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

Strobe options for wall mount models include Wheelock's patented Multi-Candela strobe with field selectable candela settings of: 15, 30, 75 or 110cd.

Ceiling mount models are available in 15, 30, 75 or 100cd intensities.

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. Additionally, the audible may be silenced while maintaining strobe activation on combination Series AS units.

All models may be synchronized when used in conjunction with the Wheelock SM or DSM Sync Module(s).

Synchronization of the continuous horn tone provides the temporal (Code 3) tone. This ensures a distinct temporal (Code 3) pattern when 2 or more audibles are within hearing distance. If not synchronized, the temporal sound may overlap and not be distinctive. At the same time, the strobes will also be synchronized. This provides the ability to comply with recommendations concerning photosensitive epilepsy and when installing two 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 WIRES.*

Wheelock's Series AS Audible Strobes and AH Audibles employ a Patented Universal Mounting Plate that can be mounted to single gang, double gang, 4" square, 100mm European back boxes or the SHBB surface back box.

**For Weatherproof Series AS Audible Strobe, See Datasheet S9004C.**

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SERIES AS




SERIES AH



Multi-Candela Indicator  
(bottom of lens)

#### Features

- Approvals include: CAN/ULC-S526-02 for Visual Signaling Appliances and CAN/ULC-S525-99 for Audible Signaling Appliances
- ADA/NFPA/ANSI compliant
- **Wall mount models are available with Field Selectable Candela Settings of 15, 30, 75 or 110cd (Multi-Candela models)**
- ASWP and AH-24WP models are weatherproof for outdoor applications
- 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
- Strobes produce 1 flash per second over the regulated voltage range
- 12 and 24 VDC models with wide ULC Listed Voltage using filtered DC or unfiltered VRMS input voltage
- Wall Mount or Ceiling Mount models
- Synchronize with Wheelock SM or DSM sync module(s)
- ZERO Inrush above Peak
- Compatible with all Wheelock 2-Wire products
- 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. 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.

**⚠ WARNING:** FOR ULC VERSIONS THESE APPLIANCES WERE TESTED TO THE OPERATING VOLTAGE OF 20.0-31.0 VOLTS FOR 24V MODELS AND 10.5-15.6VDC FOR 12 VDC MODELS USING FILTERED (DC) OR UNFILTERED FULL-WAVE RECTIFIED (FWR). APPLY 80% AND 110% OF THESE VOLTAGE VALUES FOR SYSTEM OPERATIONS.

**General Notes**

- Strobes are designed to flash at 1 flash per second minimum over the Voltage Range.
- All candela ratings represent minimum effective Strobe intensity based on CAN/ULC-S526-02.
- Series AS Strobe products are listed under for indoor use with a temperature range of 0° C to 49° C (32° F to 120° F) and maximum humidity of 93% (± 2%).
- Series AH-24 horns are listed under CAN/ULC-525-99 for audible signal appliances (Indoor use only).
- Series AH-24WP audible appliances are listed under UL 464 for indoor/outdoor use with a temperature range of -35°C to 66°C (-31°F to 150°F) and maximum humidity of 95%.
- **All Canadian Installations should be in accordance with the Canadian Standard for the Installation of Fire Alarm Systems - CAN/ULC-S524-01 and Canadian Electrical Code, Part 1.**

Model	Input Voltage VDC	Regulated Voltage Range VDC/FWR	Strobe Candela (cd) ULC
AS-24MCW-FR	24	20.0 - 31.0	15/30/75/110

<b>Average Current-with High dBA Setting (99 dBA)</b>				
Voltage	15cd	30cd	75cd	110cd
20.0 VDC	.088	.125	.200	.267
24.0 VDC	.080	.102	.150	.194
31.0 VDC	.080	.096	.130	.160
<b>ULC Current-with Medium dBA Setting (95 dBA)</b>				
20.0 VDC	.074	.110	.190	.253
24.0 VDC	.066	.084	.132	.173
31.0 VDC	.055	.075	.106	.133
<b>ULC Current-with Low dBA Setting (90 dBA)</b>				
20.0 VDC	.068	.105	.182	.245
24.0 VDC	.052	.076	.121	.158
31.0 VDC	.045	.062	.094	.121

VOLTAGE	High	Medium	Low
20.0 VDC	.035	.020	.014
24.0 VDC	.050	.025	.017
31.0 VDC	.065	.030	.021

\*Average current per actual Wheelock production testing at listed VDC.

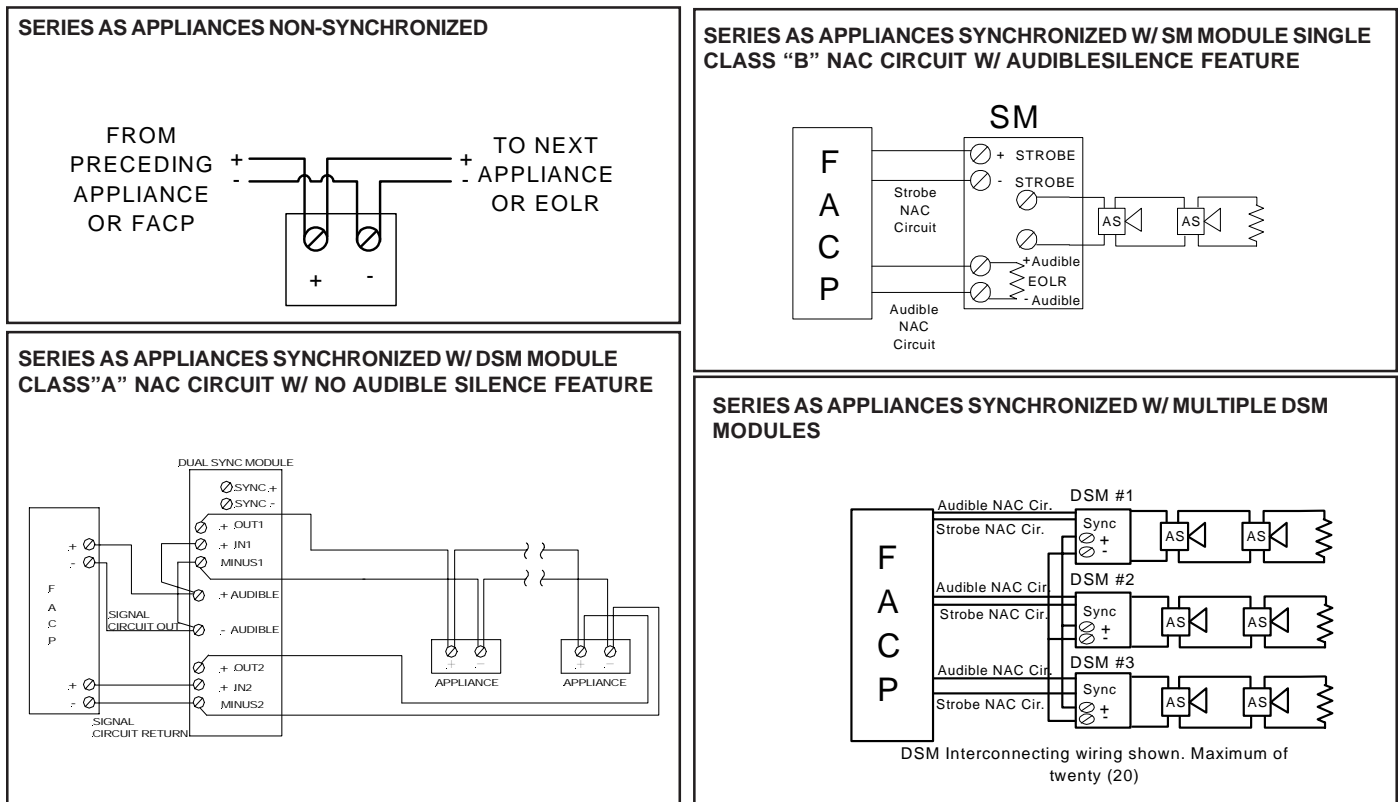
VOLTAGE	High	Medium	Low
10.5 VDC	.093	.037	.030
12.0 VDC	.119	.045	.035
15.6 VDC	.149	.075	.045

Description	Volume	Anechoic dBA @ 10 ft. Per CAN/ULC S525-99
Continuous Horn	High	99
	Medium	95
	Low	90
Code 3 Horn	High	99
	Medium	95
	Low	90

**⚠ WARNING: CONTACT WHELOCK FOR THE CURRENT "INSTALLATION INSTRUCTIONS" (P83947) SERIES AS-24MCW, (P83519) Series AH, (P83641) Series AH-WP AND "GENERAL INFORMATION" SHEET (P82380) ON THESE PRODUCTS. THESE DOCUMENTS UNDERGO PERIODIC CHANGES. IT IS IMPORTANT THAT YOU HAVE CURRENT INFORMATION ON THESE PRODUCTS. THESE MATERIALS CONTAIN IMPORTANT INFORMATION THAT SHOULD BE READ PRIOR TO SPECIFYING OR INSTALLING THESE PRODUCTS, INCLUDING:**

- TOTAL CURRENT REQUIRED BY ALL APPLIANCES CONNECTED TO SYSTEM SECONDARY POWER SOURCES.
- FUSE RATINGS ON NOTIFICATION APPLIANCE CIRCUITS TO HANDLE PEAK CURRENTS FROM ALL APPLIANCES ON THOSE CIRCUITS.
- ADDING, REPLACING OR CHANGING APPLIANCES OR CHANGING CANDELA SETTINGS WILL EFFECT CURRENT DRAW. RECALCULATE CURRENT DRAW TO INSURE THAT THE TOTAL AVERAGE CURRENT AND TOTAL PEAK REQUIRED BY ALL APPLIANCES DO NOT EXCEED THE RATED CAPACITY OF THE POWER SOURCE OR FUSES.
- COMPOSITE FLASH RATE FROM MULTIPLE STROBES WITHIN A PERSON'S FIELD OF VIEW.
- THE VOLTAGE APPLIED TO THESE PRODUCTS MUST BE WITHIN THEIR VOLTAGE RANGE.
- INSTALLATION OF 110 CANDELA STROBE PRODUCTS IN SLEEPING AREAS.
- INSTALLATION IN OFFICE AREAS AND OTHER SPECIFICATION AND INSTALLATION ISSUES.
- THESE APPLIANCES ARE NOT DESIGNED TO BE USED ON CODED SYSTEMS IN WHICH THE APPLIED VOLTAGE IS CYCLED ON AND OFF.
- FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR GENERAL INFORMATION SHEETS COULD RESULT IN IMPROPER INSTALLATION, APPLICATION, 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.
- CONDUCTOR SIZE (AWG), LENGTH AND AMPACITY SHOULD BE TAKEN INTO CONSIDERATION PRIOR TO DESIGN AND INSTALLATION OF THESE PRODUCTS, PARTICULARLY IN RETROFIT INSTALLATIONS.

## Wiring Diagrams #



# For detail using SM or DSM Sync Module refer to Data Sheet S3000C or Installation Instructions P83123 for SM and P83177 for DSM.

Wheelock products must be used within their published specifications and must be PROPERLY specified, applied, installed, operated, maintained and operationally tested in accordance with their installation instructions at the time of installation and at least twice a year or more often and in accordance with local, state and federal codes, regulations and laws. Specification, application, installation, operation, maintenance and testing must be performed by qualified personnel for proper operation in accordance with all of the latest National Fire Protection Association (NFPA), Underwriters' Laboratories (UL), National Electrical Code (NEC), Occupational Safety and Health Administration (OSHA), Canadian Standard for the Installation of Fire Alarm Systems, Canadian Electrical Part 1, local, state, county, province, district, federal and other applicable building and fire standards, guidelines, regulations, laws and codes including, but not limited to, all appendices and amendments and the requirements of the local authority having jurisdiction (AHJ).

## 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 Strobe shall meet and be ULC Listed under Standard CAN/ULC-S526-02 for Visual Signaling Appliances and Standard CAN/ULC-S525-99 for Audible Signaling Appliances. The Series AH Audible shall be ULC Listed under Standard CAN/ULC-S525-99 for Audible Signaling Appliances. The audible/strobe shall be listed for indoor use and 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 Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. The Series AS shall be of low current design. Where wall mount, Multi-Candela appliances are specified, the strobe intensity shall have four (4) field selectable settings and shall be rated for: 15, 30, 75 or 110 candela. The selector switch for selecting the candela shall be tamper resistant and not accessible from the front of the appliance. For ceiling mount applications, the strobe intensity shall be 15, 30, 75 or 100 candela.

When synchronization is required, the appliance shall be compatible with Wheelock's SM or DSM Sync Module(s). The strobes shall not drift out of synchronization at any time during operation. If the sync module 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.

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.

## Ordering Information

Note: Wall and Ceiling Models are Compatible

Model	Order Code	Strobe Candela ULC	Non-Sync	Sync w/ SM, DSM	24 VDC	12 VDC	Wall Mount	Ceiling Mount	Mounting Options
AS-24MCW-FR	9024	15/30/75/110	X	X	X	-	X	-	A,B,D,E,F,G,H,J,N,O,R,X
AS-24MCW-FW	9025	15/30/75/110	X	X	X	-	X	-	A,B,D,E,F,G,H,J,N,O,R,X
ASWP-2475W-FR	9012	180 ULC	X	X	X	-	X	-	I (see Data Sheet S9004C)
AH-24-R	7892	-	X	X	X	-	X	X	A,B,D,E,F,G,H,J,N,O,R,X
AH-24-W	7893	-	X	X	X	-	X	X	A,B,D,E,F,G,H,J,N,O,R,X
AH-12-R	7891	-	X	X	-	X	X	X	A,B,D,E,F,G,H,J,N,O,R,X
AH-12-W	7894	-	X	X	-	X	X	X	A,B,D,E,F,G,H,J,N,O,R,X
AH-24WP-R	7416	-	X	X	X	-	X	X	K

\*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.

**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.**

## WE SUPPORT AND ENCOURAGE NICET CERTIFICATION

3 YEAR WARRANTY  
Assembled in the USA



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